

# Turning Risk into Success



**An Entrepreneurship Program for  
Teenagers and Young Adults**



Third Edition  
SAGEGLOBAL

Turning Risk into Success, Third Edition, by Curtis DeBerg

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# **Turning Risk into Success**

**An Entrepreneurship Program for  
Teenagers and Young Adults**

## About the Author

**Curtis L. DeBerg** is a Professor at California State University, Chico. He earned his Ph.D. and M.S. at Oklahoma State University in business administration (emphasis: financial accounting) and economics, respectively. Before that, he was employed as a CPA for the national accounting firm of Ernst & Whinney in Des Moines, Iowa. From September 1993 to May 2005, he was the Sam M. Walton Free Enterprise Fellow at Chico State. As a Walton Fellow, Dr. DeBerg was the faculty adviser for a Students in Free Enterprise (SIFE) team on campus. One of the SIFE team's most outstanding projects was called "Cal-High SIFE." Based on the success of Cal-High SIFE, Professor DeBerg founded Students for the Advancement of Global Entrepreneurship (SAGE) in summer 2002. SAGE is a global community of teenage entrepreneurs sharing a common purpose: to make the world a better place. Youth use their school learning to become self-reliant, create wealth, and help others. SAGE is currently operating in eight states and 22 additional countries. He has traveled to over 45 countries in the past 17 years to advance SAGE's mission. Professor DeBerg has published several articles in many academic refereed journals. He is a sought after speaker and a critically-acclaimed book, *How High Is Up?*





# Turning Risk into Success:

## Introduction

Before reading this lesson, we urge you to watch these two videos:

<a href="https://www.youtube.com/watch?v=CzJEF4DGCWU">https://www.youtube.com/watch?v=CzJEF4DGCWU</a> (5:42) – “Follow Your Dreams: Be An Entrepreneur”
<a href="https://www.youtube.com/watch?v=oqt47t9wFcw">https://www.youtube.com/watch?v=oqt47t9wFcw</a> (4:23) – “Turning Risk into Success (Introduction)”

### Introduction

If you have ever wondered how to start a business, wonder no more! “Turning Risk into Success”—TRIS—is a series of 26 lessons that will teach you how to launch and operate your first business. You probably think that starting business is expensive, and it can be. However, we will show you that there are many ways to finding money to get started. And when the lessons are over, you’ll have the opportunity to travel to a tournament and win some prize money. All you have to do is give a presentation about your business to a panel of judges.

We want to give your business the greatest possible chance of succeeding. One way to do that is to create it based on something you are passionate about. If you do not know, ask a few people who know you really well. You can also ask yourself what you are good at. Are you an artist? Singer? Musician? Writer? Are you talented in web design or computer programming? Digital Marketing? How about math? Are you good at caring for your younger brother or sister? Are you a good cook? Are you an athlete? Do you like pets? Once we figure that out, we can brainstorm ways to turn your passion into a business.

## Teens: You can turn your passion or hobby into a business!

- What are you good at doing?

- Singer
- Musician
- Writer
- Web designer
- Fashion designer
- Babysitting
- Dog walking
- Cooking
- Math



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During the TRIS program, you will gain other knowledge and skills that will help you become a successful entrepreneur, and a more confident person. We will help you identify a problem worth solving. We will brainstorm and use computer skills to do research on the Internet and do financial spreadsheets with Excel. We will show you how to make a compelling presentation.

## Do you have a problem worth solving?

- What bothers you each day?
- Can you fix it?
- Can you see problems as opportunities?



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## Course Organization

TRIS lessons are very hands-on; they are organized into five parts:

- The Big Picture
- Questions and Answers
- Taking Action
- Quiz Yourself
- What to Do Before the Next Lesson

## What Will You Learn?

You are probably wondering what exactly you will learn in the TRIS program. During the TRIS course, you will:

- Gain knowledge and skills to become a successful entrepreneur
- Implement project-based learning, with heavy influence on STEM areas
- Develop critical thinking of a businessperson
- Integrate computing skills (e.g. creating financial spreadsheets)
- Conduct research for career skills relevance (based on CTE standards)
- Design Pitch Deck presentations to make TRIS content come to life
- Learn design thinking and brainstorming techniques to identify problems worth solving

Once you learn and apply this knowledge to your business, it will be a lot easier to run and make a profit.

Take six minutes now and have a look at this video on YouTube, [“Follow Your Dreams: Be an Entrepreneur.”](#) Among all the entrepreneurs featured, who is your favorite? Should there be more women in the video? Are you one of the 1% of people who can be an entrepreneur?

## Course Contents

This course contains 26 lessons. Some lessons can be covered in one class session; others may take two class sessions.

Lesson One: What is an Entrepreneur?
Lesson Two: Do You Have Problem Worth Solving?
Lesson Three: Brainstorming Ideas
Lesson Four: Design Thinking
Lesson Five: Organizing Your “Big Idea” Using the Lean Canvas Business Model
Lesson Six: A Closer Look at the Lean Canvas
Lesson Seven: Projecting Startup Costs, Expenses, and Revenues
Lesson Eight: Using Excel to Make Your Life Easier
Lesson Nine: Sources of Financing (Personal Savings, Friends, Family, Angel Investors)
Lesson Ten: Sources of Financing (Crowdfunding)
Lesson Eleven: Pitching Your Idea with the Pitch Deck

Lesson Twelve: Marketing Your Product or Service to Customers
Lesson Thirteen: A Close Look at Digital Marketing
Lesson Fourteen: School Clubs, Sole Proprietorships and Partnerships
Lesson Fifteen: Corporations, Hybrids, and Nonprofits
Lesson Sixteen: Cash – The Gasoline That Keeps Your Business Running
Lesson Seventeen: Running the Business (Recordkeeping, Financial Statements, and Employee Management)
Lesson Eighteen: Taxes
Lesson Nineteen: Intellectual Property
Lesson Twenty: Using Math to Make Business Decisions
Lesson Twenty One: The Triple Bottom Line and Civic Engagement
Lesson Twenty Two: Social Entrepreneurship-More than the Financial Bottom Line
Lesson Twenty Three: Macro vs. Micro Social Entrepreneurship
Lesson Twenty Four: Doing Business in the Global Community
Lesson Twenty Five: Going to College and Majoring in Business
Lesson Twenty Six: Pitching Your Business at a SAGE Competition

Each lesson has several topics to be addressed, along with at least one or two videos to be viewed prior to reading the lesson.

Are you ready to learn about entrepreneurship? So get ready. Set. Go!

## Lesson One: What is an Entrepreneur?

Before reading this lesson, we urge you to watch these videos:

<a href="https://www.youtube.com/watch?v=Va-TZbO9YNY">https://www.youtube.com/watch?v=Va-TZbO9YNY</a> (5:53) -TRIS Lesson One-What is an Entrepreneur?
<a href="https://www.youtube.com/watch?v=eHzAtxW3TzY">https://www.youtube.com/watch?v=eHzAtxW3TzY</a> (39:37) – “Steve Jobs’s Top 10 Rules for Success”
<a href="https://www.youtube.com/watch?v=QoqohmccTSc">https://www.youtube.com/watch?v=QoqohmccTSc</a> , (18:39) - “50 Entrepreneurs share priceless advice”

### The Big Picture

Is there anything that really bothers you each day? Is there something that bothers you enough so that you might wonder, “Can I solve this problem?” Do you find yourself idolizing Mark Zuckerberg or Bill Gates or Steve Jobs more than Cristiano Ronaldo, LeBron James, or Lady Gaga? Maybe you would rather read *Business Week* or *The Economist* than *Sports Illustrated* or *Teen Magazine*. If this sounds like you, you may already be on your way to becoming an entrepreneur.

According to *Webster’s New Collegiate Dictionary*, an entrepreneur is “one who organizes, manages, and assumes the risks of a business.” An entrepreneur would much rather create a job than take a job created by someone else, even though this usually involves much more risk. Entrepreneurs have a very different attitude than most people, which allows them to more readily deal with new, exciting – but uncertain – situations. Entrepreneurs must be action-oriented, since the success of their business depends on them. They are usually good at finding innovative ways to create goods or services, or finding new ways to deliver existing goods and services.

Perhaps two of the most important characteristics of an entrepreneur are (1) strength and courage to resolve problems in the face of adversity and (2) competitive spirit. The reward for this attitude is the chance to do something you love while earning money for you and your family. This also means you can give more money and time back to your community through jobs, charity and, of course, taxes.

After completing this lesson, you will better understand entrepreneurship and see if you have what it takes to become an entrepreneur.

Even if you decide you do not want to start your own business, you can still develop an entrepreneurial attitude. This attitude helps you see the world as filled with opportunities. This means that you need to do your best in school, because the more knowledge and skills you acquire, the more opportunities you will have to live a happy and successful life. So, let’s get started.



## Questions and Answers

**Question 1:** Do entrepreneurs have any special characteristics. If so, what are they? What makes them different from other people?

**Answer:** Most entrepreneurs are competitive. They want to win, and one measure of winning is whether customers are willing to buy their goods or services at a price greater than the cost. One of the co-founders of eBay is an entrepreneur named Jeffrey Skoll, who currently runs an organization called the Skoll Foundation. The Chief Executive Officer and President of the Skoll Foundation is Sally Osberg.

A few years ago, Ms. Osberg wrote an article outlining five main characteristics of an entrepreneur. The characteristics she listed are inspiration, creativity, action-orientation, courage and fortitude.

Let's quickly explore each of these characteristics.

**Inspiration:** Before someone can start a new business or social venture, he or she needs to be fired up by an innovative idea. Mark Zuckerberg of Facebook saw how the computer could be used to create an on-line social network. Bill Gates saw how computer software could make repetitive human tasks much easier. Often, entrepreneurs take an existing product or service and make it better rather than create an entirely new product. Fred Smith of UPS revolutionized shipping by streamlining the process to make it more efficient. Sam Walton of Wal-Mart did not discover a new product; rather he discovered a new process of getting retail merchandise into the hands of customers who did not live near big cities. Walton also vowed never to raise the price of his merchandise more than 30% of its cost. These simple ideas turned the Walton family into the third wealthiest family in the world. **Creativity:** How often, in school and in life, do you react to situations? It's like playing basketball and always playing defense. Entrepreneurs, on the other hand, are proactive. They seek opportunities to solve problems that can add value,

resulting in profit or social change—or both. They are constantly thinking about new ways to solve everyday problems.

**Action-Orientation:** Have you ever met someone who always has good ideas, but never implements them? After a while, most people stop listening. Successful entrepreneurs act on their ideas and turn them into businesses or social ventures.

**Courage:** Entrepreneurs know that there will always be people who tell them that they cannot do something, that they will not be successful, or that they don't have good ideas. In spite of this, entrepreneurs believe in themselves and take chances by investing time and money to go forward with their ideas. In other words, entrepreneurs take calculated risks even in the face of possible failure and ridicule from others, because of the chance that they can be successful. This takes guts!

**Drive and Fortitude:** Entrepreneurs never give up! If you believe your idea has merit, and you are inspired to go for it, then pursue your passion. Thomas Edison failed hundreds of times, but he ultimately succeeded. And if your first idea does not work, try, try again!

Question 1

- Do entrepreneurs have any special characteristics? If so, what are they? What makes them different from other people?

1. Inspiration    2. Creativity    3. Action-Oriented

4. Courage    5. Drive and Fortitude

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Question 2: Why not just get a job rather than start your own business?





**Answer:** It's not always easy getting a good job—one that you like and that pays well—even if you have a good education. Each person has a unique set of talents and skills. The key is to create or improve a product or service that others will buy by combining your natural talents with hard work and determination. Additionally, the profits you can make from your business can be much greater than if you were working for someone else.

Table 1 provides a list of benefits to owning your own business. Can you think of others?

<b>Table 1: Benefits of Owning Your Own Business</b>
<ul style="list-style-type: none"> <li>• <b>Having the independence and power to make your own business decisions</b></li> </ul>
<ul style="list-style-type: none"> <li>• <b>Making a living doing what you enjoy</b></li> </ul>
<ul style="list-style-type: none"> <li>• <b>The personal satisfaction, sense of achievement, and recognition that comes with being successful</b></li> </ul>
<ul style="list-style-type: none"> <li>• <b>More flexible work hours</b></li> </ul>
<ul style="list-style-type: none"> <li>• <b>Having the ability to work at home</b></li> </ul>
<ul style="list-style-type: none"> <li>• <b>Direct contact with customers, employees, suppliers and other business professionals</b></li> </ul>
<ul style="list-style-type: none"> <li>• <b>The opportunity to create substantial wealth and job security for yourself and your family</b></li> </ul>
<ul style="list-style-type: none"> <li>• <b>The opportunity to be creative in developing your own idea, product or service</b></li> </ul>
<ul style="list-style-type: none"> <li>• <b>Contributing to your community and others in the form of employment, or possibly supporting a local charity</b></li> </ul>

**Question 3:** Starting a business sounds great, but what are the disadvantages?

**Answer:** Table 2 shows several disadvantages of owning your own business. While there are



many potential benefits, there are also disadvantages to starting your own business. The first one is risk. Two out of every three new businesses fail within the first five years. There are many reasons why they can fail. Most will fail due to inadequate research, lack of planning, a shortage of money to keep the business running in its early phases, or poor management. Entrepreneurs learn to minimize their risks by planning, which usually means writing a business plan before they commit to starting their business.

So, keeping your enthusiasm in check, we caution you to investigate the disadvantages of starting and running your own business



**Table 2: Disadvantages of Owning Your Own Business**

- |   |
|---|
| <ul style="list-style-type: none"> <li>• You no longer have only one boss; you will now answer to your customers, to government agencies (local, state and federal), and possibly the bank</li> </ul>   |
| <ul style="list-style-type: none"> <li>• The financial risk is great and the failure rate of starting a new business is high<br/>As an owner, the hours will be long and hard</li> </ul>  |
| <ul style="list-style-type: none"> <li>• There will be limited time for social engagements and few, if any, vacations in the first few years</li> </ul>   |
| <ul style="list-style-type: none"> <li>• Your profits from the business, unlike a salary from a regular job, will fluctuate from month to month with your business</li> </ul>   |
| <ul style="list-style-type: none"> <li>• If any problem arises, all the responsibility is yours; the cost comes out of your pocket, not your employer's</li> </ul>  |
| <ul style="list-style-type: none"> <li>• You may find that you do not like the work, after all, and you'll be stuck doing it for years until you can sell the business or find another way of satisfying your debts without a major financial loss</li> </ul> |
| <ul style="list-style-type: none"> <li>• You may lose focus on school or other commitments</li> </ul>   |
| <ul style="list-style-type: none"> <li>• Owning a business is very risky due to the increasing amount of regulation and litigation. A lifetime of work building a business can be lost because of a lawsuit or a new law or regulation.</li> </ul>            |



**Question 4:** What types of businesses are there?

**Answer:** There are many types of businesses. “Commercial” businesses whose primary goal is to make money are categorized in two ways: a product business or a service business. A product business manufactures and/or sells a finished good to a customer. Examples of product businesses are a business that makes jewelry, pottery, clothing, or automobiles.

A service business, on the other hand, provides labor or expertise. For instance, lawyers, doctors, childcare providers, cooks, and housekeepers are all service providers.

Some businesses combine both categories and offer both products and services. A good example of this would be a hairdresser. A hair stylist offers the service of cutting and styling your hair and often offers an assortment of products that you can purchase for your hair.

Another type of business is a non-profit business. These types of businesses are sometimes called “social” enterprises; examples include running a homeless shelter or soup kitchen. Instead of selling goods and services, non-profit businesses usually get most of their money from government grants or private foundations (such as the Bill and Melinda Gates Foundation).

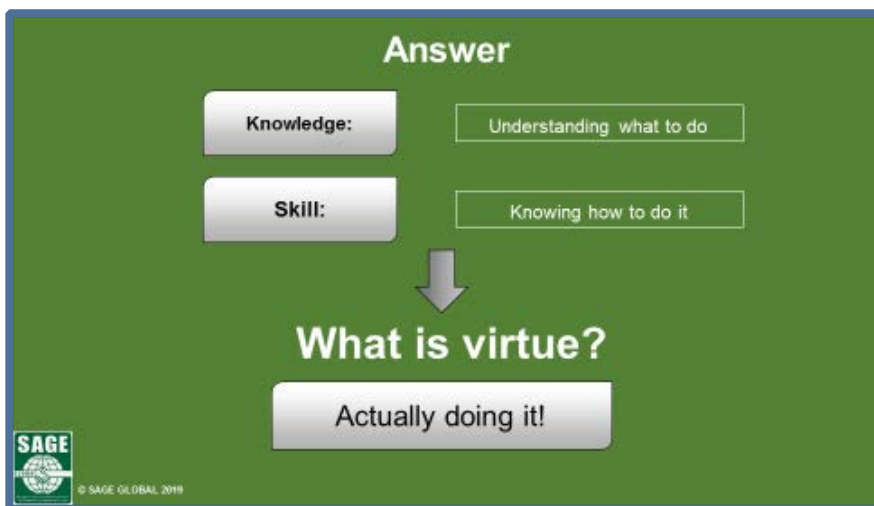
There are several types of business legal structures, such as sole proprietorships, partnerships, corporations, or limited liability companies. Later in the course, we will talk more about which legal structure is best for your business.

**Question 5:** What skills do you have?



Answer: A wise woman once said, “Knowledge is understanding what to do, and skill is knowing how to do it.” Thus, a skill is something you know how to do because you learned it. Cooking, baking, camping, basketball, dancing, writing computer code, and sewing are all examples of skills. Let’s take another example of an airline pilot. The pilot acquired math knowledge in school, but when she learns how to fly, she must apply this knowledge by calculating distance, speed and altitude. Here, flying a plane is a skill acquired after learning math. The wise woman also said that if knowledge is learning what to do, and if skill is knowing how to do it, then what is virtue?

*Answer: Actually doing it!)*



**Question 6:** After watching [“Steve Jobs’s Top 10 Rules for Success,”](#) which was Steve Job’s Rule #10?

**Answer:** Stay Hungry, Stay Foolish!



## Taking Action

**Exercise 1:** Go to Table 1. Which three benefits are most important to you in starting your business?

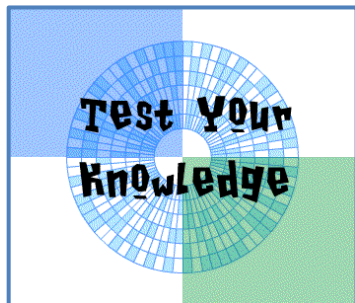
**Exercise 2:** From Table 2 which three disadvantages would be the best reasons for you not to start a business?

**Exercise 3:** From the list of characteristics in Table 3, please rate yourself using the scale below. Put a check mark in the box that best fits your answer.



**Table 3**

You are:	Not at all	Somewhat	Average	Above Average	Very Much
An Inspiration to Others					
Creative					
Action-Oriented					
Hard-Working					
Honest					
Intelligent					
Enthusiastic					
Motivated/Determined					
A Risk Taker					
A Leader					
Trustworthy					
A Good Team Player					
Bossy					
Lazy					
Selfish					
Independent					
Competitive					



### Quiz Yourself

1. This lesson described five main characteristics of an entrepreneur. Which of the following is one of these characteristics?
  - A. Unmotivated
  - B. Shy
  - C. Drive and Fortitude
  - D. None of the above
  - E. All of the above
2. What of the following is a benefit of owning your own business?
  - A. The financial risk is great and the failure rate of starting a new business is high
  - B. If any problem arises, all the responsibility is yours

- C. You may lose focus on school or other commitments
  - D. Having the independence and power to make your own business decisions
  - E. None of the above
3. Which of the following is true about most nonprofit businesses?
    - A. Their main source of funds is government grants, private foundations, or philanthropists
    - B. They are part of the public sector
    - C. They are part of the social sector
    - D. They are not allowed in America; only public and private sector organizations are legal
    - E. None of the above
  4. What is a sole proprietorship business?
    - A. Business owned by two or more individuals who jointly share the rewards and risks
    - B. Business owned by one person who is solely responsible for all of the financial and legal matters
    - C. Business recognized as a corporation, with shares owned by investors
    - D. A business that only sells fish (specialty: fillet of sole!)
    - E. None of the above
  5. What kind of legal structure consists of a business owned by two or more individuals who jointly share rewards and risks fall under?
    - A. Sole proprietorship
    - B. Partnership
    - C. Nonprofit
    - D. Corporation
    - E. None of your business
  6. True or False: An entrepreneur would much rather create a job rather than take a job created by someone else.
  7. True or False: Often, entrepreneurs take an existing product or service and make it better rather than create an entirely new product.
  8. True or False: An advantage of owning your own business is that you are assured of becoming richer than if you take a job with an existing employer.
  9. True or False: An advantage of owning a business is that it is less risky taking a job with an existing company.
  10. True or False: Steve Jobs' Rule #10 was to Stay Hungry, Stay Foolish!

## **What to Do Before the Next Lesson**

Congratulations, you are on your way! One lesson down. Only 25 more to go to become a certified TRIS student! We hope that you might already have one or two ideas for possible businesses to start. You have taken the first step by enrolling in this course. If you keep trying, before you know it, you will have the ability to see business opportunities all around you. You are on your way to being an entrepreneur.

The next step is to conduct research using the Internet. You can also survey possible customers in your community to see if they would buy your product or service. Another good idea is to go to the Chamber

of Commerce to ask for information that they normally give out to a prospective new business owner in your area.

This type of background research will help you determine if your idea is feasible. It can also help you take your idea and make it better! Without doing the necessary research, there's no way you can write a good business plan, which you will learn to do in Lesson 3. In preparing for the next lesson, we ask that you answer the following questions.

1. What is your best business idea?
2. Will it take a lot of money to start?
3. Do you think you will form a partnership with at least two other students in the class? If so, what qualities do these people have that might make them attractive partners? Do they have skills that you do not have? Do they have money to contribute to start the business? (Note: this is called "startup capital")
4. Who is your main competition?
5. Why would a customer choose your new business over one he/she is already considering? Can you provide the customer with better service or a better product than he/she is currently receiving?
6. How many of these types of businesses are there in your area? A question to think about is if the market is saturated with this type of business.
7. In other words, is your product or service something that is new or unusual enough to lure the customer to buy your product or service.
8. What is the predicted outlook for your product or service? Will there be an increase or decrease in demand?
9. What is the future economic outlook for this area?







## Lesson Two: Do You Have a Problem Worth Solving?

Please watch these videos before reading the lesson:

<a href="https://www.youtube.com/watch?v=S6q-GsuV084">https://www.youtube.com/watch?v=S6q-GsuV084</a> (7:08) TRIS Lesson Two: Do You Have a Problem Worth Solving?
<a href="https://www.youtube.com/watch?v=h-KHWUq3B7I">https://www.youtube.com/watch?v=h-KHWUq3B7I</a> (1:40) - "The Life of an Entrepreneur in 90 Seconds"
<a href="https://www.youtube.com/watch?v=2nW9lg-fenY">https://www.youtube.com/watch?v=2nW9lg-fenY</a> (4:03) "Lean Canvas Example (Vegan Restaurant)"

### The Big Picture

Entrepreneurs see opportunities when others see problems. For example, each day, something happens that annoys me. Often, I say, "I wonder if I can fix that problem." For example, one time I had a roommate that took 20-minute showers. I believed then, and still do, that showers should take 5-10 minutes or less. Could anything be done to encourage my roommate to take a shorter shower, saving valuable water?

Yes! A couple years ago a group of teens in Ireland started a company called [Greener Globe](#). These teens created a color coding system to remind people that when six minutes elapsed, the color turned green for a minute. After another two minutes, the water color turned amber (as in yield!). The final minute, the water turned red (as in stop!).

Leaders in the community want teens to graduate from high school who are creative and innovative problem solvers. However, many public schools produce (1) students who concentrate on passing standardized exams in order to get into their preferred college, (2) graduates who don't go on to college, and are left to find lower-wage jobs, join the military, or join the ranks of the unemployed, or (3) students who don't graduate at all.

By creating this course, we want to appeal to ALL teens to exercise their creativity and really start a business. But where to start?

The first step, of course, is to identify a problem in your daily life that needs to be solved. Such a problem can be relatively minor, like how long your shower should take, or it can be more serious. More serious problems can usually identified when you can empathize with people in your life with major challenges. These challenges can involve such issues involving health, transportation, computers, cell phones, etc. If you are creative, you might think about how you can address the problem from a different angle.

## Where others see PROBLEMS...



Entrepreneurs recognize **OPPORTUNITIES**



This lesson is designed to help you determine if you have a problem worth solving. The only way you can find out is to **GET OUT OF THE BUILDING** and interview prospective customers. An entrepreneur cannot sell his goods or services if nobody wants them!

Almost 50% of startup companies fail because, as it turns out, nobody needs their product. It bears repeating: *Why invest a lot of cash and sweat by building something nobody wants.*

### Questions and Answers

Question 1: Do you have a problem worth solving?

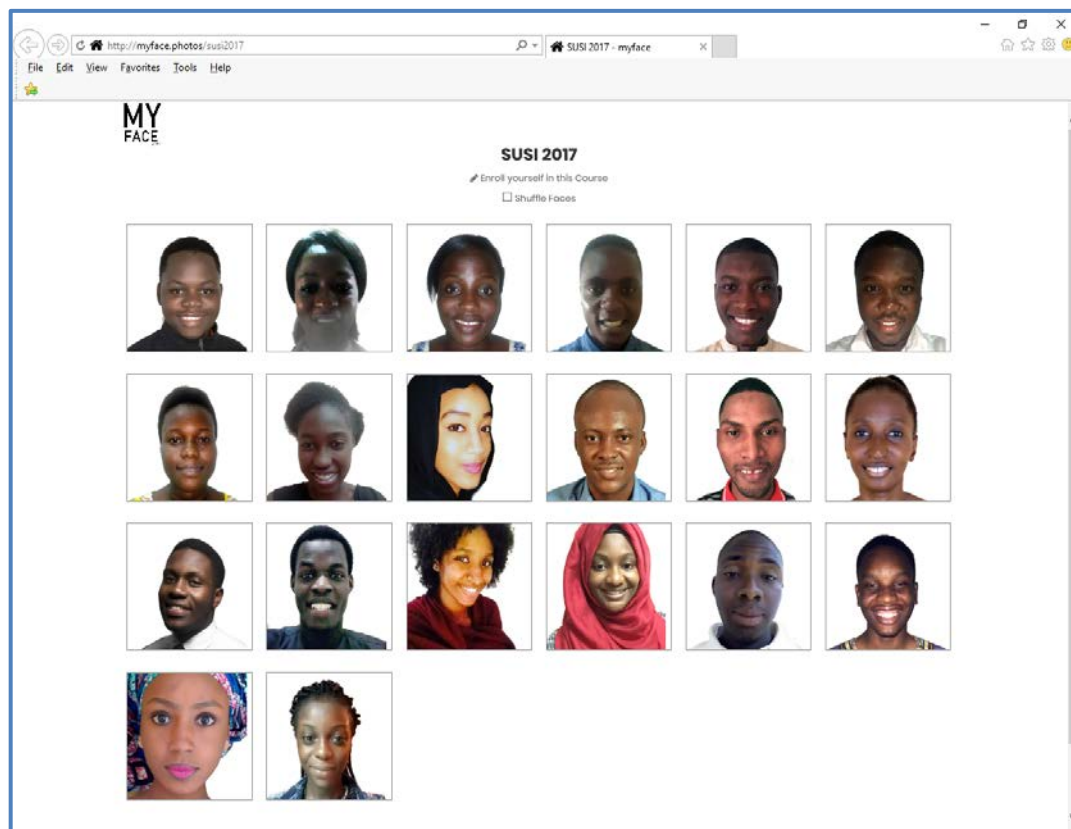
**Answer:** Another way to ask this question is, “Do other people care about what you plan to make?” In addition: “Are you a subject matter expert in the area.”

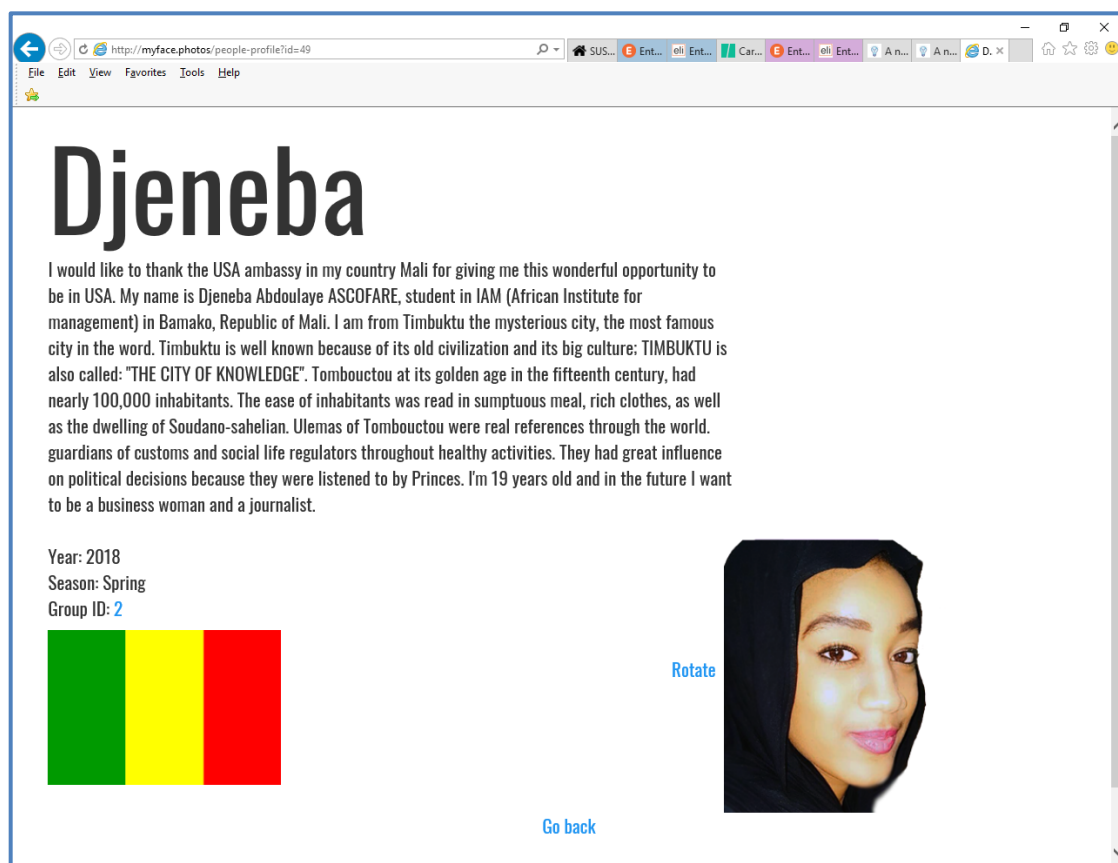
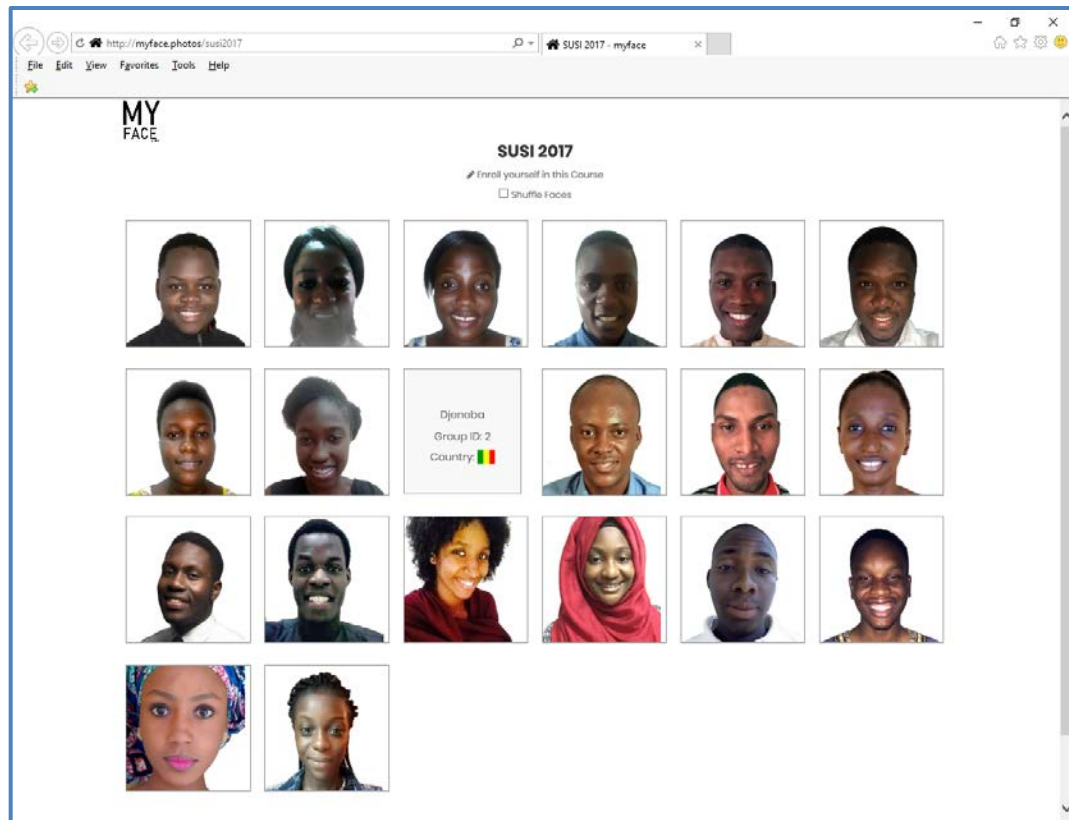
I am a professor at a major university, and I run into the same problem each semester. I try very hard to get to know student names. Research shows that students learn more in an environment where they believe the teacher cares about them individually. However, with class sizes often exceeding 100 students, this is becoming harder and harder to do.

A friend of mine and I recently started a venture known as Myface. We have created a prototype web site and experimented with a new software program that makes it much easier to not only get to know student names, but also it allows us to learn more about the student, including hometown, hobbies, and goals for the semester. Have a look here: <http://myface.photos/susi2017>. What do you think?

Click on the young woman with the black hijab (note: a hijab is a Muslim woman’s scarf). The picture flips to her name, group ID, and country. Note that Djeneba is from Mali. Now click on the name. It takes you to her profile, where she explains that she is an African student who is studying management, and she is from Timbuktu.

Students like Djeneba can self-enroll in the course by uploading their favorite selfie and filling in some biographical information. Note that the instructor can click the “Shuffle Faces” box and the names are rearranged in a new, random order. This makes it easy for instructors to learn names, and they can learn names faster by groups!





**Question 2:** Do you have an idea that can be sold (either a product or service)?

**Answer:** It is crucial to do preliminary research by talking to prospective customers. If you can, build a prototype of your product, or a “landing page” web site so that people can get a clearer picture of the problem you are trying to solve. Create a list of questions for prospective customers, and ask them if your product or service is of interest.

As for Myface, student reaction has been positive, as has the reaction of faculty who strive to learn student names. To date, we are certain that there is a problem worth solving, but we aren’t sure who our customer is. We will use the Myface example throughout many of the lessons.

**Question 3:** Who is your customer?

**Answer:** An entrepreneur must be open to considering customers from across a wide spectrum. For Myface, for example, is the primary customer the university student? If so, will the student be required to buy the software as a course requirement, like a textbook? Alternatively, are teachers the target customers? Teachers who like the software might not want to buy it from their own pockets, but they might ask their school to buy a site license. Schools often have funds in its budget exclusively for new software that enhances the student learning experience.

Alternatively, might the market be somewhere outside the academic market? Would large companies, like law and accounting firms, find this software useful when conducting human resource or leadership workshops?

**Question 4:** What is your UVP (unique value proposition)? What problem are you trying to solve that has not already been tried? Or has the problem already been solved, and you are not aware of it yet?



**Answer:** A value proposition is a promise of value to be delivered. It is the primary reason a prospective customer should buy from you.

In a nutshell, value proposition is a clear statement that

- explains how your product solves customers’ problems or improves their situation (relevancy),
- delivers specific benefits (quantified value),

- tells the ideal customer why they should buy from you and not from the competition (unique differentiation).

**Question 5:** How will you solve the problem?

**Answer:** What skills, knowledge, or device will solve the problem confronted by the prospective customer? For example, a timed showerhead that delivers green, yellow, and red water at different time intervals can help solve the problem of consuming excess water.



**Question 6:** How will you reach your customers?





**Answer:** Before the age of the Internet, entrepreneurs would reach customers with TV, radio, and newspaper ads. They would also print flyers and bulletins and mail them (using snail mail). Now, it is much easier, cheaper, and efficient to test the market by placing ads on Facebook, Google, etc. Digital marketing is the new buzzword for getting the word out about your product. Lesson Thirteen is devoted to digital marketing.

**Question 7:** Can you make money?



**Answer:** As Steve Jobs said, to be a successful entrepreneur you must have so much passion for your idea that that no other rational person would work as hard as you do to make your idea profitable. You need to know two things to determine if you can make money. First, you need to determine if anyone is interested in your product. Is your UVP interesting to prospective customers? Second, you need to know if you can sell your product for a price greater than the cost. That's why a basic understanding of financial topics such as projected startup costs, revenues and expenses is important (Lesson Seven). In addition, you need to know about budgeting, cash flows, and financial reports (Lesson Seventeen).



**Taking Action**

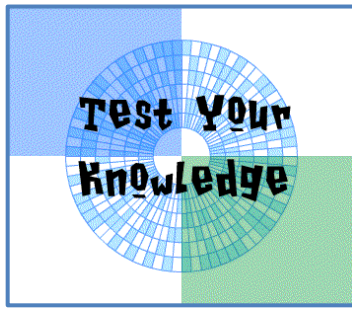
**Exercise 1:** On your computer or cell phone, do a Google search of the following people:

- Mark Zuckerberg
- Jeff Bezos
- Pierre Omidyar
- Ann Moore
- Muhammad Yunus

Answer the following questions.

1. What company did each person start?
2. When was it started?
3. What was their big idea?

Be prepared to discuss the answers to these questions during the next class period.



### Quiz Yourself

1. What is the first step in starting a business?
  - A. Identify a problem in your daily life that needs to be solved
  - B. Find investors
  - C. Create a prototype
  - D. Look for business partner with ideas
  - E. Write a business plan
2. What problem does Myface help solve?
  - A. Easier to get to know students and their names
  - B. Allows teachers to quickly learn more about student
  - C. Creates a bond between the teacher and student
  - D. Students upload their own pictures and profiles, without the teacher having to do it
  - E. All of the above
3. Why is it crucial to do preliminary research by talking to prospective customers?
  - A. Find out if this is something a prospective customer would want/need



- B. Get a clearer picture of the problem you are trying to solve
  - C. It will help you create a landing page for your prospective product
  - D. Make sure the problem you think you are solving addresses someone's needs or wants
  - E. All of the above
4. What should be included in your value proposition (UVP) statement?
- A. It should explain how your product solves customers' problems or improves their situation
  - B. It should explain how it delivers specific benefits
  - C. It should explain how your product is similar to existing products
  - D. Both A and B
  - E. None of the above
5. What is an example of digital marketing?
- A. Flyers
  - B. Google Ads
  - C. Newspaper Ads
  - D. Hitchhiking to a TV station
  - E. Radio Ads
6. True or False: Entrepreneurs see opportunities when others see problems.
7. True or False: A value proposition should tell the ideal customer why they should buy from you and not from the competition (unique differentiation).
8. True or False: Before starting a company, you must be confident that you can sell your product for a price less than its cost.
9. True or False: An entrepreneur must not be open to considering customers from across a wide spectrum.
10. True or False: A value proposition should explain how your product solves customers' problems or improves their situation (relevancy).

### **What to Do Before Lesson 3**

Congratulations, you are on your way! If you keep trying, before you know it, you will have the ability to see business opportunities all around you. You are on your way to being an entrepreneur. For next time, please contact at least one entrepreneur in your neighborhood or family and arrange for a 15- or 20-minute interview. Ask the entrepreneur to please answer the following questions.

## Interview Questions

1. What is your name?
2. How long have you been in business?
3. How much time did it take to get your business operating? How long did it take before you made a profit?
4. What were your biggest fears?
5. Did you write a business plan before starting your business?
6. If not, did you wish you had done so?
7. Do you have a current business plan now?
8. How important was it to you to do market research before starting your business?
9. What makes your product or service innovative? What are the three best things about owning your own business?
10. What are the three biggest obstacles?
11. Would you advise students to do as well as they can in school? In other words, how useful has book knowledge been to you in finding success in the real world?
12. What one single piece of advice could you offer a teenage entrepreneur in the TRIS program?

Make sure the entrepreneur emails the answers to you, or you record the interview so that you have an audio file of the recording. Bring the answers with you to the next class or upload them to the class homework folder.



## Lesson Three: Brainstorming Ideas

Before reading this lesson, make sure you have watched these videos.

<a href="https://www.youtube.com/watch?v=FbLOiKEBMiU&amp;t=32s">https://www.youtube.com/watch?v=FbLOiKEBMiU&amp;t=32s</a> (4:21) - "Brainstorming Ideas"
<a href="https://www.youtube.com/watch?v=Mtjatz9r-Vc">https://www.youtube.com/watch?v=Mtjatz9r-Vc</a> (21:15) - "The art of innovation: Guy Kawasaki"
<a href="https://www.youtube.com/watch?v=9K8W4ooygUU">https://www.youtube.com/watch?v=9K8W4ooygUU</a> (3:41) "Brainstorming Done Right!"
<a href="https://www.youtube.com/watch?v=VVgIX0s1wY8">https://www.youtube.com/watch?v=VVgIX0s1wY8</a> (6:11) - "Classroom Experiments in Entrepreneurship"

## The Big Picture

Buckminster Fuller, a famous architect, designer, and inventor, once said, "Everyone is born a genius, but the process of living de-geniuses them." Fuller was most famous for designing the geodesic dome, a building that could sustain its own weight with no practical limits.

How often have we observed toddlers and grade school children as they discover something new? You can see their sense of wonder and awe with each discovery. Sometimes, these kids will amaze you by saying or doing something that you have never seen before. Young minds are curious, always testing, refining, adjusting, learning, and growing. Yes, they are geniuses!



When do such minds turn off their creative energy? At puberty, when hormones start going crazy? When the temptation of drugs yields to actually trying them? With mind-numbing minutes and hours spent waiting in line or in traffic? With endless text messages to friends (which rob you of time when you can be innovating, creating, or reading some great books). When teachers insist that students always learn in straight rows, in 50-minute segments, seven hours a day, with Pavlovian bells ringing exactly every 50 minutes?

Entrepreneurs are not caught in a rut, a box, or even a triangle. Most cannot sit still. They fiddle, tinker, and play. That is why many entrepreneurs are not A or B students. Many entrepreneurs do not go on to

college, or they start college but do not finish. Neither Bill Gates, nor Steve Jobs, nor Mark Zuckerberg finished college.

Like most young people, entrepreneurs are creative. They are always on the lookout for new opportunities. And once they latch onto a new opportunity and identify a problem worth solving, they begin to test, refine, adjust, grow – and repeat!

Here you are now, a teenager or young adult! You are at your creative and innovative peak, even if you have other competing activities that might stifle your creative genius.

With so much going on at home, at school, or at work, how do you have time to find a relevant problem worth solving? How can you discover an opportunity that begs for a solution? This is the topic of today's lesson.

## Questions and Answers

**Question #1:** What is brainstorming? How is this different from ideation?



According to Wikipedia, brainstorming is “a group creativity technique by which efforts are made to find a conclusion for a specific problem by gathering a list of ideas spontaneously contributed by its members.” When brainstorming, participants should try to remove inhibitions. In such an exercise, people are able to think more freely and they suggest many spontaneous new ideas as possible.

All the ideas are written down on an easel, whiteboard, or paper. The ideas should not be criticized; after the brainstorming session, the ideas are evaluated.

Both brainstorming and ideation are processes invented to create new valuable ideas and insights, and both are methods for envisioning new ways to solve problems. Brainstorming and ideation share some of the same ground rules, including:

- Generating as many ideas as possible
- Taking care not to classify them at this stage as good or bad

However, the difference between brainstorming and ideation is one of vision. While brainstorming uses a variety of exercises to unlock new thinking about old subjects, ideation is more visionary. The process of ideation seeks solutions for problems that are not yet defined in many cases. Elon Musk not only wants to create better cars that do not rely on fossil fuels, but he wants to create spaceships that can return to earth and be used again, rather than disintegrating in outer space. Elon Musk is an ideator!

# DO's & DON'Ts

Before starting a brainstorming session, select someone to write things down on a whiteboard or flip chart. There are three “do’s” for [effective brainstorming](#).

1. Capture everything
2. Encourage participation
3. Ask clarifying questions

There are three “don’ts” for effective brainstorming: Do not:

1. Evaluate anything
2. Force participation
3. Ask judging questions

After everything is written down, the scribe, with help from participants, should categorize answers, reduce them, and then analyze the results. The result, quite possibly, will be an idea to plant a seed for your new business.

<b>Brainstorming:</b>	Uses a variety of exercises to unlock new thinking about old subject; ideation is more visionary.
<b>Ideation:</b>	Seeks solutions for problems that are not yet defined, in many cases.



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## Taking Action

**Exercise #1:** Let's do a brainstorming session. Select someone in the class to take notes. Starting with the first person in the class, brainstorm a type of business that students in the TRIS program might start. For example, the first person starts with the letter A. Here, a sample business idea might be "Artist" or "Auto Detailer." The next person takes the letter B. Sample answers are "Babysitter" or "Bottle Washer." The letter C can be for "Computer Programmer" or "Cookie Company." The key here is: *do not hold back!* If a person is stuck after a moment, then have the whole class help them out. Once the group has gone through the entire alphabet once, try it AGAIN. If an individual or the group is stuck on letters like X or Z, just put something down like "X-Ray technician" or "Zookeeper."



**Exercise #2:** Now let's do an ideation session. If you are taking this course as part of a school class, break students into groups of five or six. One student should be the "scribe" while another student explains, in one minute or less, his or her business idea. Then, the group should brainstorm for five minutes about what can be done to make the idea better. Think outside the triangle!

Sample questions: How innovative is the idea? Is there a problem worth solving? Where will the product or service be sold? How will it be advertised? Does the person have the knowledge, skills, and passion to pursue the idea? Who are the customers?





## Sample Questions

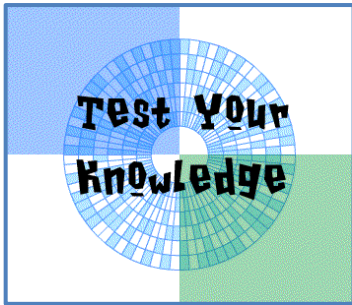
1. How innovative is the idea?
2. Is there a problem worth solving?
3. Where will the product or service be sold?
4. How will it be advertised?
5. Does the person have the knowledge, skills, and passion to pursue the idea?
6. Who are the customers?



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After you have done this, a new student should be a scribe and another student explain his or her idea. Continue doing this until everyone has participated as both the scribe and the idea person.



## Quiz Yourself

1. Entrepreneurs are most likely able to...
  - A. Sit still
  - B. Get caught in a rut
  - C. Think outside the box or triangle
  - D. Not play
  - E. Be followers rather than leaders
2. What are some of the "don'ts" for effective brainstorming?
  - A. Evaluate anything
  - B. Capture everything
  - C. Encourage participation
  - D. Ask clarifying questions
  - E. Write things down
3. What are some of the "do's" for effective brainstorming?
  - A. Ask judging questions

- B. Force participation
  - C. Ask clarifying questions
  - D. Evaluate anything
  - E. Hog the show
4. What are some things that entrepreneurs are always on the lookout for?
    - A. New opportunities
    - B. Finding a problem that's already solved
    - C. A new job at another company
    - D. Innovative ideas
    - E. Both A and D\*
  5. What makes ideation different from brainstorming?
    - A. Brainstorming is done in a group, while brainstorming is an individual exercise
    - B. The process of ideation seeks solutions for problems that are not yet defined, in many cases.
    - C. Ideation involves looking at existing problems, while brainstorming tries to come up with new solutions
    - D. Ideation is done at night, while dreaming, while brainstorming is done during the day
    - E. None of the above
  6. True or False: Both brainstorming and ideation are processes invented to generate as many ideas as possible
  7. True or False: To be a successful entrepreneur, it is essential that one graduates from college
  8. True or False: Ideation is more visionary compared to brainstorming and seeks solutions for problems that are not yet defined in many cases.
  9. True or False: It is important to ask clarifying questions while brainstorming in order to create new valuable ideas and insights.
  10. True or False: It is not important to find a relevant problem worth solving in order to create a successful business.

## What to do Before Lesson Four

By now, you should have some idea (maybe a real wild and crazy one!) for a business. Look at the worksheet below. Please fill this out. This worksheet will be helpful when you actually create your own lean canvas business plan.

Name: \_\_\_\_\_ Age: \_\_\_\_\_ School: \_\_\_\_\_

1. Go online and find two businesses that you like (e.g., Nike, Lulu's, Forever 21). What is their "mission statement?" For example, Google's mission statement is: "To organize the world's information and make it universally accessible and useful."
2. What would be a good "mission statement" for your business?



3. What is a good three or four-word “mantra” for your business (e.g., Just Do It!)?
4. Describe the Product/Service. What makes your business idea unique?
5. Describe the Place you would set up your business and the Place you intend to sell your product or service.
6. How would you Promote your business?
7. At what Price would you sell the product or service? How would you determine this?
8. What would be a good name for this business?



## Lesson Four: Design Thinking

Before reading any further, make sure you have watched these videos.

<a href="https://www.youtube.com/watch?v=0LYWPMBxpH8&amp;t=36s">https://www.youtube.com/watch?v=0LYWPMBxpH8&amp;t=36s</a> (5:14) - “Lesson 4-Design Thinking”
<a href="https://www.vox.com/videos/2017/9/21/16227280/designer-ideo-tim-brown">https://www.vox.com/videos/2017/9/21/16227280/designer-ideo-tim-brown</a> (4:50) - “IDEO’s Tim Brown Explains Design Thinking”
<a href="https://www.youtube.com/watch?v=5G0ndS3uRdo">https://www.youtube.com/watch?v=5G0ndS3uRdo</a> (1:00) - “A Look at the Sustainable Development Goals”
<a href="https://www.youtube.com/watch?v=5_hLuEui6ww">https://www.youtube.com/watch?v=5_hLuEui6ww</a> (3:02) - “Transitioning from the MDGs to the SDGs”

### The Big Picture

In Lesson Three, you learned about brainstorming and ideation. Today’s lesson will take this a bit further, by introducing a concept known as “Design Thinking” (DT). According to [IDEO](#) (pronounced, “Eye’ dee oh”), the world needs more creative thinkers. DT is defined as a process for creative problem solving.

Think of DT as ideation on steroids! DT utilizes elements from the designer's toolkit like *empathy* and experimentation to arrive at innovative solutions. By using design thinking, you make decisions based on what future customers really want instead of relying only on historical data or making risky bets based on instinct instead of evidence.

Empathy? What is empathy? It is the ability to understand and share the feelings of another. For example, though I live in California, and at times California has suffered from temporary water shortages, I empathize with people in developing countries who do not have access to clean drinking water. As an entrepreneur who has studied water shortages and pollution, I may want to design a brand new way of helping people obtain clean water. That might mean creating a new way to pump water, or a new way to haul water, or a new way to sanitize dirty water, or a new way to bottle water. With this idea in mind, I can find a group of like-minded friends to brainstorm, or to ideate. But because my problem is based on empathy and guesses as to what future customers might want, I may want a bolder, more systematic way of unlocking creativity.

The wheel below shows an example of how DT works.



Most definitions of DT include [six steps](#), starting with empathy. What is the problem, and who are the users? Then, we define where the problem exists and we ideate a range of crazy, creative ideas. The next step involves developing a prototype. This may be hard to do, but it is crucial. A rough prototype is much cheaper than building a finished product that nobody wants! When creating the prototype, the entrepreneur must build real representations for a range of his ideas. The fifth step is testing the prototype with prospective customers. Finally, the idea needs to be implemented.

## "Questions and Answers

**Question #1** – Are most entrepreneurs driven by the thought of making lots of money, or are they driven by a problem worth solving?

**Answer** – As Steve Jobs said, most entrepreneurs are so passionate about their idea that other people think they are crazy. They believe that their idea can solve a problem and, concurrently, that their solution can make a profit by selling it to willing customers. So the answer to this question is that most entrepreneurs are driven by the idea, first. The secondary goal is to make lots of money.

**Question #2** – Why is empathy a part of design thinking?

**Answer** – Some entrepreneurs are more driven to succeed because of the profit they can earn, while others are more driven to solve a social problem. These people want to make a social impact. If a business idea can solve a big social problem, then the person who pursue this business is known as a social

entrepreneur. Social entrepreneurs are design thinkers.

**Question #3** – The United Nations has identified 17 Sustainable Development Goals (SDGs). What are some of them?

**Answer:** Please visit this [web page](#). Look around and see which goals are most interesting to you. Note that the overall goal of the SDGs is to reduce poverty in all its forms everywhere. To achieve this, these goals address such societal problems as hunger, sustainable agriculture, healthy lifestyles, quality education, gender equality, and many more. The web site describes actually social enterprises created by teens participating in the [SAGE program](#).



**Question #4** – Why is it important to build a prototype of your product?

**Answer** – When people actually see, or hold, an example of a product that can help improve their lives, they are much more likely to become customers. Another name for a prototype is the “minimum viable product” (MVP), which is formally [defined](#) as a “development technique in which a new **product** or website is developed with sufficient features to satisfy early adopters. The final, complete set of features is only designed and developed after considering feedback from the **product's** initial users.



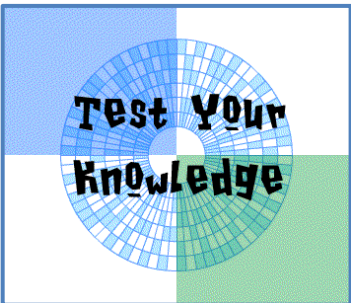
**Question #5** – Can teens really start a business that addresses a social problem?

**Answer** – Absolutely. Note that the [SAGE team from Ireland](#). Their business creates maps for developing countries to help plan their villages, towns, and cities in a more efficient manner. The ultimate goal is to create a better infrastructure that will eventually create jobs.

## Taking Action

**Exercise 1:** Review about the SDG winners here. Which one do you like best? Why?

**Exercise 2:** Does your business idea attempt to solve a social problem? If so, does it map onto one of the SDGs?



## Quiz Yourself

1. According to IDEO, the world needs more:
  - A. Creative thinkers
  - B. Liberal mindsets
  - C. Conservative mindsets
  - D. Facebook users
  - E. None of the above
  
2. There are several components in the Design Thinking framework. Which of the following is not one of them?
  - A. Empathy

- B. Ideation
  - C. Prototype
  - D. Leadership
  - E. Testing
3. What are some of the 17 Sustainable Development Goals?
- A. Good Health and Well-Being
  - B. End Hunger
  - C. Quality Education
  - D. Gender Equality
  - E. All of the above
4. In general, how many components are part of Design Thinking?
- A. 4 Steps
  - B. 10 Steps
  - C. 6 Steps
  - D. 5 Steps
  - E. The Texas Two-Step
5. What is the first step in DT (“Design Thinking”)?
- A. Define
  - B. Empathy
  - C. Ideate
  - D. Test
  - E. Implement
6. True or False: Most social entrepreneurs have characteristics of a design thinker because they want to build a business idea that can solve a big social problem.
7. True or False: A prototype is important in order for people to actually see, or hold, an example of a product that can help improve their lives, they are much more likely to become customers.
8. True or False: Empathy is not necessary for entrepreneurs who want to make a social impact.
9. True or False: Most entrepreneurs are driven by making lots of money, first and the idea, second.
10. True or False: The overall goal of the Sustainable Development Goals is to reduce poverty in all its forms everywhere.

## Taking Action

**Exercise #1:** It is crucial to the success of your businesses, and to your ability to sleep well each night with clear conscience, to operate in an ethical manner. Ethics means “doing the right thing,” even when there is no clear right and wrong answer. Below is a sample ethics pledge. Using our ethics pledge as an example, create and write down an ethics pledge for your business. Be creative, innovative and make sure you display an important message about ethics. This is the pledge by which you and your employees are expected to uphold. Below are some examples of ethics pledges.

### Ethics Pledge

- I shall always strive to be ethical in everything I do.
- I shall be honest and truthful in my business dealings.



- I shall be happy, helpful, and successful.
- I shall always live by the Golden Rule.
- I shall be kind and respectful.

Suggestion: Ask students if they have had any personal ethical dilemmas lately, such as knowing any classmates who have cheated on an exam, or someone who has stolen money. In the first case, ask them who the *stakeholders* are in such a situation.

One stakeholder, of course, is the person who cheated. Another stakeholder is the class as a whole, too.

What if the student gets caught? Will the parents be affected? Will the school's reputation be affected if it does not take proper action? Will you be affected if you do not report the student? A simple matter such as cheating on an exam has great possible ramifications to many other stakeholders.

You may want to ask, "Is this like an entrepreneur who *cheats* on his tax return?" Who are the stakeholders when someone doesn't pay their fair share of taxes? Other taxpayers?

And what about those citizens who won't get government benefits this year because the government has a budget shortfall?

There are no right and wrong answers here. The objective is to get students to think about ethical situations, and to brainstorm situations that they have been in when there is not a black and white answer – only gray!

**Exercise #2:** If you haven't already done so, watch this video <https://www.youtube.com/watch?v=2nW9lg-fenY> (4:03) "Lean Canvas Example (Vegan Restaurant)" Then sketch out a very rough draft of your lean business canvas on the template below, or using the template that you can find here. Focus primarily on Problem(s), Customer segments, and Solution(s).

Problem(s)	Solution(s)	Unique value proposition(s)	Unfair advantage	Customer segments
	Key Metrics		Channels	
Cost structure			Revenue streams	

## What to do Before the Next Lesson

Watch this video. [“The Lean Canvas Business Model-Creating the Killer Business Plan”](#) (16:31) – “The Lean Canvas Business Model - Creating the Killer Business Plan (Amazon Example)”

What was Amazon’s Unique Value Proposition (UVP) and Unfair Advantage?





## Lesson Five: Organizing Your “Big Idea” Using the Lean Canvas Business Model

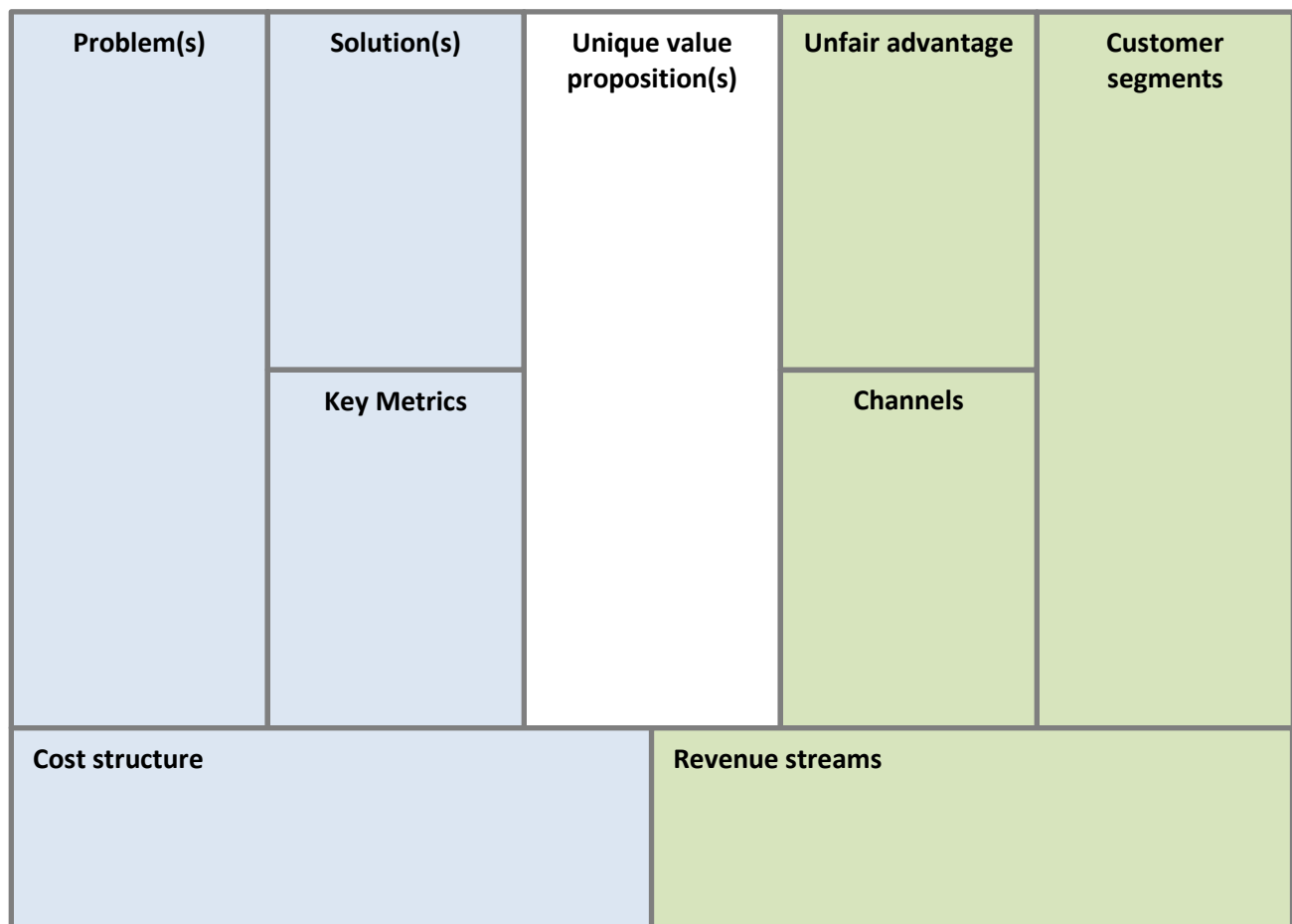
Before reading any farther, make sure you watch these videos:

[https://www.youtube.com/edit?o=U&ar=1&video\\_id=yq0rTu8aOyl](https://www.youtube.com/edit?o=U&ar=1&video_id=yq0rTu8aOyl) (5:14) “Lesson Five-Organizing Your ‘Big Idea’ Using the Lean Canvas”

[“The Lean Canvas Business Model-Creating the Killer Business Plan”](#) (16:31) – “The Lean Canvas Business Model - Creating the Killer Business Plan (Amazon Example)”

### The Big Picture

At the end of Lesson Four, we asked you to begin putting your ideas down on one sheet of paper. This page has nine building blocks, or “cells”, and [it looks like this](#):



We call the single page, with nine cells in it, a *lean canvas*.

This is the business model” that describes the rationale of how a business creates, delivers, and captures value. Unlike a traditional “business plan,” which often looks like a dissertation and can be over 50 pages long, the heart of the lean canvas is its simplicity. Behind each cell, however, an entrepreneur must do more legwork to support the assertions in the lean canvas.

We urge you to read [An Introduction to Lean Canvas](#), by Steve Mullen. He explains the components of

each cell. Let's review them:

### 1. Problem

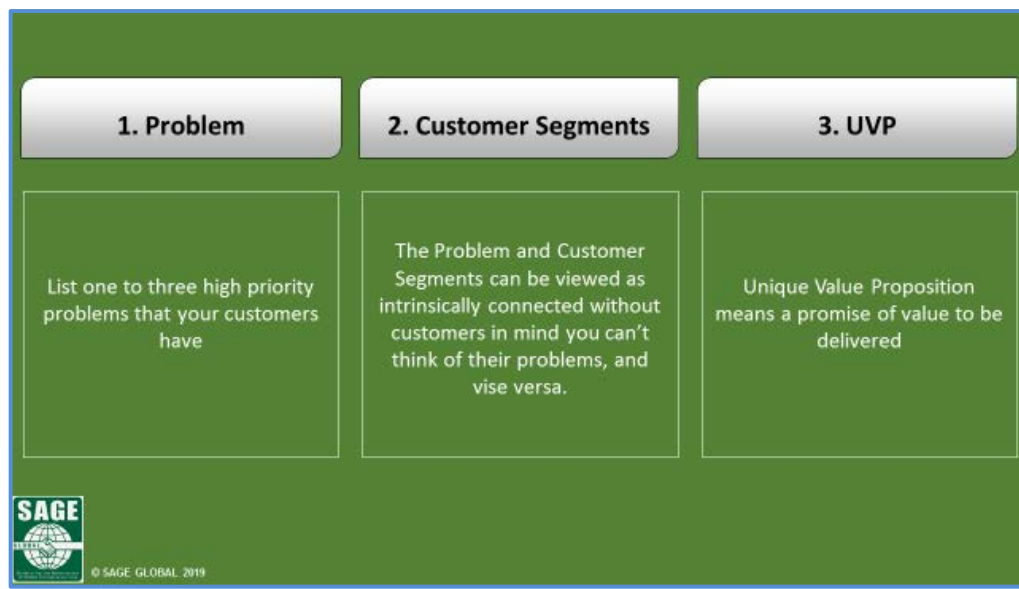
Each customer segment you are thinking to work with will have a set of problems that they need solving. In this box, try listing three high priority problems that your customers have. Without a problem to solve, you do not have a product/service to offer.

### 2. Customer Segments

The Problem and Customer Segments can be viewed as intrinsically connected – without customers in mind you cannot think of their problems, and vice versa.

### 3. Unique Value Proposition

In the middle of the canvas is the UVP. A value proposition is a promise of value to be delivered. It is the primary reason a prospect should buy from you. A way to get your head around this is to think: “Why am I different? And why should my customers/investors invest time in me?” See here for more details about the [UVP](#).



### 4. Solution

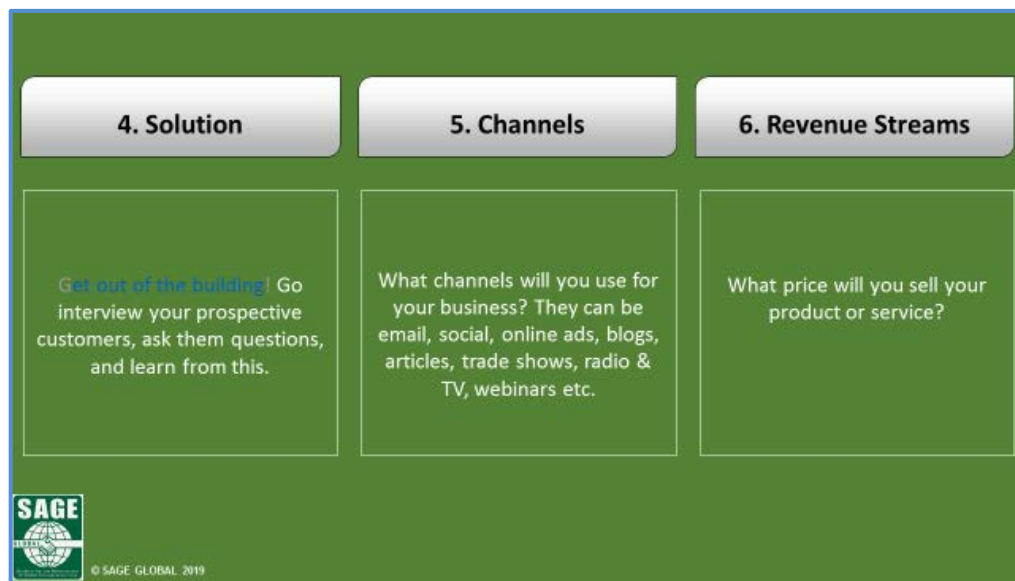
Finding a solution to the problem is the golden egg! You are not going to get this right off the first bat – it's okay, as that is what the lean canvas is all about. What you need to do is *get out of the building* – a phrase coined by the godfather of Lean Startup, Steve Blank. The solution is not in your office, where you have fallen in love with your idea, but it is out there in the streets. So go interview your prospective customers. Ask them questions, and learn from this.

## 5. Channels

Channels are ways for you to reach your customers. The digital marketing age gives entrepreneurs a cheap, efficient, and measurable means to reach their target audience. What channels will you use for your business? Remember, in the initial stages it is important not to think how you are going to grow (i.e., “scale”) your business, but to focus on learning. With this in mind, try to think which channels will give you enough access to your customers at the same time give you enough learning. Channels can be email, social, online ads, blogs, articles, trade shows, radio & TV, webinars etc.

## 6. Revenue Streams

At what price will you sell your product or service? How you price your product will depend on the type of business you are in. However, it is quite common for startups to lower their prices, perhaps even offering it for free to gain traction. However, remember, getting people to sign up for something free is a lot different than asking them to pay. There is also the idea of perceived value. If something is given away free, people may think it is worth exactly that--nothing!



## 7. Cost Structure

Here you should list all the operational costs for taking this business to market. How much are your startup costs? How much will it cost to build a prototype, or a landing page for your product? A landing page is a one-page web site where you describe your business’s features and benefits, and offer prospective customers a chance to buy your product before it is ready for market! This is a great way to test whether a market exists!

What is your [burn rate?](#) How much are your total monthly operating costs, and how much money do you have to cover these costs? How much will it cost to interview your customers? How much do market research papers cost? You can then use these costs and potential revenue streams to calculate a rough

breakeven point. Breakeven, as you will see later in the course, is that point where revenues minus all expenses equals zero.

## 8. Key Metrics


Every business, no matter what industry or size, will have some key metrics that are used to monitor performance. Metrics should be tangible, in that they should help determine revenue. For example, a key metric is how many people signed up for your monthly newsletter. How many people pre-paid for your product from your landing page? A key metric is NOT how many people visited your web site!

## 9. Unfair Advantage

This is the most difficult to block to answer. However, do try to think about this as having an unfair advantage can help when it comes seeking partners and investors. Here is a great definition of unfair advantage: *“The only real competitive advantage is that which cannot be copied and cannot be bought.”* – Jason Cohen. Unfair advantage can be insider information, a dream team, getting expert endorsements, existing customers, etc. So rather than think about adding something like “commitment and passion” as an unfair advantage (because it is not), think about what you have that no one else can buy.

When completing a lean canvas, you should complete the cells in the following order:

7. Cost Structure	8. Key Metrics	9. Unfair Advantage
List all the operational costs for taking this business to market.	How many people signed up for your monthly newsletter? How many people pre-paid for your product from your landing page?	Think about what you have that no one else can buy.

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Below is a completed lean canvas for Myface. Take a few minutes to visit this website: <http://myface.photos/susi2017>. Kunal Bhavsar, a Chico State MBA student, and I, Professor Curt DeBerg, started this business idea. We think we have a big idea. Spend a few minutes reviewing the lean canvas below.

## Lean Canvas for Myface



Problem(s)	Solution(s)	Unique value proposition(s)	Unfair advantage	Customer segments
Remembering names is hard	Easy-to-use memory training tool	The fastest and most fun way to learn student names	Knowledge of the market	Individuals who need, or want, to remember large groups of names
Some jobs (like teaching) depend on remembering names	Match photos with names		Access to talent	Organizations that wish to build camaraderie
Students don't learn as much when they know the instructor doesn't know who they are	Match names with profiles		Channels	Early Adopters
	Key Metrics		Facebook ads aimed at early adopters	Professors
	# of interviews yielding positive results		Landing page	Departments/ Colleges
	# of beta testers		Listserves and LinkedIn user groups	Universities
	Advance orders from landing page		Academic conferences	
Cost structure		Revenue streams		
Customer acquisition costs (ads)		Teachers buying for a class		
Programming expertise		Organization software license based on number of images		
People (webmaster, administrator)		Organization software license based on users		
Legal		Individual students buying the software app		

## Questions and Answers

**Question #1** – I do not have a “big idea” yet? What shall I do?



**Answer** – Ask yourself, “What am I passionate about? What do I love to do? What am I good at?” If you play the guitar and are good at it, you might want to start a band. If you do play in a band, what will make you special? Who will listen to you? If you love math, why not start a math tutoring business for classmates who are having a hard time, or for younger students? If you love computer games, ask yourself if you can create a game that is better than your favorite games. If you love cooking, then consider selling your cakes and cookies at future sporting events at your school.

Do you see an opportunity? Is there a problem? Can you solve it? Everyone is good at something. Now, it

is up to you to determine if the market will give you an A grade by buying your creation!

**Question #2** – Who is your customer? Is there more than one type of customer?



**Answer** – That is the cell on the far right in the lean canvas. Without a customer, you do not have a problem worth solving. Get out of the building. For Myface, we need to conduct surveys of students, faculty, and others to see if they would like an easier way to learn names. We do not know, yet, if students, professors, or the university itself will buy the Myface software. Alternatively, are there other customer segment? How about large companies that conduct staff training sessions?

**Question #3** – What is a lean canvas?



**Answer:** A lean canvas is a one-page sheet of paper summarizing your business model. The page is broken down into nine parts. Problem. Customer Segments. Problem. Unique Value Proposition, Key Metrics. Channels. Unfair Advantage. Cost Structure. Revenue Streams.

## Taking Action

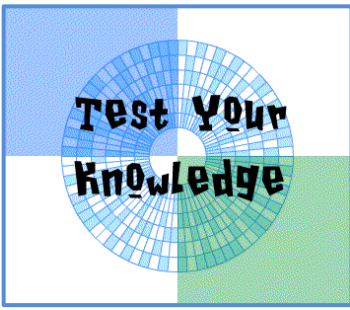
**Exercise 1:** The class, as a whole, should review the Myface lean canvas. What do you think can be improved? Do you think Kunal and Dr. DeBerg have a problem worth solving? How can they find out?



**Exercise 2:** Pair up with one other student in the class and compare your lean canvases. Offer input and constructive comments to help the student improve the canvas.



**Exercise 3:** A few volunteers should be asked to come to the front of the room and show the class their lean canvas. The class, as a whole, should provide input and constructive criticism.



## Quiz Yourself

1. What are some things that a *lean canvas* or a “business model” should describe?
  - A. Problem
  - B. Customer Segments
  - C. Channels
  - D. Metrics
  - E. All of the above
2. What is a Unique Value Proposition?
  - A. A problem that needs solving
  - B. A promise of value to be delivered
  - C. A solution to a problem
  - D. A way to reach your customers
  - E. Something you say to a girl or guy in a bar
3. What is cost structure?
  - A. A price at which a product will be sold
  - B. A way to reach your customers
  - C. A list of all operational costs for taking a business to market
  - D. A solution to a problem
  - E. A building with a marquee that says “Cost” on it
4. What is an example of Key Metrics?
  - A. The number of people that pre-paid for a product
  - B. The number of people signed up for a monthly newsletter
  - C. The number of people visiting a website
  - D. The number of keys that can be inserted in a lock
  - E. Both A and B
5. What is the first thing you must understand before starting a business?
  - A. Who are my investors?
  - B. How will I sell my product or service?
  - C. What problem am I trying to solve?
  - D. Who are my customers?
  - E. How much money can I make?
6. True or False: When finding a solution to the problem it is important to interview your prospective customers, ask them questions and learn from this.

7. True or False: The digital marketing age makes it harder for entrepreneurs to reach their target audience in a cheap and efficient way.
8. True or False: Metrics should be tangible which means that they should help determine revenue.
9. True or False: Unfair advantage can be insider information, a dream team, getting expert endorsements, and existing customers.
10. True or False: Cost structure is what price you will sell your product or service.

## **What to Do Before the Next Lesson**

Watch this video: <https://www.youtube.com/watch?v=MYNuR70oyJc> (5:01) – “Lesson Six-A Closer Look at the Lean Canvas. Dr. DeBerg uses the myface.photos example to help students understand the lean canvas. He walks students through each of the nine cells, applying his entrepreneurial idea to the lean canvas. Do you think he has a problem worth solving? Time will tell!

Also, continue working on your lean canvas. Before long, we will ask you to create a “pitch” to see if anyone wants to invest in your company, or buy your product!



## Lesson Six: A Closer Look at the Lean Canvas

Before reading this lesson, make sure you watch these videos:

<a href="https://www.youtube.com/watch?v=MYNuR70oyJc">https://www.youtube.com/watch?v=MYNuR70oyJc</a> (5:01) – “Lesson Six-A Closer Look at the Lean Canvas”
<a href="https://www.youtube.com/edit?ar=1&amp;o=U&amp;video_id=dBY6xJud9Z8">https://www.youtube.com/edit?ar=1&amp;o=U&amp;video_id=dBY6xJud9Z8</a> (4:23), “Remembering Student Names Using myface.photos”

### The Big Picture

By now, you should have a rough draft of the lean canvas for your business idea. Lesson Five showed you an example using the lean canvas for Myface. This lesson will go deeper into the Myface example. This should be helpful for your lean canvas. Below is the lean canvas presented in Lesson Five.

### Lean Canvas for Myface

Study the example below.

Problem(s)	Solution(s)	Unique value proposition(s)	Unfair advantage	Customer segments
Remembering names is hard	Easy-to-use memory training tool	The fastest and most fun way to learn student names	Knowledge of the market Access to talent	Individuals who need, or want, to remember large groups of names Organizations that wish to build camaraderie
Some jobs (like teaching) depend on remembering names	Match photos with names Match names with profiles			
Students don't learn as much when they know the instructor doesn't know who they are	Key Metrics # of interviews yielding positive results # of beta testers Advance orders from landing page		Channels Facebook ads aimed at early adopters Landing page Listservs and LinkedIn user groups Academic conferences	Early Adopters Professors Departments/ Colleges Universities
Cost structure Customer acquisition costs (ads) Programming expertise People (webmaster, administrator) Legal		Revenue streams Teachers buying for a class Organization software license based on number of images Organization software license based on users Individual students buying the software app		

Then go [here](#) and see how the owners of the business are building a prototype. Is the prototype appealing? Can it solve the problems in the first cell?

Now, let's take a close look at each box. As we go through this, be thinking about your own lean canvas.



What can you do to improve it?

## Questions and Answers

### Question 1: What is the problem?



**Answer** - You think you might have a problem worth solving, but you cannot be sure unless you have some customers in mind. Myface has identified several problems, including:

- Remembering names is difficult
- Some jobs depend on, and benefit from, remembering names. This is especially true for high contact jobs involving many new faces, either on an ongoing basis (e.g., Sales, Human Resources, Doctor's office visits) or in waves (e.g., teachers)
- Some organizations depend on having employees know each other (e.g., companies that conduct staff training sessions in teams; teammates can get to know one another before face-to-face or online meetings).

However, before you go very much further, you should try to imagine who your early customers would be.

### Question 2: Who are the customers?



**Answer** - The problem must *always* go hand-in-hand with customer segments. Without customers, you have no problem worth solving! For Myface, the potential customers are:

- Individuals who need, or want, to remember names
- Potential early adopters include college faculty, and the colleges themselves

- Companies that need to foster camaraderie

At this stage, you should write a “problem interview” script like the one in Appendix A to this lesson. Then, you should go interview at least 20 prospective customers to get their “take” on your big idea.

### Question 3: What is the Unique Value Proposition (UVP)?



Myface’s UVP is that, based on a review of other products that make learning names easier, no other program is as fast and fun. One novel aspect of Myface is that, by simply hitting the SHUFFLE FACES button on the webpage, all the faces change position, so that the teacher must seek out facial characteristics rather than relying on the position of the photo. It makes learning faces a lot like the old card game, *Concentration*.


### Question 4: What is the solution?



**Answer** – Myface offers a software application that makes it easy for faculty to remember names, with students loading up their own and photos. This information is seamlessly updated to the class Myface page and faculty can begin memorizing names on the first day of class. In other words, students do most of the work, leaving the best part for last: the faculty actually getting to know students. For example, on the first day of class, students can load their own photo and profile directly to the specified web page (e.g., <http://myface.photos/yourclass>). Myface does not rely on any Classroom Management System, like

Blackboard.

The teacher gives simple directions in the first five minutes of class, using guidelines such as these:

STUDENT INFORMATION SHEET	
<b>Getting to know you</b>	
I would like to get to know you – this begins with my learning your name. You can help: Just follow these instructions.	
<b>Part I.</b> Upload your name, age, and profile, including a brief biography to <a href="http://myface.photos/mycourse">http://myface.photos/mycourse</a> . Make sure to include your hometown, intended major, favorite hobby, and dream job (see Miguel's example below)	
<b>Part II. Take a selfie.</b>	
<ul style="list-style-type: none"><li>• Take your picture against a solid colored background. <i>A white or neutral colored wall is perfect.</i></li><li>• Make sure your face and head take up most of the frame. <i>Do not include your body or other people.</i></li><li>• Stand square to the camera. <i>Keep the camera level to avoid odd angles.</i></li><li>• Smile!</li></ul>	<p>Example Photo</p> 
<b>Things to avoid:</b>	
<ul style="list-style-type: none"><li>• Don't wear a hat.</li></ul>	
<ul style="list-style-type: none"><li>• Don't include friends in your picture.</li></ul>	
<ul style="list-style-type: none"><li>• Don't include your body or other items in the picture.</li></ul>	
<ul style="list-style-type: none"><li>• Don't cover your face with hair.</li></ul>	
<ul style="list-style-type: none"><li>• Don't wear sunglasses.</li></ul>	
<ul style="list-style-type: none"><li>• Don't use filters on your photo.</li></ul>	

flipface.io/curt/profile.php?u=Miguel

# Miguel

I have always had a strong interest in the world of business. Whether it was selling snacks for a school fundraiser or reselling thrifted clothing to my friends, business has always been on my mind. My senior year of high school I worked as a brand ambassador for a tuxedo rental company named SimpleTux. As I moved on to college I ended up getting the opportunity to be a brand ambassador for Uber. I never imagined myself to be working for a company like this so early in my career. Through this job, our team of brand ambassadors helped bring Uber to Chico, California. I plan to graduate Chico State with a degree in business marketing. After graduation I plan to either work marketing for a clothing label or magazine, or to focus on running my own companies. This course will help me learn how to successfully start up and run a business. This will come in handy because I am currently running my own magazine called Lavender Issue. It focuses on youth culture, art, photography and writing. I am also in the process of creating my own luxury clothing label. With the guidance of my professors, I will also learn how to make great strategic choices when it comes to making business decisions. I am excited for all the valuable information that I will attain during this course.

Learn how to start up and run a successful business.  
Learn how to work in high stress situations.  
Better my skills when it comes to networking and presenting.




## Question 5: What are the channels?



Answer – There are many ways to use digital marketing age here. For example, if the primary target for early adopters is the teacher, then Facebook or YouTube ads can be placed targeting younger educators who are more inclined to get to know their students. Instagram is another popular place to advertise. In

addition, LinkedIn is another way to explain your idea, focusing on groups such as university educators and community college teachers. Another idea is to build a landing page (e.g., a one page website) briefly explaining the product, with an offer for a deep discount if a teacher pre-orders.

Yet another way is for Kunal and Dr. DeBerg to attend educator conferences that focus on teaching and learning. They could present academic research papers here, or they can set up poster sessions to describe their idea.

#### **Question 6: What are the revenue streams?**



Before you can answer this, you must have a good idea of your early adopters. In Myface's case, Kunal and Dr. DeBerg think it might be the university instructor. But they do not really know unless they ask them! That is why interviews of potential customers are crucial before you fall too much in love with your idea. It bears repeating: get out of the building!

Who knows, maybe nobody wants the software at all, either because teachers have their own way of doing things, or they just don't care about knowing who their students are.

But if one in 10 teachers are interested, and one in 10 of these really likes the idea, then 1 in 100 teachers are your early adopters. Would a teacher pay \$500 for a class of 100 students, so long as the Myface website is administered effectively and seamlessly?

Or, perhaps, the revenue stream might come directly from the student, at the behest of the teacher. After all, don't teachers require students to buy textbooks and supplies for the course? If instructors see Myface as a vital part of the course, he or she might require students to buy the app.

What if students buy the Myface app for \$2.95 each? For a class of 100 students, that's \$295.

There is yet another alternative. Maybe the university itself would buy a license so that all faculty have access to the software. If Myface sells its license by the image, for example. Assume a 15,000-student university buys a one-year license for \$1 per student. Now we are talking big money! But then that leads to another question: at what price would Myface offer a second-year license?

Answers to these questions are much easier to find when interviews have resulted in a clear signal that there is a problem worth solving; when you have a viable prototype/landing page, and the product or service is almost good enough to go to market.

#### **Question 7: What is the cost structure?**



**Answer** – Costs are a function of revenue. In other words, the higher the revenue, the higher the costs to generate that revenue. There are three types of costs:

- Initial startup costs
- Fixed, recurring costs (called fixed expenses)
- Variable, recurring costs (called variable expenses)

Initial startup costs for Myface might include the cost to hire a programmer on an hourly basis to help Kunal and Dr. DeBerg code, or the cost to have a web developer create a one-page landing page. Other startup costs include the cost to obtain a business license, and maybe the cost of filing fees to be recognized by the state of California as a special corporation.

Fixed, recurring costs would include insurance, rent, utilities, advertising, and cell phone charges. These costs have to be paid whether or not you sell 10 items or 1,000. They remain the same no matter the sales volume.

Variable, recurring costs would increase with as sales volume increases, or goes down when sales go down. Variable expenses would be negligible for a software company like Myface, because it does not sell physical merchandise like a company such as Costco. For companies that sell inventory, the biggest variable expense is the cost of inventory sold. For example, if a bicycle costs Costco \$100 and then sells it for \$130, the cost of the bicycle is a variable expense. The more bicycles sold, the more the total cost of bicycles sold.

Contrast this with insurance, a fixed expense. It does not matter how many bicycles are sold, total insurance expense will remain the same.

**Question 8: What are key metrics?**





As indicated in Lesson Five, metrics should be tangible, in that they should help determine revenue. For example, for Myface, one of its first key metrics is how many interviews of prospective teachers yielded insight as to how well the idea was received, and at what price could it be sold? How many people signed up for my newsletter? How many people pre-ordered on my landing page?

### Question 9: What is the unfair advantage?



Myface has an “insider’s perspective” because Dr. DeBerg is professor; as such, he knows the “market.” Based on this 30-year teaching career, he certainly has met many like-minded faculty who enjoy learning student names. At conferences, he runs into colleagues all the time who learn student names in different ways. When he shows them Myface, the reaction has usually been positive.

So, the primary unfair advantage is that the entrepreneur, Dr. DeBerg, is intimately familiar with his target audience. Moreover, Dr. DeBerg’s classrooms are like experimental labs. He see what works and what does not. Finally, many of Dr. DeBerg’s students offer suggestions as to how to improve the software, and even make suggestions as to the best ways to get the word out using digital marketing. In essence, his students are on the cutting edge. As a result, they are a free resource!

## Taking Action

### Exercise 1:

Google the term, “Learning Student Names.” What are the top three hits on Chrome?

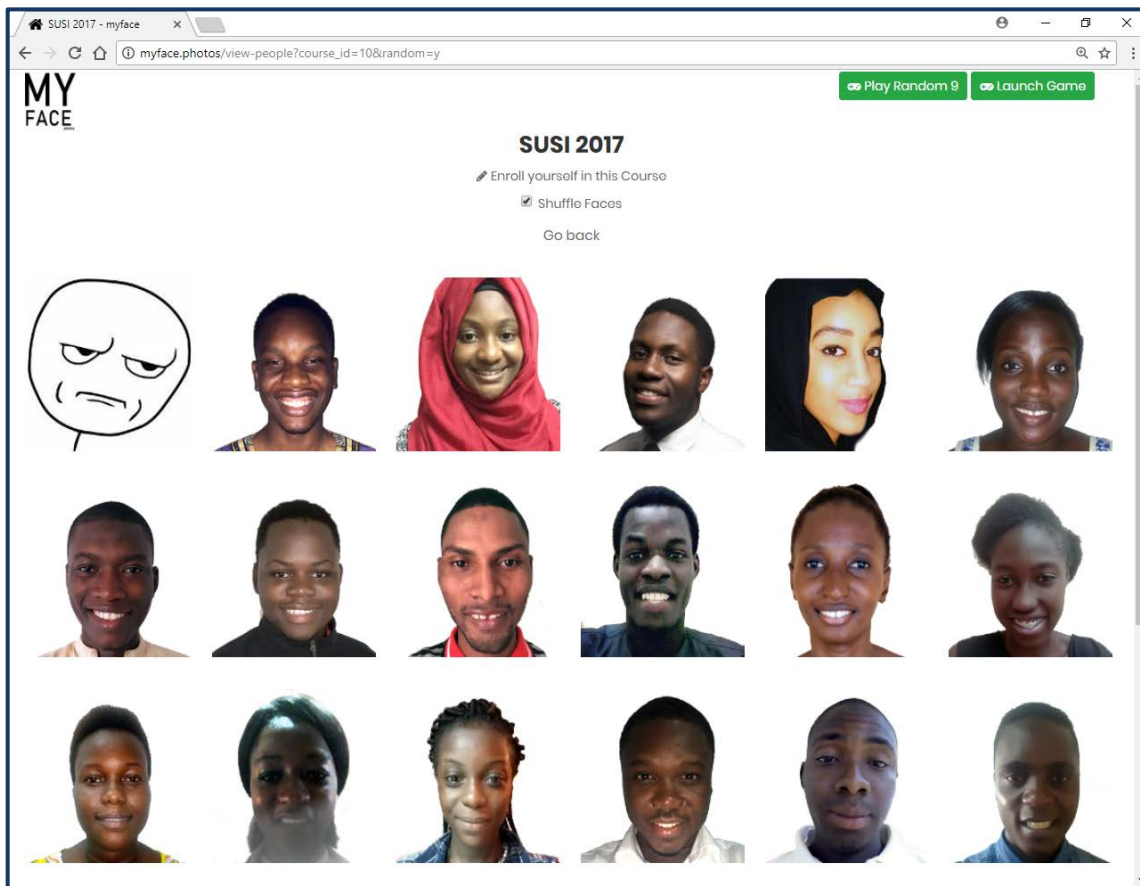


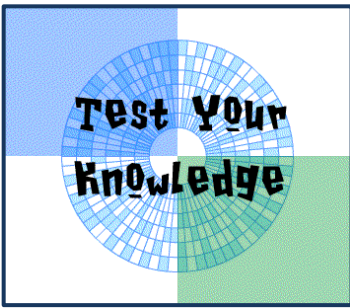


**Exercise 2:** Take ten minutes to skim one of the three articles that came up first in your search in Exercise 1. What are three popular ways to learn student names?



**Exercise 3:** Go to <http://myface.io/susi2017>. Find Mimi. Where is she from? What are her hobbies? Go back to the main page and click on “Shuffle Faces.” Where did Mimi go?





## Quiz Yourself

1. What are some fixed or recurring costs that should be included in the cost structure?
  - A. Insurance
  - B. Rent
  - C. Utilities
  - D. Cell Phone
  - E. All of the above
2. Why do businesses make a landing page?
  - A. In order to determine if there are early potential customers
  - B. In order to solve a problem
  - C. In order to calculate cost structure
  - D. In order to predict revenue
  - E. None of the above
3. What is the problem that Myface has identified?
  - A. Remembering names is hard
  - B. Some jobs depend on remembering names
  - C. Students learn less if they know the instructor doesn't know who they are
  - D. All of the above
  - E. None of the above
4. What are some important ways to use digital marketing?
  - A. Using Facebook ads to target specific customers
  - B. Using YouTube to buy a display ad
  - C. Focus groups
  - D. Ads on the radio
  - E. Both A and B
5. What is the proposed solution to Myface's problem?
  - A. Easy-to-use memory training tool
  - B. Match photos with names
  - C. Match names with profiles
  - D. Students load their own photos directly to Myface
  - E. All of the above
6. True or False: The problem does not always need to go hand-in-hand with customer segments.
7. True or False: One way to use channels is by building a landing page briefly explaining the product, with an offer for a deep discount on your product.
8. True or False: The cost structure includes initial startup costs.

9. True or False: Variable, recurring costs would not increase as sales volumes increase because those costs do not change.
10. True or False: Fixed costs include insurance, rent, utilities, and advertising. They remain the same no matter the sales volume.



### **What to Do Before Lesson Seven**

Read the Problem Interview Script in Appendix A to this lesson. Then, write a script for your business (soon, you will go out and interview at least 20 early adopters of your product or service).

**APPENDIX A:**  
**PROBLEM INTERVIEW SCRIPT**

**(Myface Example)**

**Welcome - 2 minutes**

Thank you very much for taking the time to speak with me today.

I am currently working to build a software program that makes it easy and fun to remember student names. I got the idea when I realized that I only learned only a few of my students' names each semester.

I read that students really care about them, and the first thing that shows you care is to know their names. But before getting too far ahead of myself, I wanted to make sure that teachers might be interested in a software program we call Myface. We want to know if teachers and universities would be interested in buying it for their class or their campus as a whole.

The interview will work like this. I'll start by describing the main problems I am tackling, and then I'll ask if any of those resonate with you.

I'd like to stress that we don't have a finished product yet, and our objective is to learn from you, not to sell or pitch anything to you.

Does that sound good?

**Collect Demographics (Test Customer Segment) - 2 minutes**

Before we go on to the problems, I'd like to learn a little about you.

What is your current profession?

University Teacher ____
University Dean or Administrator ____
University Student ____
Business Leader ____
High School Teacher ____
High School Administrator ____
High School Student ____
Other ____

Did you have a hard time learning names?

Do you wish you were better at learning names?

Do you currently have any techniques to help you learn names?

## **Tell a Story (Set Problem Context) - 2 minutes**

So, one of the biggest problems that students complain about is that teachers do not care about them. They often go through an entire course and the teacher has no clue who they are. Does any of this resonate with you?

## **Problem Ranking (Test Problem - see if they really struggle with this problem) - 4 minutes**

Why do you think this is a problem?

1. Teachers simply don't care? Learning student names isn't my priority. My priority is teaching course material. Learning names is touchy-feely.

Priority ranking: \_\_\_\_\_ Pain level: \_\_\_\_\_

2. It's too hard? Since I have a poor memory, I don't even try.

Priority ranking: \_\_\_\_\_ Pain level: \_\_\_\_\_

3. Classes are too large? With classes of 40 student or more, there's no way I want to spend the time trying to learn my student names and profiles.

Priority ranking: \_\_\_\_\_ Pain level: \_\_\_\_\_

10 = Highest priority    5 = Mid-Priority    1 = Lowest Priority

Are there other reasons that I didn't list above?

## **Explore Customer's Worldview (Test Problem) - 15 minutes**

How do you address the attitude problem?

How do you address the difficulty problem?

How do you address the size problem?

## Testing and Pricing

1. Would you be interested in beta testing Myface?
2. If it works well, would you be interested in buying it, or recommending it to your organization to buy it?
3. How much would you pay for it?
4. Would you buy it by the class, or by the number of students?
5. Would your organization be interested in buying a site license, do you think?
6. Alternatively, might you require individual students to buy the Myface app for their phone as part of the required class materials?
7. If so, what would be a fair price for an individual student to pay?

## Wrapping Up (the Hook and Ask) - 2 minutes

We are almost done with our product, and I think we have a pretty awesome solution to help teachers not only learn student names, but to get to know a little bit more about them, too. We plan to offer a software program called Myface. It has three key features:

- It offers a fun way to remember names
- It's easy! Students to do all the work to upload the pictures and profiles; all a teacher has to do is start playing
- You can put students in groups (e.g., color-coded), which makes it even easier to remember names and it enhances group learning

No other system combines our powerful three components—fun, fast, and affordable. Would you like to sign up for our electronic newsletter?

### Tips:

1. Don't ask questions that might get a polite response back. Asking a yes or no question or whether or not they will use your service will often yield a polite answer.
2. Always ask questions that will make them tell you what they already do right now as an alternative to solve their problems.
3. Probe their behavior instead of asking them questions that leads them to answer that they want to use your solution.
4. The point of the interview is to learn about them, not to sell to them.
5. The trick to get people to talk more is by asking them open-ended questions like "What do you usually do to solve this problem." and not "Is this how you solve this problem nowadays?"

## Lesson Seven: Projecting Startup Costs, Expenses, and Revenues

Before reading this lesson, make sure you watch the following four videos:

<a href="https://www.youtube.com/edit?ar=1&amp;o=U&amp;video_id=uNjpJfHZTEk">https://www.youtube.com/edit?ar=1&amp;o=U&amp;video_id=uNjpJfHZTEk</a> (3:43), “Lesson 7-Projecting Startup Costs, Expenses, and Revenues”
<a href="https://www.youtube.com/edit?ar=1&amp;o=U&amp;video_id=qSaj6Stp5T0">https://www.youtube.com/edit?ar=1&amp;o=U&amp;video_id=qSaj6Stp5T0</a> (5:37) - Lesson 7-Larry's Lawn Service (Projecting Revenues and Expenses)
<a href="https://www.youtube.com/watch?v=ksnKQpdMgL0">https://www.youtube.com/watch?v=ksnKQpdMgL0</a> (1:32) - “Revenue & Profit Definition for Kids”
<a href="https://www.khanacademy.org/economics-finance-domain/core-finance/stock-and-bonds/valuation-and-investing/v/introduction-to-the-income-statement">https://www.khanacademy.org/economics-finance-domain/core-finance/stock-and-bonds/valuation-and-investing/v/introduction-to-the-income-statement</a> (15:26) - “Introduction to the Income Statement”

### The Big Picture

The two bottom cells in the lean canvas includes Cost structure and Revenue streams, respectively. Most entrepreneurs hate to think about costs, meaning cash going out; instead, they prefer to think about cash coming in!

As you can see, the main cash going out for Myface will be to pay experts to help Dr. DeBerg and Kunal to improve the software, to design a website-landing page, and to place ads in social media. Where will Dr. DeBerg get the money for this? Probably, from his personal savings, or he could borrow money from his friends.

Problem(s)	Solution(s)	Unique value proposition(s)	Unfair advantage	Customer segments
Remembering names is hard  Some jobs (like teaching) depend on remembering names  Students don't learn as much when they know the instructor doesn't know who they are	Easy-to-use memory training tool  Match photos with names  Match names with profiles	The fastest and most fun way to learn student names	Knowledge of the market  Access to talent	Individuals who need, or want, to remember large groups of names  Organizations that wish to build camaraderie
	Key Metrics  # of interviews yielding positive results  # of beta testers  Advance orders from landing page		Channels  Facebook ads aimed at early adopters  Landing page  Listservs and LinkedIn user groups  Academic conferences	Early Adopters  Professors Departments/ Colleges  Universities
<b>Cost structure</b>  Customer acquisition costs (ads) Programming expertise People (webmaster, administrator) Legal		<b>Revenue streams</b>  Teachers buying for a class Organization software license based on number of images Organization software license based on users Individual students buying the software app		

You can think of the “story” of business as having three chapters. The first chapter is to get your FINANCES in order. Chapter 2 has you INVEST in startup costs, which include things like computers, printers, cars, rent, advertising, and maybe inventory. Chapter 3 is you begin OPERATIONS. Let’s go into more detail.

Before a business can start spending money, and then earning money, it needs to receive its initial cash FINANCING. Most people start a business by taking money from personal savings, or they borrow money from friends or relatives. Once a prospective business owner can convince others that it will make money, then it may be possible to get a loan from a bank. Or you might take on a partner, or seek an angel investor. Sometimes, a company will obtain cash from crowdfunding sites like Kickstarter or Indiegogo (we will talk more about crowdfunding in Lesson Ten).





Once the FINANCING cash has been obtained, the company can begin INVESTING this cash in startup costs, like equipment, furniture, a company vehicle, and business licenses. Any cash spent on something that will last more than a year is an investing activity. Money spent on such things as insurance, rent, or inventory, which will happen on a regular basis, is considered a short-term OPERATING cost. These are also considered startup costs.

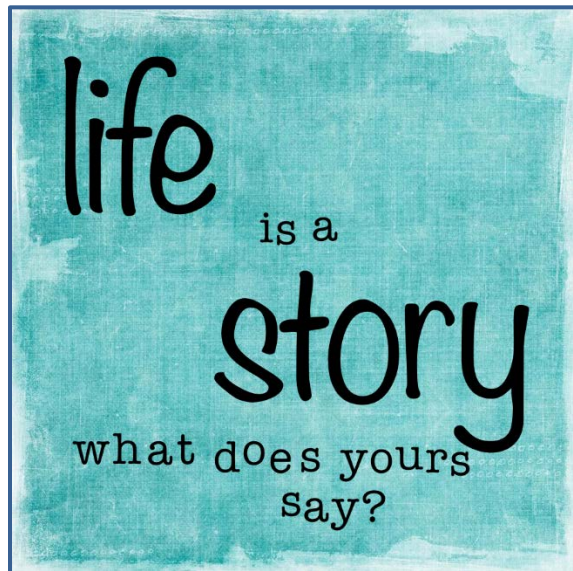


When the business is up and running, all money coming in from customers is considered OPERATING cash inflows (i.e., revenues), and all money going out for recurring costs (i.e., expenses) are OPERATING cash outflows.

It bears repeating: the “story” of business, as it affects cash, can be summarized into three “chapters,” or categories:

- a. Financing activities
- b. Investing activities
- c. Operating activities

[Note: as in life, the story of business really has a fourth chapter: decline and liquidation! Ultimately, all humans and their businesses die out.]



A company like Myface will not have too many startup costs, because Kunal is an expert at computer programming and web design. Initially, he can do most of this himself. He will not need to pay rent or insurance, or buy any equipment, because he can use his campus office on weekends and at nights to work on his business venture. However, a company that has inventory, or merchandise to sell, must factor in this cost in projecting startup costs.

One of the favorite words for an entrepreneur is *revenue*. This is money coming in from selling goods or services. Myface hopes to generate revenue from selling directly to college professors, or to their campus administrators.



Another favorite phrase is *net income*, which also goes by the word *profit*. Net income is simply the amount of revenue for a period minus the operating expenses.

To get a better handle on these phrases, let's take an example of a 16-year old named Larry. He loves working outdoors and he is good with his hands. Let's call his business "Larry's Lawn Service." In fall 2018, Larry is a junior at Anaheim High School. Here is what happened to Larry during his first week of operations for his new business "Larry's Lawn Service." He makes up a "scoresheet" to help him keep track

of his cash.



**Day 1a:** Larry used \$50 from his own savings account and opened up a business account called “Larry’s Lawn Service.”

		ASSETS =		DEBTS +	EQUITY	
Date	Type of Activity	Cash	Lawn Mower	Debt to Dad	Net Worth	Description
Day 1a	Financing	50.00			50.00	Transfer from savings
Day 1b	Financing					Loan from Dad
Day 2	Investing					Purchased lawn mower
Day 3	Operating					Supplies expense
Day 4	Operating					Advertising expense
Day 5	Operating					Service revenue
Day 6	Operating					Paid back Dad
Day 7	Financing					Withdrawal to go bowling
Balance	---					

Note that ASSETS (e.g., things owned, like cash) must always equal DEBTS + EQUITY. Now check out the next transaction.

**Day 1b:** Larry Dad loaned his \$500 to start his lawn service (his Dad does not charge interest!).

		ASSETS =		DEBTS +	EQUITY	
Date	Type of Activity	Cash	Lawn Mower	Debt to Dad	Net Worth	Description
Day 1a	Financing	50.00			50.00	Transfer from savings
Day 1b	Financing	500.00		500.00		Loan from Dad
Day 2	Investing					Purchased lawn mower
Day 3	Operating					Supplies expense
Day 4	Operating					Advertising expense
Day 5	Operating					Service revenue
Day 6	Operating					Paid back Dad
Day 7	Financing					Withdrawal to go bowling
Balance	---					

Note that cash goes up and his debt to dad goes up \$500.00 each. ASSETS still equal DEBTS + EQUITY. Another name for debts is "LIABILITIES".

Here are the next six transactions for the week, and how it affects his scoresheet.

**Day 2:** Larry purchased a \$450 lawn mower from John Deere Lawn Mowers.

**Day 3:** Larry bought \$30 of supplies from Office Depot.

**Day 4:** An advertisement was placed in the newspaper for \$14.

**Day 5:** Larry received \$80 in cash from two neighbors who purchased Larry's services.

**Day 6:** Larry paid back his Dad \$10 of the \$500 he borrowed.

**Day 7:** Larry took \$5 out of the business to go bowling.

		ASSETS =		DEBTS +	EQUITY	
Date	Type of Activity	Cash	Lawn Mower	Debt to Dad	Net Worth	Description
Day 1a	Financing	50.00			50.00	Transfer from savings
Day 1b	Financing	500.00		500.00		Loan from Dad
Day 2	Investing	-450.00	450.00			Purchased lawn mower
Day 3	Operating	-30.00			-30.00	Supplies expense
Day 4	Operating	-14.00			-14.00	Advertising expense

Day 5	Operating	80.00			80.00	Service revenue
Day 6	Financing	-10.00		-10.00		Paid back Dad
Day 7	Financing	-5.00			-5.00	Withdrawal to go bowling
Balance	---	121.00	450.00	490.00	81.00	

Do you see how everything balances? If you have ever used Excel spreadsheet software, you could do the accounting scoresheet much more quickly.

From the scoresheet, we can ask: How much was revenue for the week? How much was total operating expenses? How much was net income?

We can make another scoresheet summarizing revenues and expenses. This scoresheet is called an income statement, sometimes known as the Profit and Loss statement (P&L).

Revenues				\$ 80.00
	Operating Expenses:			
		Supplies	\$ 30.00	
		Advertising	\$ 14.00	
	Total Expenses		\$ 44.00	(\$44.00)
Net Income				\$ 36.00

## Questions and Answers

**Question #1:** What was Larry's initial source of cash financing?

**Answer:** He obtained financing of \$50.00 from his personal savings and \$500.00 from his Dad.

**Question #2:** What were his initial startup costs?



**Answer:** His startup costs included a lawn mower for \$450.00 (an investing activity) and purchasing supplies and advertising (operating activities).

**Question #3:** How much were his revenues less his total expenses for the first week?

We can see from the income statement that his lawn mowing revenues were \$80.00 and he had two expenses totaling \$44.00. So, revenues less expenses equals net income of \$36.00 for the first week.

**Question #4:** Why wasn't the \$10 he paid his Dad and the \$5 he spend bowling part of his operating expenses?

**Answer:** When Larry borrowed \$500, it was a financing activity. When he pays it back \$10 on the loan, this transaction is also a financing activity, not an operating activity. The same is true. When Larry put personal savings into the business, it was a financing activity; when he takes money from the business and puts it in his personal savings, it's a financing activity.

**Question #5:** Does Larry's Assets equal the total of his Debts + Equity at the end of the first week?

**Answer:** Yes. The bottom row balances: Congratulations! You have learned the fundamental accounting equation:

$$\text{Assets} = \text{Liabilities} + \text{Equity}$$

When you make a formal list like the one below, it is called a "Balance Sheet." Along with the Income Statement, the Balance Sheet is one of the most important financial reports that companies must prepare each accounting period.

**Assets:**

Current Assets	
Cash	\$121.00
Property, Plant and Equipment	
Lawn Mower	\$450.00
Total Assets	\$571.00

**Liabilities:**

Current Liabilities	
Debt to Dad	\$490.00
<b>Equity:</b>	
Beginning	\$50.00
Add: Net income	\$36.00
Less: Draw	-\$5.00
Total Liabilities and Equity	\$571.00



**Question #6:** Larry had net income of \$36.00 in his first week. If he works 50 weeks a year, that is \$1,800 a year. What if, instead of starting his lawn business, that he could have gotten a job at a local coffee shop at \$10 an hour, and he works 5 hours a week for 50 weeks. Here, he could have earned \$2,500. Should Larry have not started the lawn business?

**Answer:** Because Larry can earn \$1,800 in his business, but \$2,500 as a part-time worker at a coffee shop, he might consider doing the part-time job instead. His *opportunity cost* is \$700 if he starts his business instead. Other things he should consider, though: (1) will he get more lawn mowing jobs and earn more revenue as his reputation grows?; (2) does he like working outdoors more than being inside?

## Taking Action

### Completing the Income Statement and Balance Sheet for Annette's Tutoring Services

Let's look at another example. Annette has always been good at math, and after she completed the TRIS program, she decided to start a tutoring service for junior high students in her neighborhood. She did not have much personal savings, so she decided to start a service business rather than a product business. In Annette's first week of operations in September 2018, several transactions occurred. Here is what happened:



Sept. 9: Annette transferred \$100 from her savings account and opened up a checking account under the business name of "Annette's Tutoring Services."

Sept. 10: She borrowed \$200 from her Mom and deposited it in her bank account.

Sept. 11: Annette spent \$40 to have a flyer made up describing her tutoring services.

Sept. 12: She printed 300 flyers and distributed them to seventh grade students at her junior high. The cost of the flyers was \$.04 each.

Sept. 13-15: Four students took advantage of Annette's services. She worked a total of 15 hours after school by providing tutoring services for the middle school students. Her rate is \$6 an hour. Annette accepts only cash in payment. In other words, she does not "give credit," or accept credit cards either!

Sept. 16: Annette placed an ad in the newspaper describing her tutoring services. The ad cost

\$15.

Sept. 16: Annette took \$20 out of the business and treated her sister to a movie.

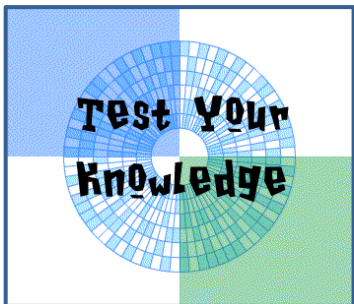
The worksheet below is completed, except for the last two transactions on September 16.

**Exercise #1:** Complete the worksheet below. Make sure to add up the ending balances. Do Assets = Liabilities + Equity?

Date	Activity	Cash	Debt to Mom	Net Worth	Description
Sept. 9	Financing	100.00		100.00	Transfer from savings
Sept. 10	Financing	200.00	200.00		Loan from Mom
Sept. 11	Operating	-40.00		-40.00	Flyer expense
Sept. 12	Operating	-12.00		-12.00	Copying expense
Sept. 13-15	Operating	90.00		90.00	Tutoring Revenue
Sept. 16	Operating				Advertising Expense
Sept. 16	Financing				Withdrawal (movies)
Balance					

**Exercise #2:** Prepare an Income Statement for Annette's Tutoring Business for the week ended September 16, 2018. How much was net income?

**Exercise #3:** Prepare a Balance Sheet for Annette's Tutoring Business, as of the close of business on September 16, 2018. How much is total assets? Total liabilities?



## Quiz Yourself

1. When starting a new business, where does the initial financing usually come from?
  - A. Loan from a bank
  - B. Angel Investor
  - C. Personal savings
  - D. Taking on a partner
  - E. Corporate shareholders



2. What are some examples of startup costs that a business usually invests in first?
  - A. Equipment
  - B. Company vehicle
  - C. Business licenses
  - D. Insurance
  - E. All of the above
3. How does a business earn revenue?
  - A. Borrowing money from the bank
  - B. Coming up with a unique idea
  - C. Buying inventory
  - D. Selling goods or services
  - E. None of the above
4. What must ASSETS always equal?
  - A. Debts + Equity
  - B. Equity - Debt
  - C. Debt - Equity
  - D. Debt \* Equity
  - E. None of the above
5. What do we call recurring cash outflows from operations?
  - A. Revenue
  - B. Investing activities
  - C. Operating cash inflows
  - D. Operating cash outflows
  - E. Withdrawals
6. True or False: The cost to pay for the first shipment of inventory purchase is not a startup cost.
7. True or False: Net income is simply the amount of revenue for a period minus the operating expenses.
8. True or False: Cash spent on such things as insurance, rent or inventory, are considered short-term operating costs.
9. True or False: The balance sheet is a financial statement showing assets, liabilities, and equity.
10. True or False: Initial cash financing for a small business hardly ever comes from personal savings or borrowing money from friends or relatives.

## What to Do Before Lesson Eight

First, go back to your lean canvas and focus on costs and revenues. Do your best to complete a projected income statement and balance sheet for the first year of operations. Larry did it for his lawn service. Annette did it for her math tutoring business. You can do it, too! Most entrepreneurs have no clue how to do this, but as you can see, it is not that hard!

Second, continue to work on all the cells in the lean canvas. Is your original idea feasible? You should have a good idea of how much money you will need to start the business, and you should consider where you would get the money to start it, assuming you do not have enough personal savings to start it all by yourself.

Third, you should use your Problem Interview Script that you wrote in Lesson Six, and go out and interview at least 10 early adopters.

Fourth, answer the following questions:

1. What is the accounting equation?
2. Which financial statement summarizes a business entity's revenues and expenses for a period?
3. If an entity has \$40 in liabilities and \$120 in assets, what is its debt to equity ratio?
4. When an owner takes money out of a business for personal reasons, what effect does this have on the spreadsheet (for example, does cash go up or down? Do liabilities go up or down? Does equity go up or down)?
5. What do we call it when an owner takes money out of a business for personal reasons?

## Lesson Eight: Using Excel to Make Your Life Easier

Watch the following four videos before reading any further. If you can, open a second computer with Excel loaded on it. Pause the videos and practice, practice, practice!

<a href="https://www.youtube.com/watch?v=hLWoFIMJzQU">https://www.youtube.com/watch?v=hLWoFIMJzQU</a> - “Professor DeBerg's Top Ten Things to Love about Excel (Part A)”
<a href="https://www.youtube.com/watch?v=5frz0mLsEyU">https://www.youtube.com/watch?v=5frz0mLsEyU</a> - “Professor DeBerg's Top Ten Things to Love about Excel (Part B)”
<a href="https://www.youtube.com/watch?v=pTI-TXXCuh4">https://www.youtube.com/watch?v=pTI-TXXCuh4</a> (8:54), Lesson 8a, “Annette’s Tutoring Business”
<a href="https://www.youtube.com/watch?v=d8ncnGXc9Wk">https://www.youtube.com/watch?v=d8ncnGXc9Wk</a> (5:41) , Lesson 8b, “Predicting Cash Inflows (Revenues) and Cash Outflows (Expenses) for Myface”

### The Big Picture

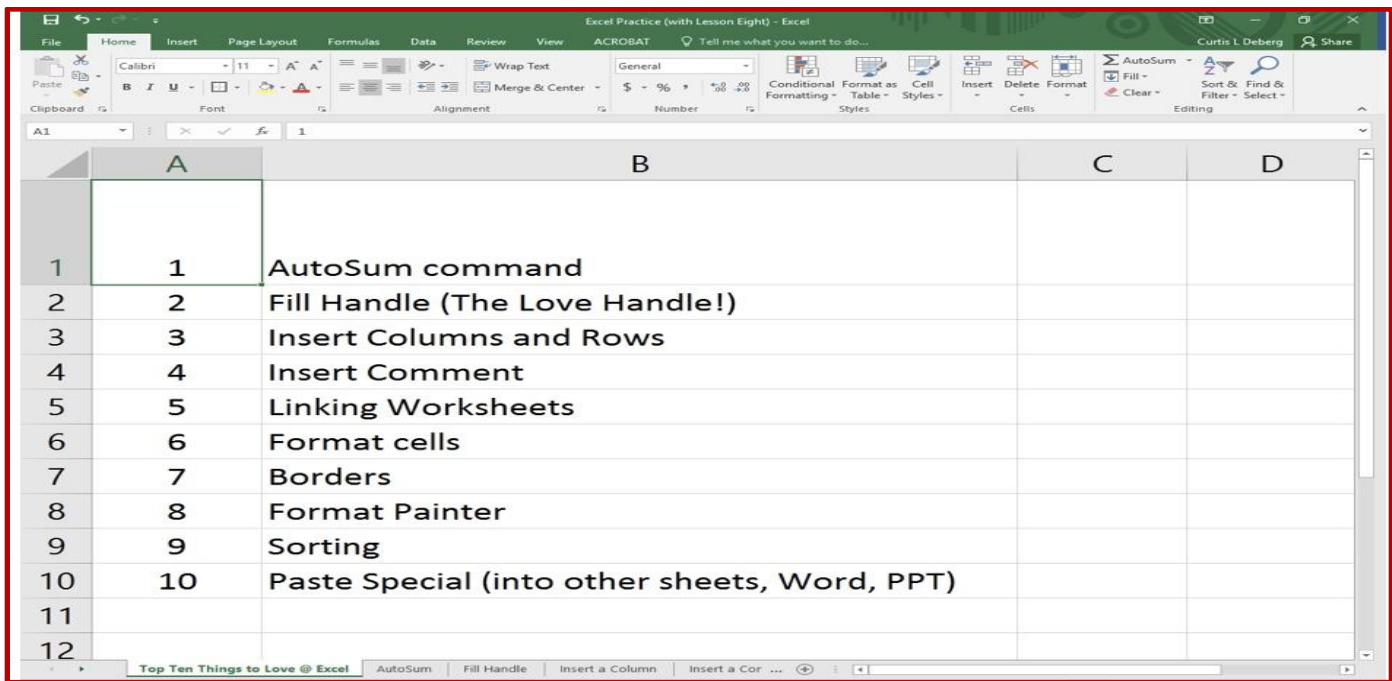
An electronic spreadsheet is a wonderful tool to do amazing things with numbers. Once you learn **Professor DeBerg’s Top Ten Things to Love about Excel**, you will never need to use a calculator again, except maybe to use your cell phone calculator for basic arithmetic at the grocery store!

Microsoft Excel is the most popular spreadsheet tool used in today’s workplace. Because most students have free access to this software in their schools, we will use Excel as our preferred spreadsheet platform.

Excel is an essential tool for all entrepreneurs. Entrepreneurs can predict costs, revenues, and profit using several difference scenarios. Financial statements can be updated under each scenario with one click of the mouse! While your friends are doing their homework, you have saved dozens of hours by learning the magical power of electronic spreadsheets.

Below is a screenshot of a spreadsheet file with a list of 10 items.





Note that there is a thin green box around Column A and Row 1. That's called a "cell." Cell A1 has a "value" in it. It's the number 1. Cell B1 has a "label" in it called "AutoSum command." But the magic of Excel lies in "formulas."

## Questions and Answers

**Question 1:** Which of the ten features of Excel, as explained by Professor DeBerg, do you think are the most helpful?

**Answer:** All of them are helpful, but the one feature that made Excel famous was Tip #5—Linking Worksheets.

Let's use Annette's Tutoring Services from Lesson Seven to show you how awesome this is! Recall that Annette's worksheet after the first week of activity looks like this. Note the ending balance in Cash is \$303.00.

TRIS Lesson 4 Spreadsheets [Compatibility Mode] - Excel

File Home Insert Page Layout Formulas Data Review View ACROBAT Tell me what you want to do... Curtis L Deberg Share

Clipboard Font Alignment Number Styles Cells Editing

E39

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	
1	<b>Annette's Tutoring Services</b>														
2															
3	<b>List of Items Owned and Owed at September 17, 2018</b>														
4															
5				<b>Assets</b>	<b>Liabilities</b>	<b>+</b>	<b>Equity</b>								
6															
7															
8			<b>Type of</b>		<b>Debt to</b>		<b>Net</b>								
9	<b>Date</b>	<b>Dep/Ck. #</b>	<b>Activity</b>	<b>Cash</b>	<b>Mom</b>		<b>Worth</b>	<b>Description</b>							
10															
11	Sept. 9	Dep. 1	Financing	100.00			100.00	Transfer from savings							
12															
13	Sept. 10	Dep. 2	Financing	200.00	200.00			Loan from Mom							
14															
15	Sept. 11	Ck. 101	Operating	-40.00			-40.00	Flyer expense							
16															
17	Sept. 12	Ck. 102	Operating	-12.00			-12.00	Copying expense							
18															
19	Sept. 13-15	Ck. 103	Operating	90.00			90.00	Tutoring revenue							
20															
21	Sept. 16	Ck. 105	Operating	-15.00			-15.00	Advertising expense							
22															
23	Sept. 17	Ck. 106	Financing	-20.00			-20.00	Withdrawal (movies)							
24															
25	<b>Balance</b>			303.00											
26															
27															
28															

Note that we can use AutoSum to add all of these numbers up in a split second!

Cell D25 commented by Curtis L Deberg

Balance Sheet Template Annette's Balance Sheet Sol'n

145%

Now, click on the tab called "Balance Sheet Template." Place your cursor in cell B6. Cell B6 is known as the *destination cell*.

Now, we need to go to Annette's Worksheet to get the origination cell. How to do this?

TRIS Lesson 4 Spreadsheets [Compatibility Mode] - Excel

File Home Insert Page Layout Formulas Data Review View ACROBAT Tell me what you want to do... Curtis L. Deberg Share

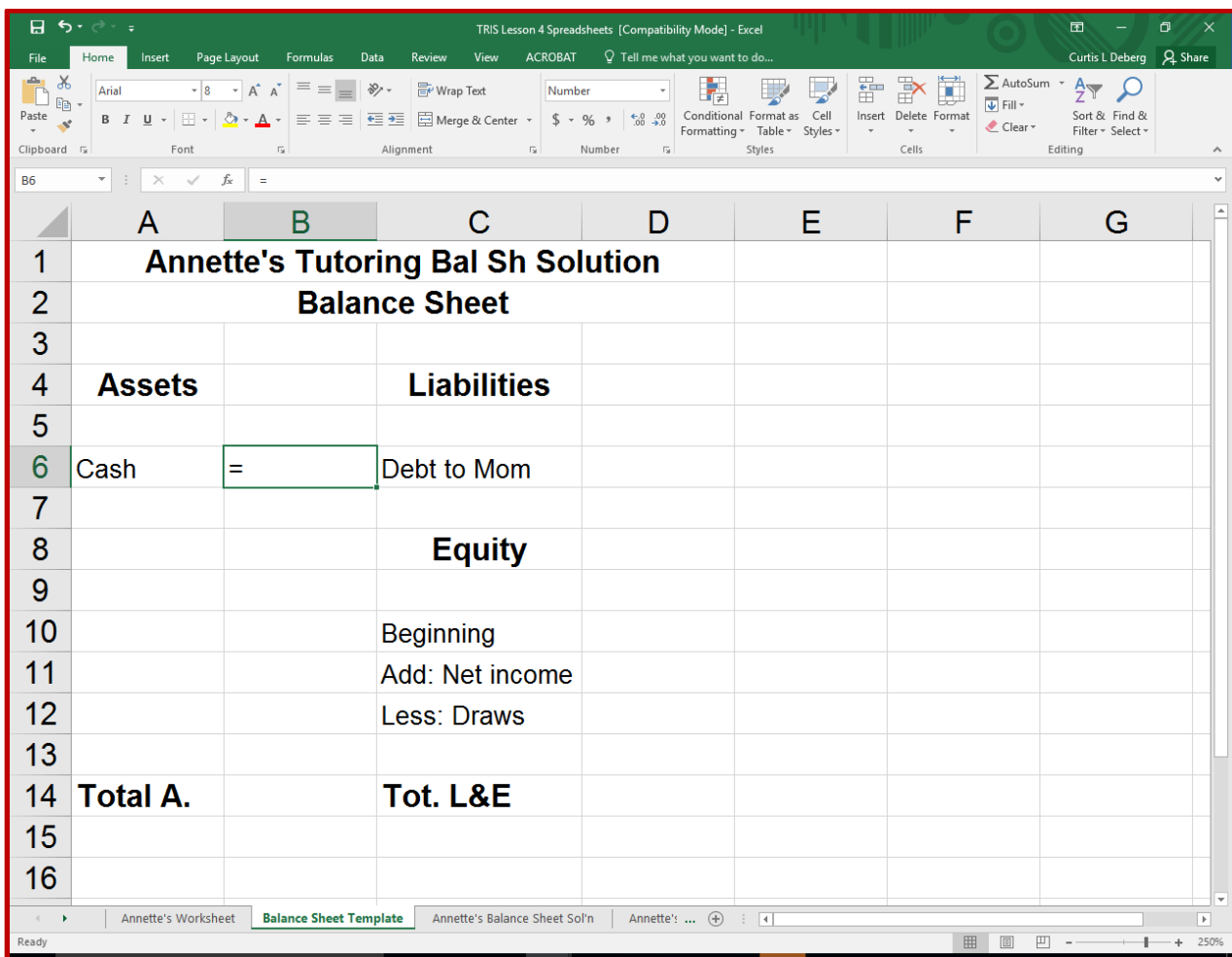
Paste B I U Font Alignment Number Styles Cells Editing

B6

	A	B	C	D	E	F	G	H	I
1	<b>Annette's Tutoring Bal Sh Solution</b>								
2	<b>Balance Sheet</b>								
3									
4	<b>Assets</b>		<b>Liabilities</b>						
5									
6	Cash		Debt to Mom						
7									
8			<b>Equity</b>						
9									
10			Beginning						
11			Add: Net income						
12			Less: Draws						
13									
14	<b>Total A.</b>		<b>Tot. L&amp;E</b>						
15									
16									
17									
18									
19									
20									

Ready Annette's Worksheet Balance Sheet Template Annette's Balance Sheet Sol'n Annette's ... 205%

Put an = sign in Cell B6.



Then: click on Annette's Worksheet tab and then click on Cell D25. A marquee surrounds the number \$303.00.

Annette's Tutoring Services [Compatibility Mode] - Excel

File Home Insert Page Layout Formulas Data Review View ACROBAT Tell me what you want to do... Curtis L Deberg Share

Clipboard Font Alignment Number Styles Cells Editing

D25 X ✓ fx =Annette's Worksheet!D25

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
4														
5				<b>Assets</b>	<b>Liabilities</b>	<b>+</b>	<b>Equity</b>							
6														
7														
8			<b>Type of</b>		<b>Debt to</b>		<b>Net</b>							
9	<b>Date</b>	<b>Dep/Ck. #</b>	<b>Activity</b>	<b>Cash</b>	<b>Mom</b>		<b>Worth</b>	<b>Description</b>						
10														
11	Sept. 9	Dep. 1	Financing	100.00			100.00	Transfer from savings						
12														
13	Sept. 10	Dep. 2	Financing	200.00	200.00			Loan from Mom						
14														
15	Sept. 11	Ck. 101	Operating	-40.00			-40.00	Flyer expense						
16														
17	Sept. 12	Ck. 102	Operating	-12.00			-12.00	Copying expense						
18														
19	Sept. 13-15	Ck. 103	Operating	90.00			90.00	Tutoring revenue						
20														
21	Sept. 16	Ck. 105	Operating	-15.00			-15.00	Advertising expense						
22														
23	Sept. 17	Ck. 106	Financing	-20.00			-20.00	Withdrawal (movies)						
24														
25	<b>Balance</b>			303.00										
26														
27														
28														
29														
30														
31														

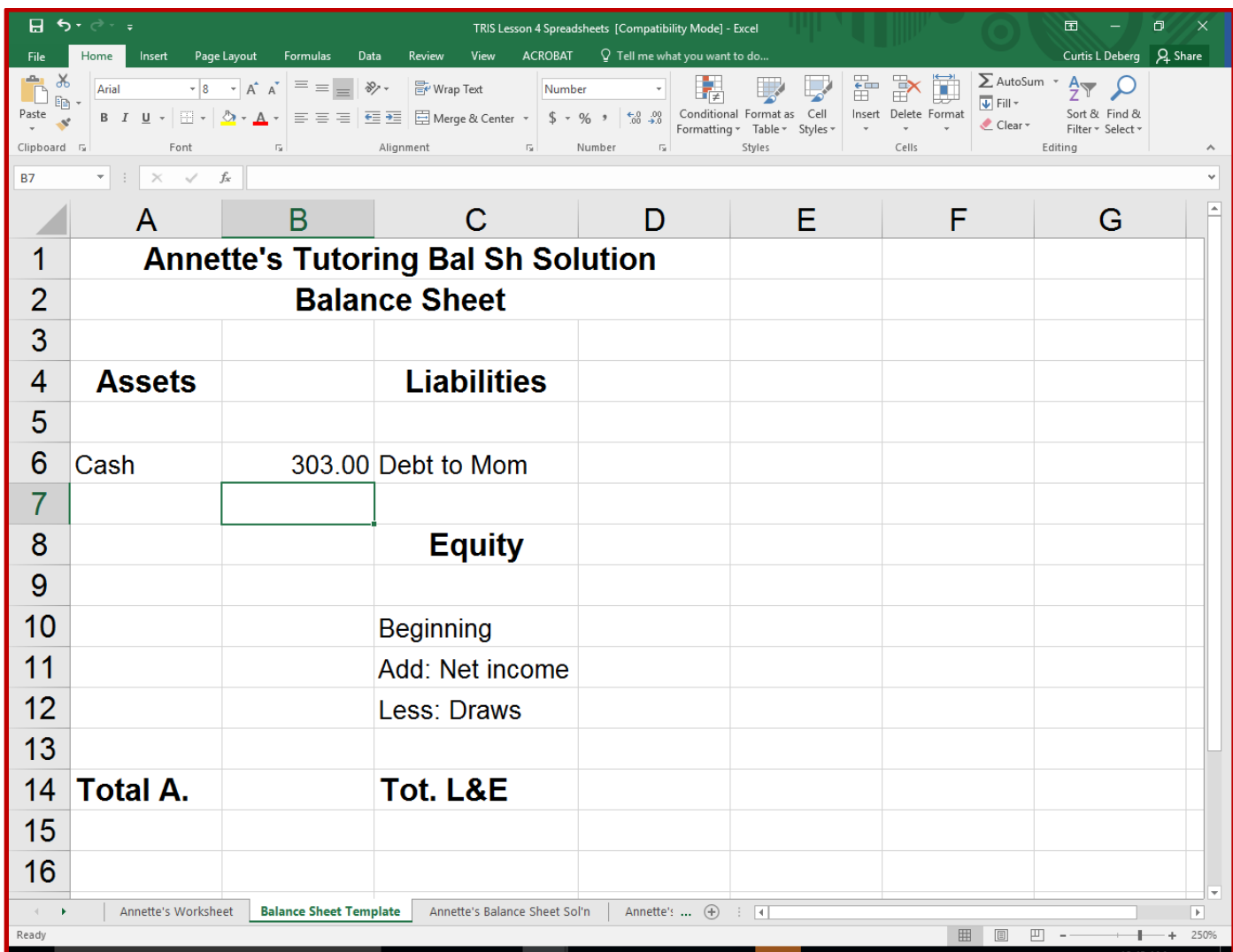
Note the green "marquee" that blinks around the box for cell D25!

Annette's Worksheet Balance Sheet Template Annette's Balance Sheet Sol'n Annette's ...

Cell D25 commented by Curtis L Deberg

Then: click on Enter. What happens?





Magic!!! The \$303.00 number has now reached its destination cell in the Balance Sheet Template tab. It has linked this number to the same number in the origination cell in Annette's Worksheet.

This feature allows companies to create a "master database" and then link numbers from the master database to any of hundreds of other databases. This is magic. 😊

## Taking Action

### Exercise 1

Working in pairs, use Excel's feature that links spreadsheets to complete the balance sheet for Annette's Tutoring Services. For example, see below for her Debt to Mom. After you've done this, finish the balance sheet.

Annette's Tutoring Services [Compatibility Mode] - Excel															
File Home Insert Page Layout Formulas Data Review View ACROBAT Tell me what you want to do... Curtis L Deberg Share															
Clipboard Font Alignment Number Styles Cells Editing															
PMT X ✓ fx =															
	A	B	C	D	E	F	G								
1	Annette's Tutoring Bal Sh Solution														
2	Balance Sheet														
3	September 18, 2018														
4															
5	Assets		Liabilities												
6															
7	Cash	303.00	Debt to Mom	=											
8															
9	Equity														
10															
11	Beginning														
12	Add: Net income														
13	Less: Draws														
14															
15	Total A.	303.00	Tot. L&E												
16															
Balance Sheet Template Annette's Balance Sheet Sol'n Annette's Income Statement 250%															

Then click on the balance sheet template in cell E25.

Annette's Tutoring Services [Compatibility Mode] - Excel											
File Home Insert Page Layout Formulas Data Review View ACROBAT Tell me what you want to do... Curtis L Deberg Share											
Clipboard Font Alignment Number Styles Cells Editing											
E25 X ✓ fx =Annette's Worksheet!E25											
	A	B	C	D	E	F	G	H	I	J	K
5				<b>Assets</b>	<b>Liabilities</b>	<b>+</b>	<b>Equity</b>				
6											
7											
8			<b>Type of</b>		<b>Debt to</b>		<b>Net</b>				
9	<b>Date</b>	<b>Dep/Ck. #</b>	<b>Activity</b>	<b>Cash</b>	<b>Mom</b>		<b>Worth</b>	<b>Description</b>			
10											
11	Sept. 9	Dep. 1	Financing	100.00			100.00	Transfer from savings			
12											
13	Sept. 10	Dep. 2	Financing	200.00	200.00			Loan from Mom			
14											
15	Sept. 11	Ck. 101	Operating	-40.00			-40.00	Flyer expense			
16											
17	Sept. 12	Ck. 102	Operating	-12.00			-12.00	Copying expense			
18											
19	Sept. 13-15	Ck. 103	Operating	90.00			90.00	Tutoring revenue			
20											
21	Sept. 16	Ck. 105	Operating	-15.00			-15.00	Advertising expense			
22											
23	Sept. 17	Ck. 106	Financing	-20.00			-20.00	Withdrawal (movies)			
24											
25	<b>Balance</b>			303.00	200.00		103.00				
26											
Annette's Worksheet Balance Sheet Template Annette's Balance Sheet Sol'n Annette's ...											
Point 250%											

Then hit Enter.

	A	B	C	D	E	F	G
1	<b>Annette's Tutoring Bal Sh Solution</b>						
2	<b>Balance Sheet</b>						
3	<b>September 18, 2018</b>						
4							
5	<b>Assets</b>		<b>Liabilities</b>				
6							
7	Cash	303.00	Debt to Mom	200.00			
8							
9			<b>Equity</b>				
10							
11			Beginning				
12			Add: Net income				
13			Less: Draws				
14							
15	<b>Total A.</b>	303.00	<b>Tot. L&amp;E</b>				
16							

# Taking Action

## Exercise 2

Working in pairs, complete the income statement for Annette’s Tutoring Business, using the Linking Spreadsheets feature, starting with Revenue as per below. Make sure that net income on the balance sheet agrees with net income on the income statement.

	A	B	C	D
1	<b>Annette's Tutoring Services</b>			
2	<b>Income Statement</b>			
3	<b>For the Week Ended September 18, 2018</b>			
4				
5	<b>Revenues</b>		=	
6				
7	<b>Less: Expenses</b>			
8		Flyer		
9		Copying		
10		Ad		
11	<b>Total Expenses</b>			
12	<b>Net income</b>			
13				
14				

Annette's Tutoring Services [Compatibility Mode] - Excel											
File Home Insert Page Layout Formulas Data Review View ACROBAT Tell me what you want to do... Curtis L Deberg Share											
Clipboard Font Alignment Number Styles Cells Editing											
G19 X f =Annette's Worksheet!G19											
	A	B	C	D	E	F	G	H	I	J	K
5				Assets	Liabilities	+	Equity				
6											
7											
8			Type of		Debt to		Net				
9	Date	Dep/Ck. #	Activity	Cash	Mom		Worth	Description			
10											
11	Sept. 9	Dep. 1	Financing	100.00			100.00	Transfer from savings			
12											
13	Sept. 10	Dep. 2	Financing	200.00	200.00			Loan from Mom			
14											
15	Sept. 11	Ck. 101	Operating	-40.00			-40.00	Flyer expense			
16											
17	Sept. 12	Ck. 102	Operating	-12.00			-12.00	Copying expense			
18											
19	Sept. 13-15	Ck. 103	Operating	90.00			90.00	Tutoring revenue			
20											
21	Sept. 16	Ck. 105	Operating	-15.00			-15.00	Advertising expense			
22											
23	Sept. 17	Ck. 106	Financing	-20.00			-20.00	Withdrawal (movies)			
24											
25	Balance			303.00	200.00		103.00				
26											
Annette's Worksheet Balance Sheet Template Annette's Balance Sheet Sol'n Annette's ...											

	A	B	C	D
1	<b>Annette's Tutoring Services</b>			
2	<b>Income Statement</b>			
3	<b>For the Week Ended September 18, 2018</b>			
4				
5	<b>Revenues</b>		\$90.00	
6				
7	<b>Less: Expenses</b>			
8		Flyer		
9		Copying		
10		Ad		
11	<b>Total Expenses</b>			
12	<b>Net income</b>			
13				
14				

## Myface's Cost Structure and Revenue Stream

You will recall the two bottom cells from Myface's lean canvas: Cost structure and Revenue streams. Dr. DeBerg and Kunal have done some research about what it costs to design, test, implement, and market this software application, and they predict first year revenue streams from universities and individual faculty. Assume the following:

1. Initial startup costs include: (a) programming assistance of 50 hours times \$20 per hour; (b) a \$500 flat fee payment for web design of a landing page; (c) digital media ads costing \$300.
2. Initial investment of \$3,000 in a new computer system with two large flat-screen monitors.
3. Initial business license fee or \$200 filed with the county and city governments.
4. Recurring operating fees to pay a graduate assistant 5 hours a week at \$15 an hour for 50 weeks.
5. Expected revenues in the first year are as follows: \$1,500 license fee to four universities; five professors buy the software for \$300 each

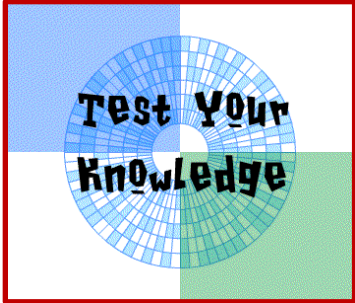
## Taking Action

**Exercise 3** - Prepare an Excel spreadsheet of projected cash inflows (revenues) and cash outflows (expenses)



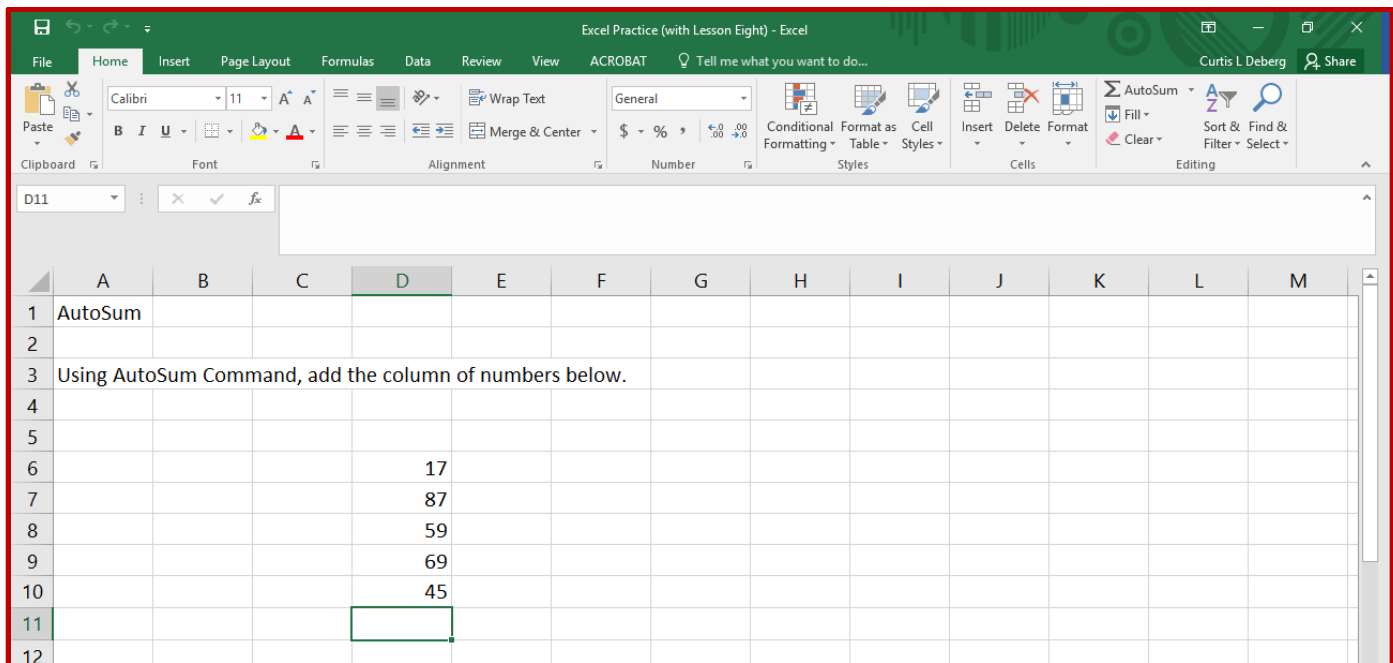
for Myface in Year 1. The cash inflow part has been done for you.

Do cash inflows exceed outflows? If not, where might Dr. DeBerg and Kunal get the money they need to start their business?



## Quiz Yourself

Open the [Excel practice file that comes with Lesson Eight](#) on your computer. Below is the first question. Answer all ten questions using your new knowledge about Excel.

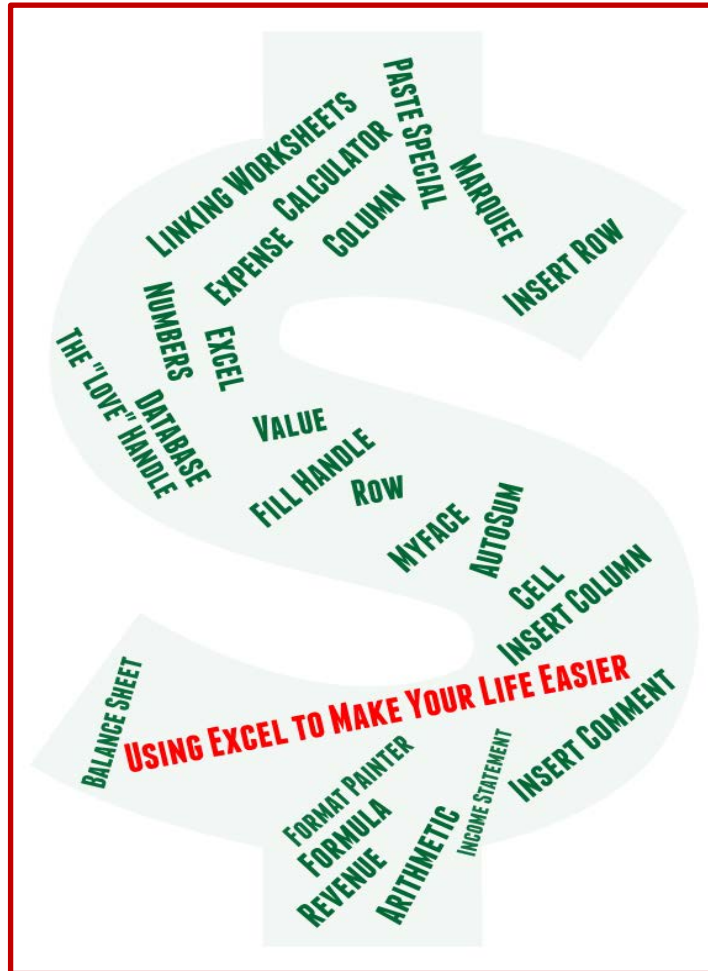


## What to Do before the Next Lesson

Read this article on the web: [How to Get Money to Start a Business](#) and answer the following questions:

- How many businesses were identified by the government as having no employees? In other words, how many businesses were classified as “non-employer” businesses?
- About how many businesses survive in their first five years?
- According to the Kauffman Foundation, how much does it cost the average business to get started?

- What's the first way to raise money for your new business?
- What's the second way?
- What is an angel investor?





## Lesson Nine: Sources of Financing (Personal Savings, Small Business Loans, and Angel Investors)

Before reading any further, make sure you have watched these videos:

[https://www.youtube.com/edit?ar=1&o=U&video\\_id=rb7CfkgKo0A](https://www.youtube.com/edit?ar=1&o=U&video_id=rb7CfkgKo0A) (11:22), Lesson 9a – “Sources of Financing (Personal Savings, Loans, Partners, Angel Investors)”

<https://www.youtube.com/watch?v=TCP6iVL8rxk>, (6:27), “Lesson 9b - How to Create an Amortization Table a \$5,000 Payable in 24 Monthly Installments at an Annual Rate of 12%”

[https://www.youtube.com/watch?v=8OCjwBkMJ\\_E](https://www.youtube.com/watch?v=8OCjwBkMJ_E) (12:01) – “Raising Money for a Startup”

### The Big Picture

After reading [How to Get Money to Start a Business](#) we learned that it is very risky to start a new business. Only about half of all new businesses survive beyond five years. The average cost to start a new business is \$30,000! Whoa! Does the average teenager have that much money?

No! But guess what. In today’s world of the Internet and digital marketing, it doesn’t take much money to start a new business, especially if it involves computer software or computer apps.

Take Myface, for example. We see from Myface’s projected new inflows and outflows is negative \$1,250. If he thinks Myface has a great chance of success, he is going to need to get some extra cash to start. Where might he get it?

	A	B	C	D	E	F	G	H	I
1	Myface								
2	Projected Cash inflows and outflows								
3	Year 1								
4									
5	Cash inflows								
6	From Universities (4 at \$1,500)								
7	From Individual professors (5 at \$300)								
8									
9	Less: Cash outflows								
10	Programming assistance								
11	Web design for landing page								
12	Digital media ads								
13	New computer system								
14	Business license								
15	Graduate assistant pay								
16	Total Outflows								
17	Projected net inflows								
18									
19									
20									

## Self-Financing, Debt Financing, and Equity Financing

Most small business owners *self-finance*, meaning they take money from their personal savings and invest it in their business. Let's be careful with terminology here. If Dr. DeBerg invests, say, \$4,000 in his business cash and opens a business checking account, this means that his personal outflow of \$4,000 is an investing activity to him, personally.

But it is the first source cash inflow for Myface, the business entity. The cash inflow is the first source of cash *financing* for the business. Dr. DeBerg should have two Excel files: one to keep track of his personal activity in his personal checking account, and another to keep track of his business activity in a separate business checking account.

Maybe for someone like a college professor like Dr. DeBerg, coming up with \$4,000 from his personal savings is no big deal. This is one example of *self-financing*. But if you are like most teen entrepreneurs, \$4,000 is a LOT of money. Other than personal savings, where might you get \$4,000 to start your business?

Well, an obvious choice would be to get a loan from your parents or grandparents. This money would first go into your personal bank account, and then you would invest this personal cash to finance the business. Or you could sell some of your personal assets, like your skateboard or laptop computer, but that wouldn't get you enough money to start. These are more examples of self-financing.

Alternatively, maybe you could ask someone to make you a business loan. The entity making the loan is called the *lender*. The entity—in this case, your business--receiving the loan is the *borrower*. Many banks like to make loans to young entrepreneurs, but only if their parents *co-sign* the note or pledge *collateral*.



Co-signing means that if you cannot pay the loan bank, the co-signer—your parents—must pay. Or if your parents have pledged collateral, that means the bank can take possession of the pledged asset (e.g., like your parents' car!) and sell it. The proceeds would be used to pay back the loan.

So borrowing money is risky. Borrowing money is an example of *debt financing*.

Are there other alternatives to raising the \$4,000? Maybe you could find a partner who would contribute half the money you need? One problem with this, though, is that if your business makes money later on, the partner gets half the profits. Another problem is that you must now share decisions with a partner.



In the article by [Christopher Freeburn article](#), you might also look for an *angel investor*. As Freeburn says, “If you can’t get enough cash from your own assets and you don’t have a rich uncle, you can always look for a wealthy non-relative. Some well-off individuals like to invest in startup ventures – often in exchange for an *equity* stake in the new business. These investors are known as angel investors. Not only can angel investors offer financing to get your business off the ground, but some are willing to provide guidance based on their own experience. They can also leverage their existing contacts within an industry to open doors for your business.”

How do you find angel investors? Many people use LinkedIn and other social media to research possible angels.

Taking on a partner or finding an angel investor are examples of *equity financing*.

## Questions and Answers

**Question:** Where can a business get its initial source of cash to finance the business?

**Answer:** The business owner can contribute money from personal savings, and/or get a personal loan for friends or relatives. This is known as self-financing.

There are two other ways to finance your business. The fancy names are through debt financing or equity financing. Debt financing is when your business borrows money from the bank, or from other lenders. Equity financing is when the business obtains money by taking on a partner or angel investor.

Let’s write it this way:

Cash needed to start a business = Cash from the owner + Cash borrowed + Cash collected from co-owners/investors



## A Closer Look at Debt Financing

Assume your business needs \$4,000 to start. You put in \$2,000 of your personal savings and you convince the local bank to loan you \$2,000 for one year at 8% annual interest [to convince the bank, you will need to fill out a bank loan application; a sample application is contained at the end of this lesson]. You and the banker discuss several different ways for your business to pay the money back. Here are three examples:

1. Pay it all back, with interest, at the end of Year 1
2. Pay it back in monthly installments, so that the loan is paid off by the end of Year 1.
3. Pay it back in one payment, at the end of three months.

## Questions and Answers

**Question 1:** How much will you need to pay the bank under option #1, where you pay it all back in one “balloon payment” at the end of the year?

**Answer:** To calculate interest, you take the amount borrowed, known as the principal, times the interest rate, 8%, times the number of years, 1.

$$\$2,000 * .08 * 1 = \$160$$

**Question 2:** How much will you need to pay the bank under option #2, where you make 12 equal installments at the end of each month?

**Answer:** Here, you must rely on the banker to give you the “right” monthly payment, or you can calculate it yourself using Excel’s nifty “formula” feature. Let’s trust the banker first. He says, “If you pay me back \$173.98 each month, you will have the entire \$2,000 paid off by the end of 12 months.”

## Amortization Table for \$2,000 Loan, at 8% per year, with monthly payments



Month	Cash Pmt	Int Exp	Prin Red.	Amt. Borrowed	Monthly Payment	Monthly Interest Rate
1	\$173.98	\$13.33	\$160.64	\$1,839.36	\$173.98	0.006667
2	\$173.98	\$12.26	\$161.71	\$1,677.64		
3	\$173.98	\$11.18	\$162.79	\$1,514.85		
4	\$173.98	\$10.10	\$163.88	\$1,350.97		
5	\$173.98	\$9.01	\$164.97	\$1,186.00		
6	\$173.98	\$7.91	\$166.07	\$1,019.93		
7	\$173.98	\$6.80	\$167.18	\$852.75		
8	\$173.98	\$5.69	\$168.29	\$684.46		
9	\$173.98	\$4.56	\$169.41	\$515.05		
10	\$173.98	\$3.43	\$170.54	\$344.50		
11	\$173.98	\$2.30	\$171.68	\$172.82		
12	\$173.98	\$1.15	\$172.82	\$0.00		
Totals	\$2,087.72	\$87.72	\$2,000.00			

Notice that when the first payment of \$173.98 is made at the end of the first month, interest expense is calculated by taking the monthly interest rate of .006667 \* \$2,000.00. That equals \$13.33 in interest expense, and the rest reduce the debt from \$2,000.00 to \$1,839.36. If you do this 11 more times, by end of the 12<sup>th</sup> payment the debt has been extinguished. It's been amortized. It's been killed! Hooray. [Interesting side note: the root word for amortize is "mort", which is French for "die." So, it is true, all the debt has died by the end of the last payment!]

Take care to note the formula to calculate interest expense in cell C6. Interest expense is calculated by taking the interest rate of .006667 in cell I5 times the amount borrowed in cell F5, which is \$2,000. Notice the formula bar shows

$$=I\$5*F5$$

The cell I5 is surrounded by the dollar sign, as in I\$5. This tells Excel to always go back and get this number from cell I5. Cell I5 is called an absolute cell reference. Cool, huh? ☺

Then, to get the principal reduction, we simply take the cash payment of \$173.98 and subtract the interest expense part of the payment to get \$160.64, resulting in a new principal of \$1,839.36.



Amortization Tables for Lesson 9 on Debt Financing - Excel

File Home Insert Page Layout Formulas Data Review View ACROBAT Tell me what you want to do... Curtis L Deberg Share

Clipboard Font Alignment Number Styles Cells Editing

Calibri 11 A A General

B I U Merge & Center \$ % %0 %0 Conditional Formatting Format as Table Cell Styles Insert Delete Format AutoSum Fill Sort & Find & Filter Select Clear

fx =0.08/12

	A	B	C	D	E	F	G	H	I	J	K
1											
2		<b>Loan Amortization Table: Borrow \$2,000 at 8%, and monthly payments</b>									
3											
4		<b>Month</b>	<b>Cash Pmt</b>	<b>Int Exp</b>	<b>Prin Red.</b>	<b>Amt. Borrowed</b>		<b>Monthly Payment</b>	\$173.98		
5						\$2,000.00		<b>Monthly Interest Rate</b>	0.00667		
6	1	\$173.98	\$13.33	\$160.64		\$1,839.36					
7	2	\$173.98	\$12.26	\$161.71		\$1,677.64					
8	3	\$173.98	\$11.18	\$162.79		\$1,514.85					
9	4	\$173.98	\$10.10	\$163.88		\$1,350.97					
10	5	\$173.98	\$9.01	\$164.97		\$1,186.00					
11	6	\$173.98	\$7.91	\$166.07		\$1,019.93					
12	7	\$173.98	\$6.80	\$167.18		\$852.75		40			
13	8	\$173.98	\$5.69	\$168.29		\$684.46					
14	9	\$173.98	\$4.56	\$169.41		\$515.05					
15	10	\$173.98	\$3.43	\$170.54		\$344.50					
16	11	\$173.98	\$2.30	\$171.68		\$172.82					
17	12	\$173.98	\$1.15	\$172.82		\$0.00					
18	<b>Totals</b>	\$2,087.72	\$87.72	\$2,000.00							

8%/12 = .08/12 = .006667

By the end of the 12<sup>th</sup> month, you've paid back a total of \$173.98 times 12 months, or \$2,087.72. Interest here is only \$87.72, unlike the first case when we paid \$160 in interest.

**Question 3:** What is the banker loaned your \$2,000 at 8% annual interest, but with interest and principal due in one full payment at the end of the third month. How much must be paid in interest to the bank?

**Answer:** This is simple, because we use the simple interest formula:  $P * R * T$ .

$$\text{Principal} * \text{Rate} * \text{Time} = \text{Interest Expense}$$

$$\$2,000 * .08 * 3/12 = \$40$$

## Taking Action: Exercise 1

Assume you want to borrow \$5,000 at 12% a year, with interest payable at the end of each of the next two years. The principal is also due at the end of two years. How much interest must be paid at the end of Year 1? How much interest must be paid at the end of Year 2?

## Taking Action: Exercise 2

Assume you want to borrow \$5,000 at 12% a year, with equal monthly payments to be spread out evenly at the end of each of the next 24 months. The payment is \$235.37 per month. Open an Excel spreadsheet and see if you can build an amortization table like the one below. We have started it for you. [Hint: if you use the

drag and fill handle at the lower right-hand corner of cell F7, and drag it down to row 28, the table will be completely filled out for you!].

## Amortization Table for \$5,000 Loan, at 12% per year, with 24 monthly payments

Month	Cash Pmt	Int Exp	Prin Red.	Amt. Borrowed	Monthly Payment	Monthly Interest Rate
1	\$235.37	\$50.00	\$185.37	\$4,814.63	\$235.37	0.01
2	\$235.37	\$48.15	\$187.22	\$4,627.41		
3	\$235.37					
4	\$235.37					
5	\$235.37					
6	\$235.37					
7	\$235.37					
8	\$235.37					
9	\$235.37					
10	\$235.37					
11	\$235.37					
12	\$235.37					
13	\$235.37					
14	\$235.37					
15	\$235.37					
16	\$235.37					
17	\$235.37					
18	\$235.37					
19	\$235.37					
20	\$235.37					
21	\$235.37					
22	\$235.37					
23	\$235.37					
24	\$235.37					
25	\$235.37					
26	\$235.37					
27	\$235.37					
28	\$235.37					
Totals	\$5,648.82					

12%/12 = .12/12 = .01 monthly interest

## A Closer Look at Equity Financing

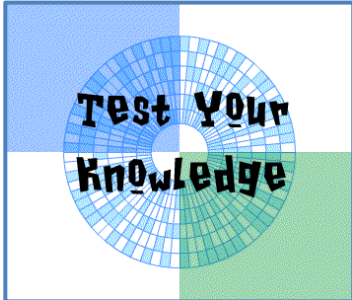
Let's say that, instead of borrowing \$2,000, you decide to bring a partner into the business, or you find an angel investor. In both cases, the partner or angel will want at least half of the profits if your business succeeds. Is it worth it to give up a half stake in your new business – a possible gold mine?

**Question** – What are the advantages and disadvantages of finding a partner or angel investor to help finance your business?

**Answer** – The advantages include: (a) you do not have to pay interest on the \$2,000 coming into the business and (b) the partner may have skills and knowledge that can add great value to the business. Disadvantages include: (a) profits and losses are shared by the partner; (b) anything the partner does on behalf of the partnership has an effect on you, because all partners are legal agents of the partnership; in other words, when one partner does something on behalf of the partnership, the other partner is personally

responsible for his actions; and (c) like any business or personal partnership (e.g., spouses in a marriage), the partners ultimately may not see eye to eye, which can often end up in an unhappy dissolution (e.g., divorce)!

It is important to note that, in any form of partnership, the partners should create a written partnership agreement, writing down exactly what duties each partner is expected to perform, and how profits and losses are to be shared among them.



## Quiz Yourself

1. Borrowing money an example of:
  - A. Debt financing
  - B. Cash Outflows
  - C. Equity financing
  - D. Angel investing
  - E. None of the above
2. When an angel investor puts money in a business, what do they get in return?
  - A. Products
  - B. Advertising
  - C. High position such as CEO
  - D. Services
  - E. Equity in the business
3. What is a possible disadvantage of taking on a partner in your business?
  - A. Your partner may make business decisions that you do not agree with
  - B. You must now share in the profits
  - C. Your ownership share is reduced
  - D. All of the above
4. What does it mean when a small business owner self-finances?
  - A. Uses personal savings
  - B. Borrows money from family
  - C. Borrows money from friends
  - D. All of the above
5. According to the article by Christopher Freeburn, what is the average cost to start a new business?
  - A. \$10,000
  - B. \$20,000
  - C. \$30,000
  - D. \$50,000
  - E. \$75,000
6. True or False: Angel investors can sometimes be found on LinkedIn or other social networks.

7. True or False: An example of debt financing is when a business borrows money from the bank, or from other lenders.
8. True or False: An example of equity financing is when a business obtains money by taking on a partner or angel investor.
9. True or False: Banks are reluctant to lend money to young entrepreneurs, unless their parents *co-sign* the note or pledge *collateral*.
10. True or False: When starting your business it is important to keep track of your personal activity and business activity separately by having two separate accounts.

## What to Do Before Lesson Ten

Continue working on your lean canvas. Also, refine your pitch, and be prepared to make a two-minute presentation with your company's mission statement, along with the contents of your lean canvas.



## Appendix

### Bank Loan

#### Application BUSINESS INFORMATION

Business Name \_\_\_\_\_

Address \_\_\_\_\_

Telephone (    ) \_\_\_\_\_

Individual Name(s) \_\_\_\_\_

Address \_\_\_\_\_

Telephone (    ) \_\_\_\_\_ Date of Birth \_\_\_\_\_

☐ Proprietorship ☐ Partnership ☐ Sub-Chapter S ☐ Corporation

☐ Non-Profit ☐ Individual ☐ LLC

**Ownership distribution:** (List partners, owner names)

*Note: Attach separate sheet  
if additional space needed.*

Name	Title	# of Months	%
------	-------	-------------	---

Name	Title	# of Months	%
------	-------	-------------	---

Name	Title	# of Months	%
------	-------	-------------	---

Nature of Business	Date Established	Number of Employees
--------------------	------------------	---------------------

Months at Present Location ☐ Own ☐ Lease

#### FINANCIAL INFORMATION

Bank of Account (if any)	Account Number
--------------------------	----------------

**Credit Relationships:** Please provide details of your business credit relationships below:

Name of Creditor	Purpose of Loan	Original Loan Amount	Amount Presently Owing	Repayment Terms	Maturity Date
------------------	-----------------	----------------------	------------------------	-----------------	---------------

		\$			
--	--	----	--	--	--

		\$			
--	--	----	--	--	--

		\$			
--	--	----	--	--	--

		\$			
--	--	----	--	--	--



# LOAN REQUEST

Amount of Loan Requested (in U.S. Dollars)

\$ \_\_\_\_\_

**Specific Loan Purpose** (Check all that apply) ☐ Working Capital

☐ Finance Purchase of Inventory ☐ Finance Purchase of Equipment

☐ Finance Purchase of Real Estate ☐ Finance Purchase of Business

☐ Refinance Existing Loan or Debts

## Type of loan

☐ One year simple interest loan, with principal and interest payable at 8% at the end of one year from the date of this contract

☐ Simple interest at 8% due one year from the date of this contract, with equal monthly installments payable for 12 months during the second year. The installments are based on an annual rate of 8%.

☐ Other (to be negotiated)

☐ Other (State type of loan required and loan purpose)

## CERTIFICATION

The undersigned certifies that, to the best of his or her knowledge and belief, all information contained in this loan application and in the accompanying statements and documents is true, complete, and correct. The undersigned agrees to notify the Bank immediately of any material changes in this information

Business Name (print): \_\_\_\_\_

Applicant Signature(s): \_\_\_\_\_ Date: \_\_\_\_\_

Applicant Title: \_\_\_\_\_

## Lesson Ten: Sources of Financing (Crowdfunding)

Before reading this lesson, make sure you have watched this video:

<https://www.youtube.com/watch?v=Tw9ZpiTIqd0> (33:08), “Kickstarter, IndieGoGo and Best Practices for Crowdfunding”

### The Big Picture

An entrepreneur can obtain cash to finance their business from personal savings, from friends and relatives, or from the banker. However, banks will not usually make loans to new businesses or teenage entrepreneurs unless they pledge collateral or if their parents co-sign a note payable to the bank.

So assume you have a great idea, but to start the business you need a total of \$5,000. You can invest \$1,000 of your personal savings, and your parents inform you that they can match \$1,000. Nevertheless, your parents are hesitant to pledge their car or house or anything else as collateral for a loan, and they do not want to co-sign a note. They say, “We’ll give you \$1,000, but that’s all we are going to put in. You’ll need to find the other \$3,000 somewhere else.”



Unfortunately, you don’t have any other relatives who will give you the money, or who will loan you the money. You don’t have any angel investors in your social network. The bank says “no” when you ask their loan officer for a loan. Therefore, self-financing and debt financing the additional \$3,000 are not options.

What else might you do? Rob a bank? Just kidding!

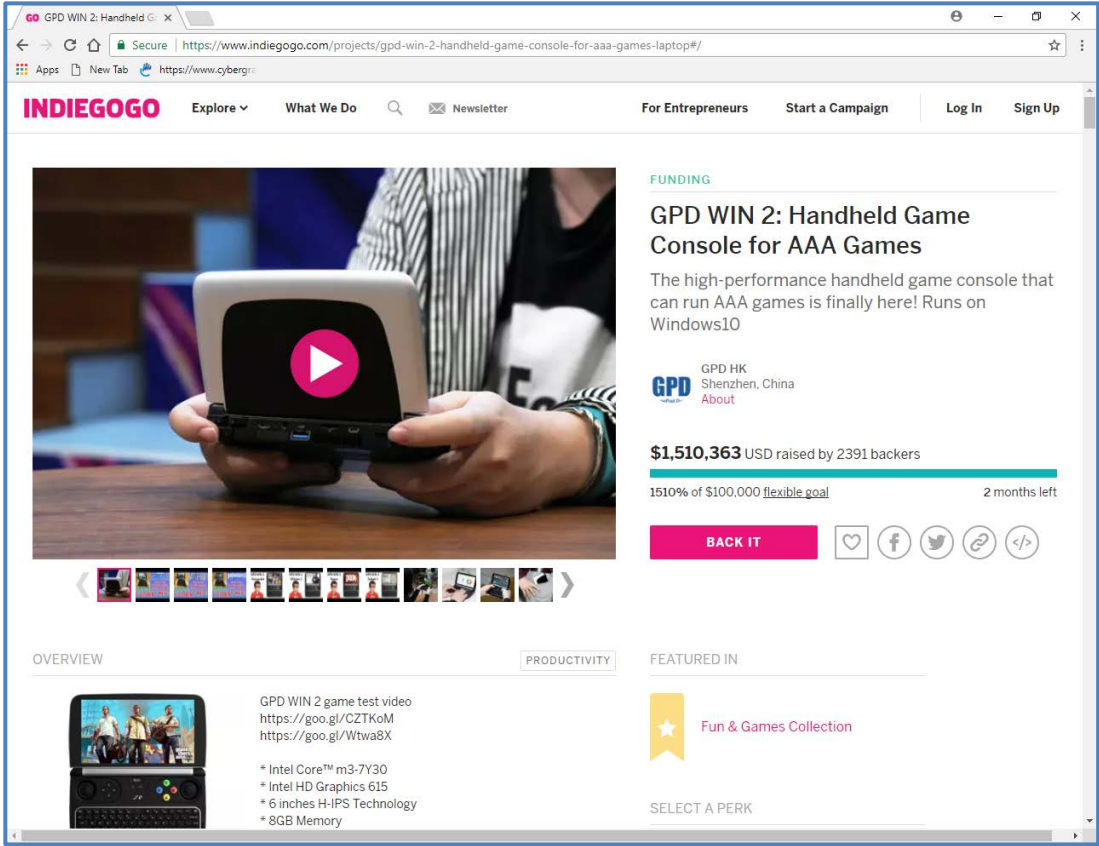
The answer: *crowdfunding*. If your idea is appealing, people might *crowd* around your website and want to support you by making a cash donation. You would start a crowdfunding *campaign*, and if your campaign is successful, you will get several *backers* to donate cash. My formal definition of crowdfunding is “the practice of obtaining cash to finance a business idea by soliciting contributions from the online community rather than from traditional providers of seed capital.”

Have you ever heard of [Kickstarter](#)? Or [Indiegogo](#)? These are two of the most popular crowdfunding websites that allow you to pitch—or campaign for—your idea online. Kickstarter typically funds ideas that are more in line with the creative arts, like producing movies or documentaries. Indiegogo is more open to general business ideas.





Take a moment and go to Indiegogo's web site. Spend five minutes or so and browse through the first few pages. Here is what their first page looks like as of February 2018:



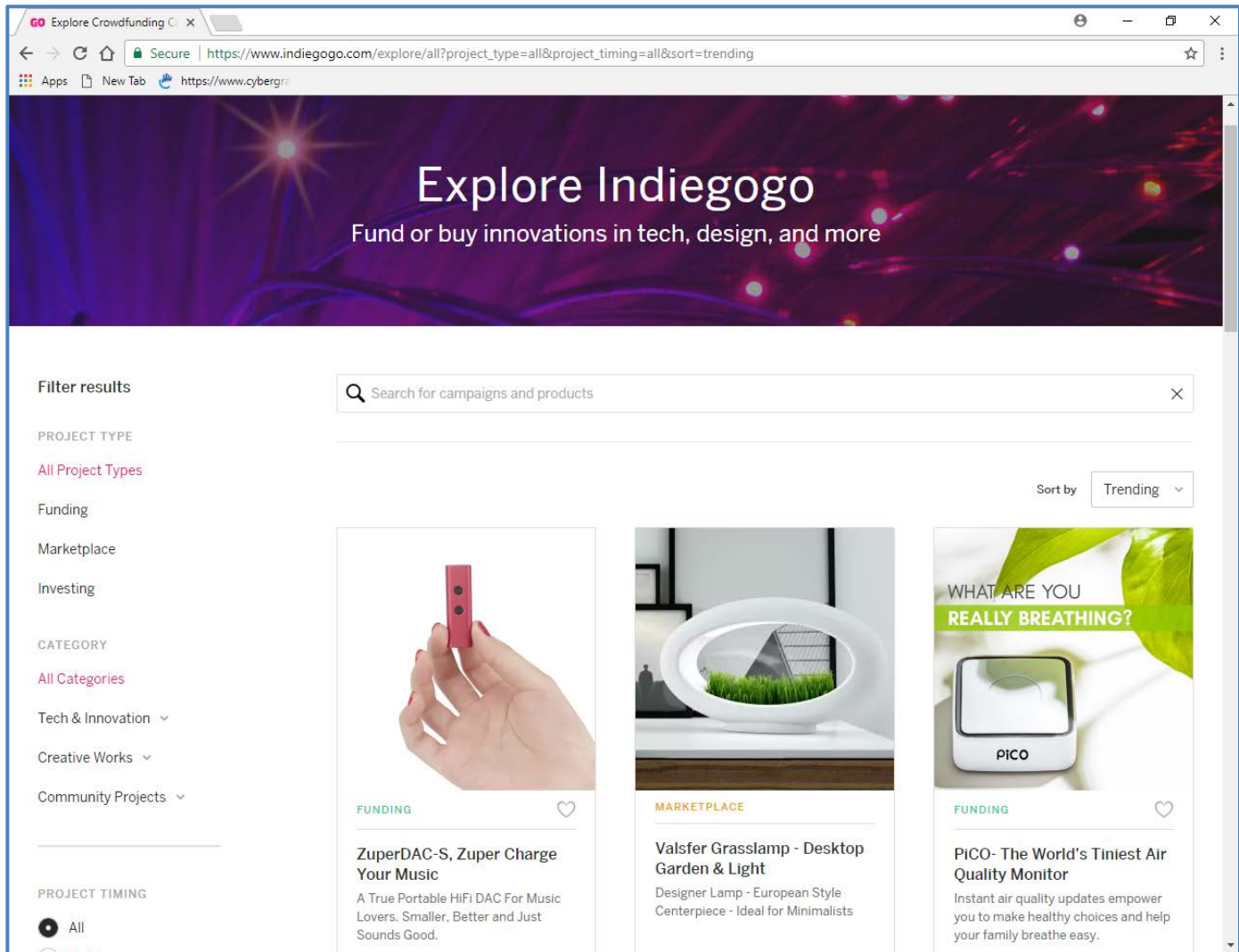
Click on the Explore tab. Note, on the left, that three main project types: Funding, Marketplace, and Investing. Projects seeking funding are not yet selling any goods or services. They are in the Funding category. The entrepreneurs need money.

Projects that are already selling goods and services are in the Marketplace category.

Projects that offer you an ownership share in the company fall under the Investing category. In the TRIS

course, we will focus only on the Funding category, because you are not yet selling anything, and you are not looking to give up any equity in your company (not yet, anyway; later, if you are wildly successful, you may want to form a corporation and sell stock in your company).

When you apply to start a crowdfunding campaign on either site, you must fill out an online application, providing details about yourself and your idea. You let Kickstarter or Indiegogo know how much you want to raise, and they will give you a fixed period to raise it, like 30 or 60 days. The pitch includes a brief overview of what you are doing, why you need the money, what a donor will receive if they give you money (optional), and a brief video. The ideal video should be between two and four minutes. The video should highlight the features of your product or service, and do its best to convince the potential backer that they should trust you to deliver the product.



The crowdfunding website, of course, should indicate how much money you want to raise. You should also inform backers of what they will receive in return. Some backers are promised something small, like a free T-shirt or key chain. Kickstarter requires campaigners to give a reward, but with Indiegogo, offering such “perks” is optional.

It's worth noting that, in Indiegogo's case, instead of giving small tokens of appreciation to donors, the entrepreneur may offer products or services that it intends to sell at a discount. This is a good way for the entrepreneur to gauge early demand for the product while, at the same time, attracting a larger number of donors.

For example, let's say your company is pitching "widgets." You might promise donors who give \$500 that they will receive 100 free widgets when your company is up and running. If they give \$1,000, they get 250 widgets. If they pledge all \$2,000, they get 500 widgets.

Alternatively, you might offer them an "equity" position. For example, you could promise donors who give \$500 that they will receive 3% of your company when it is up and running. If they give \$1,000, they get 10%, or if they all \$2,000, they will receive 20%. However, you must be careful here. When you sell equity in your company, you will be subject to securities and federal regulations. We advise you to stay away from this until your company begins to succeed beyond, and that your product or service is viable. At this point, we would suggest you get some legal advice from an attorney specializing in business law.

There is one important difference to note between Kickstarter and Indiegogo. With Kickstarter, if your target is to raise \$3,000 in 30 days, but you only end up raising \$2,000, then all the money is returned to the donors.

With Indiegogo, however, you can choose a fixed funding target, like Kickstarter. Or you can choose a flexible funding program, meaning, for example, if you raise only \$2,000 rather than \$3,000 target, you still get all \$2,000.

What does Kickstarter or Indiegogo receive in return? They get a small percentage of the total amount donated to your cause (e.g. 5%). Plus they get 3% of all donations received.

## Questions and Answers

**Question 1:** What is crowdfunding?

**Answer:** In the TRIS course, we define crowdfunding as "the practice of obtaining cash to finance a business idea by soliciting contributions from the online community rather than from traditional providers of seed capital."

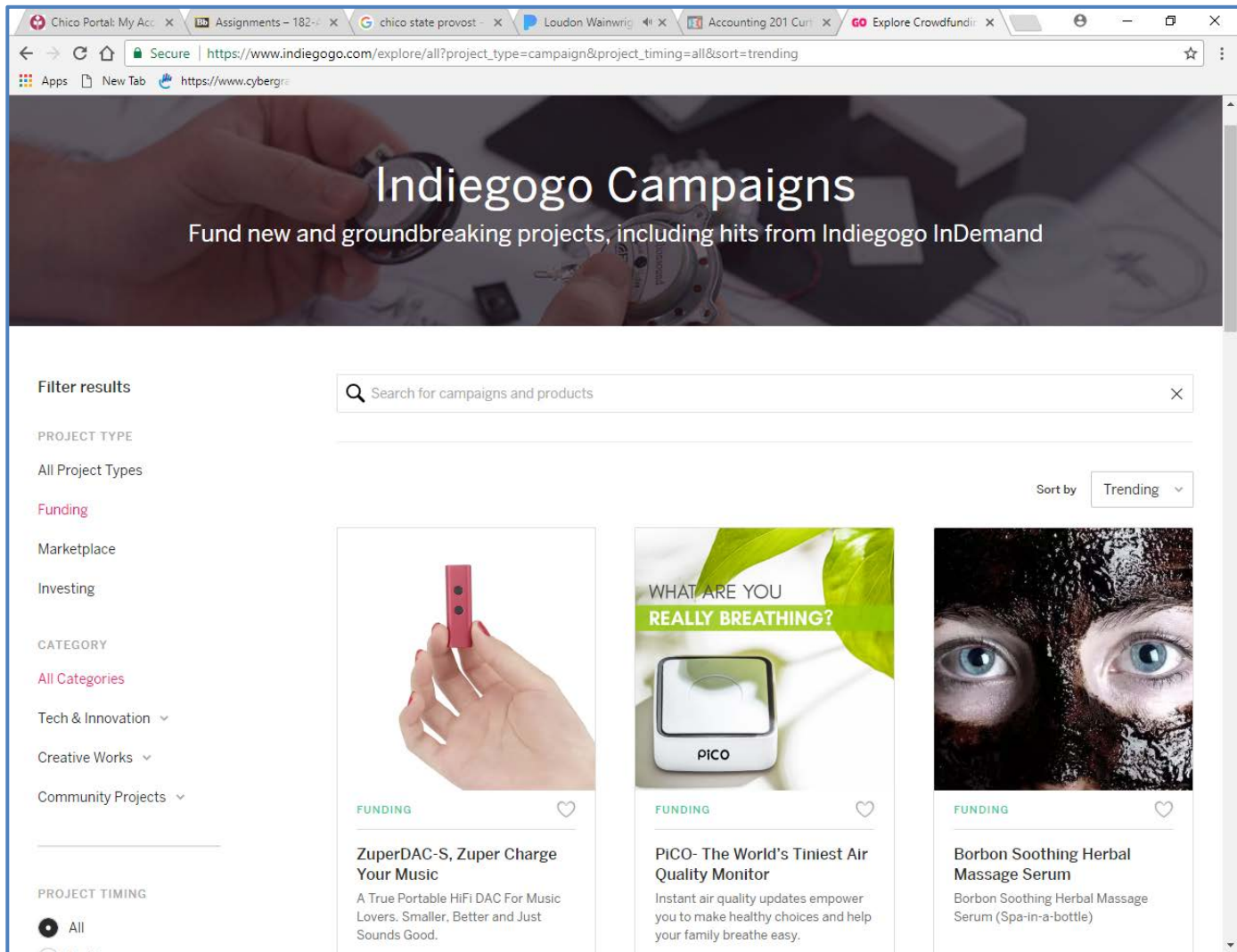


**Question 2:** When uploading their business idea onto a crowdfunding website, should entrepreneurs offer rewards, or benefits, to people who donate?

**Answer:** It depends. With Kickstarter, the campaigner must offer some type of benefit. However, this is optional for Indiegogo.

**Taking Action**

**Exercise 1:** Go to <http://www.indiegogo.com>. Click on the Explore tab. Then click on the “Funding” link under “All Project Types” category. You should get an image highlighting three business ventures, similar to what you see below.



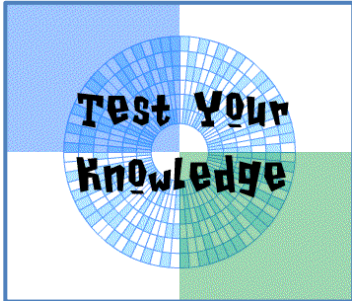
When I did this, I liked the third one the best – Borbon Soothing Herbal Massage Serum. The two-minute video explained a new massage potion. The owner, Carmen Milagro of San Francisco, already raised \$12,219 from 131 backers. She only asked for \$10,000!

Furthermore, as a reward, Carmen offers “discounts” to people who buy the product in advance. What a great way to increase cash flow before the product hits the market. Nevertheless, Carmen must be careful – she must honor the commitments to deliver the goods as promised.

Now, take a few minutes to navigate all three campaigns that are trending. What are the three campaigns featured? Which one do you like best? Why?

**Exercise 2:** What did you learn when you watched the video, “Kickstarter, IndieGoGo and Best Practices for Crowdfunding” <https://www.youtube.com/watch?v=Tw9ZpiTIqd0> (33:08). Did it help you decide which crowdfunding site might be best for your business?





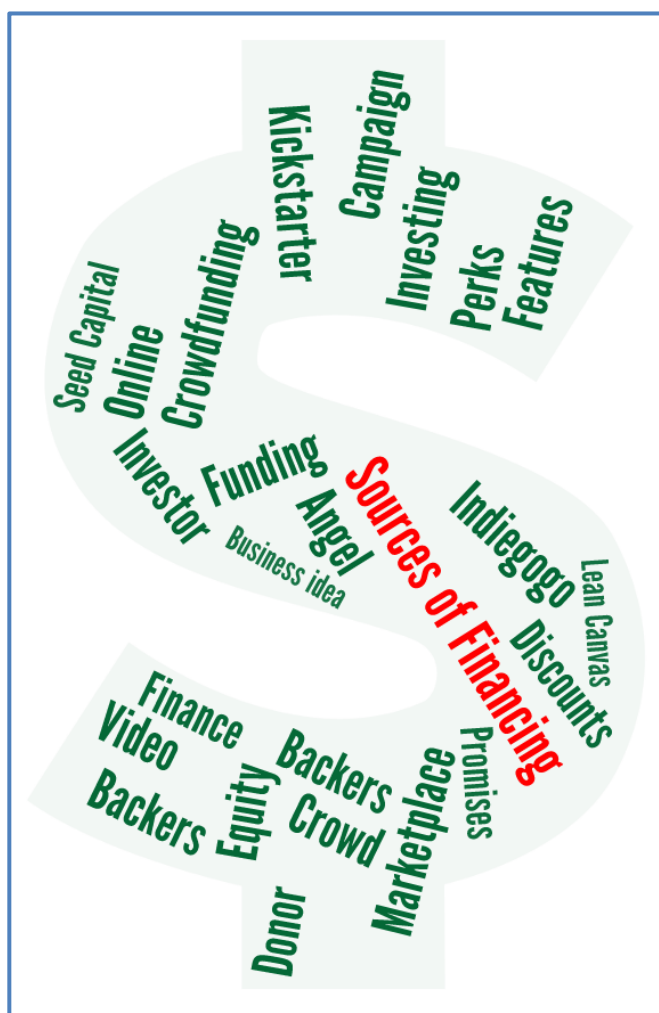
## Quiz Yourself

1. What is an example of a crowdfunding website?
  - A. Kickstarter
  - B. Indiegogo
  - C. LinkedIn
  - D. Facebook
  - E. Both A and B
2. What is something your business should clearly indicate when starting a crowdfunding page?
  - A. How much money you want to raise
  - B. When the business started
  - C. Whether you are a sole proprietorship or a partnership business
  - D. When you came up with the idea for the business
  - E. None of the above
3. What happens if you sell equity in your company?
  - A. You will not be subject to securities laws
  - B. You will not be subject to federal regulations
  - C. You will give up an ownership share of your company
  - D. You will make a lower profit
  - E. None of the above
4. What does Kickstarter receive in return from a business that lists on its crowdfunding site?
  - A. Advertising
  - B. Free business products
  - C. Discounted business products
  - D. Small percentage of total amount donated
  - E. A thank-you note from the CEO of Kickstarter
5. Why would a business on Indiegogo offer “purchase discounts” to people who buy its product, in advance?
  - A. To gauge early demand for the product
  - B. To attract a larger number of donors
  - C. To bribe the funders into buying something they don’t want
  - D. Both A and B are true
  - E. None of the above
6. True or False: All crowdfunding websites require campaigners to give a reward or offer some “perks”.
7. True or False: Some businesses may offer equity in the company in exchange for donations to get the business up and starting.

8. True or False: Crowdfunding is the practice of obtaining cash to finance a business idea by soliciting contributions from the online community rather than from traditional providers of seed capital.
9. True or False: An example, of exchanging money for equity in a company is if a donor gives you \$500 in exchange for a 5% share of your company when it is up and running.
10. True or False: There are three different project types for crowdfunding on Indiegogo: Funding, Marketplace and Investing.

## What to Do Before the Next Lesson

Continue working on your lean canvas. Also, refine your two-minute pitch and be prepared to present it to fellow students or upload it to YouTube.





## Lesson Eleven: Pitching Your Idea with the Pitch Deck

Before reading any further, please make sure you have watched these two videos:

<https://www.youtube.com/watch?v=dcFhuOCOB78&t=212s> (7:50), “Lesson 11 - Pitching Your Idea with the Pitch Deck”

<https://www.youtube.com/watch?v=hludN2e33TY> (5:51) – “The 3 Most Important Things Investors Look For in a Winning Business Plan”

### The Big Picture

If you are an entrepreneur looking for money to start your business, you will need to convince potential funders that you have a problem worth solving. You will also need to convince them that there are potential customers for your idea and, hopefully, your prototype.

Investors like to hear very short pitches, sometimes as short as one or two minutes! The first ten seconds are crucial—the audience gets to see who you are, and how innovative your idea is. I have often heard investors compare their decision whether or not to fund a company to a horse race. Their decision to make a bet depends just as much, if not more, on the jockey than it does on the horse. You are the jockey. Your business is the horse.

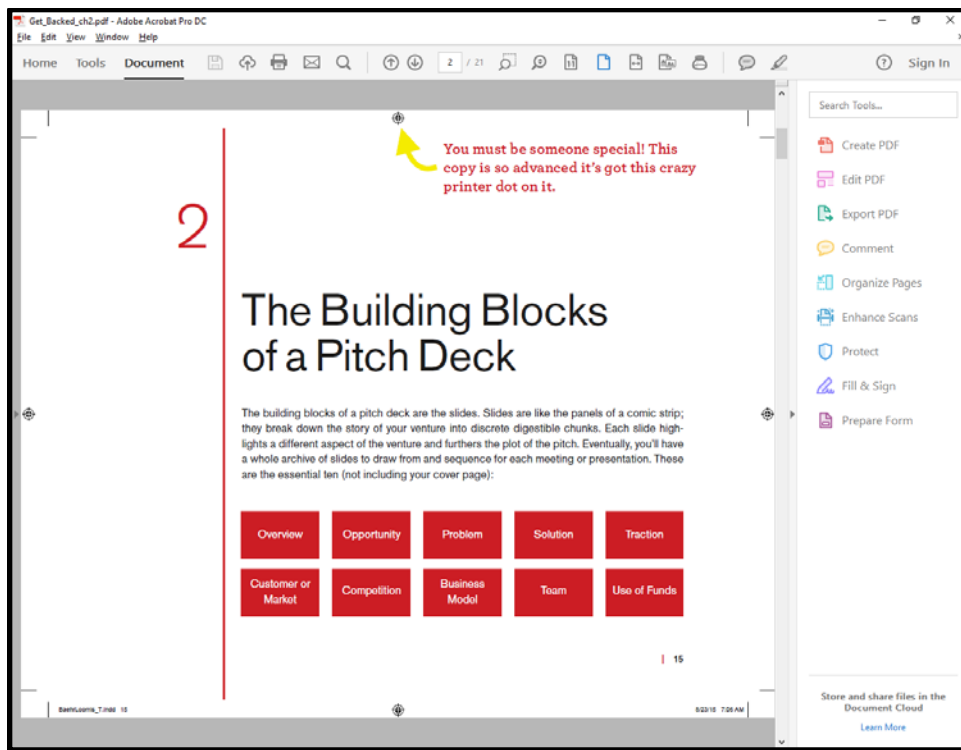


First impressions matter! Who are you? What is your idea? Is there a market? What is your unique value proposition? Do you have an unfair advantage?

Of course, investors will want to see your lean canvas and really get inside your head before they invest, but you need to get their attention first. A *pitch deck* consists of 10 or 11 visually appealing slides that address the most important aspects of your business. Your pitch will be successful if it gets you to the next meeting!

The successful pitch deck gets the audience to understand your business model, care about it, and then take action. For example, assume a panel of angel investor plans to hear two dozen, three-minute pitches in one afternoon. Going in to the day, you learn that the investors plan to fund up to four businesses. That means they might invite eight entrepreneurs to the next meeting so they can scrutinize their businesses more closely, including the lean canvas and supporting documentation for each cell.





So obtaining funding for your business might be a long shot, but you can dramatically improve the odds in your favor. How? By making a smashing presentation.

You can do it! First, use your lean canvas as a guide. Then, begin drafting your slides.

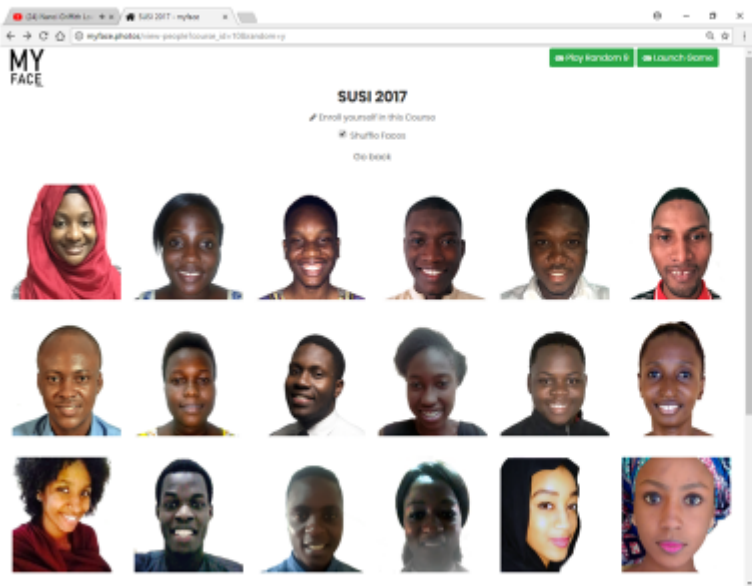
Let's use Myface as an example as we create our slides. A wonderful web site to visit here is "[Get Backed](#)." You can go to this web site and download Chapter 2 free by entering your email address, or you can [click here](#). The following discussion is based on Chapter 2. The authors recommend a cover slide plus 10 slides for the pitch deck.

## The Pitch Deck

In this section, we provide an example of a pitch deck using Myface, introduced in Lesson Six.

### Slide #1: Cover page

The first slide has to look great; it must be short and simple. It should have your company logo, an inviting picture, and a descriptive title.



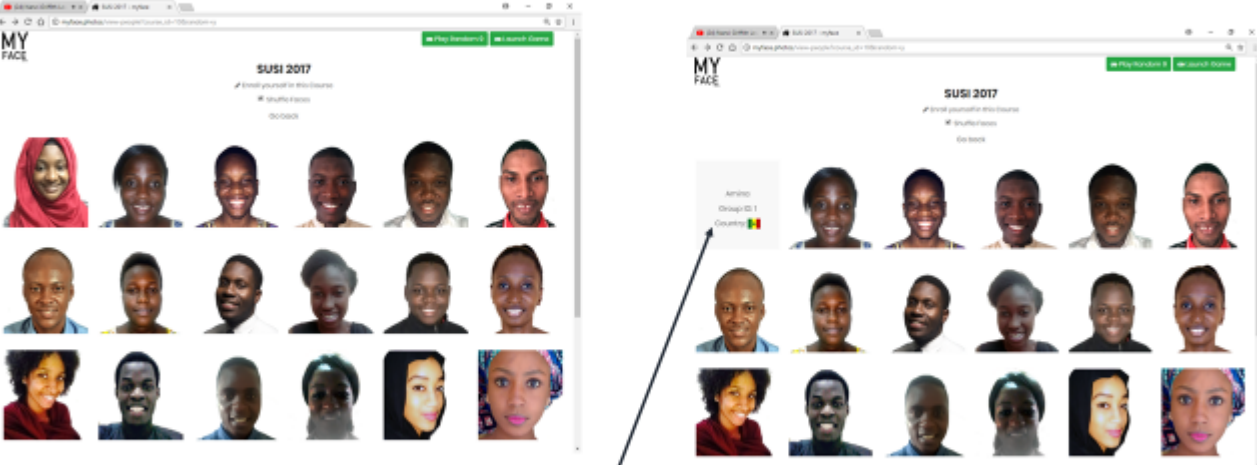
# Myface

The fastest, easiest and most fun way to learn names and faces

Slide #2: Overview

This slide shows how Myface solves a problem. We explain how, by using our software, it is easy it to link a face to a name to a profile. And students do almost all the work. Amina takes her own photo, creates her own profile, and automatically loads it up to <http://myface.photos/susi2017>. (Note: if there is Internet connectivity, it might be wise to visit the website directly at this point.)

## Overview – Who is Amina?



There she is! Now click on her name or country flag....

## Slide #2: Opportunity

An investor needs to know if there is a large customer base interested in your product.

### *Opportunity*

- There are millions of professors who would like to get to know their students better
- Our initial target market consists of individual faculty, departments, colleges and universities

Worldwide: 6 million faculty and 20,000 colleges and universities

USA: 1.5 million faculty and 5,000 colleges and universities



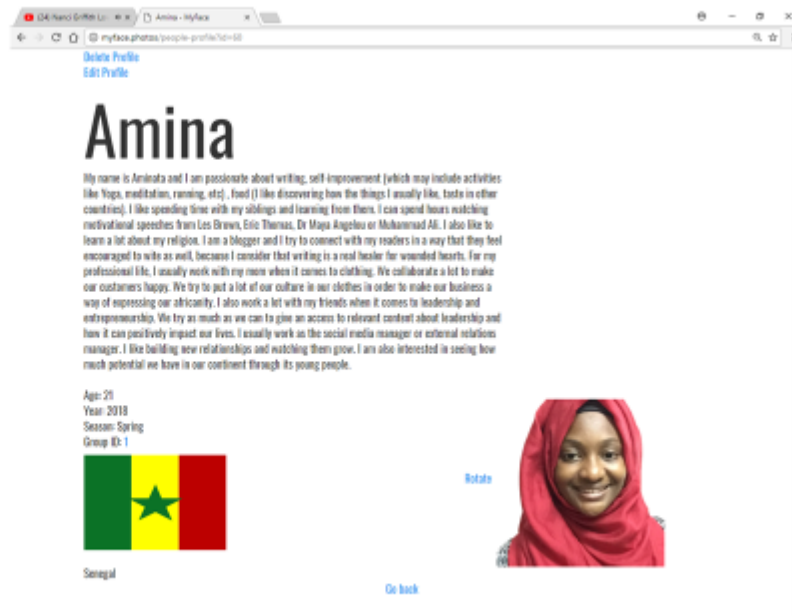
## Slide #3: Problem

What do potential customers want from this business? Is there a problem worth solving? As classes get larger and larger, professors often throw up their hands and say, "This is impossible. I can never learn all my students' names." Dr. DeBerg and Kunal, by now, must convince the audience that there is a real problem.

## Problem

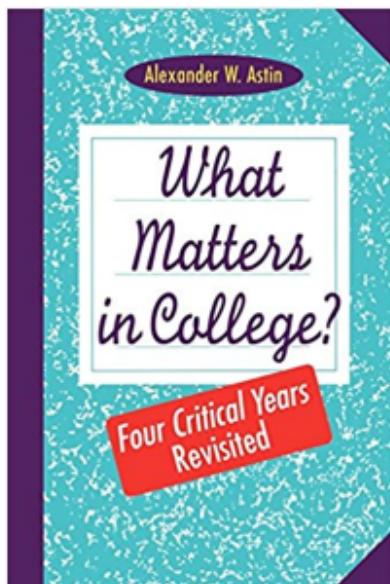
Large class sizes  
make it very hard to  
get to know  
students personally

Amina would really  
like it if her  
professor learned  
her name!



### Slide #3a (optional):

In case the audience is not convinced there is a real problem, Dr. DeBerg might include the following slide. Here, he cites a well-known authority in how students learn. Alexander Astin wrote a famous book that provides evidence that the single most important factor in student learning is greater faculty student interaction. If this slide is not used here, it should be in an Appendix set of slides, in case the audience wants to learn more about the business during a question and answer session.



Alexander Astin, *What Matters Most in College* (1993):

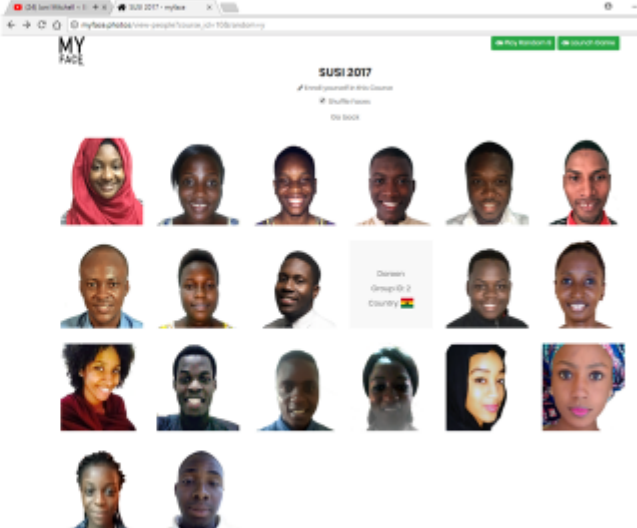
GREATER  
FACULTY/STUDENT  
INTERACTION

## Slide #4: Solution

This slide is crucial! There is no holding back now. Dr. DeBerg must offer a viable solution to the problem. If, indeed, there is a problem worth solving, then how does Myface address the problem? Dr. DeBerg cites ease of use, a matching-game strategy, a shuffle benefit, a privacy option, grouping benefit, and joy! Myface is fun. Depending on the reaction of the audience, Dr. DeBerg may want to “go live” and show the audience the prototype here: <http://myface.photos/susi2017>. He can demonstrate the shuffle and grouping features.

### *Solution*

- Easy-to-use memory training tool
- Matches photos/ names/profiles
- Shuffles photos to make learning faster
- Tom Sawyer approach: Students load their own photos and profiles directly onto our website
- Students can choose to keep their profile private
- Faster learning by grouping students
- Fun way to learn names.



The screenshot shows a web browser window with the URL [http://myface.photos/view-people?source\\_id=100&rand=0.5](http://myface.photos/view-people?source_id=100&rand=0.5). The page title is "MY FACE". The main content area displays a grid of 24 student photos arranged in 4 rows and 6 columns. A sidebar on the right contains filters: "SUSI 2017", "Email yourself or other classes", "Shuffle photos", "Go back", "Display", "Group (0-2)", and "Country".

## Slide #5: Traction

Is there any proof, or evidence, that Myface will be successful? Traction is defined as the extent to which a product or idea gains acceptance or popularity. To date, Myface has no sales revenue, nor has it signed any contracts with professors or universities. But it does have some positive news. A beta test is a “test run” by a professor actually using Myface. Learning 170 names in three weeks is impressive.

## Traction

Early results of beta test:  
--170 names learned in 3 weeks

Software has  
been pilot  
tested in classes  
ranging from 35  
to 100 students

*"I really like that the professor knows everyone's name. This motivates me to do all the readings and homework every night prior to class."*

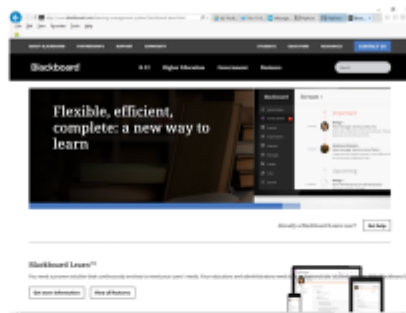


## Slide #6: Customer or Market

This slide is related to the Opportunity slide. It reinforces the target audience and offers a strategy to move forward with sales, from beta testers to actually buying customers.

## Market

We will start by  
targeting  
professors who  
show interest in  
beta testing the  
software



Fall 2019: 20 beta testers from 20 colleges/universities

Spring 2020: 50 new beta testers and 25 adopting schools

Fall 2020: 100 new beta testers and 50 adopting schools

## Slide #7: Competition

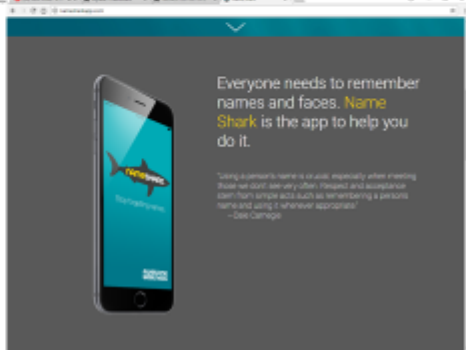



Many entrepreneurs fall so deeply in love with their own idea that they fail to research potential competitors. Myface has done a great deal of research on potential competitors, and only two are doing what Myface is doing. The closest competitors are Brigham Young University-Idaho and Name Shark. Investors want to know that you know this, and that your product is better.

# Competition

Competitors, like BYU and Name Shark, already are committed to learning student names

*But Myface has features BYU and Name Shark do not have (e.g., shuffle, profile privacy, grouping, self-loading!)*



## Slide #8: Business Model

How will a business generate revenue? Dr. DeBerg believes that licensing the software to individual faculty, or to university departments, or possibly even to the university itself, is the most likely way to generate revenue.

# Business Model

## Revenue (Licensing)

- Individual faculty
- Departmental units (first year and renewal)
- University level (first year and renewal)
- Large organizations that want to pre-register guests, including their faces and profiles



## Slide #9: Team

This slide should be brief, and explain what the expertise each person brings to the team.

### Curt DeBerg – The Brain

Dr. Curt DeBerg has been a professor at California State University, Chico for 27 years. He is the mastermind behind Myface.



### Kunal Bhavsar – The Braun

Kunal Bhavsar is an MBA student at Chico State; he has sick computer programming skills. He has authored the software and will service customer requests and needs.





## Slide #10: Use of funds

This is your big ask. How much do you need? What are you going to do with the funds? Dr. DeBerg wants to hire some programmers to help Kunal improve the prototype, get ready to grow, and market the software.

### *Use of Funds*

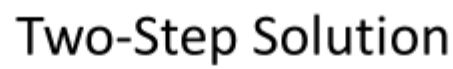
- Hire programmers to assist Kunal with continuous improvement and web site development
- Optimize the platform for scale
- Ramp up sales



## Questions and Answers

**Question #1:** Must you keep your pitch deck to include only a cover and 10 slides?

**Answer:** Not necessarily. Other slides might include such things as projected financial statements, milestones achieved, testimonials, frequently asked questions, etc. Myface has several additional slides in case the audience wants to see a “demo.” If Dr. DeBerg doesn’t have access to the Internet, he can go through the following additional slides:



Step 2: Students upload their picture and biographical information (e.g., name, hometown, hobby, goals) (this takes five minutes)

Done! Faculty can now memorize names using our “Myface” technology

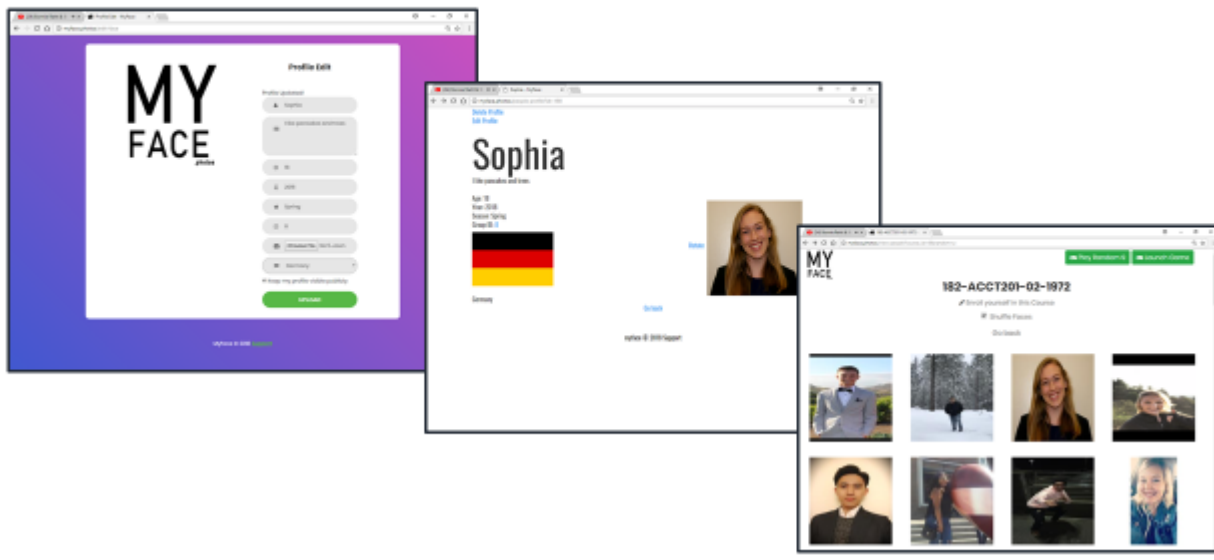
Step 1:

### Professor creates account



## Step 2:

Students upload their biographical information and picture to the assigned URL created by the professor  
(e.g., <http://myface.photos/acc201-02>)



**Question #2:** What should I do before my presentation?

**Answer:** There are several things you can do to prepare for the presentation. Here are some key tips.

Tip #1: Preparation is everything. Rehearse. Possibly in front of a mirror. Videotape yourself. If you need to use note cards, make sure you do not read directly from them. You should know the subject matter so well, and be so well rehearsed, that the presentation comes across as natural and relaxed (even though your heart may be beating 160 beats a minute!). It is worth it to be obsessed with effective presentation techniques. Of course, you are the expert of the subject matter, but do not let your expertise get in the way of keeping your message simple.

Tip #2: Have someone edit your slides. Make sure you have selected relevant images and graphics to supplement your message.

Tip #3: Transitions. Work hard to make sure the transitions are smooth.

Tip #4: Confidence. The better you know the material, the more confidence and poise you will have.

Tip #5: Attire. Make sure you wear a business suit that is not too showy, unless the main idea can be enhanced with a special costume or uniform (e.g., if you are going to offer flying lessons, you may want to dress up as an airline pilot).

Tip #6: Feedback. Obtain feedback from friends and relatives who will provide an honest critique.

Tip #7: Decide whether to provide handouts to the audience ("thumbnails" of the slides; a copy of the lean canvas; a sample of the product).

Tip #8: Get plenty of rest the night before.

Tip #9: Bring a bottle of water to the presentation. Consider giving each panelist a personal handshake before you start.

Tip #10: Arrive early. Just-in-time or late arrivals will make you nervous and unsteady.

**Question #3:** What should I do during my presentation?

**Answer:** Here are five suggestions.

Tip #1: Thank the audience for coming. A warm smile helps!

Tip #2: Present in a professional tone that is not overly loud, showy, or ostentatious, or unduly soft and unenthusiastic.

Tip #3: Be as relaxed and natural as you can. Your preparation should give you poise and confidence.

Tip #4: Make sure any sound system is properly calibrated.

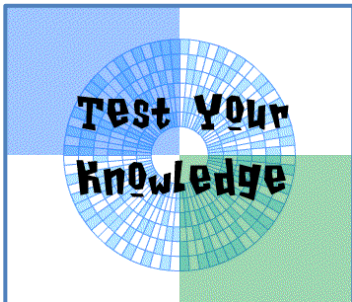
Tip #5: Do not forget to use humor in the presentation!

**Question #4:** What should I do after my presentation?

Thank the audience—again! And perhaps offer them business cards, unless your information is included in handout materials.

## Taking Action

**Exercise 1:** Go to this website and watch this [video](#). According to the narrator, what are the three most important things investors look for in a winning business plan?



## Quiz Yourself

1. What is a pitch deck?
  - A. The place a baseball pitcher stands on a luxury cruise.
  - B. 10 or 11 visually appealing slides that address the most important aspects of a business.
  - C. A group of cards that contain famous baseball players from the past.
  - D. A business plan with nine cells, with Problem on the left and Customer Segments on the right.
  - E. The upward-sloping area above a sand trap but before the green on a golf course
2. How can you dramatically improve the odds of obtaining funding for your business?

- A. Wear a business suit costing \$400 or more
  - B. Make a great presentation to potential funders, using a pitch deck
  - C. Bribe the “fixer,” who is a good friend of the city mayor
  - D. Inflate your projected revenues and understate your projected expenses
  - E. None of the above
3. Traction is defined as:
- A. the “stickiness” of a car tire to the surface of the road
  - B. the extent to which a product or idea gains acceptance or popularity
  - C. the blend of fractions and trinomials
  - D. the extent to which an investor is willing to put money in a business
  - E. None of the above
4. What is the name of the company used as an example in this lesson?
- A. Funnyface
  - B. Myspace
  - C. MemorizeMe
  - D. Concentration
  - E. Myface
5. Which of the following is NOT one of the 10 slides in a pitch deck?
- A. Overview
  - B. Problem
  - C. Demand
  - D. Opportunity
  - E. Solution
6. True or False: Investors like to hear very short pitches, sometimes as short as one or two minutes.
7. True or False: The first ten seconds of a presentation are not crucial – it is the ending that counts most.
8. True or False: You must always keep your pitch deck to include only a cover and 10 slides.
9. True or False: It is usually wise for entrepreneurs to create a lean canvas or a pitch deck, but not both.
10. True or False: Many potential investors base their investment decisions on both the business idea and the people behind the idea.

### What to do Before the Next Lesson

- I. Create your own pitch deck. Use [Myface’s pitch deck](#) as a guide, and your lean canvas for input. Include a cover slide and 10 more slides.
- II. Visit this [web site](#) to see a 3-minute pitch made by the author of the TRIS lessons. He was not permitted to use any visuals, nor was he allowed to move around. Is the pitch effective? What could have been better?





## Lesson Twelve: Marketing Your Product or Service to Customers

Before reading any further, please watch these videos:

<a href="https://www.youtube.com/watch?v=RBEXTmpnpjg">https://www.youtube.com/watch?v=RBEXTmpnpjg</a> (5:40) – “Lesson 12 - Marketing Your Product or Service to Customers”
<a href="https://www.youtube.com/watch?v=JlirzTdaey4">https://www.youtube.com/watch?v=JlirzTdaey4</a> (5:18) – “A New Look at the 4Ps of Marketing”
<a href="https://www.youtube.com/watch?v=oyTpJ3khprk">https://www.youtube.com/watch?v=oyTpJ3khprk</a> (6:55) – “Guy Kawasaki – The Holy Grail of Marketing”

### The Big Picture

You’ve completed the lean canvas. You’ve made your pitch. You’ve gotten the cash you need to finance the business. You’ve done surveys to help you determine that potential customers see the special value you’ve presented in your unique value proposition (UVP). Your goal, of course, is to satisfy customer expectations for value. Who are your customers? How will you reach them?

At this point in the TRIS course, you should have created a prototype, or a landing page, for your prototype or service. In other words, you have a minimum viable product (MVP). All signals are positive—you are convinced that people are interested in buying what you are selling. What is your job now?

It’s to create, communicate, and deliver value to a target market for a profit, according to marketing guru [Philip Kotler](#). This is the mantra of marketing. You are confident that you have a *product* that people want to buy. *Product* is the first of four famous P’s in a marketing strategy. What are the other three P’s? They are:

*Price*: How much are you going to set as your initial selling prices? Will you offer a discount to early buyers?

*Place*: Where are you going to sell your product? Will you be selling in retail stores? Will you be delivering your product? How?

*Promotion*: How will you let people know that your product exists? Will you use traditional marketing, like TV, radio, newspapers, and billboards? What about on-line marketing, like Google and Facebook ads? Can you expand your social network, and potential customer base—by utilizing social networks like LinkedIn?

This lesson focuses on the Price, Place, and traditional ways to Promote your product. Lesson 13—the next lesson—will dive deeper into today’s Internet world of digital marketing.

Recall that the far right cell of the lean canvas is Customer segments. Who is interested in buying your product to solve their problem? What price will you charge? Where can they buy? How will they learn about it?





Problem(s)	Solution(s)	Unique value proposition(s)	Unfair advantage	Customer segments  Who are your customers?
	Key Metrics		Channels  What is your paths to customers?	
Cost structure			Revenue streams	

Let's take a close look at each of the four P's.

## Price

What is the optimal price? This is a crucial decision. Is price the key factor when customers buy? Or is quality? Should you offer quantity discounts? If you set your price too low, you will be leaving money on the table. If your price is too high, you will lose sales. But the price has to be enough to make a profit.

Sam Walton, the founder of Walmart, adopted the following

pricing strategy: always mark up the cost of the product by 30%. For example, if a bicycle costs Walmart \$100, Sam Walton would take 30% of the cost, or \$30, and add it to the cost. So,  $\$100 + \$30 = \$130$ , giving him a sales price of \$130.

Other retailers would mark up merchandise by a much higher percentage, but Walton's philosophy was never to gouge the customer, even when he could see the product for more than its cost.

Side note here: do not confuse the purchase *cost* of a product with the sales *price*. Here, the cost is \$100 and the *price* is \$130.

Because Walmart made a 30% gross profit on its cost, it needs to sell large quantities of merchandise in order to cover all the remaining costs, like labor, insurance, labor, and utilities.

Problem(s)	Solution(s)	Unique value proposition(s)	Unfair advantage	Customer segments  <i>Who are your customers ?</i>
	Key Metrics		<b>Channels</b>  <i>What is your paths to customers ?</i>	
Cost structure			Revenue streams	

## Place

Have you ever heard someone say, "Location, location, location?" Obviously, they are referring to where you plan to buy or sell something. Look at the lean canvas again. Below and to the left of the Customer segments cell is the Channels cell. Where will you sell your product? How will you deliver it to customers? Will you require a store, or only an Internet site, or both? Of course, answers to these questions depend on what type of business you are in.

Again, let's look at Walmart. Walmart is a discount merchandise retailer. Before Walton started Walmart, most discount retailers sold their products only in major cities. If customers lived in smaller towns or cities, they would have to travel long distances to shop at Ben Franklin or Montgomery Ward or Woolworth stores. Sam Walton chose to sell his products in smaller towns and cities near interstate highways, where customer traffic was high. He also built huge distribution centers in the center of a "wheel" of stores within easy replenishment of inventory.

Side note: do not confuse the purchase *cost* of a product with the sales *price*. Here, the cost is \$100, the *price* is \$130.

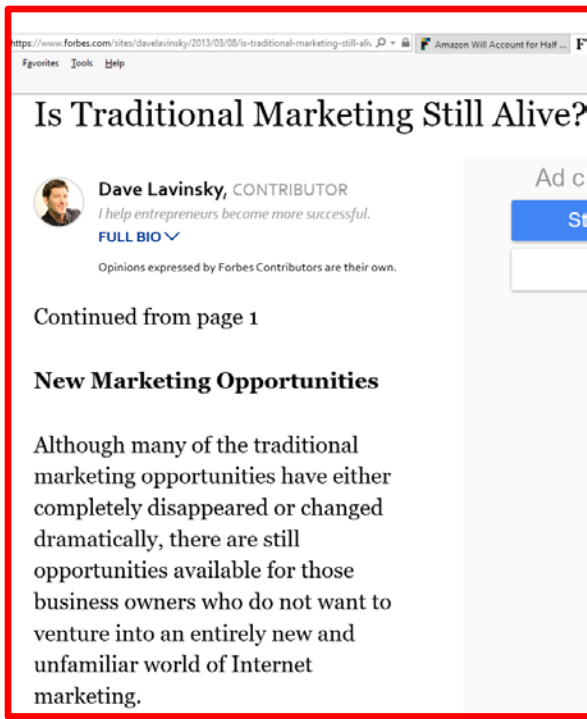
## Markup

- *Markup*: the percentage you increase cost to arrive at a sales price
- Assume: cost = \$100, markup = 30%; what is the sales price?
- Sales price = \$100 + (30% of \$100)
- \$130 = \$100 + \$30
- Markup as percentage of cost =  $\$30/\$100 = 30\%$
- Markup as a percentage of sales price =  $\$30/\$130 = 23\%$

Note: Sales price should depend on what prices your competitors charge, and how much your business product or service is demanded by consumers

Recently, Walmart has started to compete with companies like Amazon by selling online. This is an example of e-commerce. According to an article in [Business Insider](#), "Walmart recently started discounting online orders that are picked up in-store, and rolled out a new mobile app features for its pharmacy and money order services." Amazon is still the king of kings here, having captured 53% of all growth in US e-commerce in 2017. Stuningly, [Amazon](#) is expected to make up 50% of all U.S. e-commerce sales by 2021.

Many new businesses sell products from home, but they have challenges related to storing and shipping



inventory. This is called order fulfillment. Also, many business sell services from home (e.g., graphic design, web development). Without a physical storefront, these companies are especially challenged to attract customers. This leads to our new P – Promotion. Note the highlighted part of the lean canvas below.

## Promotion

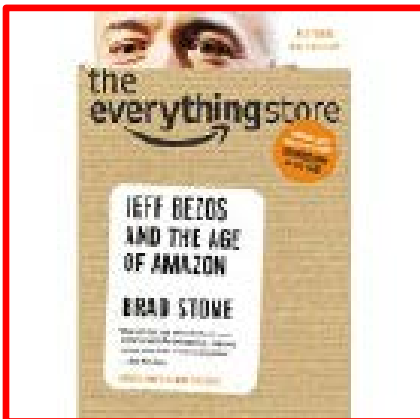
When you think of promotion, one of the first words that comes to mind is advertising. What is the most cost effective way to reach your customer? What is your best path to customers? Have a look again the lean canvas.

Traditional advertising includes such things as:

- TV
- radio
- print newspapers and magazines
- telemarketing (e.g., phone)
- billboards

- direct mail
- catalog
- brochures
- flyers
- sponsorships of local and regional events
- yellow pages (ask your parents about this!)
- business cards

One problem with these forms of advertising is that they can be very expensive. Another problem is that it's nearly impossible to measure the impact of such advertising. In other words, how do you know whether an ad is successful? Traditional marketing is not dead, but it's struggling. For example, I encourage you to read this article, ["Is Traditional Marketing Still Alive?"](https://www.forbes.com/sites/davelavinsky/2013/03/06/is-traditional-marketing-still-alive/)



An effective way to obtain free advertising is to have your company, and its product, featured in traditional media outlets such as TV, radio, newspapers, etc. There's nothing better than having someone else, besides you, extolling the virtues of your creation! If your product is newsworthy, you should write a press release

describing your business, send it to local media (with pictures, if possible), and offer to do an interview. Young entrepreneurs have an advantage here, because the media are always looking for “feel good” stories about the younger generation. A young person starting a business is a perfect story for the media wanting to mix in some good news with the constant barrage of negative news. If your company has a good public relations department, this department will issue the press release.

With today’s digital marketing options, cost can be minimized and impact can be maximized. It’s now possible to track a customer inquiry, from placement of the digital ad to an actual sale. The most effective digital ad campaigns can be scaled up; the least effective can be modified or dropped.

An excellent video summarizing the four P’s can be found here: “[A New Look at the 4Ps of Marketing](#)”.

## Questions and Answers

**Question #1:** Assume you are selling a new product that costs you \$80 to produce. If you want to mark it up 40%, how much is the total markup, in dollars? What is the selling price?

**Answer:** Because 40% of \$80 is \$32, your markup is \$32. Your sales price would be  $\$80 + \$32 = \$112$ . Is this a good price? Is it too low? Too high? What have your early results shown, when you did user surveys? Setting your price is a huge decision.

**Question #2:** What are two of the main problems with traditional advertising?

**Answer:** Traditional advertising is expensive, and you usually can’t determine if the ad is successful, because it’s almost impossible to link the ad directly to the sale.

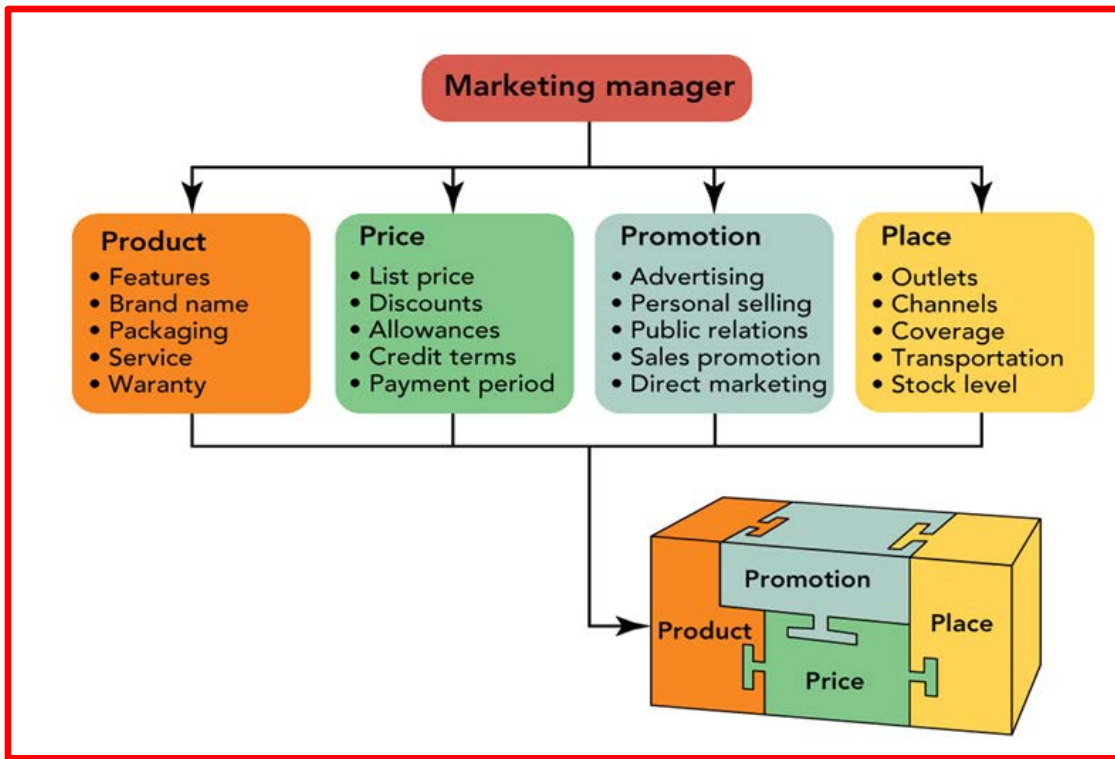
**Question #3:** Why is a newspaper article about you and your business better than paid advertising?

**Answer:** Because it’s free, and it provides an avenue for other people to tell what a great business you have. It lends more credibility to your business.

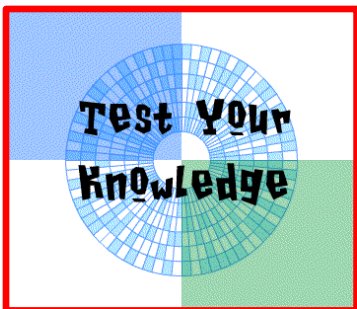
## Taking Action

**Exercise 1:** Watch this brief video: “[Guy Kawasaki - The Holy Grail of Marketing](#)”. Who is Guy Kawasaki? What was the most interesting thing you learned from the video?

**Exercise 2:** Carefully study the graphic below.



Note the bullet items under Product. The marketing manager has to manage many tasks, including features, brand name, packaging, service, and warranty. In groups of three or four students, look at the bullet points under the other three P's. Can you figure out what each of these terms mean? If not, do a Google search and learn about the one's you don't understand. What is the product or service your business will sell? At what price? How will you advertise? Where will you sell? Will you need a warehouse?



## Quiz Yourself

1. Which is NOT one of the four P's?
  - A. Price
  - B. Product
  - C. Pizzazz
  - D. Place
  - E. Promotion
2. What is an example of traditional marketing?

- A. Newspaper ads
  - B. Radio ads
  - C. TV ads
  - D. Billboards
  - E. All of the above
3. Your product costs you \$500 to make. You sell it for \$750. What is the markup as a percentage cost?
- A.  $\$500/\$750 = 67\%$
  - B.  $\$250/\$750 = 33\%$
  - C.  $\$250/\$500 = 50\%$
  - D.  $\$250/\$1,250 = 20\%$
  - E. none of the above
4. Your product costs you \$500 to make. You sell it for \$750. What is the markup as a percentage sales price?
- A.  $\$500/\$750 = 67\%$
  - B.  $\$250/\$750 = 33\%$
  - C.  $\$250/\$500 = 50\%$
  - D.  $\$250/\$1,250 = 20\%$
  - E. none of the above
5. Which company is the “king of kings” among e-commerce?
- A. Amazon
  - B. McDonalds
  - C. Google
  - D. Facebook
  - E. LinkedIn
6. True or False: Sam Walton, the founder of Walmart, always marked up his merchandise by 100% of cost.
7. True or False: Purchase cost should always be higher than sales price.
8. True or False: There are two ways to compute markup: (1) as a percentage of cost and (2) as a percentage of sales price.
9. True or False: When we are talking about marketing, we are focusing on two cells of the lean canvas: Problem and Solution.
10. True or False: An effective way to obtain free advertising is to have your company, and its product, featured in traditional media outlets such as TV, radio, newspapers, etc.

## What to do Before the Next Lesson?

Read “[Digital Marketing Vs. Traditional Marketing: Which One Is Better?](#)” by Julie Cave. Answer the following questions.

- According to the author, is traditional marketing dead? If not, what are the main benefits?
- What is the downside to traditional marketing?
- What are the main benefits of digital marketing?





## Lesson Thirteen: A Close Look at Digital Marketing

Before you read this lesson, make sure you watch the following videos:

<a href="https://www.youtube.com/edit?o=U&amp;ar=1&amp;video_id=HAv82qHWbSc">https://www.youtube.com/edit?o=U&amp;ar=1&amp;video_id=HAv82qHWbSc</a> (9:22), “A Close Look at Digital Marketing”
<a href="https://www.youtube.com/watch?v=2A1kDUgdXbE">https://www.youtube.com/watch?v=2A1kDUgdXbE</a> (38:39) – “Digital Marketing Basics”
<a href="https://www.youtube.com/watch?v=IDIU7mZm-Nw">https://www.youtube.com/watch?v=IDIU7mZm-Nw</a> (14:17) – “Introduction to Digital Marketing”

### The Big Picture

Have you heard of Johannes Gutenberg? He invented the movable type printing press in 1450 in Mainz, Germany. This led to mass production of knowledge using the printed word. No longer was knowledge locked up in Italian and German monasteries. Before the Gutenberg printing press, books were written by hand, in Latin, and locked away in secretive libraries.

Can you imagine how people reacted when mass-produced books were first unleashed upon the world? Authors of books became entrepreneurs. Gutenberg’s technology changed the world during the Renaissance.

A new Renaissance started in the 20th century, when two men—Robert Kahn and Vint Cerf—invented the Transmission Control Protocol and the Internet Protocol, the basic computer tools at the heart of the Internet. More brilliant people soon came along, like Bill Gates and Paul Allen (Microsoft), Steve Jobs and Steve Wozniack (Apple), Larry Page and Sergey Brin (Google), Mark Zuckerberg and Sheryl Sandberg (Facebook), and Jeff Bezos (Amazon). These entrepreneurs—some of them college dropouts—collectively changed the way information is now assimilated, digested, and disseminated—using any computer, tablet, or cell phone hooked up to the Internet.

Textual information, formerly found in hardcover books, is now hyperlinked to web pages, search engines (e.g., Google Chrome, Yahoo, YouTube, Bing, and Internet Explorer), videos, regular blogs, video blogs, Facebook, LinkedIn, Wikipedia, research articles, online newspapers, and more! In addition to traditional marketing, entrepreneurs now have the ability to brand their company on any number of these outlets. For example, you can guide Internet visitors to your web page, make a sale, and then collect the money using electronic money transfer companies like PayPal or Stripe. Your channels to customers have been greatly expanded, beyond just TV or radio channels!



With the dawning of the new Renaissance in the 20th and 21st centuries, we have ushered in a new age of marketing, making many traditional forms of marketing seem downright ancient! We refer to this Internet promotion and sales as *digital marketing*, an umbrella term for all online marketing and selling efforts. It is the promotion of products or brands using one or more forms of





electronic media.

In this lesson, you will learn several new terms and acronyms unique to the digital marketing era. Some of the phrases seem intimidating at first, and they will not make a lot of sense unless you actually begin to use them to increase sales of your product. Some of the most popular terms are Search Engine Optimization (SEO), Search Engine Marketing (SEM), Social Media Marketing (SMM), Pay per Impression (PPI), Pay per Click (PPC), Display Advertising, Remarketing, and Sales Funnel. We will talk about each of these terms in this lesson, and show you how to use them in your digital marketing campaigns! (Note: this is a long lesson, compared to earlier lessons, because

of all the exciting new things happening in the digital marketing. To keep the main part of this lesson short, we have included an Appendix that contains list of 30 commonly used terms and definitions when speaking the language of “digital marketing.”)

## Sales Funnel

In the digital age, there is a term called the *sales funnel*. A sales funnel is a visual representation of the steps required to sell your product or service. As an entrepreneur, you need to make a great first impression. Then, of course, you want potential customers to show interest by clicking to your website. After that, you want them to make a decision to buy. That leads to action on your part to deliver the product or service. Here is a picture of the sales funnel. The first place to start when creating awareness is your company’s website.



## Websites

When talking about digital marketing, it should always begin with your company's website. In the early 1990s, when websites first became popular, most of them were just fancy digital brochures. Now, almost 30 years later, web pages need to:

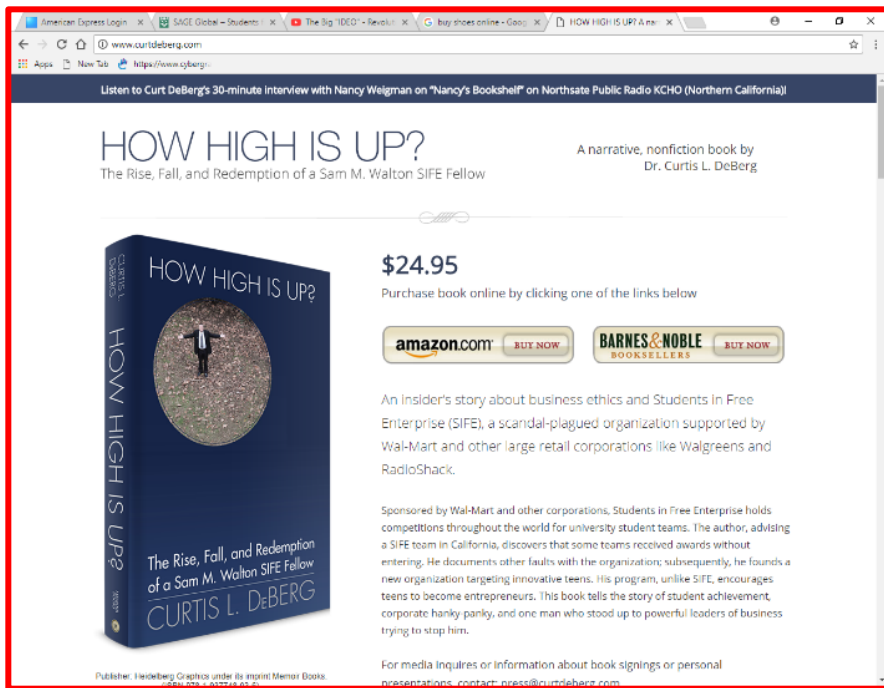
- ✓ Be your primary lead generator
- ✓ Be set up so that there is a clear call to action
- ✓ Be optimized for all forms of devices (e.g., personal computers, tablets, mobile phones)
- ✓ Contain key words describing your product or service in order to build your Search Engine Optimization (SEO)
- ✓ Provide an appealing site for people who visit your website by referrals (e.g., word of mouth)

You have several choices when it comes to building your company's first web page. You can take a web design class. In no time, you will learn how to build your own website. Alternatively, you might want to spend a little bit more money and hire a professional designer to design your web site exactly to your wishes. Hundreds of companies provide inexpensive web services. For example, if you type in "Web Design Companies in Chico, CA," you get over 9 million results using Internet Explorer. Make a few calls and pick one that best fits your budget. Here, companies offer pre-formatted designs where you simply provide them with basic content.

No matter who builds your website you need to make your website appealing. Here are seven tips:

1. No misspelled words
2. No formatting or grammatical errors
3. Use contrasting colors
4. Test you site on different browsers and different screens (use your cell phone!)
5. Look for ways to have the visitors give you information (but avoid registering upfront)
6. Simpler is usually better
7. Have a "call to action" as to where people can find out more and/or buy your product

Look at this site at <http://curtdeberg.com>. Dr. Curt DeBerg, the author of this TRIS course, created the website. Note that he is selling a book at a website with his name in the domain.



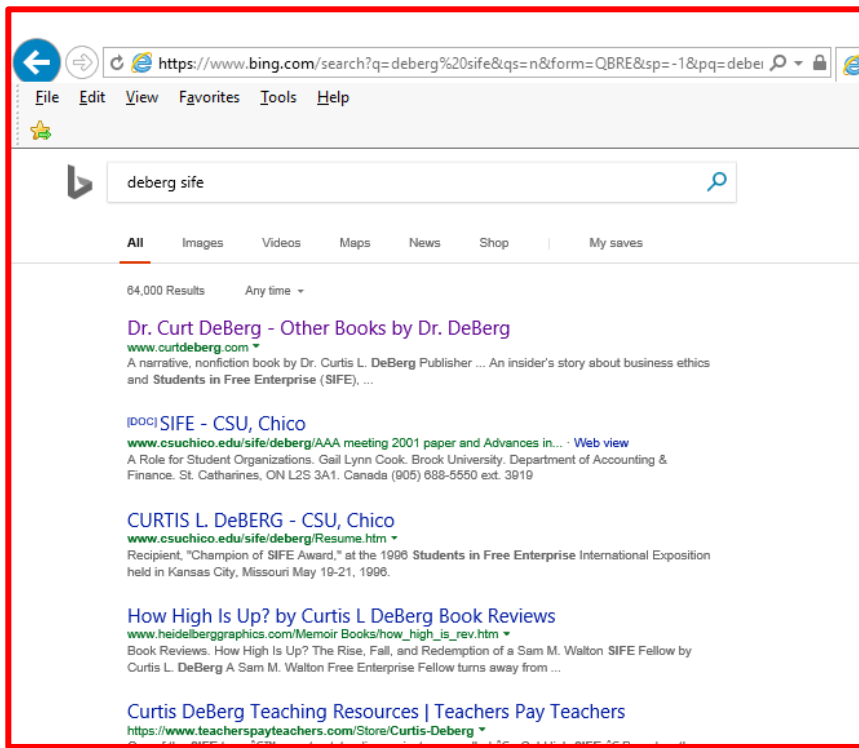
Has Dr. DeBerg used the seven tips? What do you like about it? Don't like? Is there an easy way to order his book?

## Search Engine Optimization (SEO)

The fancy definition for SEO is "the process of improving a website's performance and positioning in organic search engine results through a variety of methodologies including content production or improvement, technical and code improvement, and link acquisition."

Let's look at Dr. DeBerg's web site. The main phrase is the book's title, *How High Is Up?* Let's play around a bit. Maybe you heard about this book on the radio but you cannot remember the title. You remember Dr. DeBerg's last name and that he worked with an organization named SIFE. So go to Internet Explorer or Google and type "DeBerg SIFE." With Internet Explorer, you get this page. Note that the very first "hit" is the website for Dr. DeBerg's book.





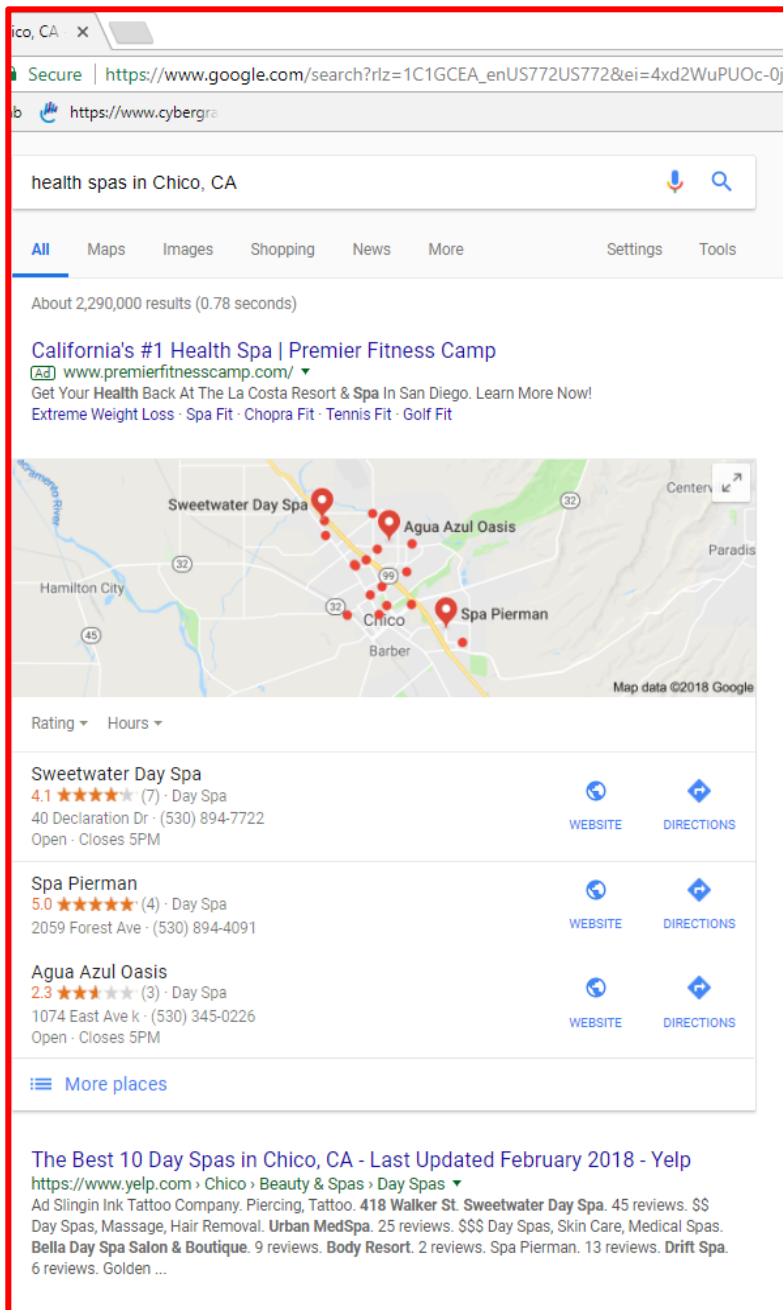
Alternatively, with Google Chrome, you get several relevant hits about Dr. DeBerg, but the link to <http://curtdeberg.com> is the eighth link down.

In both cases — using Internet Explorer or Google Chrome — typing in a keyword or phrase allows you to find Dr. DeBerg’s website quite readily, making it easy for a visitor to make a purchase.



SEO is a free way to advertise your product, but your website must have keywords that make it easy for search engines to pick you out of the crowd. People must be able to find you by what the kind of product you sell, not just your name. Keyword selection is KEY!

It usually takes a while to get solid SEO results. A website with excellent keywords usually can start getting results in three to six months.



**Search Engine Marketing (SEM)** - While SEO is free, SEM costs money. For example, if you are interested in going to a health spa in Chico, CA, you could search on "health spas in Chico, CA". The first hit is a paid advertisement from a company called Premier Fitness Camp. This company has paid a fee to Google to have its website listed first. Note the little "Ad" box in front of the website link. Below that, you see the top three "organic" sites that pop up because of the SEO process, starting with Sweetwater Day Spa. These three sites have a website with strong SEO keywords that map best onto Google's search engine. Sweetwater, Spa Pierman, and Agua Azul have paid nothing to have their websites pop up here. Google featured them because of the keywords in their name and website content.

If I merely see the Premier Fitness Camp link without clicking on it, the ad has made a general *impression* on me. One way that Premier Fitness Camp will pay Google is by the number of impressions. Hence, the term *Pay per Impression (PPI)*. In other words, I have seen the link but I have not clicked on it.



But if the ad intrigues me enough to click on the link, then this means I’m more serious about checking out Premier’s website and seeing what it has to offer. This ad caused me to *click* on the relevant website, so Google now charges me a bit more money because I am now considered a serious potential customer. Google would charge Premier Fitness Camp a separate, higher fee. They would charge a fee based on *Pay per Click* (PPC). Let’s say 1,000 people saw the ad based on the keyword search, but 50 people actually visited the web site. This results in a new term, the *click-through rate* (CTR). The CTR is the percentage of browsers who click through on a link. In this case, the CTR is  $50/1000 = 5\%$ .

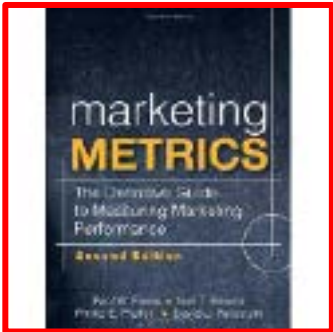
Another cool term now comes into play here. If your website does not grab the visitor’s attention, and they leave after just seeing your first page only, these people have “bounced.” The *bounce rate* is the percent of people who leave your website after visiting your first page only. They spend less than five seconds on your site.

Finally, let’s say that, of the 50 visitors, five of them actually make a purchase at the site. The *transaction conversion rate* (TCR) is  $5/50$ , or 10%. The TCR is the percentage of visitors who make a purchase after clicking through your web site.

Therefore, in the end, five people out of 1,000 bought the product. This leads to a last concept known as the *take rate* (TR). The TR is  $5/1000 = .5$  of 1% = .005. Another way to calculate this is by multiplying

$$\text{Take rate} = \text{CTR} * \text{TCR} = .05 * .10 = .005!$$

End the end, you must ask yourself: If you spent \$600 on the advertising campaign, and five people purchased from you, your advertising cost is  $\$600/5 = \$120$  per sale. Is this worth it? What if the average customer spends \$400 for four hours at Premier Fitness Camp? Then, yes, absolutely. Only you can decide if the cost is worth it, based on how much profit you make on each sale.



## Question and Answers

**Question:** Assume 500 people see the Google ad; of these, 100 people click through to your website; of these, 10 people buy your product. What is the CTR? The TCR? TR?

**Answer:** What is the CTR?  $\Rightarrow 100/500 = 20\%$   
What is the TCR?  $\Rightarrow 10/100 = 10\%$   
What is the Take Rate?  $\Rightarrow 20\% * 10\% = 2\%$

**Answer:**

What is the CTR?	What is the TCR?	What is the Take Rate?
$100/500 = 20\%$	$10/100 = 10\%$	$20\% * 10\% = 2\%$

**SAGE**  
© SAGE GLOBAL 2019

Therefore, of the 500 total number of people who saw your ad, 2% end up buying. Two percent of 500 people is 10 customers. If you paid \$800 for the advertising campaign, each customer cost your \$80 in advertising expense. Is this worth it?

Another example of SEM advertise is through Google Adwords. This is the mechanism of buying top spots in Google based on specific search words. It works as a real time automated auction for those top spots. You set your budget and the parameters and it executes until you run out of money.

## Social Media Marketing

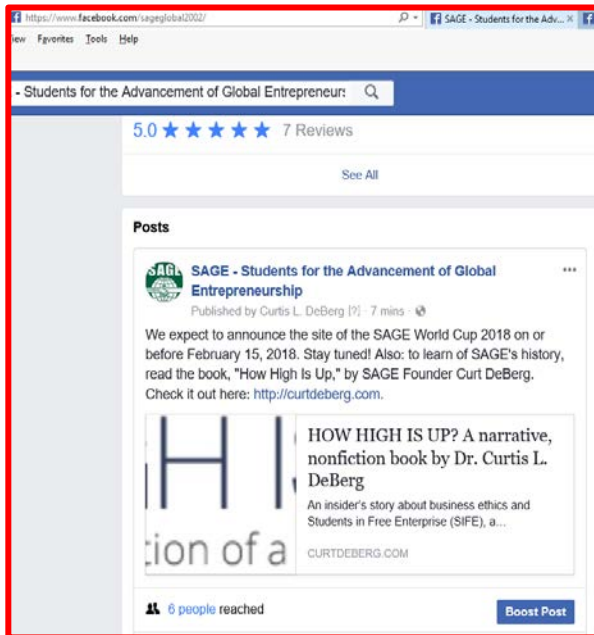


Social media marketing (SMM) is the process of gaining traffic or attention through social media sites. Examples of social media are Facebook, Twitter, Instagram, Pinterest, and LinkedIn. These “social sites” are designed to let people share short messages or “updates” with others with people who



share common interests, like Facebook friends and Twitter followers.

As an example, there is a group on Facebook called SAGE-Students for the Advancement of Global Entrepreneurship. Dr. DeBerg manages it. He recently published a post on the SAGE Facebook page announcing an upcoming event and mentioning his book. By typing in the book's URL, an image from the book's website pops up. Visitors can click on the image and go directly to Dr. DeBerg's book website!

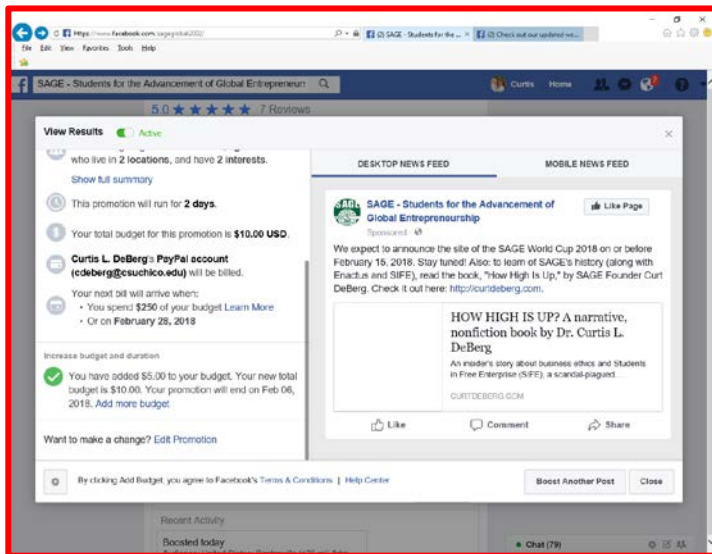
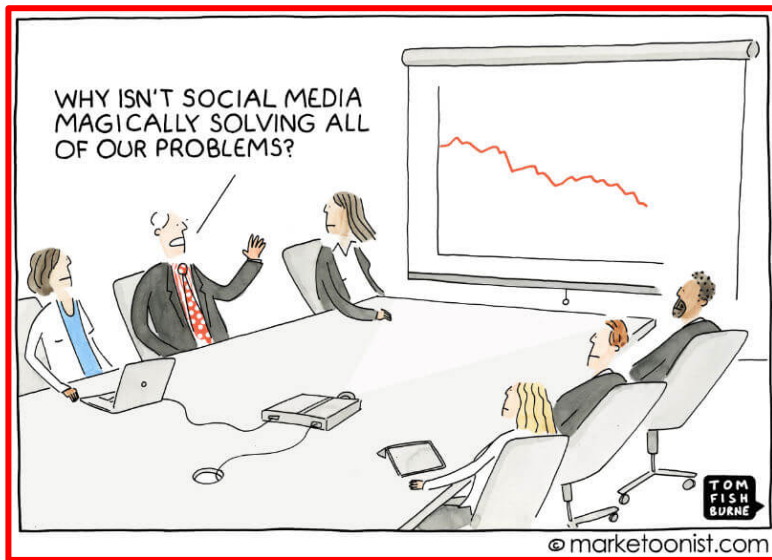


Notice the "Boost Post" button in the right-hand corner. By clicking on this button, he can have this post appear on Facebook pages of people who are interested in what Dr. DeBerg considers keywords. He chooses "Walmart," "Enactus," and "SAGE."

Dr. DeBerg opts to pay \$10.00 for the ad, which will run for two days. He pays using his PayPal account. Two minutes after submitting the post, Dr. DeBerg was sent an email saying that his post was successful, and he can check a special "Ads Manager" page to see how many impressions he makes until the campaign ends in 48 hours. If he sells 50 books because of the ad, the cost is only 20 cents per book.

It is remarkable to know that people whose Facebook profiles contain these terms can now see the book, which features Walmart, Enactus, and SAGE. This is an example of *target marketing*.

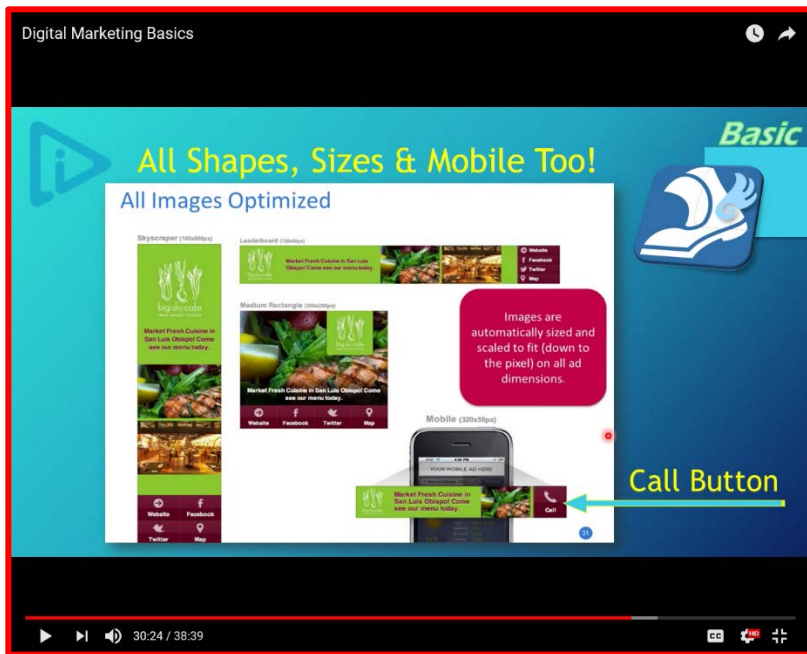




Often times, web browsers complain that the barrage of SMM ads are disruptive and frequently irrelevant. They would rather keep track of friends and follow musicians and artists rather than be bombarded with irrelevant information. Nevertheless, many people want to keep track of what is happening with their favorite brands, so there is a role for SMM. To be successful, though, a digital ad should be authentic, useful, credible, and relevant to the target audience.

## Display Advertising

This is an amazing way to advertise! It is more effective and cheaper than traditional advertising, like print, radio, and TV advertising. With traditional marketing, you could spend \$500 on a beautiful color ad in a magazine, but you would have no idea who is looking at it, and you will not know if the ad resulted in actual sales. With display advertising, however, your ad is linked to your website, Facebook page, and Twitter account. In addition, the ad pops up on relevant web pages to people who should be interested in your product.



The ad is often animated, with links to your phone number and a map to your business. It can come in all shapes and sizes. Businesses who buy a display ad will pay per impression (i.e., PPI), not PPC. As an example, let's say you own a landscaping business. Your ad would appear on the *Better Homes and Garden* website in your area.

Display advertising is a connection powerhouse. Your ad links all over the web and you can precisely track how many impressions and clicks you get. Moreover, there is a cool thing called *remarketing* (also known as *retargeting*). When someone clicks on your ad, this ad will reappear when he or she clicks on another relevant web page. In effect, this ad will "chase them" when they click on another site, reminding the visitor to still consider buying the product.



Recently, a friend of mine took a vacation to Belize, a beautiful little country south of Mexico along the Caribbean coast. He booked a hotel in Placentia Village after a quick Google search. Immediately after, when he checked his Facebook page, he saw ads about popular restaurants and nightlife in Placentia Village. Then, as he navigated scuba diving shops, the same restaurant ads popped up. In essence, these restaurants had followed him from his Facebook page.

## E-Mail Marketing

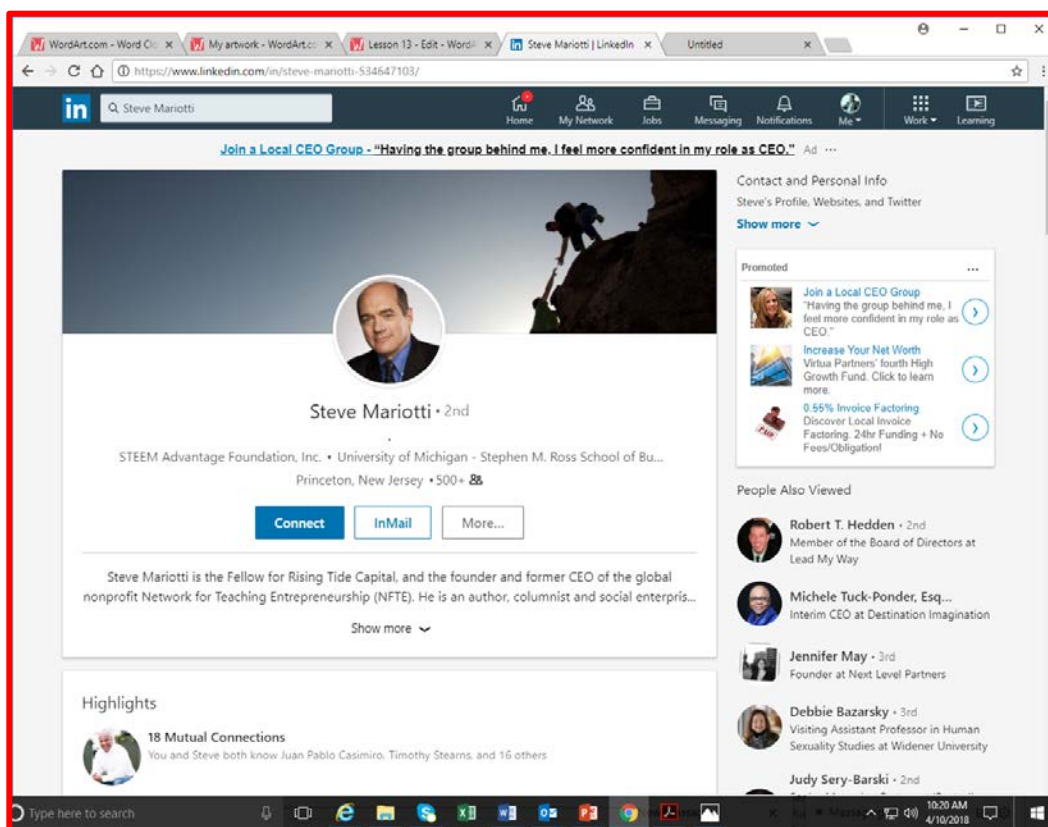
Once you establish a social network of business contacts, like contacts you have established on LinkedIn, you can create specific lists of email accounts for people your overall network. You can send one email that reaches all people on your list. For example, Dr. DeBerg could create a list of 200 email accounts from LinkedIn connections who have “SAGE” in their profiles. He could announce the publication of his book and ask people to visit his book’s website, since the book contains a history of how SAGE was started.

You can download all the emails in a network like LinkedIn. LinkedIn is a social networking website oriented around connecting professionals to jobs, businesses and other professionals in their industry. LinkedIn is also a strong platform for marketing, job posting, and sharing professional content.

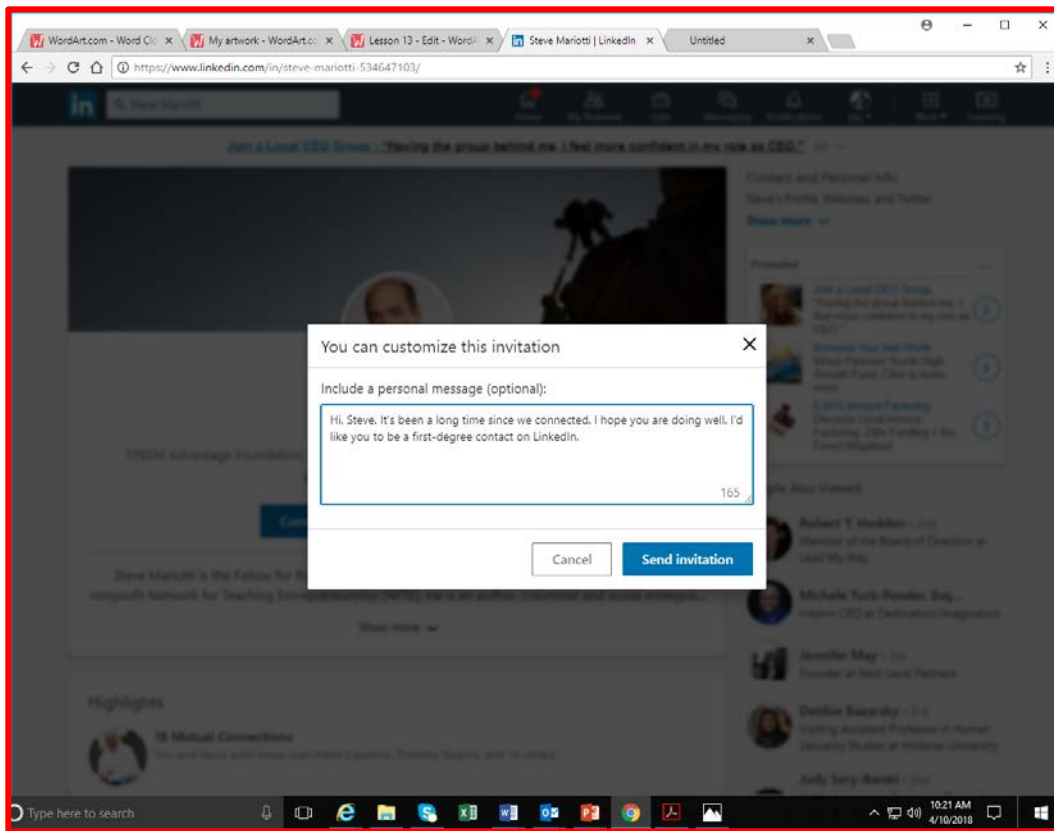
## Taking Action

**Exercise 1:** Go to <http://www.linkedin.com>. If you have not signed up, please take 10 minutes to do so now.

**Exercise 2:** Invite someone (e.g., your parents, or the author of this course, Curt DeBerg) you know to be one of your contacts. For example, I know a man named Steve Mariotti who I want to join my network. After I search his name, up pops his profile. Next, I will click on the blue Connect box.

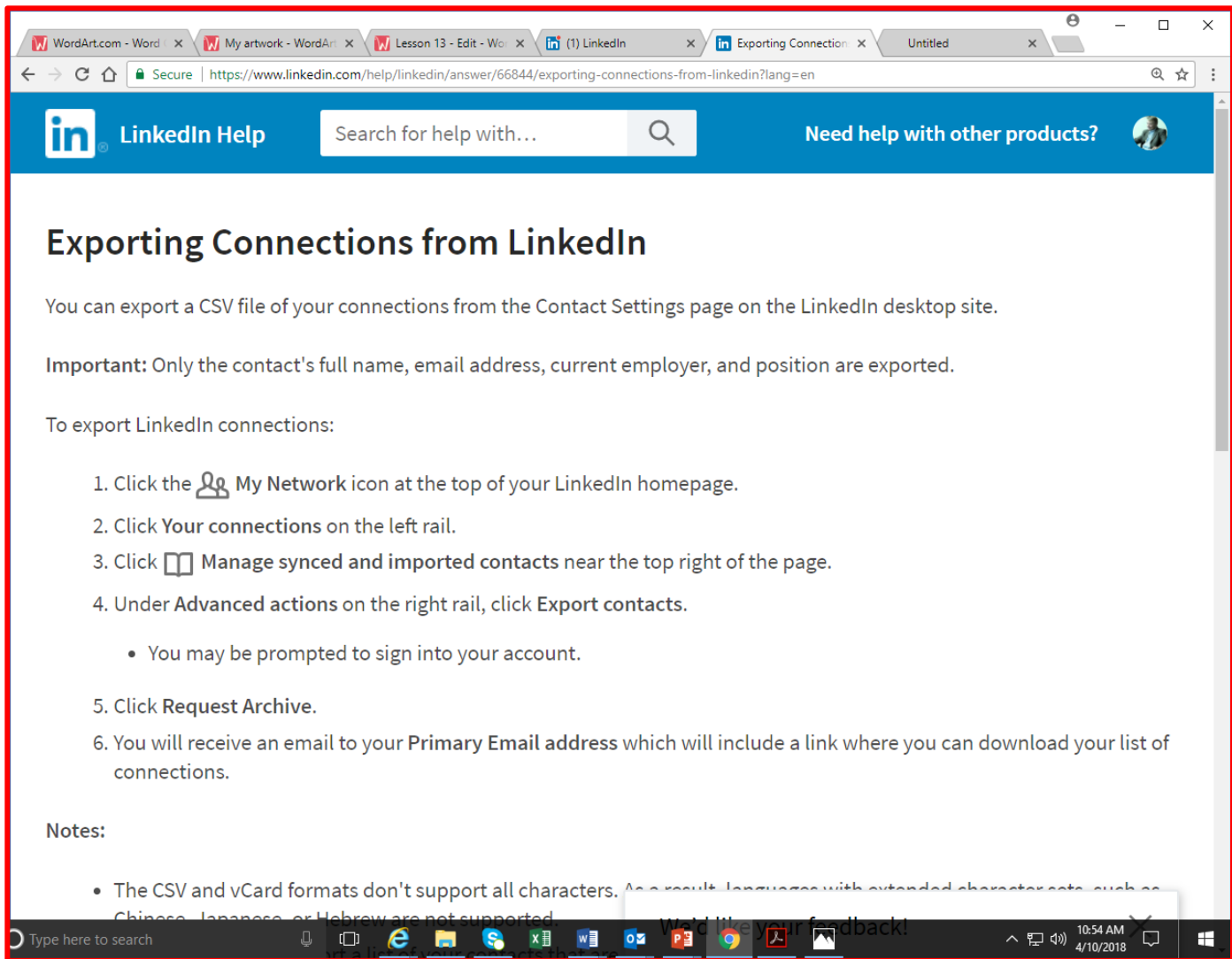


I am prompted to include a personal message, which I do. Then I hit the blue Send Invitation box, as per below.



Mr. Mariotti will get an email asking him if he wants to accept my invitation.

Once you have a key nucleus of people in your network, you can send them a personal email by downloading their personal email address letting them know about your business idea. People in this network may be early adopters or future customers. Below are directions for downloading these emails. This is but one of many examples of how to build a network of future business suppliers, employees, or customers.



## Benefits Digital Marketing: A Summary

Below are the main benefits of digital marketing, as extracted from an excellent article by Julie Cave called [“Digital Marketing vs. Traditional Marketing: Which One is Better?”](#)

1. **You can target a local audience, but also an international one.** Further, you can tailor a campaign to specific audience demographics, such as gender, location, age and interests. This means your campaign will be more effective.
2. **Your audience can choose how they want to receive your content.** While one person likes to read a blog post, another person likes to watch a YouTube video. Traditional marketing does not give the audience a choice. Most people hate receiving sales flyers in their mailbox or phone calls at inconvenient times on stuff for which they have very little interest. Online people get the choice to opt in or out of communications and often it is relevant because they were the ones searching for it in the first place. Do not underestimate the power of market segmentation and tailored marketing.
3. **Interaction with your audience is possible** with the use of social media networks. In fact, interaction is encouraged. Traditional marketing methods do not allow for audience interaction. You can encourage your prospects, clients and followers to take action, visit your website, read about your products and services, rate them, buy them and provide feedback that is visible to your market.





4. **Digital marketing is cost-efficient.** Though some invest on paid ads online; however, the cost is still cheaper compared to traditional marketing.
5. **Data and results are easily recorded.** With Google Analytics and the insights tools offered by most social media channels, you can check on your campaigns at any time. Unlike traditional marketing methods, you can see in real time what is or is not working for your business online and you can adapt very quickly to improve your results.
6. **Level playing field:** Any business can compete with any competitor regardless of size with a solid digital marketing strategy. Traditionally a smaller retailer would struggle to match the finesse of the fixtures and fittings of its larger competitors. Online, a crisp well thought out site with a smooth customer journey and fantastic service is king – not size.
7. **Real time results:** You do not have to wait weeks for a boost to your business, unlike waiting for a fax or form to be returned. You can see the numbers of visitors to your site and its subscribers increase, peak trading times, conversion rates and much more at the touch of a button.
8. **Brand Development:** A well-maintained website with quality content targeting the needs and adding value to your target audience can provide significant value and lead generation opportunities. The same can be said for utilizing social media channels and personalized email marketing.
9. **Viral:** How often are your sales flyers passed around instantly by your customers and prospects? Online, using social media share buttons on your website, email and social media channels enables your message to be shared incredibly quickly. If you consider the average Facebook user has 190 friends of which an average of 12% see their liked posts – your one message has actually been seen by 15 new prospects. Now imagine a number of them also like and share your message and their friends do the same? That is why high-quality content is so important.

## Myths of Digital Marketing

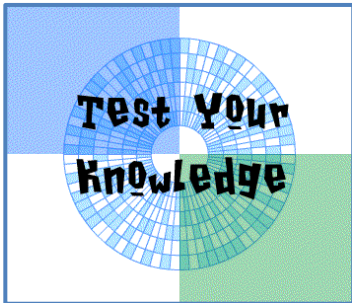
While on-line selling and marketing is certainly popular and enticing, do not overestimate its powers! Here are the Top 10 myths of digital marketing.

1. Online customers are easy to please!
2. If I launch a site customers will flock to it.
3. Making money on the web is easy.
4. Privacy is not an important issue on the web.
5. The most important part of any e-commerce effort is technology.
6. “Strategy” - I do not need a strategy to sell on the web. Just a web site.
7. On the web, customer service is not as important as a traditional retail store!
8. Flashy websites are better than simple ones.
  - a. It's the opposite that sells
9. Digital marketing is easy. I will not have to test, re-test, or re-purpose my campaigns.

10. It is too late to get on the web (hint: it is never too late).



Digital marketing is necessary for modern day advertising and promotion campaigns. Unlike traditional marketing, however, you can reach out locally *and* globally. If you have a unique product that adds value to a customer's life, then you have a good story! Digital marketing allows you to tell your story. The better the story, the more people become engaged, and the more engagement, the greater the sales.



## Quiz Yourself

1. Who is Johannes Gutenberg?
  - A. The inventor of the steam engine
  - B. The inventor of the printing press
  - C. The inventor of M&Ms
  - D. The inventor of the microprocessor
  - E. The inventor of the automobile
2. What is digital marketing?
  - A. Counting with your fingers when spending advertising dollars
  - B. Selling a product by taking out newspaper and radio/TV ads
  - C. An umbrella term for all online marketing and selling efforts
  - D. Using LinkedIn to attract more members to a social network
  - E. Using Facebook to invite more friends to a social network
3. What is true about Search Engine Optimization (SEO)?
  - A. It's a free way to advertise your product
  - B. It's a process that places importance on keywords to make it easier for search engines to find your website

- C. It's the process of improving a website's performance and positioning in organic search engine results
  - D. With good keywords, you can usually can start getting results in three to six months
  - E. All of the above are true
4. Assume 1,000 people see a Google ad; of these, 250 people click through to your website; of these, 50 people buy your product. What is the CTR?
- A.  $250/1,000 = 25\%$
  - B.  $50/1,000 = 5\%$
  - C.  $50/250 = 20\%$
  - D.  $300/1,000 = 30\%$
  - E. None of the above
5. Why is display advertising an effective way to advertise?
- A. Your ad links all over the Internet
  - B. You can precisely track how many impressions and clicks you get
  - C. The ad may follow you after you've shown interest in the product in an earlier click; hence, the ad is remarketed
  - D. It is usually more effective and cheaper than traditional marketing
  - E. All of the above
6. True or False: A sales funnel is a visual representation of the steps required to sell your product or service.
7. True or False: When talking about digital marketing, it should always begin with your company's website.
8. True or False: LinkedIn is a social networking website for connecting personal friends, not for connecting professionals to jobs, businesses and other professionals in their industry.
9. True or False: A display ad is often animated, with links to your company's phone number and a map to your business.
10. True or False: In most cases, traditional advertising is cheaper and more effective than digital marketing.

## What to do Before the Next Lesson

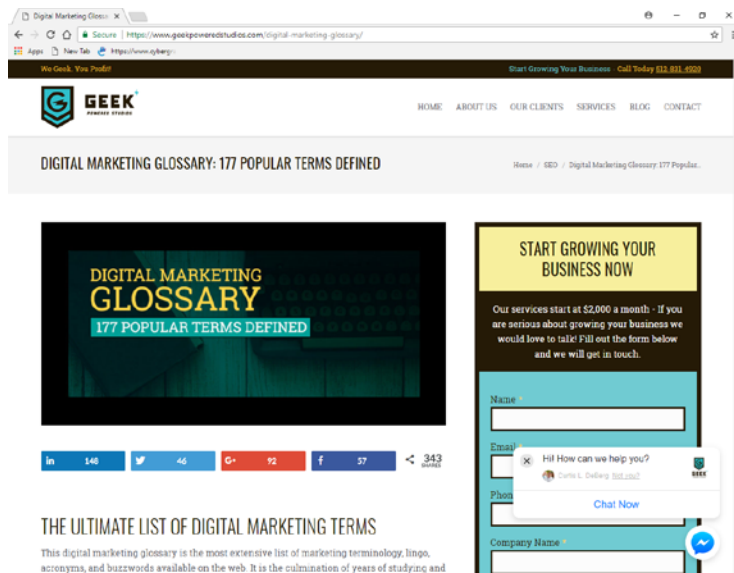
First, keep working on your business idea. Do you have any results from customer surveys? Have you built a landing page for your product or service? Have you built a prototype? You can do it!

Second, go to this video, called ["Finding the Right Business Structure."](#) If you continue your business after you turn 18, what kind of business would you be? A sole proprietorship? A partnership? A corporation?



## Appendix: Digital Marketing Glossary

Terms can be overwhelming, but here are 30 of the most important things to know when it comes to digital marketing.



1. **Adwords (Google Adwords)** – A Google owned program that is used by advertisers to place ads on Google search results pages, on YouTube, and on Google ad network sites. Adwords is the primary platform for PPC advertising.
2. **Blog** – Short for “web log”, a blog is a web page or a website that is regularly updated with new written content. Blogs are an important section of a website in digital marketing, as they offer fresh new content on a regular basis that can help attract new visitors, engage existing visitors, and give authority signals to Google.
3. **Bounce Rate** – The percentage of visitors to a website that leave immediately without clicking or interacting with any portion of the page. For example, if 100 people visit a website, and 50 of them immediately leave, the website has a bounce rate of 50%. Websites aim to have as low of a bounce rate as possible, and averages tend to be anywhere between 40-60%.
4. **Campaign** – A series of advertising messages that share a theme, and market a product or service. In the context of digital marketing, campaigns can be run through search and display network advertising platforms (i.e. Google, Bing), social media, email, or other online platforms.
5. **Click-Through-Rate** – A metric showing how often people click on an ad after they see it. It can be calculated by dividing the number of clicks on the ad divided by the number of impressions (how many times it was seen). This ratio can be useful when determining whether an ad is messaging matches what the consumer is searching for, and if it resonates with them.
6. **CPA (Cost per Acquisition)** – A metric in paid advertising platforms that measures how much money is spent in order to acquire a new lead or customer. It can be calculated by dividing the total spend by the number of conversions, for a given period. For example, if in a month a PPC account spends \$1000 dollars and gets 10 conversions (leads), then the cost per acquisition is \$100.
7. **CPC (Cost per Click)** – The amount of money spent for a click on an ad in a Pay-Per-Click campaign. In the Adwords platform, each keyword will have an estimated click cost, but the prices change in real time as advertisers bid against each other for each keyword.

8. **CTA (Call to Action)** – an element on a web page used to push visitors towards a specific action or conversion. A CTA can be a clickable button with text, an image, or text, and typically uses an imperative verb phrase like “call today” or “buy now.”
  9. **CTR (Click through Rate)** – the ratio of how many times an advertisement was clicked on, versus how many times it was shown. It is calculated by dividing the ad’s clicks by the ad’s impressions. For example, if an ad is shown to 100 people, and 10 of them click the ad, then it has a click through rate of 10% (10 clicks / 100 impressions = 10%)
  10. **Display ad** - (commonly known as Banner ad) – A popular type of digital image ad that can be placed across various websites. Google runs the largest and most popular image ad network. Formats include images, flash, video, and audio. These are the advertisements that are seen around the web on news sites, blogs, and social media.
- 
11. **Dashboard** – A web page that contains and displays aggregate data about the performance of a website or digital marketing campaign. A dashboard pulls information from various data sources and displays the info in an easy-to-read format.
  12. **Digital Marketing** – A catchall term for online work that includes specialized marketing practices like SEO, PPC, web design, blogging, content, and any other form of advertising on an internet-connected device with a screen. Traditionally, television was not considered digital marketing, however the shift from cable television to internet streaming means that digital advertising can now be served to online TV viewers.
  13. **Ecommerce (or E-Commerce)** – Stands for Electronic Commerce, it is a classification for businesses that conduct business online. The most common form of e commerce business is an online retailer that sells products direct to the consumer.
  14. **Email List** – A collection of email addresses that can be used to send targeted email marketing campaigns. Lists are typically segmented by user classification so a list of existing customers can receive one type of communication, while potential customers can receive more promotional communication.
  15. **Email Marketing** – The use of email with the goal of acquiring sales, customers, or any other type of conversion.
  16. **Facebook Advertising** – Facebook allows advertisers to reach its users through their ad network. A range of ad types can be created to reach various goals set by companies. Facebook advertising is unique in that audiences are set up based on vast demographic information that Facebook has about their users, as compared to Google advertising that uses keywords.
  17. **Google Analytics** – A free software platform created by Google, which is used to analyze nearly every aspect of users accessing a website. Website traffic, conversions, user metrics, historical data comparisons, and effectiveness of each channel of marketing can all be managed using this tool.
  18. **Hyperlink** – A hyperlink is an HTML code that creates a link from one webpage to another web page, characterized often by a highlighted word or image that takes you to the destined location when you click on that highlighted item.
  19. **Keyword** – A word or phrase indicative of the major theme in a piece of content. When you search for something in a search engine, you type in a keyword and the search engine gives you results based on that keyword. One major Goal of SEO is to have your website show in searches for as many keywords as possible.
  20. **Lead** – A potential customer in the sales funnel who has communicated with a business with intent to purchase through a call, email, or online form fill.
  21. **LinkedIn** – A social networking website oriented around connecting professionals to jobs, businesses and other professionals in their industry. LinkedIn is also a strong platform for marketing, job posting, and sharing professional content.

22. **Landing Page** – The destination webpage a user lands on after clicking on a link (in either an ad or anywhere else). Some landing pages are designed with the purpose of lead generation, and others are with the purpose of directing the flow of traffic throughout a site.
23. **Remarketing** – Also known as *retargeting*, a type of paid ad that allows advertisers to show ads to customers who have already visited their site. Once a user visits a site, a small piece of data called a “cookie” will be stored in the user’s browser. When the user then visits other sites, this cookie can allow remarketing ads to be shown. Remarketing allows advertisers to “follow” users around in attempts to get the user back to the original site.
24. **Organic** – A source of traffic to a website that comes through clicking on a non-paid search engine result. Organic traffic is a main measurement of an SEO campaign and grows as a site ranks better for keywords, or ranks for more keywords in search engines
25. **SEO (Search Engine Optimization)** – the process of improving a website’s performance and positioning in organic search engine results through a variety of methodologies including content production or improvement, technical and code improvement, and link acquisition.
26. **SEM (Search Engine Marketing)** – paid digital marketing that involves a search engine, i.e., PPC (pay-per-click).
27. **Sessions** – A metric in Google Analytics that measures one user interacting with a website during a given period of time, which Google defaults to 30 minutes. A session is not dependent on how many pages are viewed, so if a person goes to a website and looks around at different pages for 20 minutes, it would count as 1 session.
28. **Unique Visitors** -A metric used in web analytics to show how many different, unique people view a website over a period. Unique visitors are tracked by their IP addresses. If a visitor visits the same website multiple times, they will only be counted once in the unique visitors metric.
29. **URL** – stands for Uniform Resource Locator and is the address of a web page. The URL refers to what specific web page a web browser is viewing.
30. **YouTube advertising** – YouTube offers advertising in 6 different formats. Display ads, overlay ads, skippable video, non-skippable video ads, bumper ads, and sponsored cards. These ads can all be created and run through the Google Adwords platform.





## Lesson Fourteen: School Clubs, Sole Proprietorships and Partnerships

Before reading this lesson, please watch the following two videos:

<a href="https://www.youtube.com/edit?ar=1&amp;o=U&amp;video_id=in2NqTh1sck">https://www.youtube.com/edit?ar=1&amp;o=U&amp;video_id=in2NqTh1sck</a> (7:26), "Lesson 14 - School Clubs, Sole Proprietorships, and Partnerships"
<a href="https://www.youtube.com/watch?v=A-Up-JUkaj0">https://www.youtube.com/watch?v=A-Up-JUkaj0</a> (3:58) – "Finding the Right Business Structure"

### The Big Picture

As a teenager, you are experiencing new and exciting things every day. New friends, new teachers, new places to go, new software apps, new freedom. It is a great time to be alive!

However, if you are going to start a business, hold your horses. Until you turn 18, you are considered a minor. Therefore, you lack the capacity to enter into any legal contracts. Therefore, if you want to start a new business, your options are limited to starting an "educational enterprise," where all of your business activities are considered a part of your schoolwork.

On the other hand, you can have one of your parents be the legal person of record if you decide to start a sole proprietorship, a partnership, a corporation, or a nonprofit organization. In this lesson, we will provide an overview of the first two types of business ventures:

- Sole proprietorships
- Partnerships

[Note: In the next lesson, Lesson 15, you will learn about regular corporations and specific types of corporations and companies (which we call these "hybrid" organizations). In addition, you will learn about the exciting option of forming a nonprofit corporation.]

Ready? Set? Go!



### Starting a Business at School



If you decide to start a new business at school, you really have two options: (a) the business can be part of an existing course or (b) the business can be an after-school club. If your business makes profit, it does not have to pay income tax so long as the profits are used to grow the business, or if the profits are distributed in the form of scholarships. This is a clever way to reward the best performers, rather than paying them a salary or wage. Here, you are not considered a “legal entity.” You will not have to file any tax returns or pay income taxes. Instructors teaching business courses are encouraged to start an official student business club to track assets, liabilities, equity, revenues, expenses, and cash flows.



The entity concept is important. This means that you must keep your business transactions *separate* from your personal transactions. In other words, when exchanging money, do not mix business with pleasure! The formal definition of entity is “an economic unit where the personal transactions of the owner(s) are maintained separately and distinctly from the financial transactions of the business.”

## Business Entity

- Meaning
  - The business and its owner(s) are two separate existence entity
  - Any private and personal incomes and expenses of the owner(s) should not be treated as the incomes and expenses of the business



9

An example of this, say, is if one of your parents has a full-time job during the day, but runs a web design service as a side business on weekends. All revenues and expenses from the web design service should not be mixed in, or commingled, with the revenues from the day job. The reason for this is that your



mom's salary from her day job is taxed a little differently from her net income from her web design business. We will talk more about this later in the course when we talk about income tax on earnings vs. self-employment income.

## Starting a Business from Home

If you can somehow link your business to a class at school, then your business can still be considered an educational activity. More likely, though, you will start the business as a sole proprietorship if you are the only owner. Many sole proprietors start their businesses by operating from home.

**Sole proprietorship:** Profits and losses will be reported each year to the Internal Revenue Service (IRS) on your individual income statement provided by the IRS. This statement is called Schedule C of IRS Form 1040. Here is a picture of Schedule C:

**SCHEDULE C  
(Form 1040)**

Department of the Treasury  
Internal Revenue Service (99)

**Profit or Loss From Business  
(Sole Proprietorship)**

► Go to [www.irs.gov/ScheduleC](http://www.irs.gov/ScheduleC) for instructions and the latest information.  
► Attach to Form 1040, 1040NR, or 1041; partnerships generally must file Form 1065.

OMB No. 1545-0074

**2017**  
Attachment  
Sequence No. **09**

Name of proprietor		Social security number (SSN)
A Principal business or profession, including product or service (see instructions)		B Enter code from instructions
C Business name. If no separate business name, leave blank.		D Employer ID number (EIN) (see instr.)
E Business address (including suite or room no.) City, town or post office, state, and ZIP code		
F Accounting method: (1) <input type="checkbox"/> Cash (2) <input type="checkbox"/> Accrual (3) <input type="checkbox"/> Other (specify) _____		
G Did you "materially participate" in the operation of this business during 2017? If "No," see instructions for limit on losses		<input type="checkbox"/> Yes <input type="checkbox"/> No
H If you started or acquired this business during 2017, check here		<input type="checkbox"/> Yes <input type="checkbox"/> No
I Did you make any payments in 2017 that would require you to file Form(s) 1099? (see instructions)		<input type="checkbox"/> Yes <input type="checkbox"/> No
J If "Yes," did you or will you file required Forms 1099?		<input type="checkbox"/> Yes <input type="checkbox"/> No

**Part I Income**

1 Gross receipts or sales. See instructions for line 1 and check the box if this income was reported to you on Form W-2 and the "Statutory employee" box on that form was checked	1	
2 Returns and allowances	2	
3 Subtract line 2 from line 1	3	
4 Cost of goods sold (from line 42)	4	
5 Gross profit. Subtract line 4 from line 3	5	
6 Other income, including federal and state gasoline or fuel tax credit or refund (see instructions)	6	
7 Gross income. Add lines 5 and 6	7	

**Part II Expenses.** Enter expenses for business use of your home **only** on line 30.

8 Advertising	8		18 Office expense (see instructions)	18	
9 Car and truck expenses (see instructions)	9		19 Pension and profit-sharing plans	19	
10 Commissions and fees	10		20 Rent or lease (see instructions):		
11 Contract labor (see instructions)	11		a Vehicles, machinery, and equipment	20a	
12 Depletion	12		b Other business property	20b	
13 Depreciation and section 179 expense deduction (not included in Part III) (see instructions)	13		21 Repairs and maintenance	21	
14 Employee benefit programs (other than on line 19)	14		22 Supplies (not included in Part III)	22	
15 Insurance (other than health)	15		23 Taxes and licenses	23	
16 Interest:			24 Travel, meals, and entertainment:		
a Mortgage (paid to banks, etc.)	16a		a Travel	24a	
b Other	16b		b Deductible meals and entertainment (see instructions)	24b	
17 Legal and professional services	17		25 Utilities	25	
28 Total expenses before expenses for business use of home. Add lines 8 through 27a	28		26 Wages (less employment credits)	26	
29 Tentative profit or (loss). Subtract line 28 from line 7	29		27a Other expenses (from line 48)	27a	
30 Expenses for business use of your home. Do not report these expenses elsewhere. Attach Form 8829 unless using the simplified method (see instructions). Simplified method filers only: enter the total square footage of: (a) your home: _____ and (b) the part of your home used for business: _____. Use the Simplified Method Worksheet in the instructions to figure the amount to enter on line 30	30		27b Reserved for future use	27b	
31 Net profit or (loss). Subtract line 30 from line 29. • If a profit, enter on both Form 1040, line 12 (or Form 1040NR, line 13) and on Schedule SE, line 2. (If you checked the box on line 1, see instructions). Estates and trusts, enter on Form 1041, line 3. • If a loss, you must go to line 32.	31		32a <input type="checkbox"/> All investment is at risk.		
32 If you have a loss, check the box that describes your investment in this activity (see instructions). • If you checked 32a, enter the loss on both Form 1040, line 12, (or Form 1040NR, line 13) and on Schedule SE, line 2. (If you checked the box on line 1, see the line 31 instructions). Estates and trusts, enter on Form 1041, line 3. • If you checked 32b, you must attach Form 6198. Your loss may be limited.			32b <input type="checkbox"/> Some investment is not at risk.		

For Paperwork Reduction Act Notice, see the separate instructions.

Cat. No. 11334P

Schedule C (Form 1040) 2017

Note how Part I has you report your "Income" (note: we prefer the term "Revenue") and Part II reports your expenses. Your net profit (or loss) is shown on Line 31. When we get to Lesson 18, which focuses on taxes, we will come back to this topic.

For now, though, it is important to know that the income your make from your business will be transferred to the first page of Form 1040 of your tax return to add to income from other sources, like your part-time job at Starbucks or interest earned on your trust fund from Aunt Agnes.

There are many advantages to being a sole proprietor. It is easy to start, and you get to call all the shots.

Nevertheless, there are disadvantages, too. You need to raise all the money yourself (in other words, no partners are there to kick in some equity financing), and it can be lonely!

## Advantages of Sole Proprietorships

- Easy and cheap to form
- Full control of the business
- Less government regulation
- Easy to close it down when you want to go to college (i.e., “liquidate” the business)
- Income is taxed on the owner’s personal tax return (IRS Form 1040)

## Disadvantages of Sole Proprietorships

- Risky!
- It’s harder to raise money
- You go it alone
- Taxation

**Partnership:** As you can probably guess, a partnership is association of two or more persons who carry on as co-owners of a business for profit. The two most common types of partnerships are a general partnership and a limited partnership.

Assume there are three partners in the business: Peter, Paul, and Mary. Peter came up with the idea to start the business, and plans to go to work every day to make sure the business succeeds. He does not put in any money to start up the business. Paul puts in \$30,000 cash to finance the business, and he comes in to work for half days on Monday and Thursday. Mary puts in \$10,000, and she does not come in at all. She lives two states away but likes the business concept. In addition, she’s Peter’s sister. They agree to split profits and losses 45%, 40%, and 15%, respectively.

If all three partners assume full co-ownership of the business, they are considered general partners. Each has unlimited liability, meaning that the personal assets of all three general partners are at risk of legal attachment if one partner does something to bring harm, or loss, to the partnership. Each partner is an *agent* of the other partner, meaning each has the power to act on behalf of the partnership. Moreover, if one partner does something to harm or ruin the partnership, the aggrieved party legally can come after the personal assets of all the partners – not just the one who committed the offense.

On the other hand, let’s say Peter agrees to be the sole, general partner. He manages the company’s day-to-day operations. Assume that Paul and Mary agree to be limited partners. This means that only Peter’s personal assets are at risk of legal attachment, no matter what actions Paul or Mary make on behalf of the partnership. Another way of saying this is that they have limited liability. Their personal assets are not at risk of being taken away in a court decision if the other partners make decisions harmful to the partnership.

The partnership must file an IRS Form 1065 each year, and with this form, each individual partner receives what is known as a K-1. The K-1 tells the partner what amount of income or loss they need to report on their personal income tax. Have a look at the first page of Form 1065 and a K-1 form.

<b>Form 1065</b> Department of the Treasury Internal Revenue Service	<b>U.S. Return of Partnership Income</b> For calendar year 2017, or tax year beginning _____, 2017, ending _____, 20____ ▶ Go to <a href="http://www.irs.gov/Form1065">www.irs.gov/Form1065</a> for instructions and the latest information.	OMB No. 1545-0123 <div style="font-size: 2em; font-weight: bold;">2017</div>	
<b>A</b> Principal business activity  <b>B</b> Principal product or service  <b>C</b> Business code number	<div style="display: flex; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold; margin-right: 5px;">Type or Print</div> <div>           Name of partnership             Number, street, and room or suite no. If a P.O. box, see the instructions.             City or town, state or province, country, and ZIP or foreign postal code         </div> </div>	<b>D</b> Employer identification number  <b>E</b> Date business started  <b>F</b> Total assets (see the instructions) \$ _____	
<b>G</b> Check applicable boxes: (1) <input type="checkbox"/> Initial return (2) <input type="checkbox"/> Final return (3) <input type="checkbox"/> Name change (4) <input type="checkbox"/> Address change (5) <input type="checkbox"/> Amended return (6) <input type="checkbox"/> Technical termination - also check (1) or (2)			
<b>H</b> Check accounting method: (1) <input type="checkbox"/> Cash (2) <input type="checkbox"/> Accrual (3) <input type="checkbox"/> Other (specify) ▶ _____			
<b>I</b> Number of Schedules K-1. Attach one for each person who was a partner at any time during the tax year ▶ _____			
<b>J</b> Check if Schedules C and M-3 are attached <input type="checkbox"/>			
<b>Caution.</b> Include <b>only</b> trade or business income and expenses on lines 1a through 22 below. See the instructions for more information.			
Income	<b>1a</b> Gross receipts or sales . . . . .	<b>1a</b> _____	
	<b>b</b> Returns and allowances . . . . .	<b>1b</b> _____	
	<b>c</b> Balance. Subtract line 1b from line 1a . . . . .		<b>1c</b> _____
	<b>2</b> Cost of goods sold (attach Form 1125-A) . . . . .		<b>2</b> _____
	<b>3</b> Gross profit. Subtract line 2 from line 1c . . . . .		<b>3</b> _____
	<b>4</b> Ordinary income (loss) from other partnerships, estates, and trusts (attach statement) . . . . .		<b>4</b> _____
	<b>5</b> Net farm profit (loss) (attach Schedule F (Form 1040)) . . . . .		<b>5</b> _____
	<b>6</b> Net gain (loss) from Form 4797, Part II, line 17 (attach Form 4797) . . . . .		<b>6</b> _____
<b>7</b> Other income (loss) (attach statement) . . . . .		<b>7</b> _____	
<b>8</b> <b>Total income (loss).</b> Combine lines 3 through 7 . . . . .		<b>8</b> _____	
Deductions (see the instructions for limitations)	<b>9</b> Salaries and wages (other than to partners) (less employment credits) . . . . .		<b>9</b> _____
	<b>10</b> Guaranteed payments to partners . . . . .		<b>10</b> _____
	<b>11</b> Repairs and maintenance . . . . .		<b>11</b> _____
	<b>12</b> Bad debts . . . . .		<b>12</b> _____
	<b>13</b> Rent . . . . .		<b>13</b> _____
	<b>14</b> Taxes and licenses . . . . .		<b>14</b> _____
	<b>15</b> Interest . . . . .		<b>15</b> _____
	<b>16a</b> Depreciation (if required, attach Form 4562) . . . . .	<b>16a</b> _____	
	<b>b</b> Less depreciation reported on Form 1125-A and elsewhere on return	<b>16b</b> _____	
	<b>16c</b> _____		
	<b>17</b> Depletion ( <b>Do not deduct oil and gas depletion.</b> ) . . . . .		<b>17</b> _____
	<b>18</b> Retirement plans, etc. . . . .		<b>18</b> _____
	<b>19</b> Employee benefit programs . . . . .		<b>19</b> _____
	<b>20</b> Other deductions (attach statement) . . . . .		<b>20</b> _____
<b>21</b> <b>Total deductions.</b> Add the amounts shown in the far right column for lines 9 through 20 . . . . .		<b>21</b> _____	
<b>22</b> <b>Ordinary business income (loss).</b> Subtract line 21 from line 8 . . . . .		<b>22</b> _____	
<b>Sign Here</b>  <b>Paid Preparer Use Only</b>	Under penalties of perjury, I declare that I have examined this return, including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, and complete. Declaration of preparer (other than partner or limited liability company member) is based on all information of which preparer has any knowledge.		
	<div style="display: flex; justify-content: space-between;"> <div>Signature of partner or limited liability company member</div> <div>Date</div> </div>		
	<div style="display: flex; justify-content: space-between;"> <div>Print/Type preparer's name</div> <div>Preparer's signature</div> <div>Date</div> <div>Check <input type="checkbox"/> if self-employed</div> <div>PTIN</div> </div>		
	<div style="display: flex; justify-content: space-between;"> <div>Firm's name ▶</div> <div>Firm's EIN ▶</div> </div>		
	<div style="display: flex; justify-content: space-between;"> <div>Firm's address ▶</div> <div>Phone no.</div> </div>		
For Paperwork Reduction Act Notice, see separate instructions.			
Cat. No. 11390Z		Form <b>1065</b> (2017)	

When forming a partnership, it is always a good idea to write down specific terms of the agreement. This is known as a partnership agreement. This is known as a contractual agreement among partners spelling out the rules of partnership. The agreement should clearly spell out how:

- Profits and losses are to divided
- Responsibility is to be shared
- New partners are to be admitted
- How exiting partners will be bought out

## Advantages

- Easy to start
- More ways to raise cash to initially finance the business
- Other partners bring skills and money to the table
- Partners share decisions (this can be good!)

## Disadvantages

- Risky! (your partner can make decisions that can affect your personal assets)
- Must share decision making (this can be bad!)
- If one partner leaves, the partnership is dissolved
- Must file a separate tax return (IRS Form 1065)

## Questions and Answers

**Question 1:** Because you are a minor, can you legally start a business?

**Answer 1:** No. Any person under the age of 18 is not permitted to enter into legally enforceable contracts. However, you can start a business as part of a class, or as an after school club, as long as it is officially recognized as an educational activity by the school. This allows minors to start real businesses without having to file all the regulatory paperwork and pay taxes on net income.

**Question 2:** Assume you form a partnership with someone else, and this person does something on behalf of the partnership that causes harm to your business. If someone sues your business, can the plaintiff (e.g., the person or company that is suing you) win any settlements that require paying money from your personal savings account?

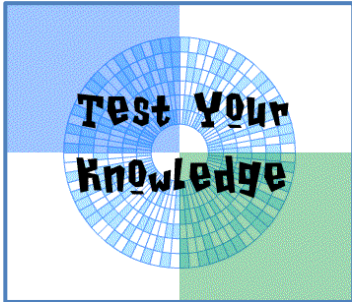
**Answer 2:** Yes! With a sole proprietorship or partnership, the owner(s) do not have limited liability. In other words, their personal assets can be seized by the court to pay any settlement ordered by the court.

**Question 3:** What is a partnership agreement?

**Answer 3:** It is a contractual agreement among partners spelling out the rules of partnership. The agreement should clearly spell out how profits and losses are to be divided, how responsibility is to be shared, how new partners are to be admitted, and how exiting partners will be bought out.

## Taking Action

Sole proprietorships and partnerships must pay income taxes. However, many teens want to start a business that focuses more on social impact rather than net income. Have a look at this video, ["What to Think about before Starting a Nonprofit Organization."](#) The video lists several things you should do before starting a nonprofit business. Name at least four of them.



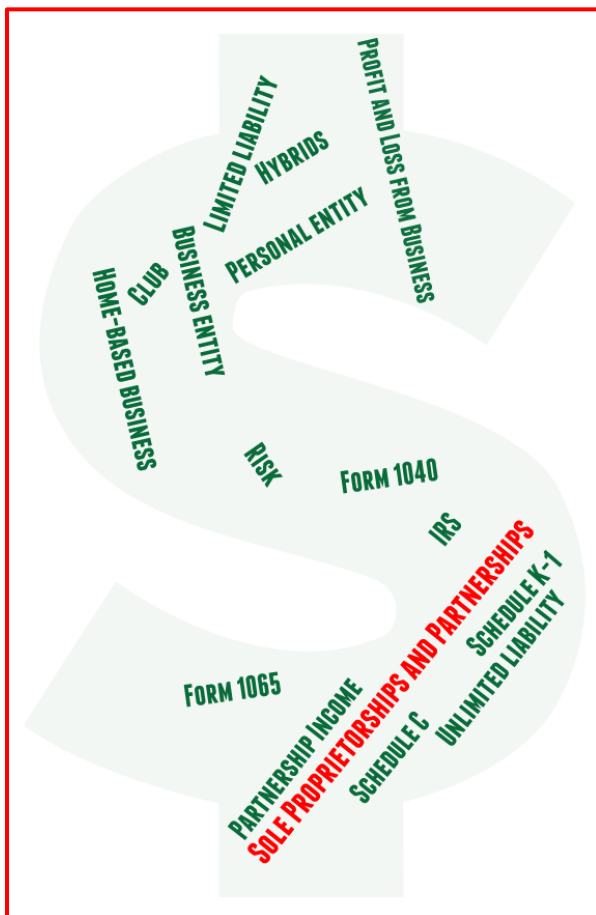
## Quiz Yourself

1. What are some of the different types of businesses that you can start?
  - A. Sole proprietorship
  - B. A partnership
  - C. A corporation
  - D. A nonprofit organization
  - E. All of the above
2. What are advantages of a sole proprietorship?
  - A. Full control of the business/easy and cheap to form
  - B. Harder to raise a large amount of startup cash
  - C. Riskier than other business forms
  - D. Double taxation
  - E. None of the above
3. When starting a business at school, what is one way to reward your "employees" without having to file any tax returns or pay income taxes?
  - A. Give profits from petty cash
  - B. Distribute profits through wages
  - C. Distribute profits in the form of scholarships
  - D. Distribute profits through gift cards to Starbucks
  - E. Distribute profits through wages
4. What are advantages of forming a partnership?
  - A. Other partners bring skills to the business
  - B. Other partners bring money to the business
  - C. The risk of running the business is shared among partners, not just one person
  - D. None of the above
  - E. All of the above
5. What specific terms should be clearly spelled out in a partnership agreement?
  - A. How profits and losses are to be divided
  - B. How responsibility is to be shared
  - C. How new partners are to be admitted

- D. How exiting partners will be bought out
  - E. All of the above
6. True or False: The two most common types of partnerships are general partnerships and limited partnerships.
  7. True or False: A limited partnership exists when there are three partners in the business, and all three partners assume full co-ownership of the business.
  8. True or False: A sole proprietorship is an association of two or more persons who carry on as co-owners of a business for profit.
  9. True or False: The formal definition of entity is “an economic unit where the personal transactions of the owner(s) are maintained separately and distinctly from the financial transactions of the business.”
  10. True or False: If you are under 18 and want to start a new business, your options of what kind of business to start are limited because you are minor.

## What to do before the Next Lesson

Continue working on your business. Also, go to this YouTube video, [“All Up In Yo' Business: Sole Proprietor, LLC, or Corporation?”](#) What is the biggest risk for a sole proprietor versus a hybrid organization or corporation?







## Lesson Fifteen: Corporations, Hybrids, and Nonprofits

Before reading any further, make sure you watch the following videos:

<a href="https://www.youtube.com/edit?o=U&amp;ar=1&amp;video_id=88H-cHJe-X8">https://www.youtube.com/edit?o=U&amp;ar=1&amp;video_id=88H-cHJe-X8</a> (11:35), "Lesson 15 - Corporations, Hybrids, and Nonprofits"
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<a href="https://www.youtube.com/watch?v=cMOM46ZbW98">https://www.youtube.com/watch?v=cMOM46ZbW98</a> (1:21) "What is a 501c3? Forming a Tax Free Non-Profit"
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### The Big Picture

Once you turn 18 years old, you are no longer a minor. In the eyes of the law, you are an adult. You can vote. You can now legally enter into contracts. Your parents are no longer responsible for your business decisions. Hooray! You can start a regular corporation or a hybrid company, or you can even start a nonprofit corporation. Instead of Mary Jones, sole proprietor, Mary can now form a corporation and call her business, Mary Jones, Inc., or Mary Jones LLC.



There are many advantages to starting one of these companies. For example, you can more readily raise cash to finance your business dream. Also, unlike a general partnership, when one of the owners leaves the company, the company lives on rather than having to be restructured. Another advantage is that when owners of stock in a corporation sell their shares to other people, it doesn't affect the day to day operations of the corporation. In other words, a change of owners doesn't disrupt the business operations.

But, like an individual proprietorship or a partnership, if your company fails to meet its contractual obligations, it can be sued. The person who sues is the plaintiff. The business being sued is the defendant. If you are a sole proprietor or general partner, your liability is unlimited. In other words, the plaintiff can come after your personal assets.

For the companies described in this lesson, though, the most an owner/investor can lose is the amount invested in the company. In other words, assume you personally invest \$10,000 to help finance a business. The most you can lose is \$10,000. This means that someone who sues your business can't come after your personal assets, like your car or your laptop. This is what we mean by "limited liability." The potential loss is limited to \$10,000.

As a teenage entrepreneur, you probably won't have to worry about these issues until you graduate from high school (and college, too, we hope!) when you can focus all of your time and energy on your business. At the point in time when you are serious about spending most of your time running your own business,

and after you've turned 18, you will want to come back and review this lesson.

In this lesson, we are going to learn about the following types of businesses:

1. C Corporation (this is a "regular" corporation; it sells shares of stock to shareholders)
2. Subchapter-S Corporation (otherwise known as a Sub-S corporation; usually limited to 100 shareholders)
3. Limited Liability Company (otherwise known as an LLC; instead of shareholders, it has members; similar to a Sub-S)
4. Nonprofit corporation [otherwise known as a 501 ( c ) ( 3), or a not-for-profit corporation]

All four of the above types of businesses share one thing in common: the owner/investor/member has limited liability. That's the good news! There's other good news, too, but like most things, there are disadvantages to each business form. Let's start with a regular C Corporation.

## C Corporation

An entrepreneur can raise money by selling "shares" of stock in the company to others; people who buy shares of stock are shareholders. The word shareholders can go by many different names, such as owners, and investors.



Here's how a corporation is formed. The "founder" of the company — let's say it's you — would apply for a state charter. This is usually done, very easily, by going online and purchasing the services from a company like [LegalZoom](#). LegalZoom will help you prepare articles of incorporation and by-laws. When you've submitted these to the secretary of state in your state of domicile, and pay the incorporation fee, you will be granted a charter. This charter makes your business an official, legal entity, and the assets and liabilities of the business must be kept separate and distinct from its owners. In other words, the personal net assets of the individual owners must be kept separate and distinct from the business activity of the business. This notion is called the entity concept. Keep your personal entity separate from the business entity!

There are some other key words unique to a corporation. First, the corporate charter "authorizes" a certain maximum number of common shares that can be sold to investors. You, as the founder, would set a total number of shares that you plan to actually sell, or "issue", to investors. As the founder and largest investor, you would issue the largest number of shares to you. If you issue more than 50% of the shares to yourself, all other shareholders would be called minority shareholders.



For example, let's say ABC Baseball Corporation authorizes 100,000 shares, but the founder/entrepreneur issues 10,000 shares at a selling price of \$15 per share. The founder buys 6,000 shares, while the other 4,000 shares are issued (e.g., "sold") to friends and acquaintances of the founder. A stock certificate looks like the one below.

<b>Cert # C2345</b>	
<b>ABC Baseball Corporation</b>	
<b>Boomtown, California</b>	
<b>This certifies that _____ is the owner of ____ shares of common</b>	
<b>stock of ABC Baseball Corporation, Inc. The par value is \$10 per share; the issue</b>	
<b>price is \$15 per share.</b>	
<b>Issue date: _____</b>	<b>President Signature_____</b>
	<b>Treasurer Signature_____</b>

The company above would raise \$150,000 (10,000 shares times \$15 per share). Of this, you as the owner would contribute \$90,000 and other investors would contribute \$60,000. The most you could lose, if the company goes under, is \$90,000.

Let's chat a moment about how a corporation is governed. Each share of common stock has one vote at the shareholders' meeting each year. The common shareholders elect a Board of Directors who, in turn, hires the executive management team (e.g., CEO, COO, CFO). The management team is usually paid a salary. In the case above, since you own 60% of the stock, you have the majority voice on who is elected to the board, and who the board hires to run the company each day. Since the business is your baby, the board would likely elect you to serve as the CEO or the President of the corporation. Eventually, if the company grows and is successful, the owner may want to sell more stock to the public, which is called an *initial public offering* (IPO).

The good news about corporations is that they have the limited liability feature, and the founder can raise money to finance the corporation by selling shares to minority shareholders. Further, if a minority shareholder wants to sell his stock to other people, he or she can do so without it affecting the day-to-day operations of the corporation.

## Advantages of a C Corporation

- A C Corporation can raise lots of money fast by offering “stock” to potential investors/shareholders
- Shareholders cannot lose more than their investment (e.g., their liability is limited to their investment; their personal assets are not at risk if the corporation is sued)
- Transfer of ownership is easy, often through “stock exchanges” if the stock is publicly traded
- Shareholders can profit either from dividends collected or increase in stock prices
- Perpetual life (when one owner sells stock to another, the corporation lives on!)
- When a company wants to expand, it’s easy to do by selling more stock
- Shareholders can benefit by receiving dividends or selling their stock at a selling price greater than its cost basis

But there are disadvantages, too. The corporation is considered a separate legal entity, in the eyes of the state, and it is subject to income tax. And when the corporation eventually pays dividends to shareholders from its successful operations, the shareholders are taxed at the individual level. This is what they mean when they say “double taxation.” The government gets a piece of the corporate profits, which are taxed again when these profits are paid to individual investors in the form of dividends.

Below, we summarize the advantages and disadvantages of a C Corporation.

## Disadvantages of a C Corporation

- There are lots more regulations (e.g., filing requirements, tax returns)
- Double taxation: corporations are taxed on net income before taxes; when dividends are paid, the shareholders are taxed on their personal tax returns as dividend income
- It costs more money to start a corporation than a sole proprietorship or partnership
- When a corporation issues stock to the public, the owner(s) must disclose personal information that they might otherwise like to remain private

## Subchapter-S Corporation

A Subchapter-S Corporation (i.e., Sub-S) is a “hybrid” organization, in that it has some features as a C Corporation and some features like a general partnership. To begin with, a Subchapter-S enjoys the same

limited liability feature as a C Corporation. But unlike a C corporation, a Sub-S isn't taxed as a separate legal entity; instead, profits and losses flow to the individual investors' tax returns and are taxed only at the individual level. This feature is just like a partnership.

Another very important feature is noteworthy. In the early life of a Sub-S, if there are losses rather than profits, the owner/investor's share can offset other personal income on their tax return. In essence, the Sub-S losses become a "tax shield" against other income.

One more thing to note: the number of shareholders for a Sub-S is restricted (usually, 100 shareholders) and they must be U.S. citizens.

## Limited Liability Company (LLC)

A Limited Liability Company – an LLC – is similar in form and substance to a Sub-S Corporation. Like a Sub-S, an LLC is considered to be a hybrid form of business organization. The main difference between a Sub-S and an LLC are in terminology. For example, an LLC doesn't have "owners"; rather, it has "members." Each member owns a percentage of the company, and members may elect to be managed by a "manager." However, only members can own the company.



Like a corporation's shareholders, members and managers of an LLC enjoy limited liability. To remind you, limited liability means that if the LLC violates the law, plaintiffs can only sue the LLC and its net assets. The personal assets of the members/managers are not subject to attachment. Finally, just like a partnership, net income or loss flows through the LLC, proportionately, to each member's percentage interest.

## Nonprofit corporations

While C-corporations are profit driven, a social mission usually drives nonprofit corporations. Nonprofit corporations are not hybrid organizations. Their founders are motivated by something other than the financial bottom line. Rather than money as the driving force, these people are driven by a social cause. They want to make an impact by providing goods and services to clients/customers who are disenfranchised, sick, or in need of things that government – the public sector – does not provide, or that profit-seeking companies – the private sector – chooses not to provide (side note: nonprofit corporations who work primarily overseas are referred to as nongovernment organizations, or NGOs).

Many nonprofits rely entirely on donations or government grants to provide their services. Examples are

the Red Cross, the American Heart Association, and Boys and Girls Club of America. But just because an organization is structured as a nonprofit doesn't mean that it shouldn't be allowed to earn profits. In fact, without making profits and relying on donations and grants, many organizations would soon die. Why? Once the donors stop giving and the grants dry up, the only way to keep the doors open is to sell some goods or services in the open market.



As you will learn in Lessons 22 and 23, during the past 40 years, the world has come to identify a new type of entrepreneur—the social entrepreneur. In the TRIS program, we classify a business that is started by a social entrepreneur as a *social enterprise business* (SEB). Social entrepreneurs are risk takers, but instead of being driven by a financial bottom line, they primarily exist to address a social problem.

There are six distinguishing features of social entrepreneurs. Social entrepreneurs:

- Play the role of change agents in the social sector
- Adopt a mission to create and sustain social value
- Recognize and relentlessly pursue new opportunities to pursue that mission
- Continually innovate, adapt, learn
- Act boldly without being limited by current resources
- Have a heightened sense of accountability

The author of this TRIS course believes that the most successful social entrepreneurs must be driven by the financial bottom line, too, in order to achieve their number one goal of addressing societal problems. The government recognizes that nonprofits often fill a void that, in more socialistic societies, would need to be filled by government agencies. In order to encourage nonprofits to attack social problems, the Internal Revenue Service (IRS) in the United States allows entrepreneurs to form a legal entity known as a "501(c)(3)" nonprofit charitable corporation. In order to encourage the private sector to support a 501(c)(3), donations made to official 501c3's are tax-deductible. For example, if a donor gave a \$1,000 gift to your nonprofit, the donor would be able to save \$300 on his personal tax return (assuming the donor was in the 30% income tax bracket).

Starting a 501(c)(3) is much like launching a C Corporation or a Sub-S. The founder files similar paperwork with the state. However, the founder must also complete a very long, cumbersome Form 1023. It's almost 30 pages long. The first page looks like this.



**Application for Recognition of Exemption  
Under Section 501(c)(3) of the Internal Revenue Code**

► Do not enter social security numbers on this form as it may be made public.  
► Go to [www.irs.gov/Form1023](http://www.irs.gov/Form1023) for instructions and the latest information.

OMB No. 1545-0056

Note: If exempt status is approved, this application will be open for public inspection.

Use the instructions to complete this application and for a definition of all **bold** items. For additional help, call IRS Exempt Organizations Customer Account Services toll-free at 1-877-829-5500. Visit our website at [www.irs.gov](http://www.irs.gov) for forms and publications. If the required information and documents are not submitted with payment of the appropriate user fee, the application may be returned to you.

Attach additional sheets to this application if you need more space to answer fully. Put your name and EIN on each sheet and identify each answer by Part and line number. Complete Parts I – XI of Form 1023 and submit only those Schedules (A through H) that apply to you.

**Part I Identification of Applicant**

<b>1</b> Full name of organization (exactly as it appears in your organizing document)		<b>2</b> c/o Name (if applicable)	
<b>3</b> Mailing address (Number and street) (see instructions)	Room/Suite	<b>4</b> Employer Identification Number (EIN)	
City or town, state or country, and ZIP + 4		<b>5</b> Month the annual accounting period ends (01 – 12)	
<b>6</b> Primary contact (officer, director, trustee, or authorized representative) a Name:			
		<b>b</b> Phone:	
		<b>c</b> Fax: (optional)	
<b>7</b> Are you represented by an authorized representative, such as an attorney or accountant? If "Yes," provide the authorized representative's name, and the name and address of the authorized representative's firm. Include a completed Form 2848, <i>Power of Attorney and Declaration of Representative</i> , with your application if you would like us to communicate with your representative.		<input type="checkbox"/> Yes <input type="checkbox"/> No	
<b>8</b> Was a person who is not one of your officers, directors, trustees, employees, or an authorized representative listed in line 7, paid, or promised payment, to help plan, manage, or advise you about the structure or activities of your organization, or about your financial or tax matters? If "Yes," provide the person's name, the name and address of the person's firm, the amounts paid or promised to be paid, and describe that person's role.		<input type="checkbox"/> Yes <input type="checkbox"/> No	
<b>9a</b> Organization's website: _____			
<b>b</b> Organization's email: (optional) _____			
<b>10</b> Certain organizations are not required to file an information return (Form 990 or Form 990-EZ). If you are granted tax-exemption, are you claiming to be excused from filing Form 990 or Form 990-EZ? If "Yes," explain. See the instructions for a description of organizations not required to file Form 990 or Form 990-EZ.			
<b>11</b> Date incorporated if a corporation, or formed, if other than a corporation. (MM/DD/YYYY)		/	
<b>12</b> Were you formed under the laws of a foreign country?		<input type="checkbox"/> Yes <input type="checkbox"/> No	



Kenneth J. Chapman  
RE: Daniel Wright  
You can take your  
shove it up your  
did I actually put  
Outlook 2016

## Advantages of a 501(c)(3) Corporation

- Cash can be raised by attacking a social problem in a more nimble way than the public sector (e.g., local, state, or federal government)
- Donors can write off their contributions on their tax returns
- The nonprofit organization doesn't have to pay taxes on its revenues (e.g., donations, grants, earned income)
- There are no shareholders; instead, the company is run by an executive management team led by an "Executive Director" or "Chief Executive Officer (CEO)"

## Disadvantages of a 501(c)(3) Corporation

- The application process is lengthy, by filing Form 1023
- Approval is not automatic
- Lots of regulation!
- It's harder to measure "value" than for-profit companies that measure value by the financial bottom line (i.e., net income); instead, the focus is on measuring social impact

### Questions and Answers

**Question 1:** What does the term limited liability mean?

**Answer:** It means that an owner of a corporation or a hybrid company can't lose more than the amount invested in the company. Assume, for example, that you own 1,000 shares of stock in ABC Corporation. If you paid \$20 per share, your investment is \$20,000. If ABC Corporation is sued because it manufactured defective parts, the corporation's net assets can be "attached," or taken away in a lawsuit. However, your personal assets, like your car, house, or vacation home, may not be sold to pay the corporate legal obligations.

**Question 2:** Who hires the executive management team of a C Corporation or Sub-S Corporation?

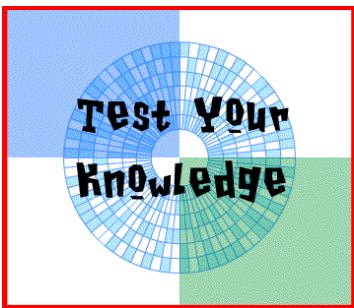
**Answer:** The board of directors.

**Question 3:** Who elects the board of directors?

**Answer:** The owners of common stock. For example, if there are 125,000 shares of common stock outstanding, and you own 25,000 shares, you control 20% of the votes (i.e.,  $25,000/125,000 = 20\%$ ).

**Question:** True or false. A nonprofit company is not allowed to earn profits.

**Answer:** False. Nonprofit companies, otherwise known as 501(c)(3) companies, can earn profits. However, the profits aren't paid out to shareholders, because nonprofits have no shareholders. Instead, profits must be used to further the mission of the nonprofit.



### Quiz Yourself

1. Which of the following is a feature of a nonprofit corporation?
  - A. Cash can be raised by attacking a social problem in a more nimble way than the public sector
  - B. Donors can write off their contributions on their tax returns
  - C. The nonprofit organization doesn't have to pay taxes on its revenues
  - D. There are no shareholders; instead, the company is run by an executive management team
  - E. All of the above answers are features of a nonprofit
2. Which of the following organizations are "hybrid" corporations?
  - A. C-corporations
  - B. S-corporations
  - C. Nonprofit corporations
  - D. Y-Corporations
  - E. Nongovernment organizations (NGOs)
3. Social entrepreneurs:
  - A. Are not risk takers
  - B. Believe in socialism more than capitalism
  - C. Play the role of change agents in the social sector
  - D. Are part of the private sector
  - E. Are part of the public sector
4. Which of the following is NOT an advantage of a C-corporation?
  - A. A C Corporation can raise lots of money fast by offering "stock" to potential investors/shareholders
  - B. Shareholders cannot lose more than their investment
  - C. Transfer of ownership is easy, often through "stock exchanges" if the stock is publicly traded
  - D. The corporation's net income is taxed first; when it pays dividends to investors, investors are taxed on this same income
  - E. Shareholders can profit either from dividends collected or increase in stock prices
5. Many nonprofits rely entirely on donations or government grants to provide their services. Does the author believe the founders of nonprofits are social entrepreneurs?
  - A. Yes, because they aren't driven by financial profits
  - B. Yes, because they are risk takers, too, so they should be considered entrepreneurs
  - C. Yes, because they act boldly in the face of great social problems and limited resources
  - D. No, because they are socialists and not capitalists
  - E. No, because a social entrepreneur must also seek the financial bottom line in case donations and grants stop
6. True or False: Individual proprietorship and partnerships can be sued, but C-Corporations cannot be sued.
7. True or False: The owner/investor of an S-Corporation has unlimited liability.
8. True or False: You buy 5,000 shares of stock for \$20 a share of C-corporation; the most you can lose on this business deal is \$100,000.
9. True or False: The number of shareholders for a Sub-S is unrestricted.
10. True or False: Rather than money as the driving force, entrepreneurs who start nonprofits corporations are driven by a social mission.

## What to do Before the Next Lesson

Consider what kind of business you are starting now, as a teenager.

What kind of business are you? A school-based business? A home-based business? When you turn 18, if you decide keep the business running, what form of business would you likely become? Why?



## Lesson Sixteen: Cash – The Gasoline That Keeps Your Business Running

Before reading any further, make sure you watch the following videos:

<a href="https://www.youtube.com/watch?v=hISdzmjNO5w">https://www.youtube.com/watch?v=hISdzmjNO5w</a> (2:28), “What is Cash Flow?”
<a href="https://www.youtube.com/edit?ar=1&amp;o=U&amp;video_id=AsKY3GDe5b8">https://www.youtube.com/edit?ar=1&amp;o=U&amp;video_id=AsKY3GDe5b8</a> (5:37), “Managing Your Personal Cash by Making a Personal Budget”
<a href="https://www.youtube.com/edit?ar=1&amp;o=U&amp;video_id=2mcw0xZSGn0">https://www.youtube.com/edit?ar=1&amp;o=U&amp;video_id=2mcw0xZSGn0</a> (7:21), “Managing Your Business’s Cash by Projecting Cash Inflows and Outflows”

### The Big Picture

Gasoline is to a car as cash is to your business! If you run out of gas, your car stops running. It doesn’t matter how big your engine is. Similarly, if your business runs out of cash, it doesn’t matter how many assets you own. The doors can be shut down and operations stop.

In this lesson, we will learn that the running cash balance is like the fuel gauge in a car. When the tank is full, you can take comfort that your business will flow smoothly. But once the tank gets low, you’ve got to be very careful about taking any long trips without going to the gas station first.

This lesson starts by looking closely at how Kayla Anderson, a high school senior, manages her personal cash budget for a month. Then, we’ll have her invest most of her personal savings to help finance a new flower shop business.

After Kayla projects her cash budget for February, we will have her open “Kayla’s Flower Shoppe” on March 1. We will be careful to track her cash flows, to make sure she always has a positive cash balance. In other words, we never want her to be in the **RED!**

Next, as you will recall from Lesson Seven, we’ll estimate the timing and amount of cash flows for her business by telling the “story of cash” for the first month of a business. Remember the three chapters?

Chapter 1: Financing activities (e.g., personal investments and bank loans)

Chapter 2: Investing activities (e.g., startup costs, like equipment, printer, laptop)

Chapter 3: Operating activities (e.g., startup costs, like inventory, rent, supplies, and sales revenue)

We will see that playing with cash is like playing with a deck of cards. But unlike a deck of cards, which has four suits, you can think of the “deck of cash” as having three suits, or categories: Financing, Investing, and Operating cash activities.

Another thing: when cash comes into the business, we’ll call it a cash inflow, and give it a black number, like this: **\$2,339**. If cash leaves the business, we will call it a cash **outflow**, and we will make the number negative and red, like this: **(\$1,394)**.

This lesson will end by comparing her actual cash balance in March with what the bank says she has in her cash balance. If they don’t agree, we must reconcile them. This means we prepare a worksheet called a

bank reconciliation.

## A Personal Budget

Kayla Anderson is an 18-year old freshman at California State University, Chico. She is from Santa Rosa, California. Kayla plans to open a new business, "Kayla's Flower Shoppe," on March 1, 2019. In February, she opens a new Excel workbook and creates a budget for February. On February 1, 2019, she starts with this.

Kayla Anderson Budget for February 2019										
Assets									Liabilities	Net Worth
Date	Description	Cash in Checking	iPhone	Laptop	iClicker	Textbooks	Household	Books	St Ln Pay	Equity
1-Feb	Beginning Balances	20	125	300	40	500	1,000	100	2,000	85

Notice the following. She starts with only \$20 cash in her checking account. She also owns several other assets, like an iPhone, laptop, textbooks, and household effects. She also has one liability: a \$2,000 student loan debt. So, when she starts the month of February, her net worth (i.e., equity) is only \$85.

Now let's look at her planned cash activity for the month. Her cash outflows are expected to be rent, groceries, supplies, and dining out, as follows:

Rent - \$275  
Groceries - \$30  
Supplies - \$50  
Dining Out - \$50

Her cash inflows include a cash grant from her parents of \$300, and earnings from a part-time job. Kayla has a job at the student union that pays her \$9 an hour. She plans to work 13 hours a week for four weeks each month. Her take-home pay is 80% of her gross pay. She is paid twice a month.

Her gross pay each pay period is calculated to be:

$$\$9 * 13 \text{ hours per week} * 2 \text{ weeks} = \$234$$

Her net pay each pay period is calculated to be:

$$\$234 * 80\% = \$187$$

With this information, Kayla can now complete her budget for February.



Kayla Anderson Budget for February 2019											
Assets									Liabilities	Net Worth	
Date	Description	Cash in Checking	iPhone	Laptop	iClicker	Textbooks	Household	Books	St Ln Pay	Equity	
1-Feb	Beginning Balances	20	125	300	40	500	1,000	100	2,000	85	
3-Feb	Grant from parents	300								300	Revenue from parents
4-Feb	Rent expense	(275)								(275)	Rent Expense
6-Feb	Groceries bill	(30)								(30)	Food Expense
15-Feb	Earnings from job	187								187	Revenue
	Cleaning/Office/										Supplies
18-Feb	Hygiene Supplies	(50)								(50)	Expense
26-Feb	Dining out	(50)								(50)	Dining out Expense
15-Feb	Earnings from job	187								187	Revenue
28-Feb	Ending Balances	290	125	300	40	500	1,000	100	2,000	355	

Take a close look at her running balance in cash. Notice that she is in great danger of running out of cash on February 6.

### A Closer Look of her Balance on February 6

Date	Description	Cash in Checking
1-Feb	Beginning Balances	20
3-Feb	Grant from parents	300
4-Feb	Rent expense	(275)
6-Feb	Groceries bill	(30)
	Cash balance	15

One very important point to know:

- ❖ cash inflows  $\geq$  your cash outflows.
- ❖ If her account is ever "in the red," this means that she is "overdrawn."

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She only has \$15 in her checking account!

She only has \$15 in her checking account! One very important point to know: cash inflows must always be greater than your cash outflows. If her account is ever "in the red," this means that she is "overdrawn."

Cash inflows and outflows go by other names. For example:

Cash inflows = cash receipts = cash collections = cash deposited

Cash outflows = cash disbursements = cash expenditures = cash withdrawals

What might Kayla do in order to provide a safety net? She could ask her parents to increase her monthly grant from \$300 to \$325. Or she could spend a little less on groceries (Top Ramen rather than hamburgers!). Or maybe she could borrow money from her roommate?



The moral of the story is this: when Kayla is dangerously close to running out of cash, she may have to alter her activity for the month. This means she must earn more in cash revenues, spend less in expenses, or borrow money.

Keep in mind that when she starts her business, she must also be careful to manage her business cash flows with a keen eye. The owner must make sure cash inflows from revenue and loans are sufficient to pay off operating expenses and debt. When there's a shortfall, the owner must find a way to increase revenues, borrow more money, or put more money into the business from personal savings.

## Investing Personal Cash to Finance the Flower Shoppe

At the end of February, assume Kayla's grandmother learns that Kayla's dream is to open a flower shoppe in Chico. Lo and behold, Kayla's grandma sends a wire transfer of \$40,000 as a cash gift on February 28. This money goes into Kayla's personal checking account. Now her spreadsheet looks like this.

Kayla Anderson Budget for February 2019											
		Assets							Liabilities	Net Worth	
Date	Description	Cash in Checking	iPhone	Laptop	iClicker	Textbooks	Household	Books	St Ln Pay	Equity	
1-Feb	Beginning Balances	20	125	300	40	500	1,000	100	2,000	85	
3-Feb	Grant from parents	300								300	Revenue from parents
4-Feb	Rent expense	(275)								(275)	Rent Expense
6-Feb	Groceries bill	(30)								(30)	Food Expense
15-Feb	Earnings from job	187								187	Revenue
18-Feb	Cleaning/Office/ Hygiene Supplies	(50)								(50)	Supplies Expense
26-Feb	Dining out	(50)								(50)	Dining out Expense
15-Feb	Earnings from job	187								187	Revenue
28-Feb	Cash gift/Grandma	40,000								40,000	Gift from Grandma
28-Feb	Ending Balances	40,290	125	300	40	500	1,000	100	2,000	40,355	

The ending balances on February 28 become the beginning balances for March 1. On March 1, Kayla opens a business checking account under the name, "Kayla's Flower Shoppe." Her personal spreadsheet shows that her cash goes down and her investment in business goes up.

Kayla Anderson Budget for February and March 1												
Assets										Liabilities	Net Worth	
Date	Description	Cash in Checking	Inv't in Business	iPhone	Laptop	iClicker	Textbooks	Household	Books	St Ln Pay	Equity	
1-Feb	Beginning Balances	20		125	300	40	500	1,000	100	2,000	85	
3-Feb	Grant from parents	300									300	Revenue from parents
4-Feb	Rent expense	(275)									(275)	Rent Expense
6-Feb	Groceries bill	(30)									(30)	Food Expense
15-Feb	Earnings from job	187									187	Revenue
18-Feb	Cleaning/Office/ Hygiene Supplies	(50)									(50)	Supplies Expense
26-Feb	Dining out	(50)									(50)	Dining out Expense
15-Feb	Earnings from job	187									187	Revenue
28-Feb	Cash gift/Grandma	40,000									40,000	Gift from Grandma
2/28/ & 3/01	End/Beg Balances	40,290		125	300	40	500	1,000	100	2,000	40,355	
1-Mar	Open Business Acct.	(40,000)	40,000									

## Kendall's Flower Shoppe, and the Story of Cash

When Kayla opens a business checking account, she must keep track of her business activity separate from her personal activity. This lies at the heart of what we call the *entity concept*. She must keep the financial activity for her personal economic unit, or entity, separate and distinct from the financial activity of her business unit, or entity.

# 1. The Entity Concept



1. Business enterprise is a separate identity apart from its owners.
2. Business is distinct from owners.
3. Business transactions are recorded in business books of accounts and owner's transactions in his personal books of accounts.
4. The examples of entity includes proprietorship firm, partnership firm, limited liability company, trusts, clubs, societies, private limited companies, and public limited companies.



To do this, Kayla would open a separate database for her business, and create a list of accounts that she thinks she will need to keep track of her business activity. A list of accounts is also called a *chart of accounts*. Below, we see that Kayla lists several assets, such as cash, flower inventory, prepaid insurance, prepaid rent, company van, and a cash register.

She also lists several liabilities, all of which end with the word *payable*. When she adds up all of her assets and subtracts her liabilities, she can calculate her business's equity, or net worth.

A business has two equity accounts: (1) that which represents the cash or other assets contributed by the owner and, (2) that which represents the cash or other assets earned by the after the business begins operating. In the TRIS course, we call these two accounts *equity contributed* and *equity earned*.

Look carefully at the database for Kayla's Flower Shoppe. Don't be intimidated!

### Kayla's Flower Shoppe: Data base showing startup financing and startup costs

			ASSETS								=	LIABILITIES			+	EQUITY	
Date	Description	OFI	Cash	Flower Inventory	Pp'd Rent	Pp'd Ins	Supplies	Printer	Cash Register	Laptop	Company Van	Wages Payable	Utilities Payable	Loan Payable		Equity Contributed	Equity Earned
1-Mar	Beginning Funds		0	0	0	0	0	0	0	0	0	0	0	0		0	0
1-Mar	Owner's Investment	F	40,000													40,000	
1-Mar	Loan from bank	F	10,000											10,000			
1-Mar	Purchase Company Van	I	(28,000)								28,000						
1-Mar	Purchase Cash Register	I	(500)						500								
1-Mar	Purchase Printer	I	(600)					600									
1-Mar	Purchase Laptop	I	(1,000)							1,000							
2-Mar	Insurance Purchase	O	(6,000)			6,000											
2-Mar	Supply Purchase	O	(4,000)				4,000										
2-Mar	Inventory Purchase	O	(7,000)	7,000													
2-Mar	Prepaid Rent	O	(1,800)		1,800												
	Bal. after startup costs		1,100	7,000	1,800	6,000	4,000	600	500	1,000	28,000	0	0	10,000		40,000	0

When Kayla's business receives \$40,000 from her personal cash account, Kayla's business cash goes up \$40,000 and equity contributed goes up by the same amount. This is her first source of cash equity financing.

Notice the column to the immediate left of cash. It's a "code" column, with F = Financing, I = Investing, and O = operating categories. Next, her cash account increases by \$10,000 when the bank credits her business account. This is her first source of cash debt financing.

Do you remember the "story" of cash from Lesson 7? Chapter 1 of the story is financing activities. The business must start out by getting its finances in order. We can summarize this as follows:

#### Financing Activities

- Equity financing: Cash collected from the owner's personal investment (e.g., owner's equity contribution)
- Debt financing: Cash collected from lenders (e.g., bank)

Chapter 2 of the story of cash is for the company to incur startup costs. These costs can either be long-term investing startup costs, or short-term operating startup costs. We can summarize this as follows.

#### Investing Activities

- Cash paid to acquire long-term assets, like computers, or vehicles; these are part of your startup costs

#### Operating Activities

- Cash paid for other, short-term startup costs, like merchandise inventory, business license, advertising, insurance, rent, and supplies inventory

Chapter 3 of the story is to collect cash from sales of goods and services, and to incur costs to purchase the

goods and services. These are also operating activities.

Take another look at Kayla's Flower Shoppe's database after she incurs all of her startup costs.

Notice that of the \$50,000 she started with on March 1, she only has \$1,100 of "working capital" cash after March 2. Her cash inflows are recorded in black, and her cash **outflows** are recorded in **red**.

The flower shoppe has several startup costs – long-term investments include a printer, cash register, laptop, and company van. Short term operating costs include one month's worth of flower inventory for \$7,000, insurance for one year for \$6,000, two months' of supplies for \$4,000, and rent of \$1,800 for three months.

Let's have a look at what her startup balance sheet looks like.

Kendall's Flower Shoppe Balance Sheet: Startup Balance Sheet					
31-Mar-19					
Current Assets			Current Liabilities		
	Cash	\$1,100		Wages Pay	\$0
	Inventory	\$7,000		Util Pay	\$0
	Ppd Rent	\$1,800	Total Current Liabilities		\$0
	Ppd Ins	\$6,000			
	Supplies	\$4,000	Noncurrent Liabilities		
	Total Current Assets	\$19,900		Loan Pay	\$10,000
				Total Liabilities	\$10,000
Noncurrent Assets			Equity		
	Printer	\$600		Equity Contributed	\$40,000
	Cash Register	\$500		Equity Earned	\$0
	Laptop	\$1,000			
	Company Van	\$28,000		Total Equity	\$40,000
	Total Noncurrent Assets	\$30,100			
Total Assets		\$50,000	Total Liabilities & Equity		\$50,000

Now she's ready to start selling! In the first month, the flower shoppe predicts \$12,825 in cash sales revenue. At the end of the month, she expect that only about \$250 of flower inventory will remain. Thus, her "cost of inventory sold" is as follows:

Flower Inventory Purchased	(\$7,000)
Flower Inventory Remaining at the end of the Month	250
Cost of Inventory Sold	(\$6,750)

Recording this entry at the end of the month would require what is known as an adjusting journal entry. In other words, we adjust flower inventory from the total cost of inventory purchased less the cost of how much remains. The difference is called "cost of goods sold" or "cost of inventory" or "cost of sales." Same thing!

Here's her database after recording sales and cost of inventory sold.

Kayla's Flower Shoppe: Data base showing sales for March																			
			ASSETS									=	LIABILITIES			+	EQUITY		
Date	Description	OFI	Cash	Flower Inventory	Ppd Rent	Ppd Ins	Supplies	Printer	Cash Register	Laptop	Company Van	Wages Payable	Utilities Payable	Loan Payable	Equity Contributed	Equity Earned	Notes		
1-Mar	Beginning Funds	--	0	0	0	0	0	0	0	0	0	0	0	0		0	0		
1-Mar	Owner's Investment	F	40,000												40,000				
1-Mar	Loan from bank	F	10,000											10,000					
1-Mar	Purchase Company Van	I	(28,000)								28,000								
1-Mar	Purchase Cash Register	I	(500)						500										
1-Mar	Purchase Printer	I	(600)					600											
1-Mar	Purchase Laptop	I	(1,000)							1,000									
2-Mar	Insurance Purchase	O	(6,000)			6,000													
2-Mar	Supply Purchase	O	(4,000)				4,000												
2-Mar	Inventory Purchase	O	(7,000)	7,000															
2-Mar	Prepaid Rent	O	(1,800)		1,800														
	Bal. after startup costs		1,100	7,000	1,800	6,000	4,000	600	500	1,000	28,000	0	0	10,000	40,000	0			
31-Mar	First Month Sales	O	12,825													12,825	Revenue		
31-Mar	Cost of Inventory Sold	--		(6,750)												(6,750)	Cost of Goods Sold		
	Balances before other adjustments	--	13,925	250	1,800	6,000	4,000	600	500	1,000	28,000	0	0	10,000	40,000	6,075			

Notice that all transactions must balance. This means any changes on the left (assets) must always equal the changes on the right (liabilities and equity). Her balance sheet after recording sales and cost of goods sold looks like this.

Kendall's Flower Shoppe Balance Sheet: Startup Balance Sheet					
3/31/2019 (before Adjusting Journal Entries)					
<b>Current Assets</b>			<b>Current Liabilities</b>		
	Cash	\$13,925		Wages Pay	\$0
	Inventory	\$250		Util Pay	\$0
	Ppd Rent	\$1,800	<b>Total Current Liabilities</b>		\$0
	Ppd Ins	\$6,000			
	Supplies	\$4,000	<b>Noncurrent Liabilities</b>		
	<b>Total Current Assets</b>	<b>\$25,975</b>		Loan Pay	\$10,000
				Total Liabilities	\$10,000
<b>Noncurrent Assets</b>			<b>Equity</b>		
	Printer	\$600		Equity Contributed	\$40,000
	Cash Register	\$500		Equity Earned	\$6,075
	Laptop	\$1,000			
	Company Van	\$28,000		Total Equity	\$46,075
	<b>Total Noncurrent Assets</b>	<b>\$30,100</b>			
<b>Total Assets</b>		<b>\$56,075</b>	<b>Total Liabilities &amp; Equity</b>		<b>\$56,075</b>

Finally, the ending balance in equity earned after the first month reflects revenues and cost of goods sold.

Revenue	\$12,825
Cost of Goods Sold	(\$6,750)
Net income	\$6,075

This is her projected net income in March, before making any adjusting journal entries. The income reflects all cash transactions. The only expense in the above analysis is cost of goods sold.

The main topic of this lesson is managing cash. The analysis we've used in this lesson presents all



transactions under a system called accrual accounting. In the next lesson, we will make more adjustments to the database at the end of the month. These adjusting journal entries are needed in order to match properly the expenses during a period in the same period as when revenue is earned.

For example, look at rent. The flower shoppe paid a total of \$1,800 reflecting three months' rent paid in advance. In other words, at \$600 a month, the flower shoppe paid for March, April, and May rent. In our database above, cash went down and prepaid rent went up.

If we had used a system called cash basis accounting, cash would have decreased and rent expense would have decreased equity earned by \$1,800.

But how much rent was actually consumed, or used up, in March? Answer: one month.

The distinction between cash basis accounting and accrual accounting is that, under cash basis accounting, the Flower Shoppe would have decreased cash by \$1,800 and decreased equity earned by \$1,800. The decrease in equity earned would be called rent expense.

But under accrual accounting, we would make an adjusting journal entry at the end of March to reflect that, of the original \$1,800 paid in rent, representing three months. \$600 has now been "used up." In the accounting records, we would only recognize \$600 as rent expense by making an adjusting journal entry to reflect only one month's rent expense. The remaining \$1,200, or two months' rent in the future, would be recognized in the database on March 31 as "prepaid rent."

## Questions and Answers

**Question 1:** The story of cash has three chapters. What are they?

**Answer:** F, I, O!

Chapter 1 – The business obtains its cash FINANCING.

Chapter 2: The business spends money on long-term startup costs. These are called INVESTING activities.

Chapter 3: The business pays for OPERATING startup costs and then begins collecting cash revenues from OPERATING activities.

**Question 2:** Assume Nathan Fisher wins the lottery and contributed \$50,000 from his personal savings to start Nathan's Skateboard Company. He also borrows \$150,000 by taking out a loan with Wells Fargo Bank. What kind of cash activities are these? Are they financing, investing, or operating cash inflows?

**Answer:** These are financing cash inflows. The \$50,000 is considered equity financing and the \$150,000 is called debt financing.

**Question 3:** What is another name for cash inflows?

**Answer:** Cash inflows can also be called cash receipts or cash collections.

**Question 4:** What is another name for **cash outflows**?

**Answer:** Other names for **cash outflows** are **cash disbursements** or **cash expenditures**.

**Question 5:** For a business, we have identified two equity accounts. What are they?

**Answer:** A business has two equity accounts: (1) that which represents the cash or other assets contributed by the owner and, (2) that which represents the cash or other assets earned by the after the business begins operating. In the TRIS course, we call these two accounts *equity contributed* and *equity earned*.

### Taking Action – Exercise 1

Assume Nathan Fisher’s cash budget looks like this for the first week of October, when he started his company. Fill out the Cash Code column, labeling each cash flow as:

F = Financing cash flows

I = Investing cash flows

O = Operating cash flows

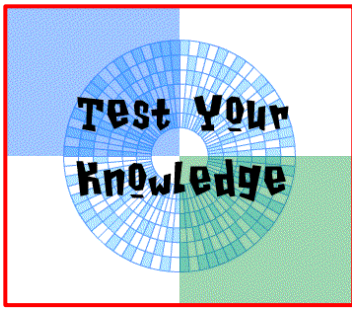
We have done the first one for you.

Also, how much will his cash balance be after incurring his startup costs?

Date	Description	OFI?	Cash
1-Oct	Beginning Balances		0
1-Oct	Invested Personal Funds	F	50,000
1-Oct	Received Loan from Bank		150,000
1-Oct	Purchased Insurance		(24,000)
2-Oct	Purchased Inventory		(80,000)
2-Oct	Prepaid Rent		(1,000)
5-Oct	Purchased Store Equip.		(6,000)
5-Oct	Purchased Supplies		(5,000)
5-Oct	Purchased Company Van		(8,000)
5-Oct	Purchased Finance Software		(10,000)
	Balance after startup costs		

### Taking Action – Exercise 2

Go to this web site, where you will find an article called [“The 10 Absolute Must-Follow Cash Flow Rules.”](#) The author says that a business owner must have cash flow projections (Rule #9). Why?



1. Which one is another name for cash inflows?
  - a. Cash receipts
  - b. Pouring in money
  - c. Cash expenditures
  - d. Cash withdrawals
  - e. Cash disbursements
2. Which is another name for cash outflows?
  - a. Cash receipts
  - b. Cash deposited
  - c. Cash expenditures
  - d. Cash disbursements
  - e. Both c. and d. are true
3. What is an example of an Investing activity?
  - a. Paying for Advertising
  - b. Buying Computers
  - c. Paying for Insurance
  - d. Paying for Rent
  - e. Buying Supplies inventory
4. What is an example of an Operating Activity?
  - a. Buying a Vehicle
  - b. Buying coffee for employees
  - c. Purchasing Computers
  - d. Buying Merchandise Inventory
  - e. Both b. and d. are true
5. An example of equity financing is\_\_\_\_\_
  - a. Finding money on the floor
  - b. Cash collected by a company from the owner's personal investment
  - c. Investing in other businesses using your personal money
  - d. Receiving money as a gift
  - e. Paying taxes on business income
6. **True or False:** When Kayla opens a business checking account, she must keep track of her business activity separate from her personal activity.

7. **True or False:** When Kayla adds up all of her assets and subtracts her liabilities, she can calculate her business's equity, or net worth.
8. **True or False:** Balance sheets are not necessary in a keeping track of a business's assets, liabilities, and equity.
9. **True or False:** If your business runs out of cash, it doesn't matter how many assets you own. The doors can be shut down and operations stop.
10. **True or False:** The story of cash has three chapters: Financing, Investing, Operating activities.

## What to do Before the Next Lesson

Like Kayla Anderson, prepare an Excel spreadsheet for your personal budget for next month (e.g., if it's currently April, do a projection for May, starting May 1). List at least eight personal assets and one liability (even if you don't owe anyone money, assume you owe somebody \$10).

What kind of business are you? A school-based business? A home-based business? When you turn 18, if you decide keep the business running, what form of business would you likely become? Why?



## Lesson Seventeen: Running the Business (Recordkeeping, Financial Statements, and Employee Management)

Please watch these videos before reading the lesson.

<a href="https://www.youtube.com/watch?v=tKCH0do4XMA">https://www.youtube.com/watch?v=tKCH0do4XMA</a> (3:39) “Understanding Small Business Accounting”
<a href="https://www.youtube.com/edit?ar=1&amp;o=U&amp;video_id=rlr-IYYhLI4">https://www.youtube.com/edit?ar=1&amp;o=U&amp;video_id=rlr-IYYhLI4</a> (15:42), “Recordkeeping and Financial Statements for Kayla’s Flower Shoppe”
<a href="https://www.youtube.com/watch?v=rQKis2Cfpeo">https://www.youtube.com/watch?v=rQKis2Cfpeo</a> (3:53) – “Young Steve Jobs on How to Hire, Manage, and Lead People”

### The Big Picture

After an entrepreneur has written a business plan, obtained the necessary startup cash to finance the business, and paid for all startup costs, then operations are ready to begin! The grand opening of any business is one of the most exciting days of an entrepreneur’s life. After the first sale is made, you are on your way.

But watch out—running a business isn’t easy, and you must make sure to manage your cash well. Also, though many business owners hate keeping good records, a basic understanding of Excel spreadsheets allows entrepreneurs to keep easy track of all cash inflows and outflows. When the business gets a little bigger, it is a good idea to buy an accounting software program so that most of the bookkeeping is done automatically.



There are two other very important parts of running a business. One is the preparation of monthly financial statements so that the owner can make decisions and pay the right amount of taxes. Second, if a business owner hires one or more employees, things become much more complicated. The owner now has to worry about equal opportunity laws, safety regulations, worker’s compensation insurance, making payroll, and making sure to pay a new tax based on employees’ wages and salaries. In the U.S.—this tax is called payroll tax.

This lesson focuses on recordkeeping, financial statements, and employees. Lesson 18 zeroes in on income tax and self-employment tax, while Lesson 19 focuses on payroll tax and sales tax.

### Recordkeeping

One of the first orders of business is to make sure you, as the owner, obtain all local and county business licenses and permits. For example, if a business plans to offer hot food for sale, it must obtain special permits from the health department. Building permits must be obtained prior to starting work on new construction or remodeling. Further, you must make sure your business complies with zoning regulations. For example, businesses are not allowed in residential neighborhoods, unless they are home-based businesses. Finally, each business must file and publish a fictitious business name statement.

Keeping good records is an important part of any business. Without good records, users of financial statements couldn't be very confident that the reported balance sheet, income statement, and cash flow numbers are accurate. What if business A reported \$2000 in net income and business B reported \$1500, but business B didn't keep very good track of its transactions? Would it be fair for business A to pay more taxes even though business B may have earned more income than business A?



In the accounting world, companies must follow rules so that they pay their fair share of taxes. Companies can use either the accrual basis of accounting or the cash basis of accounting. In either case, companies must keep good *audit trails*. To be sure that each business reports a "fair" amount of net income, the owners must have a good bookkeeping system and that they play by the same set of rules. TRIS insists that you keep good records of all cash inflows (i.e., receipts, collections) and cash outflows (i.e., payments, disbursements). Which financial statement summarizes all cash flows? Is it the Income Statement, Balance Sheet, or Statement of Cash Flows? It's the last one, of course.

What kind of business would require the most extensive set of records? Service or retail? Annette's Tutoring and Larry's Lawn Service (from Lesson Seven) were service businesses. Revenues were collected based on providing a service. Annette and Larry are lucky because they don't have to keep track of merchandise inventory. That should make it easier for them to keep track of their revenues, expenses, and cash flows.

But remember Kayla's Flower Shoppe, which sells flower arrangements. She must have fresh flower inventory on hand at all times. When starting the business it is important the Kayla's Flower Shoppe puts into place a good *management information system* so that it can make decisions based on relevant and timely data. Part of this system is a good accounting package. In Lessons 7 and 8, we have shown you how to create your own spreadsheets, post transactions, and prepare financial statements. Using our approach, you have seen how the financial statements are linked to the spreadsheet. The first step in creating a bookkeeping system is to create a **chart of accounts** and to open a **checking account**. A chart of accounts is simply a list of assets, liabilities, and equity items that you think the business will need. Each transaction should be supported with **documentation** that provides proof that it really occurred. For example, when Kayla contributed \$40,000 to the business, supporting documentation should be included describing the details of the contribution. Excel's "Insert Comment" feature is a wonderful tool for supporting documentation. The documentation should also include a copy of the deposit slip from the bank.

What do you think should be included in the **note payable** file? (Kayla borrowed \$10,000 from the bank.) How about a copy of the note itself, which details the terms of the liability? **Terms** include interest rate, repayment date, how the interest and principal payments are to be made, etc. Incidentally, terms of Kayla's note are as follows: 1 year, 10% interest, payable annually, with principal due at the end of the first year.

Opening a business checking account is essential before cash starts changing hands. This way, you can easily



keep your business transactions separate and distinct from your personal business. The database would now include a new column next to the Cash account. This column should be entitled something like “Dep/Ck. #.” For example, consider Kayla’s Flower Shoppe from Lesson 16. Her spreadsheet can now be changed a bit to keep track of cash deposits and checks.

Date	Description	OFI	Dep/ Ck #	Cash
1-Mar	Beginning Funds	--		0
1-Mar	Owner's Investment	F	Dp 1	40,000
1-Mar	Loan from bank	F	Dp 2	10,000
1-Mar	Purchase Company Van	I	Ck 101	(28,000)
1-Mar	Purchase Cash Register	I	Ck 102	(500)
1-Mar	Purchase Printer	I	Ck 103	(600)
1-Mar	Purchase Laptop	I	Ck 104	(1,000)
2-Mar	Insurance Purchase	O	Ck 105	(6,000)
2-Mar	Supply Purchase	O	Ck 106	(4,000)
2-Mar	Inventory Purchase	O	Ck 107	(7,000)
2-Mar	Prepaid Rent	O	Ck 108	(1,800)
	Bal. after startup costs			1,100

## Recording Monthly Transactions

Recall from Lesson 16 that Kayla’s Flower Shoppe had the following database recording all cash transactions for March 2019. Notice that the bottom row on March 31 says: “Balances before AJEs.” AJE is an abbreviation for *adjusting journal entry*.

Kayla's Flower Shoppe, Database for March, 2019 (before Adjusting Journal Entries)																		
				ASSETS =									LIABILITIES +				EQUITY	
Date	Description	OFI	Dp/Chk #	Cash	Inventory	Prepaid Rent	Prepaid Insurance	Supplies	Company Van	Cash Register	Printer	Laptop	Wages Payable	Utilities Payable	Interest Payable	Bank Loan Payable	Equity Contributed	Equity Earned
1-Mar	Beginning Funds	--	--	0	0	0	0	0		0	0	0	0	0			0	0
1-Mar	Owner's Investment	F	Dp1	40,000													40,000	
1-Mar	Loan from bank	F	Dp2	10,000												10,000		
1-Mar	Purchase Company Van	I	Ck101	(28,000)					28,000									
3-Mar	Purchase Cash Register	I	Ck102	(500)						500								
3-Mar	Purchase Printer	I	Ck103	(600)							600							
3-Mar	Purchase Laptop	I	Ck104	(1,000)								1,000						
1-Mar	Insurance Purchase	O	Ck105	(6,000)			6,000											
2-Mar	Supplies Purchase	O	Ck106	(4,000)				4,000										
2-Mar	Inventory Purchase	O	Ck107	(7,000)	7,000													
2-Mar	Prepaid Rent	O	Ck108	(1,800)		1,800												
30-Mar	First Month Cash Sales	O	Dp3	12,825														12,825
30-Mar	Cost of Inventory Sold	--	--		(6,750)													(6,750)
31-Mar	Balances before AJEs			13,925	250	1,800	6,000	4,000	28,000	500	600	1,000	0	0	0	10,000	40,000	6,075

At the end of the month, she must make other adjustments to her database. These adjustments are called *adjusting journal entries*, and they allow companies to prepare financial statements using a system called *accrual accounting*.





The word “accrue” means to “speed up” the recognition of revenue in this period--when it’s earned, even if cash hasn’t been collected yet. This creates an AJE that increases an asset called accounts receivable (abbreviated as A/R), and increased equity earned as revenue.

**AJE1 and AJE2** – Let’s say that on March 31, Kayla sold \$200 more of inventory for a sales price of \$375, *on account*. This means the customer walked away with her flower purchase, but agreed to pay the flower shoppe next month. Kayla would increase A/R by \$375 and increase equity earned by \$375. This is described as AJE1. She would also remove \$200 from inventory and subtract \$200 from equity earned, which was the cost of the flowers sold. This is AJE2.

There are ten more AJEs, as follows:

**AJE3** – Subtract \$600 from prepaid rent and subtract \$600 from equity earned. Recall, Kayla paid \$1,800 for three months’ rent on March 2. Now that one month has gone by at March 31, we remove one-third of this amount to show that \$600 of the rent is no longer prepaid; rather, it has expired. The amount subtracted from equity earned is called rent expense.

**AJE4** - Subtract \$500 from prepaid insurance and subtract \$500 from equity earned. Recall, Kayla paid \$6,000 for 12 months’ insurance on March 2. Now that one month has gone by at March 31, we remove 1/12<sup>th</sup> of this amount to show that \$500 of the insurance has expired, or lapsed. The amount subtracted from equity earned is called insurance expense.

**AJE5** - Subtract \$2,000 from supplies and subtract \$2,000 from equity earned. Recall, Kayla paid \$4,000 for 2 months’ worth of supplies on March 2. Now that one month has gone by at March 31, we remove the amount of supplies consumed. She goes to the supplies closet and estimates that half the supplies are remaining. So she subtracts \$2,000 from supplies. The amount subtracted from equity earned is called supplies expense.

**AJE6, AJE7, AJE8, and AJE9**– Subtract an amount from a long-term, depreciable asset and subtract equal amounts from equity earned. These four entries reflect that part of a long-term asset purchased earlier has been used up in operations this period. When the asset is purchased, the accountant must estimate the asset’s expected useful life to compute *periodic depreciation expense*. The van was assigned a 6-year life (72 months), the cash register and printer were assigned a 4-year life (48 months), and the laptop a 3-year life (36 months). The periodic depreciation is simply the historical cost of the asset divided by the number of months we expect to use the asset. For example, the van cost \$28,000 and will be used for 72 months. Dividing \$28,000 by 72 months yields \$389 of depreciation expense each period. Likewise, depreciation expense for the printer, cash register, and laptop \$10, \$13, and \$28, respectively.

**AJE10** – Add \$450 to wages payable and subtract \$450 from equity earned, and call it wages expense. Kayla hired two assistants on March 16, but agreed to pay each of them on April 1. At March 31, Kayla's Flower Shoppe owes the assistants for 15 days of service performed in March. They each agreed to work for \$15 an hour. The accountant must accrue 15 days of wages expense, because these assistants helped generate revenue in March. We must match the wages in the same period as the assistants performed the work. In this case, we haven't paid them yet, so the offset to the decrease in equity earned is an increase to wages payable.

**AJE11**- Add \$300 to utilities payable and subtract \$300 from equity earned, and call it utilities expense. Kaya received a utility bill on March 31 for energy consumed in March. Kayla plans to pay it before April 10 next month. The accountant must accrue the \$300, because the utilities consumed helped generate revenue in March. We must match the utilities consumed in the same period as they helped generate revenue. In this case, we haven't paid the utility bill yet, so the offset to the decrease in equity earned is an increase to utilities payable.

**AJE12**- Add \$83 to interest payable and subtract \$83 from equity earned, and call it interest expense. Kaya borrowed \$10,000 from the bank on March 1. She agreed to pay the entire amount back to the bank in one year, plus interest at 10%, on February 28, 2020. Though she hasn't paid the interest yet, she must recognized 1/12 of the total interest as an amount that helped generate revenue this month. The accountant must accrue \$10,000 times 10% times 1/12 of a year, which yields \$83 (rounded). Because the interest expense helped generate revenue in March, we must subtract \$83 from equity earned and add \$83 to interest payable.

## Preparing Monthly Financial Statements

Accountants have to work hard at the end of each accounting period to make sure all expenses are matched with this period's revenues. Once every account is adjusted, and the AJEs are recorded, we can easily prepare the main three financial statements under accrual accounting.

Kayla's Flower Shoppe, Database for March, 2019 (after Adjusting Journal Entries)																			
				ASSETS =										LIABILITIES +				EQUITY	
Date	Description	OFI	Dp/Chk #	Cash	Accts Receivable	Inventory	Prepaid Rent	Prepaid Insur'ce	Supplies	Company Van	Cash Register	Printer	Laptop	Wages Payable	Utilities Payable	Interest Payable	Bank Loan Payable	Equity Contributed	Equity Earned
1-Mar	Beginning Funds	--	--	0		0	0	0	0		0	0	0	0	0			0	0
1-Mar	Owner's Investment	F	Dp1	40,000													10,000	40,000	
1-Mar	Loan from bank	F	Dp2	10,000															
1-Mar	Purchase Company Van	I	Ck101	(28,000)						28,000									
3-Mar	Purchase Cash Register	I	Ck102	(500)							500								
3-Mar	Purchase Printer	I	Ck103	(600)								600							
3-Mar	Purchase Laptop	I	Ck104	(1,000)									1,000						
1-Mar	Insurance Purchase	O	Ck105	(6,000)				6,000											
2-Mar	Supplies Purchase	O	Ck106	(4,000)					4,000										
2-Mar	Inventory Purchase	O	Ck107	(7,000)		7,000													
2-Mar	Prepaid Rent	O	Ck108	(1,800)			1,800												
30-Mar	First Month Cash Sales	O	Dp3	12,825															12,825
30-Mar	Cost of Inventory Sold	--	--			(6,750)													(6,750)
31-Mar	Balances before AJEs	--	--	13,925		250	1,800	6,000	4,000	28,000	500	600	1,000	0	0	0	10,000	40,000	6,075
	AJEs																		
31-Mar	AJE1-Sales on account	--	--		375														375
31-Mar	AJE2-Remove inventory	--	--			(200)													(200)
31-Mar	AJE3 to Adjust Rent	--	--				(600)												(600)
31-Mar	AJE4 to Adjust Insurance	--	--					(500)											(500)
31-Mar	AJE5 to Adjust Supplies	--	--						(2,000)										(2,000)
31-Mar	AJE6 to Depreciate Van	--	--							(389)									(389)
31-Mar	AJE7 to Depr. Cash Reg'r	--	--								(10)								(10)
31-Mar	AJE8 to Depr. Printer	--	--									(13)							(13)
31-Mar	AJE9 to Depr. Laptop	--	--										(28)						(28)
31-Mar	AJE10 to Accrue Wag Pay	--	--											750					(750)
31-Mar	AJE11 to Accrue Util Pay	--	--												300				(300)
31-Mar	AJE12 to Accrue Int Pay	--	--						199							83			(83)
31-Mar	Ending Balances			13,925	375	50	1,200	5,500	2,000	27,611	490	588	972	750	300	83	10,000	40,000	1,577

## Balance Sheet

The first financial statement is the balance sheet. Using Excel, we can link each account balance, like cash of \$13,925, from the database to the balance sheet (recall Lesson 8!). The balance sheet is below. Note that the assets are broken down between those that will be used up in a year or less – called current assets, and those that will be used up in more than a year – called noncurrent assets. The same is true with liabilities. We classify the bank loan, which is due in less than a year, as a noncurrent liability; technically, since it's due in less than a year, it's really a current liability).

Kayla's Flower Shoppe					
Balance Sheet					
March 31, 2019					
<b>Current Assets</b>			<b>Current Liabilities</b>		
Cash	\$13,925		Wages Payable	\$750	
Accounts Receivable	375		Utilities Payable	300	
Inventory	50		Interest Payable	83	
Prepaid Rent	1,200		Total Current Liabilities	\$1,133	\$1,133
Prepaid Insurance	5,500				
Supplies	2,000		<b>Noncurrent Liabilities</b>		
Total Current Assets	\$23,050	23,050	Bank Loan Payable	\$10,000	\$10,000
			Total Liabilities		\$11,133
<b>Noncurrent Assets</b>					
Company Van (net)	\$27,611				
Cash Register (net)	490		<b>Equity</b>		
Printer (net)	588		Equity Contributed	\$40,000	
Laptop (net)	972		Equity Earned	1,577	
Total Noncurrent Assets					
	\$29,660	29,660	Total Equity	\$41,577	41,577
<b>Total Assets</b>		\$52,710	<b>Total Liabilities and Equity</b>		\$52,710

What does the balance sheet tell us? First, it shows us that she better get some new inventory soon. She's down to \$50. Also, she has quite a bit of cash, but remember: she has to pay her liabilities with that cash. Her bank loan falls due in eleven months, so she better save some cash to make this balloon payment.

## Income Statement

The second financial statement is called the income statement, sometimes called the Profit and Loss (P&L) statement. From the database, we see that all changes in equity earned in the first period are labeled as revenue or an **expense**. We can now prepare this statement from the far-right hand column, which is called equity earned.

12,825	Revenue-cash sales
(6,750)	Cost of Goods Sold
6,075	
375	Revenue- on acct.
(200)	Cost of Goods Sold
(600)	Rent Expense
(500)	Ins. Expense
(2,000)	Supplies Expense
(389)	Depr. Expense (Van)
(10)	Depr Expense (CR)
(13)	Depr. Expense (Pr)
(28)	Depr. Expense Lapto
(750)	Wages Expense
(300)	Utilities Expense
(83)	Interest Expense

First, we start with the title. Note that the income statements says “For the month ended March 31.” That means we started to measure revenues on March 1 and stopped on March 31. We are measuring changes in equity earned! The formal income statement is below, and note how it is formatted.

We start with revenues less cost of goods sold. The result is a number called gross margin. Then, we subtract all expenses except interest. These expenses are known as operating expenses. Finally, we subtract interest expense from operating income to get our financial bottom line for the month, which is called net income (before tax)!

Kayla's Flower Shoppe					
Income Statement					
For the Month Ended 3/31/2019					
	Revenues	\$13,200			
	Less: Cost of Goods Sold	(6,950)			
	Gross margin	\$6,250	\$6,250		
	Less: Operating Expenses				
	Rent	(\$600)			
	Insurance	(500)			
	Supplies	(2,000)			
	Wages	(750)			
	Utilities	(300)			
	Depreciation (total)	(440)			
		(\$4,590)	(4,590)		
	Operating Income		\$1,660		
	Less: Interest Expense		(83)		
	Net income (before tax)		\$1,577		

Does the bottom line of \$1,577 look familiar? It’s the same number that goes on the balance sheet. Net income is the increase in net assets for a period as a result of operating the business successfully. Under accrual accounting, net income is considered the best measure of how well the company

performed for a period, and it is the best predictor of how she will do in the future.

Step back a moment. Kayla earned \$1,577 in her first month, having contributed \$40,000 of equity. We can calculate her first month's "return on equity" by taking  $\$1,577 / \$40,000$  to get .039, or 3.9%. That's pretty good for one month. A 3.9% return, when multiplied by 12, gives you 47.3%. That's quite an annual return on her equity!

## Statement of Cash Flows

The third financial statement is called the statement of cash flows. From the database, we see that all changes in cash in March are labeled as O, F, or I.

Owner's Investment	F	40,000
Loan from bank	F	10,000
Purchase Company Van	I	(28,000)
Purchase Cash Register	I	(500)
Purchase Printer	I	(600)
Purchase Laptop	I	(1,000)
Insurance Purchase	O	(6,000)
Supplies Purchase	O	(4,000)
Inventory Purchase	O	(7,000)
Prepaid Rent	O	(1,800)
First Month Cash Sales	O	12,825
		13,925

Cash went up a total of \$13,925. With Excel, we can use the "sort" feature and in a few minutes create a lovely, formal statement of cash flows that looks like this:

Kayla's Flower Shoppe				
Statement of Cash Flows				
For the Month Ended 3/31/2019				
	Cash inflows from operating activities			
		First Month Cash Sales	\$ 12,825	
	Cash outflows from operating activities			
		Insurance Purchase	(6,000)	
		Supplies Purchase	(4,000)	
		Inventory Purchase	(7,000)	
		Prepaid Rent	(1,800)	
	<b>Net cash flows from operating activities</b>		<b>(5,975)</b>	<b>(5,975)</b>
	Cash flow from investing activities			
		Purchase Company Van	(\$28,000)	
		Purchase Cash Register	(500)	
		Purchase Printer	(600)	
		Purchase Laptop	(1,000)	
	<b>Net cash flows from investing activities</b>		<b>(\$30,100)</b>	<b>(30,100)</b>
	Cash flows from financing activities			
		Owner's Investment	\$40,000	
		Loan from bank	10,000	
	<b>Net cash flows from financing activities</b>		<b>\$50,000</b>	<b>50,000</b>
	Net change in cash flows during March			\$13,925
	Beginning balance in cash on March 1			0
	Ending balance in cash on March 32			<b>\$13,925</b>

Let's step back here. Kayla's cash flow from operations was negative \$5,975? Is this a bad thing? No, not really. Remember, this is her first month in business. We would expect her cash outflows from operations to be negative. She has prepaid insurance, rent, and supplies that will last her into the future, without having to pay cash for any of these items next period. For example, she has unexpired insurance of \$5,500 left.

What about cash flow from investing activities? That's negative \$30,100. Is that bad? No! This means she's expanding. Her purchases of long-term assets, like the company van, required lots of cash. But she won't be buying new long-term assets in the near future. Later on, when she sells some of her long-term assets, she will be divesting of these assets, and there will be positive cash flow from investing activities.

What about cash flow from financing activities? That's positive \$50,000. Is that good or bad? In the first month, that's good. That means she's obtained the necessary financing to open her business. We would expect cash flow from financing activities to be positive. The owner needs to get her finances for the company before investing in startup costs and beginning operations, right? Later on, when



she takes cash withdrawals from the business, cash flow from financing activities will be negative, which also is a good thing! Remember, Kayla's in business to make profits and ultimately withdraw them, to be used for personal things, like buying a house, a car, or taking a vacation.

## **Accrual vs. Cash Basis Accounting**

The above discussion assumes the Kayla's Flower Shoppe recognizes revenue when she earns it, which is the point of sale. On March 31, Kayla made a sale on account for \$375. She recognized the revenue on March 31 with AJE1 and removed the inventory with AJE2. Under cash basis accounting, this entry would not be made. Instead, the revenue would be recognized in the next period, when she collects the cash.

By the same token, Kayla spent money on insurance, rent, supplies, and flower inventory, but she didn't recognize all of it as expense in March. Instead, she adjusted these accounts at the end of the period to match the right amount of these expenses in the same period that they helped generate revenue.

Let's now look at the payables we created under accrual accounting. Note that Kayla recognized expenses for wages expense, utilities expense, and interest expense, and created three liabilities: wages payable, utilities payable, and interest payable. Under cash basis accounting, she wouldn't have made these AJEs; instead, she would have recognized the expenses in the future, when she paid the cash.

Finally, all the long-term assets that Kayla purchased are depreciable assets, meaning that we show their "wear and tear" by an accounting process known as depreciation. This means we reduce the asset's accounting value each period by an amount that it

## **A Note about Credit Cards**

A small business, like the ones you start in the TRIS program, should not use credit cards. But as a business gets larger, it is sometimes convenient to use a credit card when buying supplies or paying for smaller expense items. But, again, be careful. If you don't pay your credit card in full each month, you will end up paying the bank that issued the credit card a really, really high interest rate.




## **Reconciling Cash with the Bank Statement**



A *bank reconciliation* is simply a comparison of the cash account in your accounting spreadsheet with the amount your bank says it has in your account. For example, from your accounting records (i.e., checkbook), Kayla shows a cash balance of \$13,925 on March 31.

Date	Description	OFI	Dp/Chk #	Cash
1-Mar	Beginning Funds	--	--	0
1-Mar	Owner's Investment	F	Dp1	40,000
1-Mar	Loan from bank	F	Dp2	10,000
1-Mar	Purchase Company Van	I	Ck101	(28,000)
3-Mar	Purchase Cash Register	I	Ck102	(500)
3-Mar	Purchase Printer	I	Ck103	(600)
3-Mar	Purchase Laptop	I	Ck104	(1,000)
1-Mar	Insurance Purchase	O	Ck105	(6,000)
2-Mar	Supplies Purchase	O	Ck106	(4,000)
2-Mar	Inventory Purchase	O	Ck107	(7,000)
2-Mar	Prepaid Rent	O	Ck108	(1,800)
30-Mar	First Month Cash Sales	O	Dp3	12,825
30-Mar	Cost of Inventory Sold	--	--	
31-Mar	Balances before AJEs	--	--	13,925

But in reviewing the bank statement, from Lake City National Bank, for the month ended March 31, you see that the bank reports a balance of only \$7,075.

	<b>Lake City National Bank</b> 212 Golden Street P.O. Box 6458 Lake City, XX 12345	Statement date: July 1, 20X3 through July 31, 20X3  Statement for:      The Tackle Shack 445 Main Street Lake City, XX 12345
	Account # 76-7888-0987	

CHECKING SUMMARY

Beginning Balance, March 1, 2019	\$ -0-
Total of 2 Deposits	\$ 50,000
Total of 7 Withdrawals	\$ 42,900
Service charges	\$ <u>(25)</u>
Ending Balance, March 31, 2019	<b><u>\$ 7,075</u></b>

CHECKS AND OTHER DEBITS

Check	Date Paid	Amount
101	Mar 2	\$28,000
102	Mar 4	\$ 500
103	Mar 6	\$ 600
104	Mar 7	\$1,000
106	Mar 3	\$4,000
107	Mar 3	\$7,000
108	Mar 6	\$1,800
Monthly Service Charge		\$ 25

DEPOSITS AND OTHER CREDITS

Date Posted	Amount
#1	\$40,000
#2	\$10,000

To see why these amounts differ, you should put the checkbook next to the bank statement. If you look carefully, you can see two items on the checkbook that aren't reported on the bank statement. First, the check for insurance written on March 1 for \$6,000—Check #105—hasn't been cashed by the insurance company. This check is "outstanding." Also, Deposit #3 for \$12,825 hasn't yet been recorded by the bank by March 31. This is known as a "deposit-in-transit."

Finally, the bank statement shows a \$25 bank service charge, which we hasn't yet been recorded in the checkbook.

So, we have three reconciling items. Here is what the bank reconciliation would look like.

Kayla's Flower Shoppe					
Bank Reconciliation for Month Ended March 31, 2019					
	Cash balance per database		Cash balance bank statement		
March 31 Balance	\$13,925		\$7,075		
Less: Bank service fee	-25				
			12825	Add: Deposits in transit	
			-6000	Less: Outstanding check	
	<b>\$13,900</b>		<b>\$13,900</b>		

Kayla would now have to make one more entry to her spreadsheet by subtracting \$25.00 from cash and \$25.00 from equity earned. This would be described as “bank service charge expense.” [Note: the financial statements above would all need to be updated to reflect this transaction for \$25.]

### Taking Action: Exercise 1

Assume your business database/checkbook indicates that it has \$1,237 in the bank, but the bank statement shows that you have \$1,545. In comparing your records with the bank statement, you note the following:

- Deposits in transit are \$300.
- Outstanding checks are \$628.
- Bank service fee is \$20.

**Part A:** Using an Excel spreadsheet or by hand, please prepare a bank reconciliation.

**Part B:** What journal entry would you make to adjust your cash account balance to the true balance?

### Taking Action: Exercise 2

For each of the following, what kind of backup documentation do you think a company should have supporting its payments for:

1. Rent
2. Insurance
3. Office supplies
4. Equipment

### Questions and Answers about Hiring Employees

In the TRIS program, teens really can't hire other teens to work for them, since most teens aren't able to enter into legal contracts. Furthermore, once you hire someone and put them on the payroll, there's a lot more red tape and government regulations that must be followed. Instead, we encourage teens who work together to become business partners as an “education project.” Profits can be paid out, not in salary or wages, but in scholarships.

If your business really must hire someone to do some specialized work for your business, we encourage you to hire them as an independent contractor. This means they aren't an employee, and don't have to come into work each day. In other words, they aren't under your control. If you hire an independent contractor and pay them \$600 or more in a year, you must also file a tax form with the Internal Revenue Service at the end of the year. This is known as Form 1099-MISC, Miscellaneous Income.

**Question 1:** Why hire an independent contractor rather than hire employees?

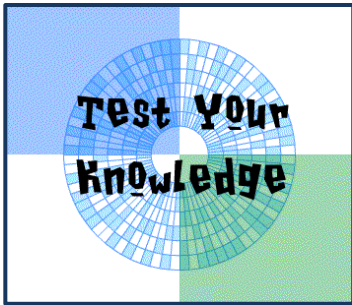
**Answer:** If you decide to hire employees, the amount of red tape and government regulation increases dramatically. For example, employers are required to collect taxes from their employees, and to forward these taxes to the appropriate federal and state agencies. In addition, employers need to be current on the many rules and regulations governing employees. The following is a partial list of items that will need to be considered:

Americans with Disabilities Act	State employee safety and health regulations
Immigration law restrictions	Federal Fair Labor Standards Act
Child labor laws	State income tax withholdings
Minimum wage requirement	Federal income tax withholdings
Deferred compensation plans	State unemployment tax
Overtime pay requirement	Federal OSHA regulations
Employee stock option plans	Title VII of the Civil Rights Act of 1964
Pension or profit sharing plan	Federal unemployment tax
Employer and Employee Social Security (FICA) and Medicare Taxes	Unions
Sexual harassment	Group insurance
Federal anti-discrimination laws	Workers' compensation or state disability insurance

As you can see, when a business hires even one employee, things get a lot more complicated! As a business grows, it is advisable to hire a separate company that specializes in payroll processing and/or human resource management. No business owner wants the headaches and problems associated with legal **encounters** dealing with such things as sexual harassment or the hiring, firing, or layoffs of an employee. Such legal battles could destroy a business, and it is the responsibility of the entrepreneur to understand the laws and regulations, or to subcontract to a company who does.

## Taking Action

To see a good description of the difference between an independent contractor and an employee, go to [this web page](#). What is the primary difference between an employee and an independent contractor?



1. Without \_\_\_\_\_, users of financial statements could not be very confident that the reported balance sheet, income statement, and cash flow numbers are accurate.
  - a. good health
  - b. good records
  - c. good friendships
  - d. good employees
  - e. good customer satisfaction
2. Long-term assets that wear out over time are called:
  - a. Depreciable assets
  - b. Money lost
  - c. Credit
  - d. Recordkeeping
  - e. Financial Statements
3. What must employers collect from employees, and then forward to the appropriate federal and state agencies?
  - a. Hush money
  - b. Personal information
  - c. Social media
  - d. Payroll taxes withheld
  - e. Confidential information
4. A basic understanding of \_\_\_\_\_ allows entrepreneurs to keep easy track of all cash inflows and outflows.
  - a. Relationships
  - b. Excel spreadsheets
  - c. Audit trails
  - d. Net income
  - e. Income tax
5. What does AJE stand for?
  - a. Adding Journal Entry
  - b. Applying Journal Entry
  - c. Audit Just Everything
  - d. Appreciated Joy Ends
  - e. Adjusting Journal Entry

6. True or False: If a business plans to offer hot food for sale it does not need to obtain special permits from the health department.
7. True or False: The word “accrue” means to “speed up” the recognition of revenue in this period.
8. True or False: When an asset is purchased, the accountant must estimate the asset’s expected useful life to compute periodic depreciation expense.
9. True or False: The main three financial statements are: balance sheet, income statement, statement of cash flows.
10. True or False: If you don’t pay your credit card in full each month, you will end up not having to pay the owed amount.

## What to Do Before the Next Lesson

Have you begun business yet? If not, keep working on your lean canvas and revise, refine, and test your idea with potential customers. If you have started a business, make sure you are using good bookkeeping practices. Also, make sure you are keeping good accounting records.



## Lesson Eighteen: Taxes

Before reading any further, make sure you watch these two videos:

<https://www.youtube.com/watch?v=vIo--LEj18k> (7:31), “Taxes: Income Tax and Self-Employment Tax for Kayla’s Flower Shoppe”

<https://www.youtube.com/watch?v=Zzvd0-rsufE>, “Self Employment Income & Taxes,” by Susan Elliott

### The Big Picture

Everyone hates paying taxes! But everyone loves good schools, police and fire protection, paved roads, clean food, national defense, and a living income and health care when we retire. That’s why we pay taxes. The business that you actually launch as part of TRIS is probably part of a business class, or it’s part of an after school club. If so, you will not have to pay taxes. If this is the case, your business is considered an educational project. Any profits from the business can be paid out to the students as scholarships. But when you turn 18 years old and start a business, you must be very careful to pay all taxes. The main two taxes are (1) *income tax* and (2) *self-employment tax*.



There may be two other taxes that must be paid, in some cases. First, if your business sell products, it must charge *sales tax* on sales and send this to—or remit this to—the state government. Second, if you hire employees, you must pay *payroll tax* to the federal and state governments.

### Income Taxes

Income taxes are taxed as a percentage of your company’s net income before tax. You might remember from Lesson 14 that sole proprietors must file a special income statement on their tax returns showing the net income for the business. This is called a “Schedule C (Form 1040).” We can easily fill one of these forms out once we have completed the income statement for Kayla’s Print Shoppe. In Lesson 17, we filled out an income statement for one month. Let’s assume that her annual income statement turned out to be exactly like her income statement for one month, but 12 times as much. For example, one month of net income is \$1,577. A full year would be  $\$1,577 * 12 = \$18,925$ . It’s easy to do this with Excel!



Kayla's Flower Shoppe					Kayla's Flower Shoppe				
Income Statement					Income Statement				
For the <u>Month</u> Ended 3/31/2019					For the <u>Year</u> Ended 2/28/2020				
Revenues	\$13,200				Revenues	\$158,400			
Less: Cost of Goods Sold	(6,950)				Less: Cost of Goods Sold	(83,400)			
Gross margin	\$6,250	\$6,250			Gross margin	\$75,000	\$75,000		
Less: Operating Expenses					Less: Operating Expenses				
Rent	(\$600)				Rent	(\$7,200)			
Insurance	(500)				Insurance	(6,000)			
Supplies	(2,000)				Supplies	(\$24,000)			
Wages	(750)				Wages	(9,000)			
Utilities	(300)				Utilities	(\$3,600)			
Depreciation (total)	(440)				Depreciation (total)	(5,275)			
	(\$4,590)	(4,590)				(\$55,075)	(55,075)		
Operating Income		\$1,660			Operating Income		\$19,925		
Less: Interest Expense		(83)			Less: Interest Expense		(1,000)		
Net income (before tax)		\$1,577			Net income (before tax)		\$18,925		

Here's how Kayla would transfer her net income before tax, from her accounting records, to the IRS's Schedule C (Form 1040).

**SCHEDULE C**  
**(Form 1040)**Department of the Treasury  
Internal Revenue Service (99)**Profit or Loss From Business**  
(Sole Proprietorship)

► Go to [www.irs.gov/ScheduleC](http://www.irs.gov/ScheduleC) for instructions and the latest information.  
► Attach to Form 1040, 1040NR, or 1041; partnerships generally must file Form 1065.

OMB No. 1545-0074

**2017**Attachment  
Sequence No. **09**

Name of proprietor <b>Kayla Anderson</b>		Social security number (SSN)
<b>A</b> Principal business or profession, including product or service (see instructions) <b>General Retail Merchandise</b>	<b>B</b> Enter code from instructions ► <b>4 5 2 0 0 0</b>	
<b>C</b> Business name. If no separate business name, leave blank. <b>Kayla's Flower Shoppe</b>	<b>D</b> Employer ID number (EIN) (see instr.) <b>1 2 3 4 5 6 7 8 9</b>	
<b>E</b> Business address (including suite or room no.) ► <b>1234 Fair Street</b> City, town or post office, state, and ZIP code <b>Chico, CA 95928</b>		
<b>F</b> Accounting method: (1) <input type="checkbox"/> Cash (2) <input checked="" type="checkbox"/> Accrual (3) <input type="checkbox"/> Other (specify) ►		
<b>G</b> Did you "materially participate" in the operation of this business during 2017? If "No," see instructions for limit on losses <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
<b>H</b> If you started or acquired this business during 2017, check here <input checked="" type="checkbox"/>		
<b>I</b> Did you make any payments in 2017 that would require you to file Form(s) 1099? (see instructions) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
<b>J</b> If "Yes," did you or will you file required Forms 1099? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

**Part I Income**

<b>1</b> Gross receipts or sales. See instructions for line 1 and check the box if this income was reported to you on Form W-2 and the "Statutory employee" box on that form was checked <input type="checkbox"/>	<b>1</b>	<b>158400</b>
<b>2</b> Returns and allowances	<b>2</b>	
<b>3</b> Subtract line 2 from line 1	<b>3</b>	<b>158400</b>
<b>4</b> Cost of goods sold (from line 42)	<b>4</b>	<b>83400</b>
<b>5</b> <b>Gross profit.</b> Subtract line 4 from line 3	<b>5</b>	<b>75000</b>
<b>6</b> Other income, including federal and state gasoline or fuel tax credit or refund (see instructions)	<b>6</b>	
<b>7</b> <b>Gross income.</b> Add lines 5 and 6	<b>7</b>	<b>75000</b>

**Part II Expenses.** Enter expenses for business use of your home **only** on line 30.

<b>8</b> Advertising	<b>8</b>		<b>18</b> Office expense (see instructions)	<b>18</b>	
<b>9</b> Car and truck expenses (see instructions)	<b>9</b>		<b>19</b> Pension and profit-sharing plans	<b>19</b>	
<b>10</b> Commissions and fees	<b>10</b>		<b>20</b> Rent or lease (see instructions):		
<b>11</b> Contract labor (see instructions)	<b>11</b>		<b>a</b> Vehicles, machinery, and equipment	<b>20a</b>	<b>7200</b>
<b>12</b> Depletion	<b>12</b>	<b>5275</b>	<b>b</b> Other business property	<b>20b</b>	
<b>13</b> Depreciation and section 179 expense deduction (not included in Part III) (see instructions)	<b>13</b>		<b>21</b> Repairs and maintenance	<b>21</b>	
<b>14</b> Employee benefit programs (other than on line 19)	<b>14</b>		<b>22</b> Supplies (not included in Part III)	<b>22</b>	<b>24000</b>
<b>15</b> Insurance (other than health)	<b>15</b>	<b>6000</b>	<b>23</b> Taxes and licenses	<b>23</b>	
<b>16</b> Interest:			<b>24</b> Travel, meals, and entertainment:		
<b>a</b> Mortgage (paid to banks, etc.)	<b>16a</b>		<b>a</b> Travel	<b>24a</b>	
<b>b</b> Other	<b>16b</b>	<b>1000</b>	<b>b</b> Deductible meals and entertainment (see instructions)	<b>24b</b>	
<b>17</b> Legal and professional services	<b>17</b>		<b>25</b> Utilities	<b>25</b>	
			<b>26</b> Wages (less employment credits)	<b>26</b>	<b>9000</b>
			<b>27a</b> Other expenses (from line 48)	<b>27a</b>	
			<b>b</b> <b>Reserved for future use</b>	<b>27b</b>	
<b>28</b> <b>Total expenses</b> before expenses for business use of home. Add lines 8 through 27a	<b>28</b>	<b>56075</b>			
<b>29</b> Tentative profit or (loss). Subtract line 28 from line 7	<b>29</b>	<b>18925</b>			
<b>30</b> Expenses for business use of your home. Do not report these expenses elsewhere. Attach Form 8829 unless using the simplified method (see instructions). <b>Simplified method filers only:</b> enter the total square footage of: (a) your home: _____ and (b) the part of your home used for business: _____. Use the Simplified Method Worksheet in the instructions to figure the amount to enter on line 30	<b>30</b>	<b>0</b>			
<b>31</b> <b>Net profit or (loss).</b> Subtract line 30 from line 29. • If a profit, enter on both <b>Form 1040, line 12</b> (or <b>Form 1040NR, line 13</b> ) and on <b>Schedule SE, line 2</b> . (If you checked the box on line 1, see instructions). Estates and trusts, enter on <b>Form 1041, line 3</b> . • If a loss, you <b>must</b> go to line 32.	<b>31</b>	<b>18925</b>			
<b>32</b> If you have a loss, check the box that describes your investment in this activity (see instructions). • If you checked 32a, enter the loss on both <b>Form 1040, line 12</b> , (or <b>Form 1040NR, line 13</b> ) and on <b>Schedule SE, line 2</b> . (If you checked the box on line 1, see the line 31 instructions). Estates and trusts, enter on <b>Form 1041, line 3</b> . • If you checked 32b, you <b>must</b> attach <b>Form 6198</b> . Your loss may be limited.			<b>32a</b> <input type="checkbox"/> All investment is at risk. <b>32b</b> <input type="checkbox"/> Some investment is not at risk.		

For Paperwork Reduction Act Notice, see the separate instructions.

Cat. No. 11334P

Schedule C (Form 1040) 2017

The net income (also known as net profit) earned by Kayla's Print Shoppe is subject to federal (and state) income taxes, which we shall compute in a few moments. First, though, we must compute her self-employment tax.



## Self-Employment Tax

Since Kayla is “self-employed,” she is required to pay a “social security” tax, which is called self-employment tax. Money paid with this tax goes into a government fund. Payments from this fund provide social security income and medical care to people after they retire, and to provide medical care for low-income people even though they aren’t yet at retirement age. To compute how much Kayla owes in self-employment tax, she must fill out another IRS Form called Schedule SE. The starting number for this form, \$18,925, comes from Schedule C, above.

<b>SCHEDULE SE</b> <b>(Form 1040)</b>  Department of the Treasury Internal Revenue Service (99)	<b>Self-Employment Tax</b>  ► Go to <a href="http://www.irs.gov/ScheduleSE">www.irs.gov/ScheduleSE</a> for instructions and the latest information. ► Attach to Form 1040 or Form 1040NR.	OMB No. 1545-0074  <div style="font-size: 24pt; font-weight: bold;">2017</div> Attachment Sequence No. <b>17</b>
Name of person with self-employment income (as shown on Form 1040 or Form 1040NR) Kayla Anderson		Social security number of person with self-employment income ► 987-65-1234

**Before you begin:** To determine if you must file Schedule SE, see the instructions.

---

**May I Use Short Schedule SE or Must I Use Long Schedule SE?**

**Note:** Use this flowchart **only** if you must file Schedule SE. If unsure, see *Who Must File Schedule SE* in the instructions.

**Did you receive wages or tips in 2017?**

**No**

Are you a minister, member of a religious order, or Christian Science practitioner who received IRS approval **not** to be taxed on earnings from these sources, **but** you owe self-employment tax on other earnings?

**No**

Are you using one of the optional methods to figure your net earnings (see instructions)?

**No**

Did you receive church employee income (see instructions) reported on Form W-2 of \$108.28 or more?

**No**

**You may use Short Schedule SE below**

**Yes**

Was the total of your wages and tips subject to social security or railroad retirement (tier 1) tax **plus** your net earnings from self-employment more than \$127,200?

**No**

Did you receive tips subject to social security or Medicare tax that you **didn't** report to your employer?

**No**

Did you report any wages on Form 8919, Uncollected Social Security and Medicare Tax on Wages?

**No**

**You must use Long Schedule SE on page 2**

---

**Section A—Short Schedule SE. Caution:** Read above to see if you can use Short Schedule SE.

<p><b>1a</b> Net farm profit or (loss) from Schedule F, line 34, and farm partnerships, Schedule K-1 (Form 1065), box 14, code A . . . . .</p> <p><b>b</b> If you received social security retirement or disability benefits, enter the amount of Conservation Reserve Program payments included on Schedule F, line 4b, or listed on Schedule K-1 (Form 1065), box 20, code Z . . . . .</p> <p><b>2</b> Net profit or (loss) from Schedule C, line 31; Schedule C-EZ, line 3; Schedule K-1 (Form 1065), box 14, code A (other than farming); and Schedule K-1 (Form 1065-B), box 9, code J1. Ministers and members of religious orders, see instructions for types of income to report on this line. See instructions for other income to report . . . . .</p> <p><b>3</b> Combine lines 1a, 1b, and 2 . . . . .</p> <p><b>4</b> Multiply line 3 by 92.35% (0.9235). If less than \$400, you don't owe self-employment tax; <b>don't</b> file this schedule unless you have an amount on line 1b. . . . . ►</p> <p><b>Note:</b> If line 4 is less than \$400 due to Conservation Reserve Program payments on line 1b, see instructions.</p> <p><b>5 Self-employment tax.</b> If the amount on line 4 is:          • \$127,200 or less, multiply line 4 by 15.3% (0.153). Enter the result here and on <b>Form 1040, line 57, or Form 1040NR, line 55</b>          • More than \$127,200, multiply line 4 by 2.9% (0.029). Then, add \$15,772.80 to the result. Enter the total here and on <b>Form 1040, line 57, or Form 1040NR, line 55</b> . . . . .</p> <p><b>6 Deduction for one-half of self-employment tax.</b>          Multiply line 5 by 50% (0.50). Enter the result here and on <b>Form 1040, line 27, or Form 1040NR, line 27</b> . . . . .</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 10%;"><b>1a</b></td><td style="width: 60%;"></td><td style="width: 30%;"></td></tr> <tr><td><b>1b</b></td><td>(</td><td></td></tr> <tr><td><b>2</b></td><td></td><td>18925</td></tr> <tr><td><b>3</b></td><td></td><td>18925</td></tr> <tr><td><b>4</b></td><td></td><td>17477</td></tr> <tr><td><b>5</b></td><td></td><td>2674</td></tr> <tr style="background-color: #cccccc;"><td><b>6</b></td><td></td><td>1337</td></tr> </table>	<b>1a</b>			<b>1b</b>	(		<b>2</b>		18925	<b>3</b>		18925	<b>4</b>		17477	<b>5</b>		2674	<b>6</b>		1337
<b>1a</b>																						
<b>1b</b>	(																					
<b>2</b>		18925																				
<b>3</b>		18925																				
<b>4</b>		17477																				
<b>5</b>		2674																				
<b>6</b>		1337																				

For Paperwork Reduction Act Notice, see your tax return instructions. Cat. No. 11358Z Schedule SE (Form 1040) 201

## Computing the Total Tax Bill on Form 1040

Once Kayla has completed Schedule C and Schedule SE, she's ready to fill out the first two pages of her tax return on Form 1040. Once Form 1040 is filled out, she will know how much money she must send to the IRS. Let's look at Form 1040 and drop in the relevant numbers from above.



For the year Jan. 1–Dec. 31, 2017, or other tax year beginning

, 2017, ending

, 20

See separate instructions.

Your first name and initial

Last name

Your social security number

Kayla N.

Anderson

9 8 7 6 5 1 2 3 4

If a joint return, spouse's first name and initial

Last name

Spouse's social security number

Home address (number and street). If you have a P.O. box, see instructions.

Apt. no.

▲ Make sure the SSN(s) above and on line 6c are correct.

4321 Hazel Avenue

City, town or post office, state, and ZIP code. If you have a foreign address, also complete spaces below (see instructions).

Presidential Election Campaign

Chico, CA 95926

Foreign country name

Foreign province/state/country

Foreign postal code

Check here if you, or your spouse if filing jointly, want \$3 to go to this fund. Checking a box below will not change your tax or refund.

☒ You ☐ Spouse

## Filing Status

Check only one box.

1 ☒ Single2 ☐ Married filing jointly (even if only one had income)3 ☐ Married filing separately. Enter spouse's SSN above and full name here. ▶4 ☐ Head of household (with qualifying person). (See instructions.)

If the qualifying person is a child but not your dependent, enter this child's name here. ▶

5 ☐ Qualifying widow(er) (see instructions)

## Exemptions

6a ☒ Yourself. If someone can claim you as a dependent, do not check box 6a . . . . .b ☐ Spouse . . . . .

c Dependents:

(1) First name	Last name	(2) Dependent's social security number	(3) Dependent's relationship to you	(4) <input checked="" type="checkbox"/> If child under age 17 qualifying for child tax credit (see instructions)
				<input type="checkbox"/>
				<input type="checkbox"/>
				<input type="checkbox"/>
				<input type="checkbox"/>

If more than four dependents, see instructions and check here ☐

Boxes checked on 6a and 6b

No. of children on 6c who:

• lived with you

• did not live with you due to divorce or separation (see instructions)

Dependents on 6c not entered above

Add numbers on lines above ▶

1

1

## Income

Attach Form(s) W-2 here. Also attach Forms W-2G and 1099-R if tax was withheld.

If you did not get a W-2, see instructions.

7	Wages, salaries, tips, etc. Attach Form(s) W-2	7	
8a	Taxable interest. Attach Schedule B if required	8a	
b	Tax-exempt interest. Do not include on line 8a	8b	
9a	Ordinary dividends. Attach Schedule B if required	9a	
b	Qualified dividends	9b	
10	Taxable refunds, credits, or offsets of state and local income taxes	10	
11	Alimony received	11	
12	Business income or (loss). Attach Schedule C or C-EZ	12	18925
13	Capital gain or (loss). Attach Schedule D if required. If not required, check here <input type="checkbox"/>	13	
14	Other gains or (losses). Attach Form 4797	14	
15a	IRA distributions	15a	
b	Taxable amount	15b	
16a	Pensions and annuities	16a	
b	Taxable amount	16b	
17	Rental real estate, royalties, partnerships, S corporations, trusts, etc. Attach Schedule E	17	
18	Farm income or (loss). Attach Schedule F	18	
19	Unemployment compensation	19	
20a	Social security benefits	20a	
b	Taxable amount	20b	
21	Other income. List type and amount	21	
22	Combine the amounts in the far right column for lines 7 through 21. This is your total income ▶	22	18925

## Adjusted Gross Income

23	Educator expenses	23	
24	Certain business expenses of reservists, performing artists, and fee-basis government officials. Attach Form 2106 or 2106-EZ	24	
25	Health savings account deduction. Attach Form 8889	25	
26	Moving expenses. Attach Form 3903	26	
27	Deductible part of self-employment tax. Attach Schedule SE	27	1337
28	Self-employed SEP, SIMPLE, and qualified plans	28	
29	Self-employed health insurance deduction	29	
30	Penalty on early withdrawal of savings	30	
31a	Alimony paid b Recipient's SSN ▶	31a	
32	IRA deduction	32	
33	Student loan interest deduction	33	
34	Tuition and fees. Attach Form 8917	34	
35	Domestic production activities deduction. Attach Form 8903	35	
36	Add lines 23 through 35	36	1337
37	Subtract line 36 from line 22. This is your adjusted gross income ▶	37	17588

For Disclosure, Privacy Act, and Paperwork Reduction Act Notice, see separate instructions.

Cat. No. 1122009

Form 1040 (2017)

Form 1040 (2017)		Page	
38 Amount from line 37 (adjusted gross income)		38	17588
<b>Tax and Credits</b>	39a Check <input type="checkbox"/> You were born before January 2, 1953, <input type="checkbox"/> Blind. <input type="checkbox"/> Spouse was born before January 2, 1953, <input type="checkbox"/> Blind. Total boxes checked <b>39a</b>		
	b If your spouse itemizes on a separate return or you were a dual-status alien, check here <b>39b</b>		
<b>Standard Deduction for—</b> • People who check any box on line 39a or 39b or who can be claimed as a dependent, see instructions. • All others: Single or Married filing separately, \$6,350 Married filing jointly or Qualifying widow(er), \$12,700 Head of household, \$9,350	40 Itemized deductions (from Schedule A) or your standard deduction (see left margin)	40	6350
	41 Subtract line 40 from line 38	41	11238
	42 Exemptions. If line 38 is \$156,900 or less, multiply \$4,050 by the number on line 6d. Otherwise, see instructions	42	4050
	43 Taxable income. Subtract line 42 from line 41. If line 42 is more than line 41, enter -0-	43	7188
	44 Tax (see instructions). Check if any from: a <input type="checkbox"/> Form(s) 8814 b <input type="checkbox"/> Form 4972 c <input type="checkbox"/>	44	718
	45 Alternative minimum tax (see instructions). Attach Form 6251	45	
	46 Excess advance premium tax credit repayment. Attach Form 8962	46	
	47 Add lines 44, 45, and 46	47	718
	48 Foreign tax credit. Attach Form 1116 if required	48	
	49 Credit for child and dependent care expenses. Attach Form 2441	49	
	50 Education credits from Form 8863, line 19	50	
	51 Retirement savings contributions credit. Attach Form 8880	51	
	52 Child tax credit. Attach Schedule 8812, if required	52	
	53 Residential energy credits. Attach Form 5695	53	
	54 Other credits from Form: a <input type="checkbox"/> 3800 b <input type="checkbox"/> 8801 c <input type="checkbox"/>	54	
55 Add lines 48 through 54. These are your total credits	55	0	
56 Subtract line 55 from line 47. If line 55 is more than line 47, enter -0-	56	718	
<b>Other Taxes</b>	57 Self-employment tax. Attach Schedule SE	57	2674
	58 Unreported social security and Medicare tax from Form: a <input type="checkbox"/> 4137 b <input type="checkbox"/> 8919	58	
	59 Additional tax on IRAs, other qualified retirement plans, etc. Attach Form 5329 if required	59	
	60a Household employment taxes from Schedule H	60a	
	b First-time homebuyer credit repayment. Attach Form 5405 if required	60b	
	61 Health care: individual responsibility (see instructions) Full-year coverage <input type="checkbox"/>	61	
	62 Taxes from: a <input type="checkbox"/> Form 8959 b <input type="checkbox"/> Form 8960 c <input type="checkbox"/> Instructions; enter code(s)	62	
63 Add lines 56 through 62. This is your total tax	63	3392	
<b>Payments</b>	64 Federal income tax withheld from Forms W-2 and 1099	64	
	65 2017 estimated tax payments and amount applied from 2016 return	65	
	66a Earned income credit (EIC)	66a	
	b Nontaxable combat pay election 66b		
	67 Additional child tax credit. Attach Schedule 8812	67	
	68 American opportunity credit from Form 8863, line 8	68	
	69 Net premium tax credit. Attach Form 8962	69	
	70 Amount paid with request for extension to file	70	
	71 Excess social security and tier 1 RRTA tax withheld	71	
	72 Credit for federal tax on fuels. Attach Form 4136	72	
73 Credits from Form: a <input type="checkbox"/> 2439 b <input type="checkbox"/> 8885 c <input type="checkbox"/> 8885 d <input type="checkbox"/>	73		
74 Add lines 64, 65, 66a, and 67 through 73. These are your total payments	74	0	
<b>Refund</b>	75 If line 74 is more than line 63, subtract line 63 from line 74. This is the amount you overpaid	75	
	76a Amount of line 75 you want refunded to you. If Form 8888 is attached, check here <input type="checkbox"/>	76a	
	b Routing number <input type="text"/> c Type: <input type="checkbox"/> Checking <input type="checkbox"/> Savings		
77 Amount of line 75 you want applied to your 2018 estimated tax	77		
<b>Amount You Owe</b>	78 Amount you owe. Subtract line 74 from line 63. For details on how to pay, see instructions	78	3392
	79 Estimated tax penalty (see instructions)	79	
<b>Third Party Designee</b>	Do you want to allow another person to discuss this return with the IRS (see instructions)? <input type="checkbox"/> Yes. Complete below. <input type="checkbox"/> No		
<b>Sign Here</b>	Designee's name <input type="text"/>	Phone no. <input type="text"/>	Personal identification number (PIN) <input type="text"/>
	Under penalties of perjury, I declare that I have examined this return and accompanying schedules and statements, and to the best of my knowledge and belief, they are true, correct, and accurately list all amounts and sources of income I received during the tax year. Declaration of preparer (other than taxpayer) is based on all information of which preparer has any knowledge.		
	Your signature <input type="text"/>	Date <input type="text"/>	Your occupation <input type="text"/>
	Spouse's signature. If a joint return, both must sign. <input type="text"/>	Date <input type="text"/>	Spouse's occupation <input type="text"/>
<b>Paid Preparer Use Only</b>	Print/Type preparer's name <input type="text"/>	Preparer's signature <input type="text"/>	Date <input type="text"/>
	Firm's name <input type="text"/>	Firm's EIN <input type="text"/>	Phone no. <input type="text"/>
	Firm's address <input type="text"/>	Check <input type="checkbox"/> if self-employed	PTIN <input type="text"/>

Looking closely at Form 1040, you can track all of the numbers to ultimately get the amount of tax on Line 44 from the tax schedule below. Kayla is a single business owner with taxable income of \$7,188. Can you see where we get the tax number of **\$718**?

If line 43 (taxable income) is—		And you are—			
At least	But less than	Single	Married filing jointly *	Married filing sepa- rately	Head of a house- hold
Your tax is—					
6,000					
6,000	6,050	603	603	603	603
6,050	6,100	608	608	608	608
6,100	6,150	613	613	613	613
6,150	6,200	618	618	618	618
6,200	6,250	623	623	623	623
6,250	6,300	628	628	628	628
6,300	6,350	633	633	633	633
6,350	6,400	638	638	638	638
6,400	6,450	643	643	643	643
6,450	6,500	648	648	648	648
6,500	6,550	653	653	653	653
6,550	6,600	658	658	658	658
6,600	6,650	663	663	663	663
6,650	6,700	668	668	668	668
6,700	6,750	673	673	673	673
6,750	6,800	678	678	678	678
6,800	6,850	683	683	683	683
6,850	6,900	688	688	688	688
6,900	6,950	693	693	693	693
6,950	7,000	698	698	698	698
7,000					
7,000	7,050	703	703	703	703
7,050	7,100	708	708	708	708
7,100	7,150	713	713	713	713
7,150	7,200	718	718	718	718
7,200	7,250	723	723	723	723
7,250	7,300	728	728	728	728
7,300	7,350	733	733	733	733

When you add \$718 of income tax and \$2,674 of self-employment tax, the total tax bill comes to \$3,392. This is how much she must send to the Internal Revenue Service (IRS) in federal taxes. She also has to pay state income tax. Yikes. If you take \$3,392 and divide it by pre-tax income of \$18,925, you get 17.9% in federal tax. The income statement for her sole proprietorship now looks like this. Note that the taxes on income comes from Line 63 from Form 1040 above.



Kayla's Flower Shoppe			
Income Statement			
For the <u>Year</u> Ended 2/28/2020			
Revenues	\$158,400		
Less: Cost of Goods Sold	(83,400)		
Gross margin	\$75,000	\$75,000	
Less: Operating Expenses			
Rent	(\$7,200)		
Insurance	(6,000)		
Supplies	(\$24,000)		
Wages	(9,000)		
Utilities	(\$3,600)		
Depreciation (total)	(5,275)		
	(\$55,075)	(55,075)	
Operating Income		\$19,925	
Less: Interest Expense		(1,000)	
Net income (before tax)		\$18,925	
Less: Taxes on income		(3,392)	
Net income after tax		\$15,533	

What if, instead of a sole proprietorship, she was a C-corporation? The corporation would be subject to its own income tax; any money paid back to Kayla, from the corporation, would be a taxable dividend on her personal income tax return.

If her business organized as a Subchapter-S corporation, partnership, or LLC, Kayla's accountant would send each owner a special form, called a K-1, showing their share of net income. Unlike a regular C-corporation, these types of businesses are not taxed separately.

671117  
OMB No. 1545-0123

**Schedule K-1**  
**(Form 1120S)**

Department of the Treasury  
Internal Revenue Service

**2017**

For calendar year 2017, or tax year

beginning  /  /  2017 ending  /  /

☐ Final K-1 ☐ Amended K-1

**Shareholder's Share of Income, Deductions, Credits, etc.** ▶ See back of form and separate instructions.

<b>Part I Information About the Corporation</b>		<b>Part III Shareholder's Share of Current Year Income, Deductions, Credits, and Other Items</b>	
<b>A</b> Corporation's employer identification number	<b>1</b> Ordinary business income (loss)	<b>13</b> Credits	
<b>B</b> Corporation's name, address, city, state, and ZIP code	<b>2</b> Net rental real estate income (loss)		
<b>C</b> IRS Center where corporation filed return	<b>3</b> Other net rental income (loss)		
<b>Part II Information About the Shareholder</b>	<b>4</b> Interest income		
<b>D</b> Shareholder's identifying number	<b>5a</b> Ordinary dividends		
<b>E</b> Shareholder's name, address, city, state, and ZIP code	<b>5b</b> Qualified dividends	<b>14</b> Foreign transactions	
<b>F</b> Shareholder's percentage of stock ownership for tax year <input type="text"/> %	<b>6</b> Royalties		
	<b>7</b> Net short-term capital gain (loss)		
	<b>8a</b> Net long-term capital gain (loss)		
	<b>8b</b> Collectibles (28%) gain (loss)		
	<b>8c</b> Unrecaptured section 1250 gain		
	<b>9</b> Net section 1231 gain (loss)		
	<b>10</b> Other income (loss)	<b>15</b> Alternative minimum tax (AMT) items	
	<b>11</b> Section 179 deduction	<b>16</b> Items affecting shareholder basis	
	<b>12</b> Other deductions		

Use Only

## Sales Tax

At the beginning of this lesson, we mentioned *sales tax*. Because Kayla's Flower Shoppe sells products (and not services), Kayla must collect sales tax from customers. Note that revenue from the sale of inventory is \$158,400. Because the sales tax rate in Chico, CA is 7.25%, Kayla's Flower Shoppe must also collect an additional \$11,484 (which is  $\$158,400 \times 7.25\%$ ) from customers during the year as it makes sales. Each quarter, Kayla's Print Shoppe must remit this cash to the California Franchise Tax Board.



Note that sales taxes are not an expense to Kayla's business; instead, Kayla's Flower Shoppe is merely an agent for the customer. The shop collects money from the customer and then sends it to the state government.

One more very important note: sales tax is not collected on the sale of services; rather, taxable sales are restricted to personal property like merchandise inventory.

The accounting entry to record sales tax collected is simply to increase cash and increase a liability, called "sales tax payable." The entry to pay the government is to reduce cash and reduce sales tax payable. Again, it bears repeating that sales taxes are not an expense to the business! The customer bears the burden of this tax, not Kayla's Flower Shoppe.

## Payroll Tax

If a company hires just one employee, recordkeeping gets a lot more complicated. And Kayla must be aware of a long list of regulations to follow, as it relates to employees.

When a company hires employees, it must pay wages or salaries according to their written contracts. The company must pay them their gross salary each period, but instead of paying it all to them in cash each period, the company withholds income taxes and social security taxes on behalf of the employee. For example, if Kayla hired an employee for \$1,000 per month, she might only pay her \$700. The rest would be withheld, and Kayla would make payments to the federal and state government totaling \$300.



The \$300 is not an expense for Kayla's print shop. Rather, it's an expense for the employee. Kayla is merely the agent between the employee and the government.

However, the government assesses a payroll tax on businesses based on the gross salary or wages it pays employees. For example, Kayla's print shop would have to pay 7.65% for social security taxes, and it must pay a small tax called unemployment tax. Let's say the unemployment tax is 2.35%. Adding these two payroll taxes means that Kayla's Print Shoppe would have an additional 10% payroll taxes added to the \$1,000 in payroll. Thus, salary expense would be \$1,000 and payroll tax expense would be \$100.

It should be noted that the better a company does at NOT contributing to unemployment, the lower the state and federal unemployment tax rates. In other words, the lower the employee turnover, the lower the tax!

## Questions and Answers

**Question 1:** What is the difference between income tax and self-employment tax?

**Answer:** While both taxes are a function of a company's net income (before tax), income tax goes into a general fund used by the government to provide services such as national defense, police and fire protection, and road improvements. Self-employment tax goes into a special fund to provide retirement income and medical care for people who are retired, and medical care for low-income people who haven't retired.

**Question 2:** Why isn't sales tax an expense for a company, rather than an expense for a customer?

**Answer:** Assume a retail company sells a new dress for \$100, but collects an additional 7.25% sales tax. The retail company collects \$107.25, but then must pay \$7.25 to the state government. The retail company only gets to keep \$100.

**Question 3:** Payroll tax expense consists of two main taxes. What are they?

**Answer:** They are the employer's share of the employees' social security tax, currently at 7.65%, and unemployment tax, which is a much smaller percentage.

## Taking Action

1. Assume a company named CarCare earned \$62,185 net income before tax, and reported this amount on Schedule C. Do a web search on the following search string: "IRS Form 1040 2017." Put \$62,185 on Line 12; this amount would come from Schedule C.

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Form **1040** Department of the Treasury—Internal Revenue Service (99) **2017** U.S. Individual Income Tax Return OMB No. 1545-0074 IRS Use Only—Do not write or staple in this space.

For the year Jan. 1–Dec. 31, 2017, or other tax year beginning , 2017, ending , 20

See separate instructions.

Your first name and initial Last name Your social security number

John Doe 1 2 3 4 5 6 7 8 9

If a joint return, spouse's first name and initial Last name Spouse's social security number

Home address (number and street). If you have a P.O. box, see instructions. Apt. no.

1234 Fair Street, Fair City, CA 91111

City, town or post office, state, and ZIP code. If you have a foreign address, also complete spaces below (see instructions).

Foreign country name Foreign province/state/county Foreign postal code

Presidential Election Campaign

Check here if you, or your spouse if filing jointly, want \$3 to go to this fund. Checking a box below will not change your tax or refund. ☒ You ☐ Spouse

**Filing Status**

1 ☒ Single

2 ☐ Married filing jointly (even if only one had income)

3 ☐ Married filing separately. Enter spouse's SSN above and full name here. ▶

4 ☐ Head of household (with qualifying person). (See instructions.) If the qualifying person is a child but not your dependent, enter this child's name here. ▶

5 ☐ Qualifying widow(er) (see instructions)

**Exemptions**

6a ☒ Yourself. If someone can claim you as a dependent, check here. ▶

b ☐ Spouse

c Dependents:

(1) First name	Last name	(2) Dependent's social security number	(3) Dependent's relationship to you	(4) <input checked="" type="checkbox"/> If child under age 17 qualifying for child tax credit (see instructions)
				<input type="checkbox"/>
				<input type="checkbox"/>
				<input type="checkbox"/>
				<input type="checkbox"/>

If more than four dependents, see instructions and check here ▶ ☐

d Total number of exemptions claimed

**Income**

7 Wages, salaries, tips, etc. Attach Form(s) W-2 7

8a Taxable interest. Attach Schedule B if required 8a

b Tax-exempt interest. Do not include on line 8a 8b

9a Ordinary dividends. Attach Schedule B if required 9a

b Qualified dividends 9b

10 Taxable refunds, credits, or offsets of state and local income taxes 10

11 Alimony received 11

12 Business income or (loss). Attach Schedule C or C-EZ 12 62185

13 Capital gain or (loss). Attach Schedule D if required. If not required, check here ▶ ☐ 13

14 Other gains or (losses). Attach Form 4797 14

15a IRA distributions 15a b Taxable amount 15b

Attach Form(s) W-2 here. Also attach Forms W-2G and 1099-R if tax was withheld.

If you did not get a W-2, see instructions.

Page 1 of 2

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Page 1 of 2

**Income**

Attach Form(s) W-2 here. Also attach Forms W-2G and 1099-R if tax was withheld.

If you did not get a W-2, see instructions.

7	Wages, salaries, tips, etc. Attach Form(s) W-2	7	
8a	Taxable interest. Attach Schedule B if required	8a	
b	Tax-exempt interest. Do not include on line 8a	8b	
9a	Ordinary dividends. Attach Schedule B if required	9a	
b	Qualified dividends	9b	
10	Taxable refunds, credits, or offsets of state and local income taxes	10	
11	Alimony received	11	
12	Business income or (loss). Attach Schedule C or C-EZ	12	62185
13	Capital gain or (loss). Attach Schedule D if required. If not required, check here <input type="checkbox"/>	13	
14	Other gains or (losses). Attach Form 4797	14	
15a	IRA distributions	15a	
b	Taxable amount	15b	
16a	Pensions and annuities	16a	
b	Taxable amount	16b	
17	Rental real estate, royalties, partnerships, S corporations, trusts, etc. Attach Schedule E	17	
18	Farm income or (loss). Attach Schedule F	18	
19	Unemployment compensation	19	
20a	Social security benefits	20a	
b	Taxable amount	20b	
21	Other income. List type and amount	21	
22	Combine the amounts in the far right column for lines 7 through 21. This is your <b>total income</b>	22	62185
23	Educator expenses	23	
24	Certain business expenses of reservists, performing artists, and fee-basis government officials. Attach Form 8879	24	
25	Health savings account deduction. Attach Form 8889	25	
26	Moving expenses. Attach Form 3903	26	
27	Deductible part of self-employment tax. Attach Schedule SE	27	4393
28	Self-employed SEP, SIMPLE, and qualified plans	28	
29	Self-employed health insurance deduction	29	
30	Penalty on early withdrawal of savings	30	
31a	Alimony paid	31a	
b	Recipient's SSN	31b	
32	IRA deduction	32	
33	Student loan interest deduction	33	
34	Reserved for future use	34	
35	Domestic production activities deduction. Attach Form 8903	35	
36	Add lines 23 through 35	36	4393
37	Subtract line 36 from line 22. This is your <b>adjusted gross income</b>	37	57792

For Disclosure, Privacy Act, and Paperwork Reduction Act Notice, see separate instructions. Cat. No. 11320B Form 1040 (2017)

ADD FILLABLE FIELDS

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2. Do a web search on the following search string: "IRS Form SE 2017." Print out a copy of 2017 Form 1040 (Schedule SE). Calculate the self-employment tax on Schedule SE, just like Kayla's Flower Shoppe.

<b>SCHEDULE SE</b> <b>(Form 1040)</b> <small>Department of the Treasury Internal Revenue Service (99)</small>	<b>Self-Employment Tax</b> ▶ Go to <a href="http://www.irs.gov/ScheduleSE">www.irs.gov/ScheduleSE</a> for instructions and the latest information. ▶ Attach to Form 1040 or Form 1040NR.	OMB No. 1545-0074 <div style="font-size: 2em; font-weight: bold;">2017</div> Attachment Sequence No. <b>17</b>
Name of person with self-employment income (as shown on Form 1040 or Form 1040NR)		Social security number of person with self-employment income ▶

**Before you begin:** To determine if you must file Schedule SE, see the instructions.

---

**May I Use Short Schedule SE or Must I Use Long Schedule SE?**

**Note:** Use this flowchart **only** if you must file Schedule SE. If unsure, see *Who Must File Schedule SE* in the instructions.

Did you receive wages or tips in 2017?

**No**

Are you a minister, member of a religious order, or Christian Science practitioner who received IRS approval not to be taxed on earnings from these sources, but you owe self-employment tax on other earnings?

**No**

Are you using one of the optional methods to figure your net earnings (see instructions)?

**No**

Did you receive church employee income (see instructions) reported on Form W-2 of \$108.28 or more?

**No**

You may use Short Schedule SE below

**Yes**

Was the total of your wages and tips subject to social security or railroad retirement (tier 1) tax plus your net earnings from self-employment more than \$127,200?

**No**

Did you receive tips subject to social security or Medicare tax that you didn't report to your employer?

**No**

Did you report any wages on Form 9919, Uncollected Social Security and Medicare Tax on Wages?

**No**

You must use Long Schedule SE on page 2

**Section A—Short Schedule SE.** **Caution:** Read above to see if you can use Short Schedule SE.

<b>1a</b> Net farm profit or (loss) from Schedule F, line 34, and farm partnerships, Schedule K-1 (Form 1065), box 14, code A. . . . .	<b>1a</b>	
<b>b</b> If you received social security retirement or disability benefits, enter the amount of Conservation Reserve Program payments included on Schedule F, line 4b, or listed on Schedule K-1 (Form 1065), box 20, code Z. . . . .	<b>1b</b>	( )
<b>2</b> Net profit or (loss) from Schedule C, line 31; Schedule C-EZ, line 3; Schedule K-1 (Form 1065), box 14, code A (other than farming); and Schedule K-1 (Form 1065-B), box 9, code J1. Ministers and members of religious orders, see instructions for types of income to report on this line. See instructions for other income to report. . . . .	<b>2</b>	62185
<b>3</b> Combine lines 1a, 1b, and 2. . . . .	<b>3</b>	62185
<b>4</b> Multiply line 3 by 92.35% (0.9235). If less than \$400, you don't owe self-employment tax; <b>don't</b> file this schedule unless you have an amount on line 1b. . . . . <b>Note:</b> If line 4 is less than \$400 due to Conservation Reserve Program payments on line 1b, see instructions.	<b>4</b>	57428
<b>5 Self-employment tax.</b> If the amount on line 4 is: • \$127,200 or less, multiply line 4 by 15.3% (0.153). Enter the result here and on <b>Form 1040, line 57, or Form 1040NR, line 55</b> . • More than \$127,200, multiply line 4 by 2.9% (0.029). Then, add \$15,772.80 to the result. Enter the total here and on <b>Form 1040, line 57, or Form 1040NR, line 55</b> . . . . .	<b>5</b>	8786
<b>6 Deduction for one-half of self-employment tax.</b> Multiply line 5 by 50% (0.50). Enter the result here and on <b>Form 1040, line 27, or Form 1040NR, line 27</b> . . . . .	<b>6</b>	4393

For Paperwork Reduction Act Notice, see your tax return instructions. Cat. No. 11356Z Schedule SE (Form 1040) 2017

2. Complete Pages 1 and 2 of Form 1040. How much is total income tax? (You can find the tax tables by doing an internet search on “2017 federal tax tables.”)



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Page 2 of 2

Form 1040 (2017) Page 2

**Tax and Credits**

38 Amount from line 37 (adjusted gross income) 38 57792

39a Check ☐ You were born before January 2, 1953, ☐ Blind. Total boxes checked ☐ 39a

if: ☐ Spouse was born before January 2, 1953, ☐ Blind. checked ☐ 39b

b If your spouse itemizes on a separate return or you were a dual-status alien, check here ☐ 39b

40 Itemized deductions (from Schedule A) or your standard deduction (see left margin) 40 6350

41 Subtract line 40 from line 38 41 51442

42 Exemptions. If line 38 is \$156,900 or less, multiply \$4,050 by the number on line 6d. Otherwise, see instructions 42 4050

43 Taxable income. Subtract line 42 from line 41. If line 42 is more than line 41, enter -0- 43 47392

44 Tax (see instructions). Check if any from: a ☐ Form(s) 8814 b ☐ Form 4972 c ☐ 44 11848

45 Alternative minimum tax (see instructions). Attach Form 6251 45

46 Excess advance premium tax credit repayment. Attach Form 8962 46

47 Add lines 44, 45, and 46 47 11848

48 Foreign tax credit. Attach Form 1116 if required 48

49 Credit for child and dependent care expenses. Attach Form 2441 49

50 Education credits from Form 8863, line 19 50

51 Retirement savings contributions credit. Attach Form 8880 51

52 Child tax credit. Attach Schedule 8812, if required 52

53 Residential energy credit. Attach Form 5695 53

54 Other credits from Form: a ☐ 3800 b ☐ 8801 c ☐ 54

55 Add lines 48 through 54. These are your total credits 55 0

56 Subtract line 55 from line 47. If line 55 is more than line 47, enter -0- 56 11848

57 Self-employment tax. Attach Schedule SE 57 8786

58 Unreported social security and Medicare tax from Form: a ☐ 4137 b ☐ 8919 58

59 Additional tax on IRAs, other qualified retirement plans, etc. Attach Form 5329 if required 59

60a Household employment taxes from Schedule H 60a

b First-time homebuyer credit repayment. Attach Form 5405 if required 60b

61 Health care: individual responsibility (see instructions) Full-year coverage ☐ 61

62 Taxes from: a ☐ Form 8959 b ☐ Form 8960 c ☐ Instructions; enter code(s) 62

63 Add lines 56 through 62. This is your total tax 63 20634

**Other Taxes**

**Payments**

64 Federal income tax withheld from Forms W-2 and 1099 64

65 2017 estimated tax payments and amount applied from 2016 return 65

66a Earned income credit (EIC) 66a

b Nontaxable combat pay election 66b

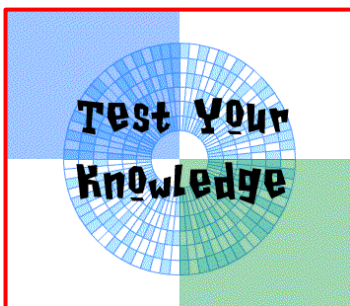
67 Additional child tax credit. Attach Schedule 8812 67

Continue

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4. How much is total income tax and self-employment tax? What is this total, divided by \$62,185?



## Quiz Yourself

1. A business must charge a \_\_\_\_\_ on sales of products and send this to the state government.
  - a. Service fee
  - b. Payroll tax

- c. Entitlement fee
  - d. Charity fee
  - e. Sales tax
2. If Kayla is self-employed, she is required to pay a \_\_\_\_\_.
- a. Net profit tax
  - b. Social security tax
  - c. IRS fee
  - d. City fee
  - e. Mutual fund
3. If you hire employees, you must remit \_\_\_\_\_ to the federal and state government.
- a. A service fee
  - b. Payroll taxes withheld
  - c. Entitlement fee
  - d. A charity fee
  - e. Sales taxes
4. In general, what does the state and federal government do with income taxes paid into its treasury?
- a. The tax goes into a general fund used by the government to provide services such as national defense, police and fire protection, and road improvements.
  - b. The tax provides social security benefits for retirement and medical care for the elderly.
  - c. Both a. and b. are true
  - d. The tax provides more income for small businesses.
  - e. The tax provides more income for corporations.
5. Sole proprietors must file a special income statement on their tax returns showing the net income for the business. This is called a \_\_\_\_\_.
- a. Schedule D
  - b. Schedule E
  - c. Schedule C
  - d. Schedule 1060
  - e. Sole proprietors are not required to pay taxes.
6. True or False: When starting a business you must be very careful to pay all taxes. The main two taxes are income tax and sole proprietor tax.
7. True or False: Sales taxes are an expense to the business.
8. True or False: Net income is also known as net profit.
9. True or False: Businesses collect the sales tax and send it to the state government.
10. True or False: Regular C-Corporations are subject to their own income tax; any money paid to the owner, from the corporation, would be taxable dividend on his or her personal income tax return.

## **What to Do Before the Next Lesson**

Continue to work on your own business.



## Lesson Nineteen: Intellectual Property

Before reading this lesson, please read these two articles:

1. [“What the Winklevoss Twins Can Teach You About Copyright & Intellectual Property So You Don’t Get Zuckerberged.”](#)
2. [“Building Intellectual Property and Equity Ownership Policy for Entrepreneurship Programs: Three Different Approaches,” by Rahn, Schakett, and Tomczyk](#)

Also, please watch these videos before reading any further:

<a href="https://www.youtube.com/edit?ar=1&amp;o=U&amp;video_id=ETFXTf46UL4">https://www.youtube.com/edit?ar=1&amp;o=U&amp;video_id=ETFXTf46UL4</a> (10:27), “Intellectual Property”
<a href="#">“Basic Facts: Trademarks, Patents, and Copyrights”</a> (8:25) by USPTOvideo

### The Big Picture

Consider this scenario.

You start a business with two other high school seniors in the TRIS course. The three of you are partners, as far as the course is concerned. One of the other two partners came up with a great idea for a computer app, but he doesn’t come to after-school meetings, nor does he do much work to follow up on the idea. The second partner helps out with customer surveys to see if the idea has merit. But, like the first partner, the second partner leaves for the summer and chooses not pursue the business any further. That leaves only you.



Roll the clock ahead. You've now turned 18 years old and have spent most of the summer writing the computer program and getting the idea ready for a test launch. You then enroll as a freshman at the local university, where you meet a wizard computer programmer who is majoring in computer science. She loves the idea and adds a lot more steak to your sizzle! The two of you decide to form a "solid" partnership and share the profits equally. You sign a partnership agreement spelling out what each of you will do to pursue the partnership's mission.

You will specialize in sales and marketing, while your partner will handle the computer programming and customer service. Your new partnership buys a domain name for the business website; you create an Internet landing page explaining the features of your product; and you enlist early adopters to beta test the software. Together, you and your partner have taken the original business idea from the inception stage to the minimum viable product stage to the early adopter stage. The beta testers become excited to buy the software, and you and your partner set a target date to sell the final product once you've ironed out a few glitches in the computer code.

Once the software is ready, you budget up to \$500 and start placing ads on Google AdWords. In addition, you boost a Facebook post where you've put a link to a feature article about your business in a trendy online magazine praising the virtues of your product.

Sales start pouring in. You see your cash balance go up every day, as a result of customers who pay by debit or credit card or PayPal. Life is good, right? Until....



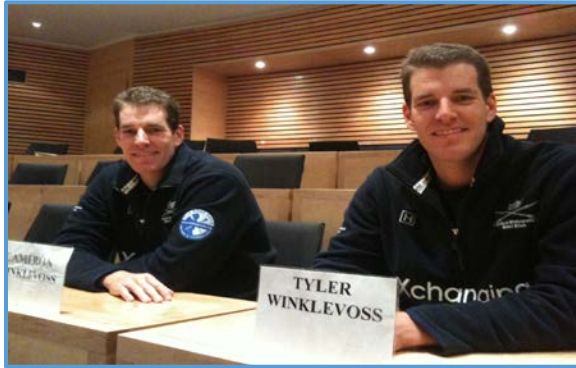
Right up until Partner A and B from the TRIS class read about you on Facebook. They wonder, "Hey, we were part of the original concept for this business? Shouldn't we get a piece of the action?"

This question lies at the heart of today's lesson: *intellectual property* (IP). In the scenario above, who owns the business? What percentage should each person receive? The original partners from the TRIS class can rightfully claim that they were "in on the ground floor." But you can justifiably claim that the elevator would have gone nowhere without your time, energy, commitment, and vision. Without you, the idea would never have come to life.

Unless the original two partners and you can come to some type of agreement, after the fact, there is a good chance you will end up in court. How could this situation have been avoided? Before answering this question, let's review the story of Facebook's original idea.

## The Case of Facebook, Mark Zuckerberg, and the Winklevoss Twins

When Mark Zuckerberg was a 19-year-old sophomore at Harvard, in 2004, he was asked by three upperclassmen to help them with a dating site called Harvard Connect. The older students knew that Zuckerberg was an expert computer programmer, and they needed his expertise to improve upon their Internet dating concept. Two of the three upperclassmen were popular, identical twins, Cameron and Tyler Winklevoss. The Winklevoss twins were star athletes and members of Harvard's elite social clubs. Zuckerberg, on the other hand, was a shy, self-described computer geek.



Shortly after working on the Harvard Connect project, Zuckerberg left the partnership and started his own site. His site—Facebook—had a greater emphasis on social networking, not just dating. Zuckerberg devoted all of his time to his new company, and soon dropped out of Harvard and headed for Silicon Valley. Not long thereafter, the Winklevoss twins sued Zuckerberg and Facebook for stealing their idea. Eventually, the lawsuit was settled when Zuckerberg and Facebook paid the twins \$20 million in cash and \$45 million in Facebook stock.



One might believe that the Winklevoss twins would be happy to get their big payday, [but they weren't](#). They felt that the settlement should have been much greater. Zuckerberg, on the other hand, argued that the dating concept would have remained just that—a dating idea—had it not been for him. It was his talent and energy, he claimed, that made Facebook what is today, a company worth over \$530 billion.



And Zuckerberg was named by [Forbes](#) as the fifth richest man in the world, with a net worth of \$56 billion. Yes, that's a 'b' as in billion, not an 'm' as in million!

## How to Avoid the Facebook Mess

What could you have done back in the TRIS class to make sure that you didn't get sued a year or two later, after you and your new partner are making money hand over fist? There's no clear-cut answer to this question, but here are a couple options.

1. When the TRIS class ended, you could have drawn up a brief statement indicating that you intended to keep the idea alive and pursue the idea over the summer. The statement could have been accompanied by a small amount of cash "consideration" that you could have offered your two classmates. With the cash consideration, the other two team members would agree to relinquish their ownership rights.
2. Instead of giving up cash and asking the two students to sign over their ownership rights, you could have offered them a small percentage ownership of the company. This is not recommended, though. What if Zuckerberg had offered the Winklevoss twins, say, 20% of the company.
3. If you wrote the computer program, you could have filed for copyright protection because computer programs are literary works. While it's true that the "big idea" may have come from another student partner, if you wrote the code and developed the minimum viable product, then you could have copyrighted your original work. This would be considered your IP, and your classmate partners would not be entitled to claim any of it as theirs.

The screenshot shows a web browser window with the URL <http://sagetriss.com/>. The page title is "SAGETRIS - Turning Risk Into Success". The navigation bar includes links for ABOUT US, OVERVIEW OF PROGRAM, OUR GOALS, LINK TO STANDARDS, FREE LESSONS, WORKSHOP REGISTRATION, and CONTACT. The main heading is "Turning Risk into Success: An Entrepreneurship Program for Teenagers and Young Adults". Below this, a paragraph describes the program as a licensed 26-lesson hands-on course created by Dr. Curtis L. DeBerg, a full professor of business from California State University, Chico. The text states that the TRIS course shows teenagers how to identify and operate their own business, which can be a commercial enterprise or a social enterprise. A section titled "Lessons are organized into five parts:" lists the following: The Big Picture, Questions and Answers, Taking Action, Quiz Yourself, and What to Do Before the Next Lesson. Below this list is a section titled "How Teachers Can Use TRIS" with two bullet points: "In a regular entrepreneurship class" and "In an advanced entrepreneurship class". To the right of the text is a graphic titled "Turning Risk Into Success" showing a 3D arrangement of dice. The dice are arranged in a cross shape, with the word "PROFIT" on top, "LOSS" on the bottom, "RISK" in the center, and "LOST" on the sides.

Call Today : 530-898-4824 Write us at : [cdeb@csuchico.edu](mailto:cdeb@csuchico.edu)

### Turning Risk into Success: An Entrepreneurship Program for Teenagers and Young Adults

"Turning Risk into Success"- TRIS- is a licensed 26-lesson hands-on course created by Dr. Curtis L. DeBerg, a full professor of business from California State University, Chico. The TRIS course shows teenagers how to identify and operate their own business. Students' businesses can be a commercial enterprise or a social enterprise.

**Lessons are organized into five parts:**

- The Big Picture
- Questions and Answers
- Taking Action
- Quiz Yourself
- What to Do Before the Next Lesson

**How Teachers Can Use TRIS**

- In a regular entrepreneurship class
- In an advanced entrepreneurship class

Turning Risk Into Success



In the rest of this lesson, you will learn about different kinds of IP, including copyrights, trademarks, patents, and domain names. IP is an asset to the person or business who owns and controls it. Since these assets don't have physical existence, they are often referred to as intangible assets.

## Copyrights

Copyrights provide their owners with the exclusive right to produce or sell an artistic or published work.

A copyright has a legal life equal to the life of the creator, plus 70 years. For example, this TRIS course is copyrighted once the author (Dr. Curt DeBerg) writes the lessons. This material is considered an "original work of authorship." Dr. DeBerg and his agent, SAGEGLOBAL, have exclusive rights to reproduce the lessons and distribute copies of the lessons.



Educational materials, like the TRIS lessons, can be copyrighted if they are original works of authorship. So can literary, dramatic, musical, artistic, and certain other intellectual works, like computer code. Some examples: musical works, including lyrics; dramatic works, including music; architectural works; photographs; and sculptures. It doesn't matter if the works are published or unpublished. What is not copyrightable? Slogans, short names, ideas, and procedures.

But what if someone challenges Dr. DeBerg, and claims that the lessons he authored are not really his? Dr. DeBerg can *protect* his work by *registering* his work with the *Copyright Office of the Library of Congress*. Registering his work is a legal formality that tells the world that there is a public record of the copyright claim. If someone uses the TRIS course without Dr. DeBerg's permission, Dr. DeBerg can file an infringement lawsuit. It bears repeating: registration is not required to secure copyright. Copyright protection is obtained automatically when the work is created. Registering the copyright gives the author/creator the right to defend the copyright.

As the author or creator, you should put everyone on notice that the copyright is yours. Notice of copyright can be noted with the symbol ©, or the word "copyright." Example: © 2019 Curtis L. DeBerg. Or © 2019 SAGEGLOBAL. Or: Copyright 2019 SAGEGLOBAL.

## Trademarks and Service Marks

Trademarks and service marks are another important class of intangible assets. A trademark is word, name, symbol or device that is used in trade with goods to indicate the source of the *goods* and to distinguish them from the goods of others. A trademark typically protects brand names and logos on goods and services.

The term of a federal trademark is 10 years, with 10-year renewal terms. Between years five and six, however, the registrant must file a form that says the trademark is still being used. Customers' buying decisions are often influenced by a distinctive name or brand because they [“convey intellectual and emotional attributes and messages.”](#)

What is an example of a trademark? How about Coca-Cola? The flowing red name “Coca-Cola” is trademarked. Notice the little ® after the word “Cola”. This tells the world that Coca-Cola has registered this name with the Patent and Trademark Office (PTO).



When the founders of Coca-Cola created the formula for the new drink in 1886, they thought “the two Cs would look well in advertising.” The script is drawn in elaborate “Spencerian script,” and the world over can see these two words and immediately think of the famous soft drink.

Federal registration is not required, but it has advantages. One can register a trademark for ten years, and it is renewable for another 10 years.

A service mark is same as a trademark except that it identifies and distinguishes the source of a *service* rather than a product. The symbol “®” is also used for service marks. For example, McDonald’s has a registered service mark, not a trademark. While McDonalds’ deals in physical goods, they actually require service marks because they provide restaurant services. They serve food. However, the product, McNuggett, is trademarked, because it is a specific good. It is a bit confusing, but you can read a good article about the difference between a trademark and a service mark [here](#). This article concludes, “The line between a trademark and a service mark is often so thin that many companies simply end up having both. For example, Google lists its brand as both a trademark and a service mark.”

One last thing to know is that a registered trademark or service mark does not prevent others from making the same goods or from selling the same goods or services; however, they must do so under a clearly different mark.

## Patents

Patents give their owners exclusive rights to use or manufacture a particular product. A patent is a document that grants the ownership rights of an invention to the inventor or another party. As [this article](#) explains, patents give you several useful rights. In addition to preventing others from unlawfully making, selling, or using your invention, they also prevent people from importing the invention. It is important to know patent laws are restricted to the boundaries of a country.

To register a patent with the United States Patent and Trademark Office (USPTO), it must be distinct. In other words, it must be novel and unique. You cannot obtain a patent if it is simply and improvement on older designs. It “must have non-obvious innovations that add significant development to the way the design is applied.” Once the USPTO issues a patent, it has a term of 20 years, usually starting from the date when the application is filed.

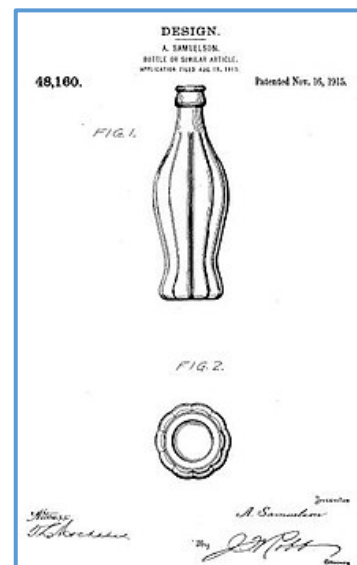
There are three categories of patents: utility patents, design patents and plant patents. Utility patents are the most common, because they cover a large range of inventions. These patents cover the creation of a new or improved product, process, or machine. They are difficult to obtain because they are hard to write, and the process is time consuming and expensive.

The first step in obtaining a utility patent is hiring a patent attorney. The next step is enlist the services of a technical illustrator to draft patent drawings. Once a utility patent is issued, the inventor has the right to stop others from using or selling their invention.

The most [typical kinds of utility patents](#) fall under four categories:

- Machines (e.g. something composed of moving parts, such as stereos or computers)
- Articles of manufacture (e.g. brooms, candleholders)
- Processes (e.g. business processes, software)
- Compositions of matter (e.g. pharmaceuticals)

Design patents are granted to inventors of an ornamental design of a functional item. For example, a design patent was awarded to Coca-Cola for the unique shape of its bottle. Plant patents are granted to an inventor or discoverer of a new variety of plant.



## Domain Names

A domain name is like a trademark, but it relates specifically to the exclusive rights to use an “Internet Protocol” address (e.g., a web site). The technical address of this web site is invisible to the viewers. Addresses to the Internet Web Servers are assigned and managed through the Domain Name System (DNS), the globally distributed internet database. One obtains a domain name from a domain name registrar, like GoDaddy or Bluehost.com.

Each domain name, such as “sageglobal.org”, has two parts.

Domain part	Description
sageglobal	Second-Level Name; it is the unique and scintillating name that is created or selected by the domain name applicant.
org	Top-Level Domain; some of the most common and popular categories of the top-level domains are .com; .org; .gov; .net; .in; etc.

Though trademarks and domain names are similar, they differ as follows:

- A trademark or service mark promotes and protects your brand name, while a registered domain name provides you protection against any unauthorized use of your domain name by any person or entity.
- Trademark supports the face value of your business or profession, while a domain name increases access value of your business from any remote place of the world over.
- A trademark (or service mark) makes your any product or service prominent in the concerned marketplace, while a domain name can also function to deliver your product or service to your customers worldwide.

Thus, a well-protected domain name is certainly immensely helpful for security, worldwide prominence, and profitability of a business, quite like an internationally protected trademark or service mark. Hence, proper registration and protection of both the trademark and domain name are advisable and imperative.



## Questions and Answers

**Question 1:** If you have a great business idea as part of the TRIS course, along with two other people, what can you do to make sure you own the rights to future profits from the business if the other two students do not want to be a part of the future business operations?

**Answer:** You have several options, but the three best ones include:

- Drawing up a brief statement indicating that you intend to keep the idea alive and you provide a small amount of cash “consideration” to your two classmates.
- Offering each of the other students a small percentage ownership of the company.
- Filing for copyright protection if you have a unique computer program or literary work.

**Question 2:** How does a copyright differ from a trademark?

**Answer:** Copyrights provide their owners with the exclusive right to produce or sell an artistic or published work. A trademark is word, name, symbol or device that is used in trade with goods to indicate the source of the *goods* and to distinguish them from the goods of others. A trademark typically protects brand names and logos on goods and services.

**Question 3:** Patents can be classified into three categories. What are they?

**Answer:** There are three categories of patents: utility patents, design patents and plant patents.

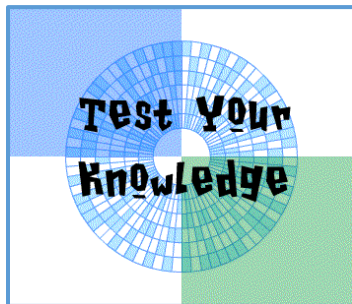
**Taking action:** Watch this eight-minute video, entitled, [“Basic Facts: Trademarks, Patents, and Copyrights.”](#) Then, answer this question. Where does one file for protection of the following IP?

A brand?

An invention?

An original artistic work?

A web address?



**1. Why did the Winklevoss twins sue Mark Zuckerberg?**

- a. Mark was rich and the twins needed money for their dating site.
- b. Mark staged the lawsuit to become famous.
- c. The twins believed Mark stole their idea.
- d. Harvard Connect was hacked and the twins believed Mark hacked them.
- e. Mark stalked them around Harvard.

**2. What are copyrights?**

- a. They are a legal way to use someone else's work without asking permission.
- b. They provide a source of funds for the government to provide social programs.
- c. They protect brand names and logos on goods and services.
- d. They provide their owners with the exclusive right to produce or sell artistic or published work.
- e. They are a way to use some other artist's painting and claim it as your own work.

**3. What are trademarks?**

- a. They protect brand names and logos on goods and services.
- b. It gives the owner a tax exemption.
- c. They protect the CEO from tax evasion.
- d. They provide their owners with the exclusive right to produce or sell artistic or published work.
- e. A tangible asset.

**4. \_\_\_\_\_ give their owners the right to use or manufacture a particular product.**

- a. Governments

- b. Patents
  - c. Trademarks
  - d. Copyrights
  - e. Domain names
5. **A well protected domain is certainly helpful for \_\_\_\_\_ , worldwide prominence, and \_\_\_\_\_ of a business.**
- a. Business; tax breaks
  - b. International trade; customers
  - c. Security; profitability
  - d. Outsourcing; growth
  - e. Offshoring; donations
6. **True or False:** Zuckerberg argued that the dating concept would have remained just that had it not been for him. It was his talent and energy, he claimed, that made Facebook what is today.
7. **True or False:** A copyright has a legal life equal to the life of the creator, plus 70 years.
8. **True or False:** Trademarks have a short legal life, but they can be renewed repeatedly.
9. **True or False:** To register a patent with the United States Patent and Trademark Office it must be novel and unique.
10. **True or False:** A trademark supports the face value of your business or profession, while a domain name increases access value of your business from any remote place of the world over.

## What to Do Before the Next Lesson

Continue working on your business. Once you have actually launched it, we encourage you to go to Lesson 26 and see what it takes to start a SAGE team. You can actually earn money and the right to represent your country at the [SAGE World Cup](#)!







## Lesson Twenty: Using Math to Make Business Decisions

Before you read this lesson, make sure you watch these videos:

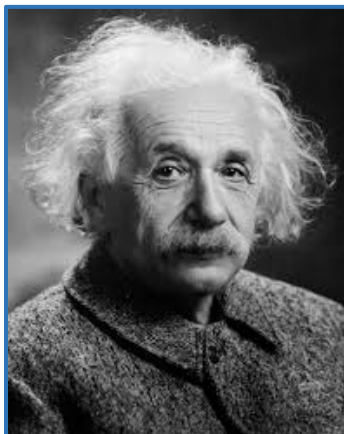
<a href="https://www.youtube.com/watch?v=nCP1qPRaPvQ">https://www.youtube.com/watch?v=nCP1qPRaPvQ</a> (10:27), “Einstein's Second Greatest Theory - The Theory of Compound Interest”
<a href="https://www.youtube.com/watch?v=wf91rEGw88Q">https://www.youtube.com/watch?v=wf91rEGw88Q</a> (1:59), “Compound Interest Explained” (1:59), by Investopedia”
<a href="https://www.youtube.com/watch?v=nCfkTpJvRYo">https://www.youtube.com/watch?v=nCfkTpJvRYo</a> (8:59), “Risky Business – The Case of Probability, Risk and Reward Using the Two-Dice Game”
<a href="https://www.youtube.com/watch?v=LyrjHYmKq2w">https://www.youtube.com/watch?v=LyrjHYmKq2w</a> (10:52,” Using Financial Ratios to Evaluate Kayla’s Flower Shoppe”

### The Big Picture

How often have you asked, “When will I ever use this stuff? How will my classroom learning ever relate to the real world?” Have you ever said this about math?

When you learn algebra, geometry, and calculus, you are learning the language of science. When you study financial accounting, you are learning the language of business. In this lesson, we are going to merge the two languages and ask this question: “How can I use math to make personal and business decisions?”

This lesson is divided into three separate sections. All three sections will utilize Excel to do a lot of the grunt work. The first one is called, “Einstein’s Second Greatest Theory: The Theory of Compound Interest.” We will see that a small amount of money invested today, at a certain interest rate, will grow to be a very large sum. If you decide to invest in a riskier venture, you will require a higher interest rate.



The second section is called, “Risky Business—The Case of Probability, Risk, and Reward.” You will roll two dice to see that some numbers come up more frequently than others do. In addition, if you were going to make a wager on the next roll of the dice, you would want to select a number that comes up more frequently than certain other numbers. We will apply this concept to business; we will learn that some businesses are riskier than others are, and that you must choose a business that fits your risk tolerance. In this section, you will use fractions, decimals, and percentages to compute probabilities and “expected values” of uncertain future outcomes. With an understanding of probability, you will be in a better position to make decisions that offer you a fair return for the risk you take. Math helps you decide which kind of business to start.

The third section goes back to Kayla’s Flower Shoppe, which we introduced in Lessons 16 and 17. We call this section “Using Financial Ratios to Evaluate Kayla’s Flower Shoppe.” We will study her first year income statement and balance sheet. Key financial ratios are computed to scrutinize how well her business performed in Year 1. We will also calculate how many flower arrangements she needs to sell in order to “break even.” Knowledge of how some expenses are variable and other are fixed, relative to sales. This will demonstrate how math can help us assess her business risk.

## Part 1: Einstein’s Second Greatest Theory – The Theory of Compound Interest

Most of us know that Albert Einstein developed the theory of relativity, but most of us do not know that Einstein was more impressed with the theory of compound interest. Einstein considered compound interest—receiving interest on interest—to be [“the most powerful force in the universe”](#) What is this theory?



Almost all students in this course are teenagers. Some of you drive your own car, or sometimes you drive a parent’s car. Almost all of you would like to drive a nicer car, right? Assume you would like to buy a new car four years from now at a price of \$20,000. How much would you need to put in the bank now if the bank credits your account at 6% interest (compounded annually)?

Einstein’s theory is very simple: an amount invested today will grow, exponentially, to a future value based on the interest rate and the number of periods you plan to leave the money in the bank. Mathematically, this can be written as:

$$PV * (1 + i)^n = FV$$

Where: PV= Present Value

i = interest rate

n = number of “compounding” periods

FV = Future Value

In the car example, if you want \$20,000 four years from now, \$20,000 is the Future Value. If the bank credits your account at 6% interest, 6% is the Interest Rate, i. If you want \$20,000 four years from now at an interest rate 6%, then four is the number of periods, as follows:

$$PV * (1 + i)^n = FV$$

$$PV * (1 + .06)^4 = \$20,000$$

Now, divide each side of the equation by  $(1 + .06)^4$ :

$$PV = \$20,000 / (1 + .06)^4 = \$15,841.87$$

$$\text{Proof} \rightarrow \$15,841.86 * (1 + .06)^4 = \$20,000$$

Here, you can see that the amount invested today—\$15,841.87—will grow, at an exponential rate of 6 percent, to a future value of \$20,000 in four years. The number 4—is the number of compounding periods.

$$\text{Note that } (1 + .06)^4 = 1.06 * 1.06 * 1.06 * 1.06 = 1.262477$$

If you take  $\$15,841.86 * 1.262477$ , you get \$20,000 (rounded).

As we will show you a bit later, Excel spreadsheets can calculate this for us much more quickly. However, for now, let us get some practice using our cell phone calculator.

## Question and Answers

**Question 1:** What if the interest rate was 8% rather than 6%. Would you need to have more money in the bank today, or less?

## Answer

You would need less money because the bank gives you a higher interest rate, calculated as:

$$PV = \$20,000 / (1 + .08)^4$$

$$PV = \$14,700.60$$



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**Question 2:** What if the interest rate was 4% rather than 6%. Would you need to have more money in the bank today, or less?

## Answer

You would need more money because the bank gives you a lower interest rate, calculated as:

$$PV = \$20,000 / (1 + .04)^4$$

$$PV = \$17,096.08$$



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**Takeaway:** *The higher the interest rate, i, the lower the amount you need to have in the bank today. PV.* However, be careful! The bank that offers the highest interest rate may be a much riskier bank. In other words, they may not be in business four years from now, so you must be sure to select a bank that has good business practices.

**Question 3:** The father of a woman named June Greg deposited \$6.11 into her savings account when she was two years old. When she was 98 years old, how much was in her account if the bank credited her account at 6% interest each year? What if it credited her at 10%?

Answer:

$$PV * (1 + i)^n = FV$$

$$\$6.11 * (1 + .06)^{96} = \$1,642.12$$

$$\$6.11 * (1 + .10)^{96} = \$57,509.42$$

**Takeaway:** The higher the interest rate,  $i$ , the higher the amount she will have in her account in the future, Future Value. Be careful to note that the bank offering the highest interest rate is also more risky. In other words, there is a higher chance the bank offering such a high return may go bankrupt before June Greg turns 98. The moral of this story is *the higher the interest rate, the more your investment will grow in the future!* However, be careful. Banks offering the highest rates are more risky!

## Taking Action

**Exercise 1:** Solve the following using your calculator.

(Which of the two methods, Compound Interest or Simple Interest, gives you the highest answer?)


**Exercise 2:** Solve the following problem.

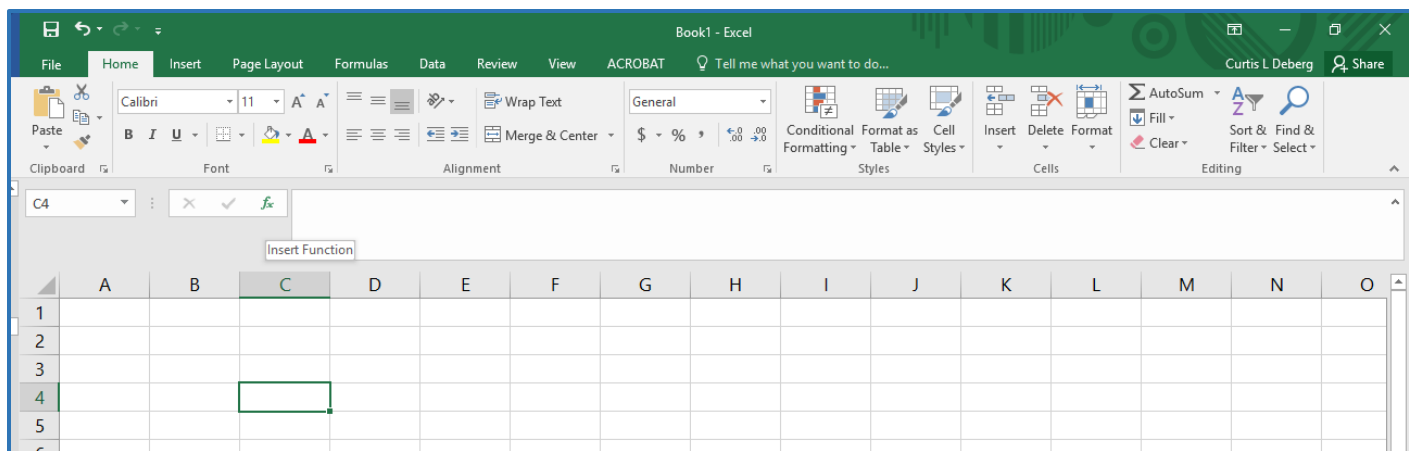
**Exercise 3:** Solve the following problem.

**Exercise 4:** You have \$300 in the bank right now. You plan to leave the money in the bank for two years. How much will be in your account two years from now, assuming the bank credits your account once each year for 8% interest (i.e., it compounds interest annually)?

**Exercise 5:** You want to have \$1,000 in the bank one year from today. How much will you need to put in now in order to have \$1,000 in the bank, assuming the bank credits your account with interest at 7% each year?

## A Spreadsheet Trick

It can really take a long time to crank through the numbers by hand. Let us show you how to use a spreadsheet to do calculations in just a few seconds. In the first spreadsheet picture below, note that the formula bar shows that the cursor is in cell C4. Especially note the “Insert Function” key, which is 



Put your cursor in Cell C4 and then click on the  $fx$  next to the Formula Bar. Up pops a calculator.

Select the “Financial” category and scroll down to a Function. Let’s go to FV and complete the following two exercises with Excel.

**Exercise 1:** Solve the following problem using Excel.

Compound Interest:  $10,000 * (1.10)^2 = 12,100$

Function Arguments

?

×

FV

Rate

= number

Nper

= number

Pmt

= number

Pv

= number

Type

= number

=

Returns the future value of an investment based on periodic, constant payments and a constant interest rate.

Rate

is the interest rate per period. For example, use 6%/4 for quarterly payments at 6% APR.

Formula result =

[Help on this function](#)

OK

Cancel



The answer is red because you entered PV as a positive amount (if you entered 10000 as a negative amount, the answer would be positive). That is the right answer: \$12,100!

**Exercise 2:** The father of a woman named June Greg deposited \$6.11 into her savings account when she was two years old. When she was 98 years old, how much was in her account if the bank credited her account at 10% interest.


Using Excel's Insert Function key, type in:

The image shows the 'Function Arguments' dialog box for the FV (Future Value) function in Excel. The dialog box has a title bar with a question mark and a close button. Inside, the function name 'FV' is listed. Below it, there are five input fields with their corresponding values and data type indicators:

Argument	Value	Indicator
Rate	0.1	= 0.1
Nper	96	= 96
Pmt		= number
Pv	-6.11	= -6.11
Type		= number

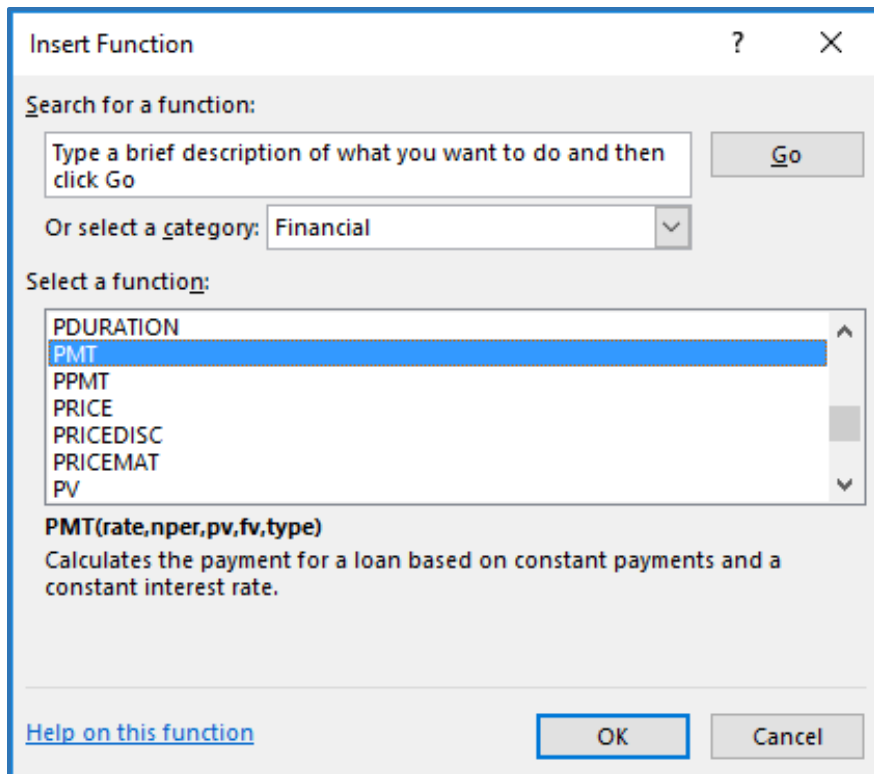
Below these fields, the calculated result is shown: = 57509.41971. A descriptive text explains the function: 'Returns the future value of an investment based on periodic, constant payments and a constant interest rate.' A note defines 'Pv' as the present value, or the lump-sum amount that a series of future payments is worth now. If omitted, Pv = 0. At the bottom, the 'Formula result' is displayed as \$57,509.42. There is a link for 'Help on this function' and 'OK' and 'Cancel' buttons.

## One More Spreadsheet Trick

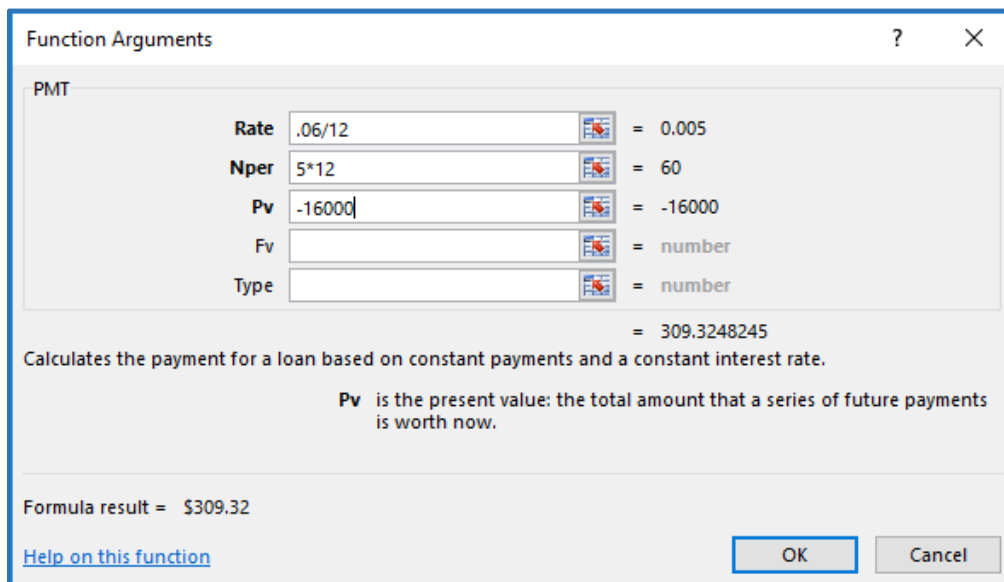
With Excel, you can easily calculate payments using the Insert Function,  key. As an example, assume you want to buy a car for \$20,000, and you make a 20 percent down payment. Because 20 percent of \$20,000 is \$4,000, you want the bank or the car dealer to lend you \$16,000 at an annual interest rate of 6 percent.

However, you want to pay the bank back in monthly installments over 5 years. Here, we must convert the annual interest rate to a monthly rate, and we must convert 5 years into 60 months (5 years times 12 months per year equals 60 months).

Our goal is to calculate the monthly PAYMENT, so after clicking on the Financial category, scroll down to the PMT variable.



When you click PMT and then hit OK, the Excel calculator pops up. We then enter our three key variables.



Click OK and you get \$309.32. This is how much you must pay the bank each month for 60 months.

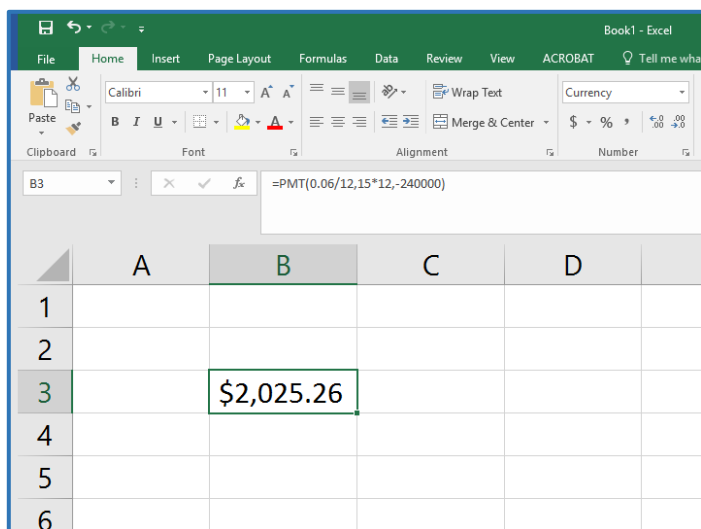
By borrowing \$16,000, you will repay the bank a total of \$309.32 times 60 months, or \$18,559. The bank earns \$2,559 of interest. That is how the bank makes money on loans to borrowers like you!

Excel spreadsheets are amazing, and the financial calculator tool is one of its best features. If you cannot afford a \$4,000 down payment and monthly payments of \$309.32 for the next 5 years (not counting insurance or car license and registration fees), you must shop for a cheaper car, or consider riding a bike or walking everywhere.

## Taking Action

**Exercise 1:** Using the Excel spreadsheet Insert Function command, calculate the monthly payment for a loan of \$240,000, with an annual rate of 6%, with the loan period of 30 years.

**Exercise 2:** Using the Excel spreadsheet Insert Function command, calculate the monthly payment for a loan of \$240,000, with an annual rate of 6%, with the loan period of 15 years.



## Part 1 Summary

Part 1 of this lesson has taught you some very important concepts. You have learned the concept of compound interest, Einstein's greatest theory. Here, we learned that the higher the interest rate, the higher the future value of an investment today. In addition, you have learned that the lower the interest rate, the more you need to set aside to reach some future goal, like buying a car for \$20,000 four years from now. You have applied Excel skills to calculate future value, present value, and payments required to take out a car loan. Are you beginning to see how math can be used to make personal and business decisions?

## Part 2: Risky Business—The Case of Probability, Risk, and Reward

Entrepreneurs are a vital part of any economy. Did you know that over 98% of all businesses in the U.S. are small businesses? Individually, these businesses create relatively few goods or services, but add them together: small businesses are an economic power! As a business owner, other people will not be telling you what to do; instead, you will make the decisions. With this greater freedom, however, comes more responsibility. Before you invest your life-savings in starting a business, it is helpful to understand a few basic concepts of risk and return. As you learned in Part 1 of this lesson, the greater the risk, the higher the return you can expect if you are successful. However, there is also a greater chance that you will fail.

## Question and Answers

**Question:** How can a business minimize risk and maximize return?

**Answer:** One must first understand the concept of risk. What is risk? In business terms, risk implies future uncertainty. The greater the uncertainty of future gain from an investment, the higher the required rate of return. Entrepreneurs understand that the future is uncertain, and they must assign probabilities to future, uncertain outcomes, and the gains or losses associated with each potential outcome. How much might the company lose under the worst of circumstances? How likely will such a loss occur? How much might the company gain under the best of circumstances? How likely with this occur? Furthermore, the kind of business an entrepreneur starts depends on the risk level he or she is willing to tolerate. The greater the risk, the higher the return. To better understand this, consider a two-dice game. If you have ever played backgammon, Monopoly, or craps, you will especially enjoy the rest of this lesson.

### Taking Action: Exercise #1

Find a pair of dice. Roll it 36 times and record each outcome in the table below. For example, if you roll “double ones,” which total 2, then put an X under by the 2 in the column “Total of Number Rolled”. On the next roll, if you roll a three and a four, which totals 7, put an X next to the 7 in the column “Total of Number Rolled.”

Total of Number Rolled (Potential Outcome)	Example Results	Your Results
2	XX	
3	XXX	
4	X	
5	XXXXX	
6	XXXX	
7	XXXXX XX	
8	XXXXX X	
9	XXXXX	
10	X	
11	X	
12	X	

1. For your 36 rolls, what outcome occurred most often? For example, in the Example Results, if you count the number of X's for the “2” total, you count two X's. For the “7” total, you count a total of seven X's. The total “7” came up a total of seven times. The “7” total came up most frequently.

2. If you had to make a bet on which outcome would come up on the next roll of the dice, which number would you most prefer? Least prefer?

## Lessons Learned

The outcome totaling "7" may have occurred most frequently when rolling your two dice. Did it? If you are doing this exercise with others, compare your results to theirs. Let us draw a picture. Here, we see that there are 36 empty boxes. The total of "7" comes up how many times? Count them. For example, assume Dice #1 came up "3", and Dice #2 came up "4". The outcome totals "7", and is recorded below:

		#1					
		1	2	3	4	5	6
#2	1						
	2						
	3						
	4			X			
	5						
	6						

How many of the 36 squares add up to a total of "7"? Let's take a look.

		#1					
		1	2	3	4	5	6
#2	1						X
	2					X	
	3				X		
	4			X			
	5		X				
	6	X					

Please note that there are six squares that total "7", and there are thirty-six squares. The *probability* that a "7" will be rolled on the next roll of two dice is six chances out of thirty-six total possibilities, or  $1/6$ , which is equal to .1667, or 16.67%.

Probability is defined as the extent to which an event is likely to occur, measured by the ratio of favorable cases (e.g., a total of "7" being rolled) to the whole number of cases possible (e.g., "36" in a two-dice game).

## Taking Action: Exercise #2

1. What is the probability of rolling a total of "2", stated as a:

$$\text{Fraction} = 1/36 = .028 = 2.8\%$$

2. What is the probability of rolling a total of "3", stated as a:

$$\text{Fraction} = 2/36 =$$

3. What is the probability of rolling a total of "4", stated as a:

$$\text{Fraction} = 3/36 =$$

4. What is the probability of rolling a total of "5", stated as a:

$$\text{Fraction} = 4/36 =$$

5. What is the probability of rolling a total of "6", stated as a:

$$\text{Fraction} = 5/36 =$$

6. What is the probability of rolling a total of "7", stated as a:

$$\text{Fraction} = 6/36 =$$

7. What is the probability of rolling a total of "8", stated as a:

$$\text{Fraction} = 5/36 =$$

8. What is the probability of rolling a total of "9", stated as a:

$$\text{Fraction} = 4/36 =$$

9. What is the probability of rolling a total of "10", stated as a:

$$\text{Fraction} = 3/36 =$$

10. What is the probability of rolling a total of "11 ", stated as a:

$$\text{Fraction} = 2/36 =$$

11. What is the probability of rolling a total of "12", stated as a:

Fraction =  $1/36 =$

## A Note on Making Decisions

Pretend that your teacher "owns", or "controls" the "7" outcome and that you "own" the "4" outcome. If the "7" comes up first, the teacher wins \$3. If the "4" comes up first, you win \$3. Is this a fair game? Who has a better chance of winning?

Let us go back to our six by six matrix. There are 6/36 winners for the teacher, and only 3/36 winners for you. In other words, the teacher has a six-three, or a two-to-one advantage. This is not a fair game.

How might we make this a fair game? By offering you a two-to-one reward for your risk!

Since the teacher has a six to three advantage, the payoff should be:

$$\frac{6 \text{ potential losers}}{3 \text{ potential winners}} = \frac{\$X}{\$3}$$

Cross-multiplying:

$$\$18 = \$3X$$

$$X = \$6$$

In other words, to make this a fair game, you should demand a higher return (\$6 instead of \$3) to compensate you for the extra risk. If you do not like risk, you do not have to play at all.

## Taking Action: Exercise #3

Assume you and the teacher engage in a wager where the teacher wins \$5 if her number—the "7" outcome—comes up before your number. If the game is fair, how much should you win? \$5? Complete the following table (the first two answers are done for you):

Teacher Total Number	Your Total Number	Teacher advantage	Your winnings if your number is rolled before the teacher's number
7	2	6 winners/1 loser	$6/1 \times \$5 = \$30$
7	3	6 winners/2 losers	$6/2 \times \$5 = \$15$
7	4	6 winners/3 losers	
7	5	6 winners/4 losers	
7	6	6 winners/5 losers	
7	8	6 winners/5 losers	
7	9	6 winners/4 losers	
7	10	6 winners/3 losers	
7	11	6 winners/2 losers	
7	12	6 winners/1 loser	



Your decision whether or not to play is much like a prospective business owner deciding to continue to work for someone else, or go into business for herself. Working for someone else is less risky.

Alternatively, consider two different business ventures. One requires that the owner buys inventory and then re-sell it. The other business is a service business. The risk is greater for the business with inventory, because if no one buys the product, the owner has lost the cost of inventory. There is a possible, greater negative monetary outcome for the product business. The greater the risk, the larger the potential payoff. Nevertheless, if no inventory sells, there is a risk of losing more money than the person starting a service business loses.

## Questions and Answers

**Question:** How will a knowledge of probabilities help an entrepreneur in deciding which kind of business to start?

**Answer:** Probabilities are used in conjunction with dollar amounts of predicted gains or losses on future outcomes. To see this, we must understand the mathematical concept of "Expected Value."

We learned about probability using the two-dice game above. Now consider two businesses. Before Business A, a service business, starts operations, its owner "guesses" that the probability of earning various amounts of net income is as follows:

Possible Outcome	Estimated Net Income	Probability of Earning This Amount of Net Income
1	\$ 50	8/36
2	\$100	24/36
3	\$200	4/36

Now compare this with Business B, which buys inventory:

Possible Outcome	Estimated Net Income	Probability of Earning This Amount of Net Income
1	(\$60)	10/36
2	\$ 50	20/36
3	\$300	6/36

Which business looks like the better one? To help answer this, we can compute a number for each business called the *expected value*. This is simply the sum of the estimated net income times the probability for each outcome. The expected value for Business A is:

Possible Outcome	Estimated Net Income	Probability of Earning This Amount of Net Income	Expected Value
1	\$ 50	8/36	\$11.11
2	\$100	24/36	\$66.67
3	\$200	4/36	\$22.22
Total			\$100.00

Now look at Business B:

Possible Outcome	Estimated Net Income	Probability of Earning This Amount of Net Income	Expected Value
1	(\$60)	10/36	(\$16.67)
2	\$ 50	20/36	\$27.78
3	\$550	6/36	\$91.67
Total			\$ 102.78

Here, you can see that Business B has a good chance of making \$550 net income, but it also stands a good chance of losing \$60. Business A, on the other hand, will make money under all three possible outcomes. It just does not have any chance to make more than \$200.

In a world where an investor is risk neutral, he or she would always pick the business with the highest expected value. In this case, even though Business B has a higher expected value (\$102.78 vs. \$100.00), many students would prefer to start Business A *because it involves less risk of losing money!*

Where does a business owner get the probabilities? By doing research. Writing a lean canvas. Interviewing customers. Testing. Refining. And using intuition.

When the risk becomes low enough, and the expected value becomes high enough (e.g., the rewards from starting the business), the entrepreneur should go for it.

It bears repeating: If people were “risk neutral,” they would always pick the business with the highest expected value. But almost all people have different tolerances for risk. The higher the risk, as indicated by interest rates, the higher should be the return!

Which of the two businesses would you prefer to invest?

## Taking Action: Exercise 4

If Business B, above, could change the probabilities to be the following, compute the new expected value in the table below:

Possible Outcome	Estimated Net Income	Probability of Earning This Amount of Net Income	Expected Value
1	(\$60)	6/36	\$
2	\$ 50	10/36	\$
3	\$150	20/36	\$
Total			\$

## Part 2 Summary

In summary, Part 2 of this lesson has shown you how math can be used to make business decisions. Your goal as an entrepreneur is to consider the risks of starting a business. Implicitly, this means you should calculate the probabilities of uncertain future outcomes, and try to measure the reward under each outcome. This involves the use of ratios, decimals, percentages, and expected values. Yes, indeed, math can be useful in making business decisions!

## Part 3 - Using Financial Ratios to Evaluate Kayla's Flower Shoppe

Remember Kayla's Flower Shoppe from Lessons 16 and 17. We saw how she projected her first month's balance sheet, income statement, and statement of cash flows. Below is her database from Year 1, showing the actual results from March 1, 2019 to February 28, 2020.

Kayla's Flower Shoppe, Database for March 1, 2019 to February 28, 2020 (before Adjusting Journal Entries)																	
		ASSETS =										LIABILITIES +			EQUITY		
Date	Description	OFI	Cash	Inventory	Prepaid Rent	Prepaid Insurance	Supplies	Company Van	Cash Register	Printer	Laptop	Wages Payable	Utilities Payable	Interest Payable	Bank Loan Payable	Equity Contributed	Equity Earned
	1-Mar Beginning Funds	--	0	0	0	0	0		0	0	0	0	0	0		0	0
1-Mar	Owner's Investment	F	40,000													40,000	
1-Mar	Loan from bank	F	10,000												10,000		
1-Mar	Purchase Company Van	I	(28,000)					28,000									
3-Mar	Purchase Cash Register	I	(500)						500								
3-Mar	Purchase Printer	I	(600)							600							
3-Mar	Purchase Laptop	I	(1,000)								1,000						
1-Mar	Insurance Purchase	O	(6,000)			6,000											
2-Mar	Supplies Purchase	O	(4,000)				4,000										
2-Mar	Inventory Purchase	O	(7,000)	7,000													
2-Mar	Prepaid Rent	O	(1,800)		1,800												
30-Mar	First Month Cash Sales	O	12,825													12,825	Revenue
30-Mar	Cost of Inventory Sold	--		(6,750)												(6,750)	Cost of Goods Sold
Throughout year	Supplies purchases	O	(24,000)				24,000										
Throughout year	Inventory purchases 11 mo	O	(77,000)	77,000													
Throughout year	Purch. 9 months rent	O	(5,400)		5,400												
Throughout year	11 more months sales	O	153,900													153,900	Revenue
Throughout year	11 more mo. Cost of inv sold	O		(70,000)												(70,000)	Cost of Goods Sold
Throughout year	12 months of wages	O	(12,000)													(12,000)	Wages expense
Throughout year	12 months of utilities	O	(1,200)													(1,200)	Utilities expense
28-Feb	Balances before AJEs	--	48,225	7,250	7,200	6,000	28,000	28,000	500	600	1,000	0	0	0	10,000	40,000	76,775
	AJEs				(7,200)												
28-Feb	Adjust rent	--			(6,000)											(7,200)	Rent expense
28-Feb	Adjust supplies	--				(27,000)										(6,000)	Insurance expense
28-Feb	Depreciate Van	--					(4,667)									(27,000)	Supplies expense
28-Feb	Depreciate Cash Register	--							(125)							(4,667)	Depreciation expense
28-Feb	Depreciate Printer	--								(150)						(125)	Depreciation expense
28-Feb	Depreciate Laptop	--									(333)					(150)	Depreciation expense
28-Feb	Accrue interest	--											1,000			(333)	Depreciation expense
	Balances after AJEs	--	48,225	7,250	0	0	1,000	23,333	375	450	667	0	0	1,000	10,000	40,000	30,300

From the above database, we can prepare her income statement and her balance sheet, as follows.

Income Statement				
For the Year Ended 2/28/2020				
Revenues	\$166,725			
Less: Cost of Goods Sold	(76,750)			
Gross margin (profit)	\$89,975	\$89,975		
Less: Operating Expenses				
Rent	(\$7,200)			
Insurance	(6,000)			
Supplies	(27,000)			
Wages	(12,000)			
Utilities	(1,200)			
Depreciation (total)	(5,275)			
	(\$58,675)	(58,675)		
Operating Income		\$31,300		
Less: Interest Expense		(1,000)		
Net income (before tax)		\$30,300		

Kayla's Flower Shoppe					
Balance Sheet					
February 28, 2020					
<b>Current Assets</b>			<b>Current Liabilities</b>		
Cash	\$48,225		Wages Payable	\$0	
Accounts Receivable	0		Utilities Payable	0	
Inventory	7,250		Interest Payable	1,000	
Prepaid Rent	0		Total Current Liabilities	\$1,000	\$1,000
Prepaid Insurance	0				
Supplies	1,000		<b>Current Liabilities</b>		
Total Current Assets	\$56,475	56,475	Bank Loan Payable (now due)	\$10,000	\$10,000
			Total Liabilities		\$11,000
<b>Noncurrent Assets</b>					
Company Van (net)	\$23,333				

Cash Register (net)	375		<b>Equity</b>		
Printer (net)	450		Equity Contributed	\$40,000	
Laptop (net)	667		Equity Earned	30,300	
Total Noncurrent Assets	\$24,825	24,825	Total Equity	\$70,300	70,300
<b>Total Assets</b>		\$81,300	<b>Total Liabilities and Equity</b>		\$81,300

From the above financial statements, we can compute several key ratios to help us evaluate Kayla's financial health:

Key metrics:

Gross margin (profit) percentage	Gross profit/Sales Revenue	$\$89,975/\$166,725 = .54 = 54\%$
Markup percentage	Gross margin/Cost of Goods Sold	$\$89,975/\$76,750 = 1.172 = 117.2\%$
Return on sales	Net Income/Revenues	$\$30,300/\$166,725 = .182 = 18.2\%$
Return on beginning equity	Net Income/Beginning Equity	$\$30,300/\$40,000 = .758 = 75.8\%$
Return on ending equity	Net Income/Ending Equity	$\$30,300/\$70,300 = .431 = 43.1\%$
Return on average equity	Net Income/Average Equity	$\$30,300/[\frac{1}{2} * (\text{Beginning Equity} + \text{Ending Equity})] = .491 = 49.1\%$
Debt to equity ratio	Total Liabilities/Total Equity	$\$11,000/\$70,300 = .16 = 16\%$
Current ratio	Current Assets/Current Liabilities	$\$56,745/\$11,000 = 5.13$

## Questions and Answers

**Question:** What does each metric mean to Kayla?

**Answer:** Every metric has an important meaning.

**Gross profit percentage** – This tells us how much Kayla earns from each flower arrangement sale, based on the sales price less the cost of the arrangement (flowers and vase and greeting card). Here, Kayla makes \$.54 for every \$1.00 of sales revenue. It might be wise to research how Kayla compares to other flower shops in the industry. Can you use the Internet to see if she is doing better or worse?

**Markup percentage** – This is the gross profit divided by the cost. In this case, Kayla makes \$1.17 for every \$1.00 of cost. In other words, she marks up her merchandise by 117%. Walmart only marks up each merchandise about 30%. Kayla is doing quite well here, wouldn't you say?

**Return on sales** – This ratio is the net income divided by sales revenue. It tells Kayla that she has net income (before taxes) of 18.2 cents on every \$1.00 of sales. If Coca-Cola earns 12 cents on every \$1.00 of sales, she is doing better than Coke here!

**Return on Equity** – There are three ways to calculate return on equity. You can calculate it based on beginning of year equity, end of year equity, or average for year equity. Most people use “Return on Average Equity,” because this shows how much new “value” was created (e.g., net income) based on how much equity “went to bat for you” during the season, not your average in the first month or the last month, but for the entire period. A baseball analogy is appropriate here.

**Debt to equity ratio** – This ratio is a key statistic to assess the riskiness of Kayla’s business. Why? Because Kayla must meet her debt obligations each period. In other words, she is legally obliged to pay her interest and principal, but she is not legally obliged to take money out of her business in the form of a personal withdrawal. Note here that her liabilities are only 16% of equity at year-end. This is a small amount of debt.

However, what if, on the last day of the year, she spent \$40,000 in cash and borrowed \$160,000 to buy land and building for a new flower shop. Her cash would go down \$40,000, her land and building would go up \$200,000, and her liabilities would go up \$160,000. Her debt to equity ratio would then be \$170,000/\$70,300, or 2.4 to 1. In this case, she has almost two and a half times as much debt as she does equity. What would happen in Year 2 if she got sick for a month and could not pay interest on her debt? The bank could force her to sell the land and building.

**Current ratio** – This is a measure of Kayla’s liquidity. Liquidity refers to how much current assets are relative to current liabilities. It gives Kayla a good idea of how quickly she can pay off her current debts with assets that can quickly be converted to cash. On February 28, she is sitting well here. She has more than five times as much current assets as current liabilities. A good rule of thumb is that a business should always have a 2:1 current ratio.

However, let us assume, once again, that on the last day of the year, Kayla bought land and building, valued at \$200,000, by paying \$40,000 in cash and borrowing \$160,000 (creating a long-term liability, called mortgage payable). Her current ratio is now \$16,475/\$11,000, 1.498. This is dangerously low! She must be careful to spend cash wisely early next period, so that her cash inflows quickly exceed her cash outflows.

## Questions and Answers

**Question:** Is there any way we can determine how many flower arrangements Kayla must sell each day in order to break even in her business. Better yet, can we infer how many units must be sold each day in order to achieve a certain target net income level?

**Answer:** Yes! This lies at the heart of breakeven analysis. The fancy term in the textbooks is cost-volume-profit analysis. Look closely at Kayla’s income statement above. She has one expense that varies directly with each sale—this expense is *cost of goods sold*. Assume the average flower arrangement costs a total \$38 (the arrangement includes the cost of the flowers, the vase, and the greeting card). Also, assume the average sales price is \$78. The gross margin per unit is sales price, \$78, minus cost of goods sold, \$38, equals \$40. In other words, she earns \$40 for each unit sold, which “contributes” to covering all of her other expenses. Cost of goods sold is a *variable expense*, or *variable cost*.

Her other expenses, such as rent, insurance, supplies, wages, utilities, depreciation, and interest, remain relatively fixed no matter how many sales are made. These are known as *fixed expenses*, or *fixed costs*. Note that the total of these costs is \$58,675.

An important question: “With fixed expenses totaling \$59,675, and each sale contributing \$40 to “covering” these expenses, can we compute how many flower arrangements must be sold in order to break even.”

The answer to this question is called the *breakeven point*. We can use our intuition here, by dividing the fixed expenses, \$58,675, by the amount contributed by each sale, which is \$40.

$$\text{\$Fixed costs} / \text{\$Contribution Margin per Unit} = \text{Breakeven point}$$

$$\text{\$59,675} / \text{\$40} = 1,492 \text{ flower arrangements}$$

[Note: 1491.875 units to be exact!]

To prove that this is true, note that the “Contribution Margin” income statement shows net income (before tax) to be exactly zero when Kayla sells 1,491.875 units!

Kayla's Flower Shoppe				
Contribution Margin Income Statement				
For the Year Ended 2/28/2020				
Sales Price (\$78 per unit)	Revenues (at 1,491.875 units)	\$116,366		
Variable Cost (\$38 per unit)	Less: Cost of Goods Sold	(56,691)		
	Contribution margin	\$59,675	\$59,675	
	Less: Fixed Expenses			
	Rent	(\$7,200)		
	Insurance	(6,000)		
	Supplies	(27,000)		
	Wages	(12,000)		
	Utilities	(1,200)		
	Depreciation (total)	(5,275)		
	Interest Expense	(1,000)		
		(\$59,675)	(\$59,675)	
	Net income (before tax)		\$0	

Of course, Kayla is not in business to break even. Assume her goal is to make \$40,000 net income before tax. She can simply revise the formula to determine the sales level she needs to make in order to meet her goal.

$$(\text{\$Fixed costs} + \text{\$Target net income}) / \text{\$Contribution Margin per Unit} = \text{Number of units}$$

$$(\text{\$59,675} + \text{\$40,000}) / \text{\$40} = \text{Units Sold at Target Income Level} = 2,491 \text{ flower arrangements}$$

[Note: 2,491.875 to be exact!]



Kayla's Flower Shoppe					
Contribution Margin Income Statement					
For the Year Ended 2/28/2020					
(Target Net income = \$40,000)					
Sales Price (\$78 per unit)	Revenues (at 2,491.875 units)	\$194,366			
Variable Cost (\$38 per unit)	Less: Cost of Goods Sold	(94,691)			
	Contribution margin	\$99,675	\$99,675		
	Less: Fixed Expenses				
	Rent	(\$7,200)			
	Insurance	(6,000)			
	Supplies	(27,000)			
	Wages	(12,000)			
	Utilities	(1,200)			
	Depreciation (total)	(5,275)			
	Interest Expense	(1,000)			
		(\$59,675)	(\$59,675)		
	Net income (before tax)		\$40,000		

Kayla can now see that she needs to sell about 2,492 flower arrangements to achieve her net income goal. This is about 208 arrangements per month. If her store is open five days a week, her daily sales must be 208/5 days, or between 10 and 11 sales per day. Can she do this?

As we can see, knowledge of how some expenses vary directly with sales, and how others remain fixed, allows us to use math to glean certain insights as to how best to manage our business.

### Taking Action: Exercise 1

Assume you want to start a custom T-shirt business in this class. Let us say you plan to sell the shirts for \$9 each, and the merchandise cost of each shirt from the supplier is \$3. If all of your other projected expenses for each period (e.g., rent of a booth at the mall, artwork, depreciation on equipment) totals \$1,800, how many T-shirts must you sell to break even?

### Taking Action: Exercise 2

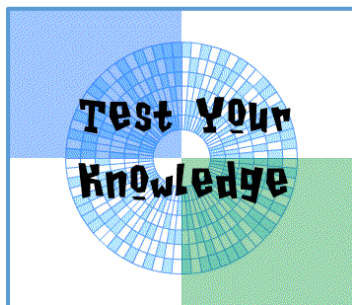
Use the same data as above. How many T-shirts must be sold in order to make a profit of \$5,000 before tax?

### Part 3 Summary

It is very important that a business knows how much revenue it must earn in order not to lose money. This is called “breaking even,” meaning, how many units must be sold in order for net income to equal zero. One technique that is often used to assure a banker that the company will not lose money is to perform what is known as breakeven analysis.

In this lesson we learned that some costs vary directly with sales revenue, while others remain fixed. In previous lessons, we have learned that before a business begins operations, it must first estimate its revenue. The revenue that a company earns is determined by the unit price times the number of units sold. Kayla’s Flower Shoppe charges about \$78 for each flower arrangement, which cost \$38.

It is fitting at this point to return to the concept of pricing. The price that a company charges for its products must be competitive unless that product is unique, and the buyer is willing to pay a premium to acquire it. Kayla’s average sales price must be a price that the average consumer will pay. The price must cover the flower arrangement cost and all of her other fixed costs.



1. If you want \$20,000 four years from now and the bank credits your account at 6% interest. How much will you have to invest today? Round to the nearest penny.
  - a. \$15,841.87
  - b. \$20,000.00
  - c. \$7,320.60
  - d. \$18,867.92
  - e. \$25,616.43
2. How do we measure return on sales?
  - a. Net income divided by total expenses
  - b. Total weight of returned merchandise
  - c. Debt divided by equity
  - d. Net income divided by sales revenue
  - e. Current assets divided by current liabilities
3. \_\_\_\_\_ tells us how much a business owner earns from each sale based on the sales price less the cost of the inventory.
  - a. Gross profit percentage
  - b. Net income
  - c. Return on sales
  - d. Return on equity

- e. Debt to equity ratio
- 4. \_\_\_\_\_ is a key statistic to assess the riskiness of your business.
  - a. Gross profit percentage
  - b. Markup percentage
  - c. Return on sales
  - d. Debt to equity ratio
  - e. Return on Equity
- 5. \_\_\_\_\_ is the gross profit divided by the cost.
  - a. Gross profit percentage
  - b. Markup percentage
  - c. Return on sales
  - d. Debt to equity ratio
  - e. Return on Equity
- 6. True or False: Einstein considered compound interest—receiving interest on interest—to be "the most powerful force in the universe".
- 7. True or False: The higher the interest rate, the higher the amount you need to have in the bank today for it to grow to your desired bankroll in the future.
- 8. True or False: The higher the interest rate (e.g., risk), the higher the expected return.
- 9. True or False: In business terms, risk implies future uncertainty.
- 10. True or False: Probabilities are used in conjunction with dollar amounts of predicted net income on future outcomes.

## What to Do Before the Next Lesson

Continue working on your business plan (or, better yet) or your business launch.

Also, go here: <https://www.economist.com/node/14301663>. Who coined the term “triple bottom line?” What is the triple bottom line? One of the three is financial profit. What are the other two? What is one of the main problems with the TBL?



## Lesson Twenty-One: The Triple Bottom Line and Civic Engagement

Before reading this lesson, make sure to watch the following videos:

<a href="https://www.youtube.com/edit?o=U&amp;ar=1&amp;video_id=8hqUNKnwW8I">https://www.youtube.com/edit?o=U&amp;ar=1&amp;video_id=8hqUNKnwW8I</a> (3:49) – “The Triple Bottom Line and Civic Engagement”
<a href="https://www.youtube.com/watch?v=Agp0keDP7-U">https://www.youtube.com/watch?v=Agp0keDP7-U</a> (8:32), “Government Spending, Debts, Deficits, and Fiscal Responsibility”
<a href="https://www.youtube.com/watch?v=2f5m-jBf81Q">https://www.youtube.com/watch?v=2f5m-jBf81Q</a> (4:13) – “Triple bottom line & sustainability: the science of good business”
<a href="https://www.youtube.com/watch?v=VHaSq0Pu6LY">https://www.youtube.com/watch?v=VHaSq0Pu6LY</a> (5:08) – “Triple Bottom Line: People, Planet, Profit”
<a href="https://www.youtube.com/watch?v=IBrmwYdp6gU">https://www.youtube.com/watch?v=IBrmwYdp6gU</a> (5:58) – “Civic Engagement 101”

### The Big Picture

In a few years, most of you will be old enough to vote. Then, and only then, will politicians pay more attention to the teenage age group. Recently, when I told a friend that I was writing a lesson about **civic engagement**, he said, “Why bother. These kids aren’t even old enough to vote.”

My reply: “First, you are not kids. You are young adults. Second, you will be able to vote in the next election cycle. And if these people running for office keep calling you kids, you will vote for their opponent!”

Civic engagement refers to the degree to which citizens are actively involved in debating what issues are most important to them, and then conveying their preferences to elected officials. For example, most schools have a group called Parent Teachers Association (PTA). Members of the PTA advocate that their school receive a fair share of state tax dollars to provide their children with the best possible resources and learning experiences.



Related to civic engagement is *environmental stewardship*. Individuals and businesses are not allowed to undertake activities that harm the environment, depriving the public of its general use and enjoyment. To prevent such behavior, laws and regulations are enacted. However, it can be difficult to assign blame to individuals when so many contribute to the problem. For example, take climate change. All of us contribute to carbon dioxide emissions by riding in a car, bus, or airplane, but none of us are fined or sent to prison for doing so. One of the best things about individual liberty and free enterprise is that the government is not allowed to interfere with our personal or professional affairs unless it does harm to others. However, at what point does our *collective behavior* do harm to all of us? How much of a role should government play?



Of course, we are talking politics here. Politics is defined as “the activities associated with the governance of a country or other area, especially the debate or conflict among individuals or parties having or hoping to achieve power.” In general, Democrats believe that government should play a larger role, because they believe that businesses are not very effective at self-regulation. Here, government’s role is larger than what Republicans believe it should be. Republicans, generally, believe that government should take a more limited, and cautious, role before enacting expensive new regulations. This is known as a *laissez-faire* approach.

So what should you do? Whether you are a Democrat, Republican, or independent in your political beliefs, you should voice your concerns. You should become involved in community organizations, and build your social network. Moreover, when you turn 18, you should vote! As a society, we want our elected officials to act in our collective best interest. It is every citizen’s job to become educated about issues that affect the community. Moreover, as business owners, you should also do more than what is minimally required by law. Civic engagement requires that people become actively engaged in their communities. It is good for the community, and it adds to an individual’s social capital.



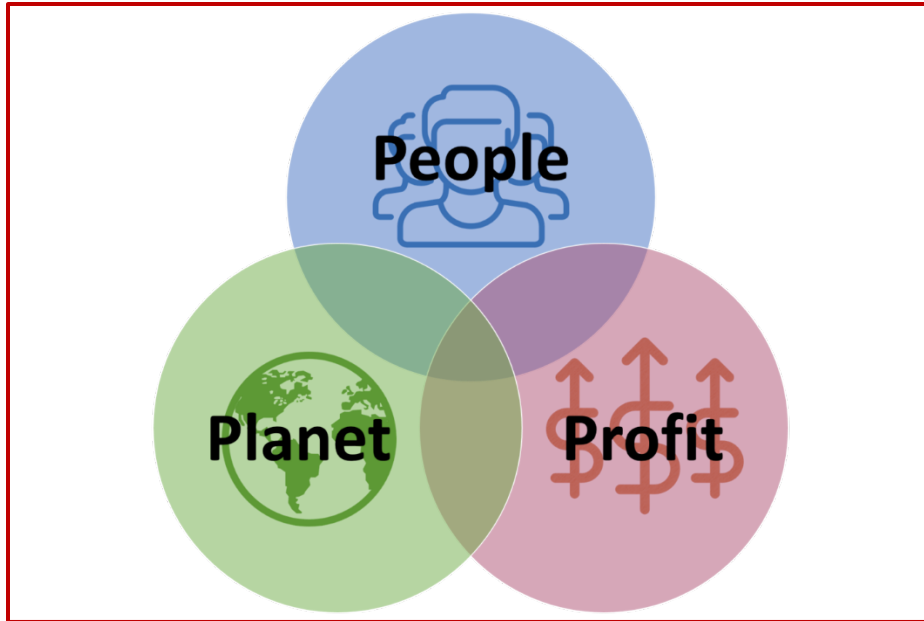


This lesson has two main sections. The first section discusses the “triple bottom line” (TBL), which includes the financial bottom line (e.g., Profit), the social bottom line (e.g., People), and the environment (e.g., Planet). The second section uses “The Penny Experiment” to show you how taxes paid to the government are *expenses* to businesses, but they are *revenues* to the government. How the government spends these tax revenues depends on whom you elect to serve in government. Again, we urge you to become an actively engaged citizen and exercise your right to vote in every election.

### **Part 1: Triple Bottom Line (TBL)**

We have already learned that when an entrepreneur prepares an income statement, the line at the bottom is called *net income*. Net income—the financial bottom line—measures how well a company performed during a period. You might recall that another name for net income is *net profit*.

There are two more bottom lines, but they are hard (and sometimes impossible) to measure: the social bottom line (*people*) and the environmental bottom line (*planet*). Companies perform a balancing act: maximizing profit while being good citizens and behaving kindly to the environment.

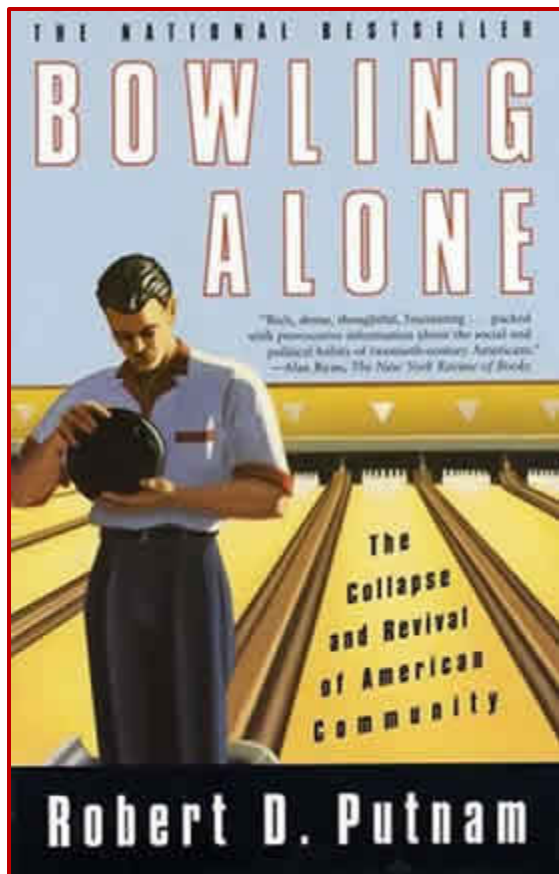


An easy way to remember the TBL is to think of the Three P's: Profits, People, and Planet. Any business that makes a profit (i.e., the financial bottom line), improves the lives of those in their community (i.e., the social bottom line), and protects the environment (i.e., the environmental bottom line) is the ideal sustainable business. Businesses that are successful in achieving this balancing act are known as socially-responsible businesses.

### Questions and Answers

**Question:** What is social capital? Is there such a thing as a “social bottom line?”

**Answer:** Harvard University professor Robert Putnam wrote a book called *Bowling Alone* in 2000. According to Putnam, modern societies are producing individuals who do not interact nearly as much with their neighbors as previous generations. In other words, relative to your grandparents and parents, the current generation belongs to fewer groups, like bowling leagues or weavers' guilds or Rotary Clubs. People tend to stay at home more and watch television and use the Internet. As a result, there is not nearly as much *civic engagement*, and people do not have nearly as many people in their network. In other words, they are not adding to their *social capital*.

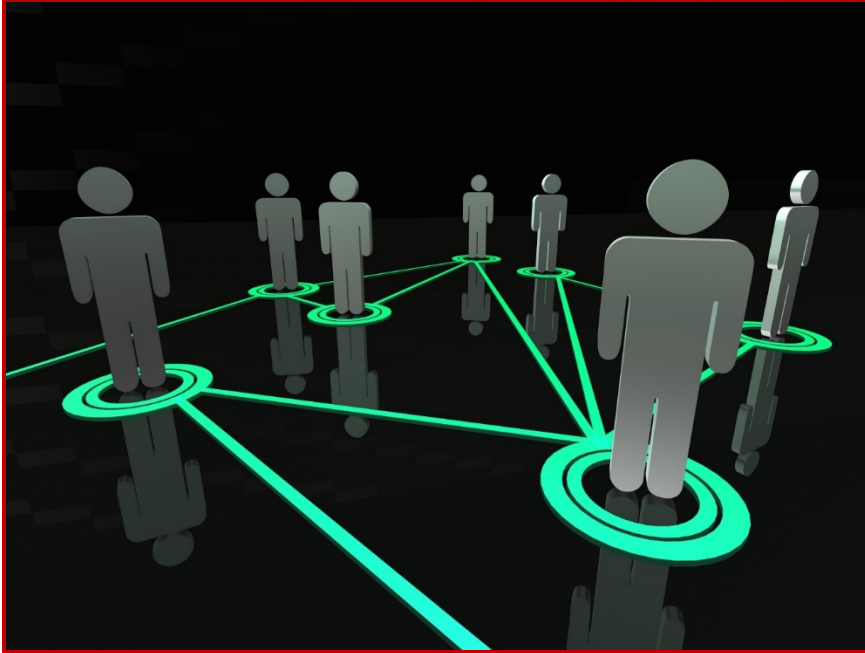


Social capital refers to the number of influential people in your network. In previous lessons, we learned that net income—profit—is the financial bottom line that measures how well a business performed during an accounting period. However, is *financial capital* the only thing that is important to businesses? To you?

Have you ever heard the phrase, “It’s not only about what you have or what you know, it’s also about who you know?” In other words, how valuable is your social network. The stronger your social network, the greater your *social capital*. An entity’s value includes financial capital and social capital. One measure of social capital is:

$$\text{Social Capital} = (\text{number of influential people in your network})^2$$

For example, if the number of influential people in your particular network is 20, then the value of your social capital is  $20^2 = 400$ . If you add one more person to your network, the value is now  $21^2 = 441$ !



According to Putnam, the greater the number of associations one belongs to, the greater the capacity for civic engagement which is essential for the functioning of a modern democracy. Individuals or businesses within a community have strong social capital if they have an

In summary, the greater the number of associations one belongs to, the greater the capacity for civic engagement which is essential for the functioning of a modern democracy. Individuals or businesses within a community have strong social capital if they have an influential network of other members who can be trusted to work together for their mutual benefit. Moreover, some of these members have access to additional resources that can help the network accomplish its goals.

An example of a local network is a city's Rotary Club, which consists of community leaders who meet once a week. A national network is the League of Women Voters. A transnational social movement organization (TSMO) is an international network advocating educating reform. One example of a TSMO is [SAGE](#), which seeks to implement entrepreneurship education into middle schools and high schools.

**Question 2:** Above, we discussed the “double bottom line” consisting of (a) financial income and (b) social value. Many authors have described a “triple bottom line” (TBL) for business. What constitutes the third bottom line?

**Answer:** The third bottom line is *environmental value*. Businesses are beginning to recognize the importance of re-using, renewing and recycling as much as they can. Sustainable businesses do their best to leave future generations at least as well off as the current generation. *Sustainability* is not just a buzzword; rather, it refers to how businesses can thrive without harming the environment or sacrificing opportunities for future generations.

The author of this TRIS course believes that sustainable businesses have the best chance to remain in business in the long-term. Such businesses are examples of *humanitarian capitalism*—making money while, at the same time, being a good citizen and being kind to the environment. The theoretical value of a sustainable business is reflected in how it balances the Three Ps. In theory, it is hard to argue the merit of the TBL. Nevertheless, there are some critics of the TBL.

### **Taking Action: Exercise 1**

Go to this article on the Internet: <https://www.economist.com/node/14301663> and answer the following questions.

1. Who is John Elkington?
2. Nike and Tesco are two examples of companies that have re-examined their policies on buying raw materials for their products. What policies did they change because of the growing awareness of corporate irresponsibility?
3. One problem with the TBL was identified at the end of the article. What is it?

### **Part 2: Government Spending, Debts, Deficits, and Fiscal Responsibility**

Businesses and individuals in society pay taxes on their incomes. Taxes paid, as tax expense, by individuals, partnership and corporations, are tax collections, or revenues, to the government. An important question is: who decides how the government—the public sector—should spend the tax money it receives from you—the private sector.

In a democratic society, citizens who actively participate in selecting their government leaders have the largest voice in deciding how the government spends its revenue. By electing politicians to represent them, individuals entrust these officials to be good stewards of their tax money.



Voting-age citizens (in a democracy) who fail to vote should not complain if their government is not serving them in the manner they would like. Greater participation yields stronger government. To help you better understand tax revenues, tax expenditures, elected officials, and the importance of voting, government and taxes, let us turn to The Penny Experiment.

**Step 1:** In this experiment, pretend that you have 100 pennies in your coin bank. Pretend each penny is \$1, and that this "\$100" represents the total income tax that your business has paid into the TRIS "Government Fund." Also, pretend that other 19 students in your class have also started successful businesses, and the average taxes paid by each business is \$100. It's now April, near the end of the school year.



Assume your business earns \$333.33 in pretax income, and that the income tax rate is 30% of pretax income. How much income tax must your business pay to the government?

	A	B	C	D	E	F	G
1							
2							
3		Income (before tax)			\$333		
4							
5		Less: Income tax expense (30%)			-100		
6							
7		Net income			\$233		
8							
9							
10							
11							
12							
13							

As you can see, \$333.33 times 30%, or \$100. With 20 businesses in the class, with each paying an average of \$100 in taxes, the School Government Fund has \$2,000.

**Step 2:** With \$2,000 in the Government Fund, the next issue is to decide how the money will be spent. After brainstorming for 20 minutes, the class settled on the following six categories:

1. Class Party
2. Local Charity
3. National Charity
4. Large-screen TV
5. Tax Refund
6. Loans to Future Business Owners

**Step 3:** Your class elects Carol Furtado as the political leader. She wants your collective input as to how your taxes should be spent. She brings six large Mason jars to class and labels each one according to the six categories.

One by one, students go up to the class with their pennies and votes with their feet! You would take your 100 pennies (i.e., "dollars") and "vote" on how you would allocate your tax money. All other students would do the same, so when you all finished, Carol can actually see how the class wants the



money to be spent. If 700 pennies went in the Class Party Jar, then 35% (700/2000) would be the amount she would spend on your behalf for the party. Assume the 2,000 pennies were distributed as follows:

Expense	Pennies	%
Class Party	700	35%
Local Charity	200	10%
National Charity	400	20%
Large-screen TV	180	9%
Tax Refund	500	25%
Loans to Future Business Owners	20	1%
	2000	100%

**Step 4:** The month of April goes by, and all expenditures by the government are made exactly as budgeted, with one exception. The government borrowed \$500 to pay for a class party that cost \$1,200, not the budgeted amount of \$700. The budget was \$2,000 but the government spent \$2,500, as in the spreadsheet below. The government has overspent, creating a deficit of \$500 in Year 1.

Government Budget						
	Assets	=	Liabilities +		Equity	
Date	Cash		Government Debt		Net Worth	Description
Beg. Balance			0		0	
7-Apr	2,000				2,000	Tax revenues
10-Apr	-700				-700	Party expense (35%*\$1,700)
12-Apr	-200				-200	Local charity expense (10%*\$1,700)
15-Apr	-400				-400	National charity (20%*\$1,700)
20-Apr	-180				-180	TV expense (9%*1,700)
24-Apr	-500				-500	Tax refund expense (25%*1,700)
25-Apr	-20				-20	Gov't Loans expense (1%*\$1,700)
Subtotals	0		5000		-5000	
29-Apr	500		500			Borrow \$500
30-Apr	-500				-500	Party expense
Balance	0		500		-500	

## A Note about Budgets

Like any good household or business, cash budgeting is essential to financial health. The same is true for governments. Because each business paid, on average, \$100 to the Government Fund, the government collected total tax revenues of \$2,000. This is how much the government can spend on programs benefiting students in your class without going into debt. However, if the government needs to borrow money in any one year to cover all expenses, then the budget includes tax revenues plus new debt. Above, the total government budget was \$2,500, which included new total debt of \$500 and a budget deficit in Year 1 of \$500.

## A Note about Total Government Debt

As deficits are incurred from year to year, an entity's total debt continues to climb. Pretend that the School Government has been in existence for 10 years before the current year. Also, pretend that each year it has borrowed \$500 to cover all of its expenses. None of the money borrowed has been paid back to the investors.

Now, entering this year (i.e., Year 11), how much is the total debt? It is \$5,000 (\$500 \* 10).

Like any other entity who borrows money, the government has to pay interest to the investors who loaned money to it. Assume that the interest rate that investors require is 6% per year. How much will the government have to pay in interest this year? The answer:

$\$5,000 \text{ debt} * .06 = \$300 \text{ interest expense}$

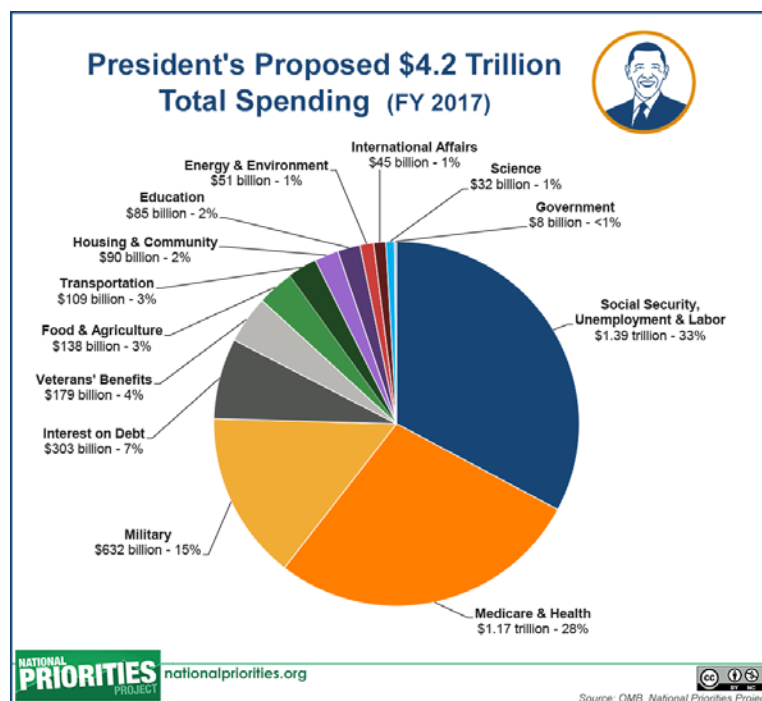
**Step 5:** Prepare an Excel spreadsheet to reflect the inherited school debt of \$5,000, and the additional interest expense category.

Government Budget				
(Includes \$5,000 inherited debt at 6% per year)				
	Assets	=	Liabilities +	Equity
Date	Cash		Government Debt	Net Worth
Description				
<b>Beg. Balance</b>			5000	-5000
7-Apr	2,000			2,000
Tax revenues				
7-Apr	-300			-300
Interest on class debt (6%*\$5,000)				
10-Apr	-595			-595
Party expense (35%*\$1,700)				
12-Apr	-170			-170
Local charity expense (10%*\$1,700)				
15-Apr	-340			-340
National charity (20%*\$1,700)				
20-Apr	-153			-153
TV expense (9%*\$1,700)				
24-Apr	-425			-425
Tax refund expense (25%*\$1,700)				
25-Apr	-17			-17
Gov't Loans expense (1%*\$1,700)				
<b>Subtotals</b>	<b>0</b>		<b>5000</b>	<b>-5000</b>
29-Apr	500		500	
Borrow \$500				
30-Apr	-500			-500
Party expense				
<b>Balance</b>	<b>0</b>		<b>5500</b>	<b>-5500</b>

Notice that interest expense is the first, required, nondiscretionary expense to be paid. The \$300 interest out of a budget of \$2,000, means that *each of the six discretionary expenses must be cut by 15%* [note:  $\$300/\$2,000 = 15\%$ ].

Do you see how the initial budget for party expense drops from \$700 to \$595? You can get this by taking 15% of \$700, or \$105, and subtracting it from \$700. If your class wants to borrow \$500 again this year to pay for a great party, your total party expense this year is reduced from \$1,200 to \$895. Because of the inherited debt of \$5,000, all the other spending categories are reduced proportionately.

Some important lessons can be drawn from The Penny Experiment. First, the higher the government debt, the more money must be paid each year to pay interest on the debt; therefore, less money is available for other government spending programs. At the national level, in the United States, the main expense categories are defense spending, social security, health, and interest on the national debt. In fact, interest expense ranks #4! Other categories include agriculture, veteran's benefits, transportation, housing, education, energy, and environment.



Second, by continuing to borrow more than we spend each period, the total debt goes up higher and higher. In our example, the government debt went from \$5,000 to \$5,500 this year. This means that tomorrow's taxpayers—your children—will have to toe the line because of your government's poor spending habits. Nearly every year over the past four decades, the U.S. federal government has spent more than it collects in tax revenues. In other words, it continues to add to the national debt each year by running an annual budget deficit. Do we want our children to inherit our debt?

## Questions and Answers

**Question 1:** What might the government do to “balance the budget?”

**Answer:** It has three options: (a) raise the tax rates on existing businesses, (b) cut back on discretionary expenditures, or (3) try to develop policies that encourage more new businesses to be created (or to design incentives for existing businesses to become more profitable).

In the first case, raising taxes on existing businesses may raise more tax revenue in the short run, but in the long run, this policy might discourage many of these businesses to continue. Hence, such a policy might backfire, resulting in lower taxes!

In the second case, cutting back on discretionary expenditures can really hurt the poor, the retired, and the disenfranchised; also, it can jeopardize our defense by cutting back on military funding.

As for the third option, this is certainly the best option. What can government do to encourage new and existing businesses to become more profitable? There are many options here. It can offer small business loans through the Small Business Administration. It can reduce onerous regulations that make it hard for companies to comply. It can put tariffs on imported goods, making domestic goods more attractive. Or it can provide subsidies to domestic companies, thereby reducing the production cost of the goods it produces.

**Question 2:** What can you do to see that the government acts the way you would like it to?

**Answer:** You can go to the polls! You can do your best to elect politicians who share your views. This is why it is so important to study the candidates and go vote. Taxes by their nature are not bad. But what we usually complain about is:

- paying too much in tax;
- not having any say as to how the government officials spend the money; or
- the inability or unwillingness of politicians to balance the budget (i.e., limit their spending to the amount of tax revenues collected).

If you don't agree with how your federal, state, and city governments spend your hard-earned money, you are encouraged to let them know.



### **Taking Action: Exercise 1**

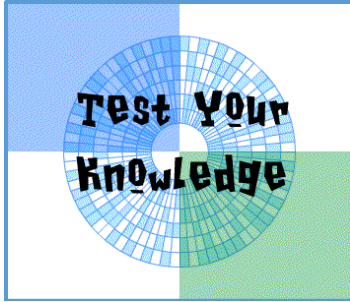
Using the Excel spreadsheet above as a guide, where the government inherited \$5,000 in debt, what if the inherited debt was \$8,000 and the interest on the debt was 6%. How would the spreadsheet change?

### **Taking Action: Exercise 2**

Using the Excel spreadsheet above as a guide, what if tax revenues were \$3,000 rather than \$2,000, but the government chose to keep the spending level as it was before, as follows. That means the government has a budget surplus of \$1,000 this year. What could they do with the surplus?

### **Summary**

Using The Penny Experiment as an example, this section has explained the difference between deficit spending, national debt, budget surplus, interest on the debt, and government budgets. Along the way, we hope you have learned one key fact. As government debt goes up, the harder it will be for you, your children, and your children's children to receive the same type of benefits in the future. It only makes sense to use our tax dollars wisely, without running up the government debt. Electing political leaders that share these values is part of a citizen's civic responsibility.



1. The term “civic engagement” can best be described as:
  - a. The degree to which citizens are actively involved in debating what issues are most important to them, and then conveying their preferences to elected officials.
  - b. A period before marriage when the future bride and groom agree not to argue.
  - c. The resolution of a dispute between a city’s mayor and the city council members.
  - d. A way to bribe a public official to give your business preferential treatment over other businesses.
2. Some businesses strive to maximize a “triple bottom line?” What does this mean?
  - a. All revenues and expenses are classified into three categories: Operating, Financing and Investing activities; “net income” is computed for each category.
  - b. These companies seek financial profits, but they also seek to create social value and environmental value.
  - c. These businesses, in their financial reporting, disclose net income for three consecutive periods.
  - d. These businesses are organized according to three activities: commercial entrepreneurship, social entrepreneurship, and government entrepreneurship.
3. When a government unit spends more money in a budget period than it collects in tax revenues, this is an example of:
  - a. wasteful spending
  - b. pork barrel politics
  - c. civic engagement
  - d. deficit spending
4. When a government inherits debt incurred by the government from prior years, what is the result?
  - a. The current government must pay interest on the debt, thereby reducing the amounts it can spend on other public programs.
  - b. The current government can ignore the interest on the debt, as long as it repays the original loan.
  - c. The current government must raise taxes in the current period to cover prior debts.
  - d. The current government can force the politicians in prior years to pay the debt out of their personal savings.

5. If a government has difficulty “balancing its budget” from one period to the next, which of the following is not a viable alternative to ensure that government revenues equal government expenditures?
- a. Raise tax rates
  - b. Design policies to encourage more new businesses
  - c. Design policies to encourage existing businesses to become more profitable
  - d. Increase spending

True or False

- 6. True or False: Social capital refers to the number of influential, trustworthy people in your network that can make a difference in matters important to you.
- 7. True or False: Environmental stewardship is the responsibility for environmental quality shared by all those whose actions affect the environment.
- 8. True or False: In the USA, the voting age is 21.
- 9. True or False: Social capital is the amount of money generated by employees at cocktail parties after the business day is over.
- 10. True or False: One problem with the triple bottom line is that, because social and environmental value are hard to measure, people don’t pay enough attention social and environmental issues.

### **What to Do Before the Next Lesson**

Continue working on your business plan (or, better yet) or your business launch.





## Lesson Twenty-Two: Social Entrepreneurship-Seeking More than the Financial Bottom Line

Make sure you have watched these videos before reading the lesson.

<a href="https://www.youtube.com/watch?v=MFg27qDafLI">https://www.youtube.com/watch?v=MFg27qDafLI</a>
(6:00) - Social Entrepreneurship-Seeking More Than the Financial Bottom Line
<a href="https://www.youtube.com/watch?v=1ecKK3S8D0E">https://www.youtube.com/watch?v=1ecKK3S8D0E</a>
(2:02) - "What is social entrepreneurship?"
<a href="https://www.youtube.com/watch?v=Qqoxmj2I3oI">https://www.youtube.com/watch?v=Qqoxmj2I3oI</a> (7:36) - "Sierra Nevada Brewery Co." - An Example of an SRB
<a href="https://www.youtube.com/watch?v=Qqoxmj2I3oI">https://www.youtube.com/watch?v=Qqoxmj2I3oI</a>
<a href="https://www.youtube.com/watch?v=ivmI9IV50KE">https://www.youtube.com/watch?v=ivmI9IV50KE</a> (2:46) - "The SDGs and Business"

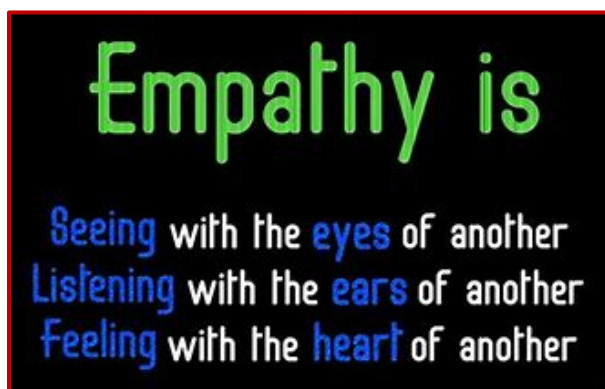
### The Big Picture

Recall from Lesson 1 that *Webster's Dictionary* defines an entrepreneur as someone who organizes, manages, and assumes the risks of a business. Note the word *risk*. Someone who starts a business is *taking a chance* that the amount of money and time contributed to the business will pay off. A business's success is measured by the amount of money it makes as reported on the income statement. When someone asks, "What's your bottom line?" she is asking, "How much net income did your business make?" For purposes of the TRIS program, we refer to a business started by socially responsible entrepreneurs who is primarily motivated by the financial bottom line as a *socially responsible business* (SRB). An example of an SRB is Sierra Nevada Brewing Company of Chico, CA. This company makes profits, but its owner, [Ken Grossman](#), insists that they recycle and reuse almost everything.



In the past 30 years, a new type of entrepreneur has been identified—the social entrepreneur. In this course, “Turning Risk into Success,” we classify a business that is started by a social entrepreneur (SE) as a *social enterprise business* (SEB). SEs are risk takers, but instead of being driven by a financial bottom line, they primarily exist to address a social problem. However, SEs must be driven by the financial bottom line, too, in order to achieve their number one goal of addressing societal problems.

Consider a case where a person, out of empathy for qualified but disabled people in her community, starts an employment agency whose main mission is to find work for people with disabilities. Her main motive is to create new jobs for disabled clients rather than to earn a high amount of net income. As such, she is a SE. As we learned in Lesson Four, empathy is a key component of design thinking.



The employment agency must still earn profits and/or raise funds from donations or government grants. However, the owner is primarily driven by a social bottom line.

An SEB can be organized as a for-profit or nonprofit enterprise; it explicitly intends to address a

social problem by using earned revenue strategies; this may be any type of business so long as:

- its products or services themselves directly address a social need and are paid for by customers (i.e., a customer-focused social enterprise)
- it employs a significant number of the people it serves—at least 50 per cent of the company's direct labor force (i.e., an employee-focused social enterprise)

The focus is on providing social value but with a strategy in place to achieve sustainability through earned income. During the startup phase in both types of businesses, financial resources may also include a mixed revenue stream that includes “unearned income” (e.g., donations, fundraisers, corporate grants, charitable contributions from philanthropists, public sector subsidies) to help meet expenses.



A social enterprise is not the same as nonprofit organization (NPO) or nongovernment organization (NGO). For an organization to be considered a viable SEB, it cannot rely solely on grants, fundraisers donations, and public sector subsidies. To be competitive as an SEB, the organization must show that it has a long-term strategy that includes earned income. The success of this strategy will transform the organization into an SEB.

A good example of a social enterprise, located in Chico, CA (SAGE's home office), is [Computers for Classrooms](#). Computers for Classroom refurbishes discarded computers and sells them at a very reasonable price to local schools. The selling price is so low because all “inventory” is donated; nonetheless, based on volume, the company continues to make tremendous profits, while at the same time employing disadvantaged people and reducing the amount of waste in the local landfill.

The very best SEBs strive to achieve four outcomes:

- To make real impact
- To quantify results
- To demonstrate sustainable business practices
- To put into place a succession plan

Examples of areas for SEs include providing clean drinking water; alleviating poverty through better healthcare and employment opportunities; legalizing rights for the disabled; providing electricity to remote villages; implementing new education methods and technologies into schools; and finding more energy-efficient means of transportation.

## **Proven Impacts**

It is essential that an SEB understand what impact it is trying to achieve. For example, a project working to reduce the incidence of malaria by distributing mosquito bed nets must demonstrate that the incidence of malaria is in fact reduced. It is not enough simply to report how many nets were distributed. As Fisher and Starr (2009) state, for a project to have measurable and proven impacts:

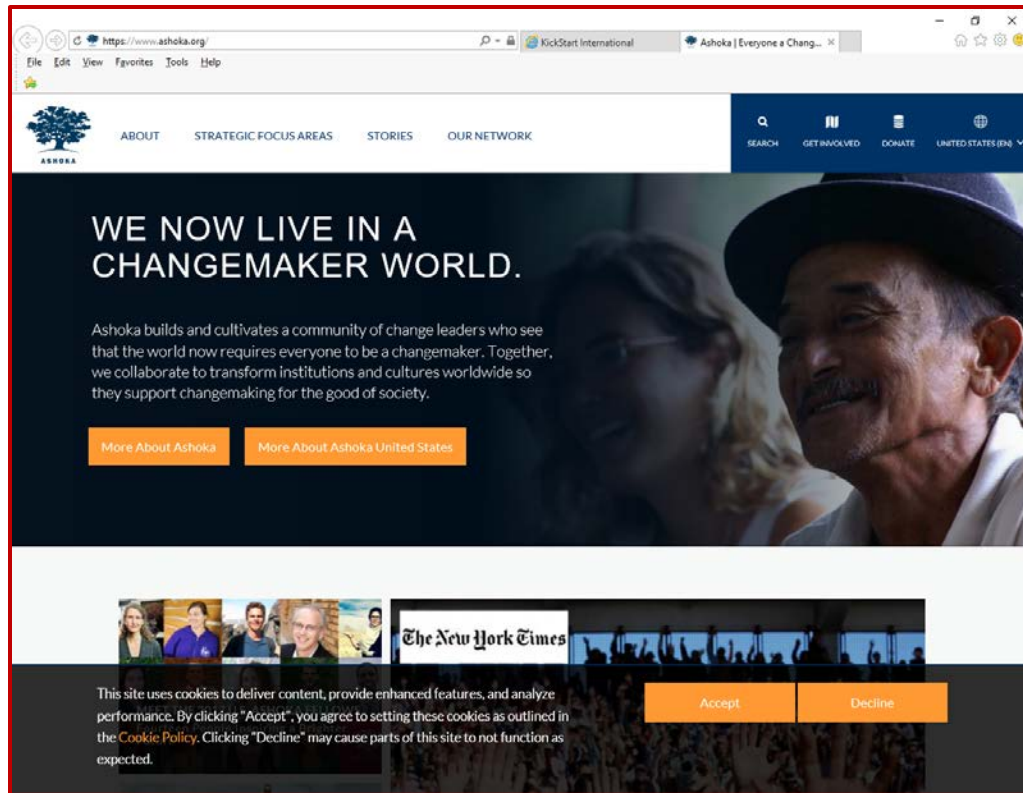
- (a) The business must succinctly define what change it is trying to achieve. This is best done in a short and concise mission statement that can be written in 10 words or less, such as “Poor families will earn a lot more money,” or “Fewer people will get, or die of, malaria,” or “the overall CO<sub>2</sub> released into the atmosphere will be reduced;”
- (b) There has to a way to both measure the desired change, and demonstrate that they are caused by the business’s actions.

Examples of areas for SEs include providing clean drinking water; alleviating poverty through better healthcare and employment opportunities; legalizing rights for the disabled; providing electricity to remote villages; implementing new education methods and technologies into schools; and finding more energy-efficient means of transportation.



According to TRIS’s philosophy and values, SEBs MUST have an earned income strategy either to generate profit or to help offset the expenses of the social enterprise. If the goals of the social enterprise are workforce development, job creation and career development for people who are disadvantaged, then the evidence should include demographic information about the numbers of people employed and the types of disadvantages they were facing, the level of wages paid, and other pertinent information. If the goal is to deliver a product or service other than job creation, the evidence could include the numbers of products sold and/or services delivered and any results achieved by the people purchasing the products and/or services. Evidence of impact can include media coverage (e.g., newspaper, TV, radio) and potential market reach (e.g., regional, national, global scale).

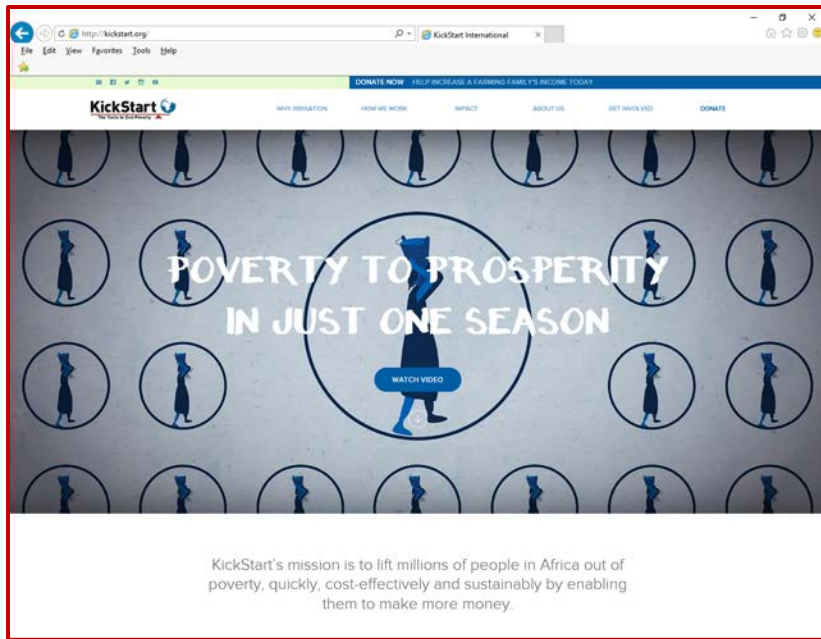
Like the [Ashoka Foundation](https://www.ashoka.org/en/search/childline), the author of this course believes that SEs strive to pass a “knockout test.” Is the business new and potentially pattern changing, relative to prior attempts? Is the SEB practical? Scalable? Cost effective? One example of a successful SEB can be found at <https://www.ashoka.org/en/search/childline>. The story here is about a company called Childline, which has provided direct assistance to more than 26,000 street children in Mumbai, India. Jerro Billimoria, the founder of Childline, is one of Ashoka’s heralded fellows.



Another company has helped cut rural electricity costs for over 1 million people in Brazil. Fábio Luiz de Oliveira Rosa has succeeded in raising the living standards of low-income rural families by taking cheap electricity to their homes and farms. This innovation has spread to 24 communities throughout Brazil. Fabio is also an Ashoka Fellow.

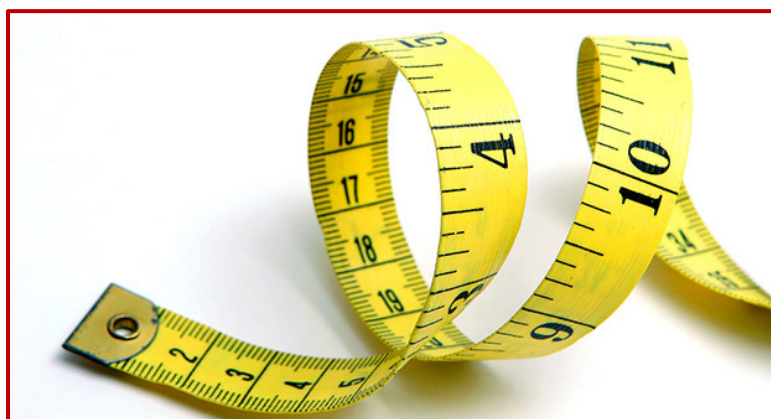
A third example is [Kickstart](#), a company started by Martin Fisher. He and his colleagues have invented low-cost, human-powered irrigation pumps and other simple moneymaking tools, coupled with a sustainable and replicable supply-chain model that enables subsistence farmers to use the equipment to become self-reliant entrepreneurs. This process is transforming the lives of hundreds of thousands of poor Africans by enabling them to double or triple their annual net family incomes.





## Quantifying Results

How does a social entrepreneur measure the “social bottom line?” In other words, how must an SE quantify results? An SEB measures the value it creates primarily through customized metrics that provide evidence that the desired social impact is being achieved. Before starting an SEB, the owners should ask, “How will we know we are successful at the end of the first year? What will we accomplish that will prove it?” Then, the owners should identify metrics that will quantify whether their desired outcomes are being achieved, and then make sure the measurement plan is carried out. What gets measured gets managed!



SEB teams should also include an income statement in its presentation summarizing sources of earned and unearned revenue, and how this revenue was used to cover expenses. Many businesses do not earn a profit in the first year; in fact, many incur losses until it builds a solid customer base and reputation. Many SEBs may have not earned any profits in their

first year, but it is necessary that they convince stakeholders that they have a clear path toward profitability based on realistic projections.

## Sustainability

We want SEBs to create positive social change directly through its social impact outlined in its mission statement, and indirectly through the practice of social responsibility by adopting sustainable business practices. Examples include paying equitable wages to their employees; using environmentally friendly raw materials; providing volunteers to help with community projects; and so on.



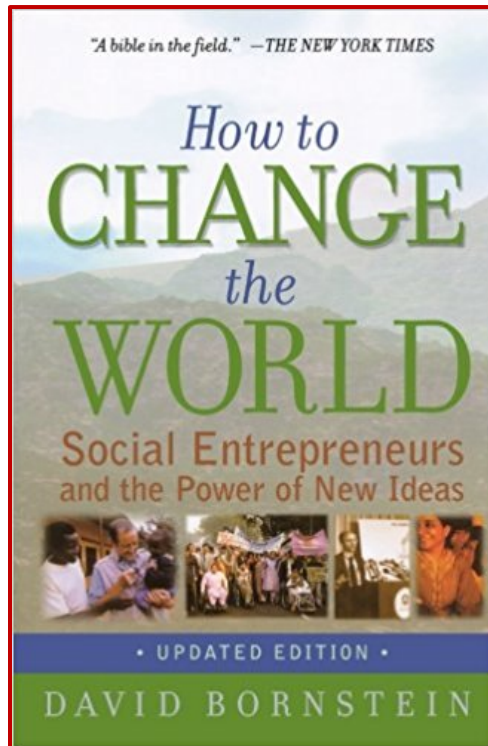
## Succession Plan

Most school projects and activities end with a final exam, a term paper or a field trip. However, businesses don't end according to a calendar. They end when the market tells them that they can no longer operate profitably, or the owners call it quits and dissolve the business. We don't want TRIS students to consider our program "just another school activity." We want students to treat their business as any other business owner would. That is, they will do their best to see that the business remains as a going concern. Moreover, we also want the best businesses to expand to other markets and, perhaps, be replicated by other businesses.

For those businesses that do not plan to continue, it is necessary that the TRIS team explain its exit strategy. Exit strategies are typically prepared well in advance of implementation, which can occur for both positive and negative reasons.

An outstanding book on the subject of social entrepreneurship is by David Bornstein, entitled [\*How to Change the World: Social Entrepreneurship and the Power of New Ideas\*](#) (Oxford University Press: 2004). In the conclusion, Bornstein said: "If I learned one thing from writing this book, it is that

people who solve problems must somehow first arrive at the belief that they can solve problems. This belief does not emerge suddenly.



The capacity to cause change grows in an individual over time as small-scale efforts lead gradually to larger ones. But the process needs a beginning—a story, an example, individuals, companies, foundations, or government an early taste of success—something along the way helps a person form the belief that it is possible to make the world a better place. Those who act on that belief spread it to others. They are highly contagious. Their stories must be told.” (p. 282)

### Questions and Answers about Social Entrepreneurship

**Question 1:** Can someone really start a business whose main objective is NOT to make money?

Answer: Absolutely. Have you ever heard of a man named Muhammad Yunus? He started a business called the Grameen Bank, which makes small cash loans to poor women in developing countries.

### Taking Action: Exercise 1

Go to the Internet and search under “Muhammad Yunus.” After reviewing three or four sites, answer the following questions.

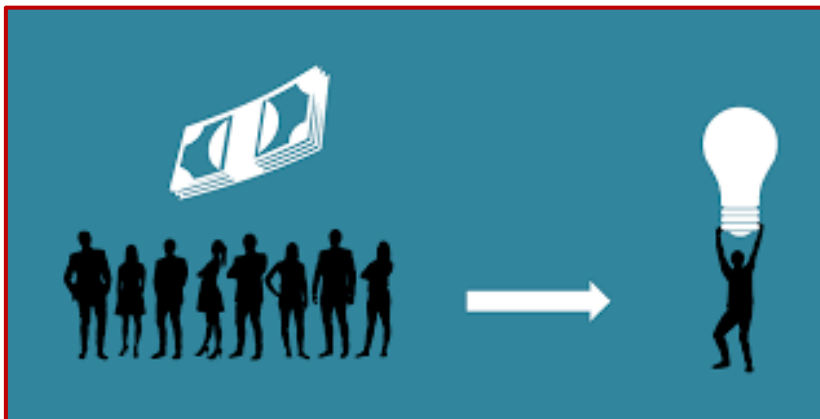
- What year did Dr. Yunus win the Nobel Peace Prize?
- How much was his first loan, and what did the women do with the money?

- What does the word “Grameen” mean?
- What is the “payback” rate on loans made by the Grameen Bank? How does this compare to other banks?
- Dr. Yunus is involved with a group called the Ashoka Foundation. What is the Ashoka Foundation?
- Based largely on the success of the Grameen Bank, other similar organizations have been created. One of them is called kiva.org. Search under the word “kiva.” How does the Kiva organization compare to the Grameen Bank?
- How does kiva.org make money?



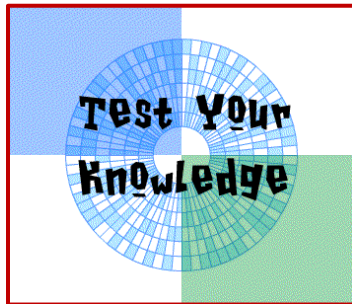
**Question 2:** How do social entrepreneurs obtain their startup capital?

**Answer:** We will address this issue in much greater detail in the next lesson. For now, though, you should know that startup capital could come from the SE’s personal savings or from contributions by individuals, companies, foundations, or government agencies. It is helpful if the SE authors a lean canvas and provides projections of future revenues and costs (i.e., expenses).



**Question 3:** Can people who start out as a commercial entrepreneur become an SEB entrepreneur?

**Answer:** Yes! Let's look at a hypothetical example. Do you remember Annette's Tutoring Services from Lesson 7? Let's say that Annette is so successful with her math tutoring business that she writes a training manual about her unique teaching and instructional methods, and files for copyright protection with the U.S. government. After presenting her ideas at various education conferences, the California Department of Education decides to buy 100,000 copies of her training manual for \$20 each. Then, a couple years later, the remaining 49 states buy another 1,000,000 copies. With profits from her commercial business, she decides to create a nonprofit corporation that provides individualized online math courses, for a fee, to students in developed countries. However, her passion is to educate girls in Western Africa in math and computer coding. She decides to provide these courses free of charge in these developing countries. She has converted from being the owner of a commercial enterprise to becoming a social entrepreneur.



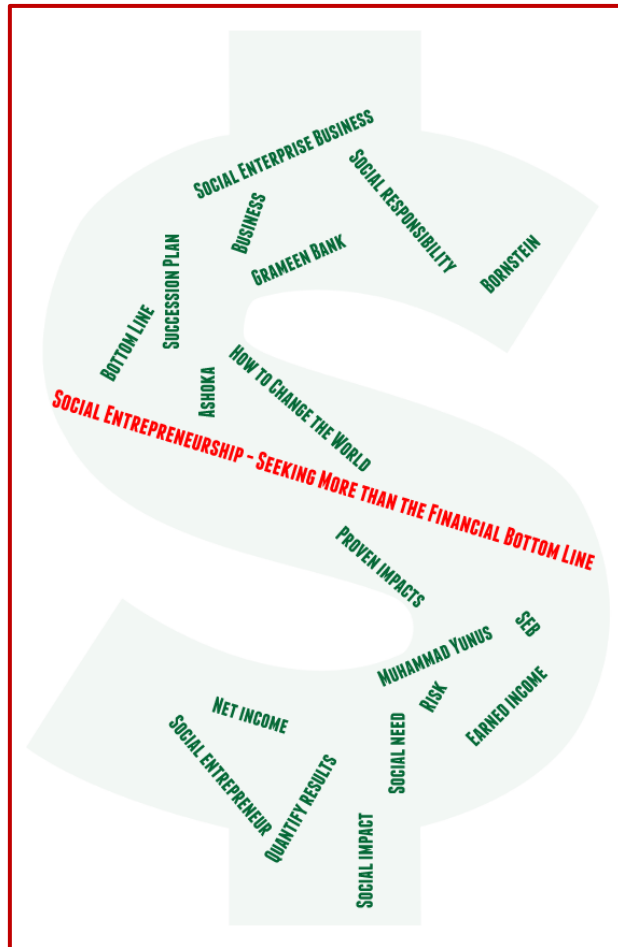
1. What must an SEB do to be competitive?
  - a. The organization must show that it has a long-term strategy that includes earned income.
  - b. Earn as much money as possible in short period.
  - c. Disregard the environmental regulations, and save money.
  - d. Buy out all the competition.
  - e. Advertise
2. We want SEBs to create \_\_\_\_\_ directly through its social impact outlined in its mission statement, and indirectly through the practice of social responsibility by adopting sustainable business practices.
  - a. Money
  - b. Opportunities
  - c. Positive social change
  - d. Environmental regulations
  - e. Trade opportunities

3. For those businesses that do not plan to continue, it is necessary that the business has a(n)
  - a. Opportunity cost
  - b. Financial stability
  - c. Exit strategy
  - d. Goodbye letter
  - e. Ceremony
4. What must an SEB succinctly define?
  - a. Business model
  - b. Business logo
  - c. Succession plan
  - d. What it is trying to achieve
  - e. Earned income
5. What are the two different types of business talked about in the lesson?
  - a. SE and SRB
  - b. SRB and BES
  - c. SEB and SE
  - d. Risky and Safe
  - e. SRB and SEB
6. True or False: An SEB can be organized as a for-profit or nonprofit enterprise; it explicitly intends to address a social problem by using earned revenue strategies.
7. True or False: For an organization to be considered a viable SEB, it cannot rely solely on grants, fundraisers donations, and public sector subsidies.
8. True or False: Examples of areas for SEs include providing clean drinking water; alleviating poverty through better healthcare; protecting our oceans from pollution; employment opportunities etc.
9. True or False: SEBs are not primarily driven by a financial bottom line, they primarily exist to address a social problem.
10. True or False: Socially responsible entrepreneurs are not motivated by the financial bottom line.

### **What to Do Before the Next Lesson**

Have a look [here](#). This web site provides a summary of Ashoka's 14 newest fellows in the United States. Of the 14, which one is the most interesting to you? Why?

Continue working on your business, if it is launched, or continue refining and iterating your lean canvas based on your most recent interviews of prospective customers. Is your business primarily focused on profit? Or is your business a social enterprise?







## Lesson Twenty-Three: Macro vs. Micro Social Entrepreneurship

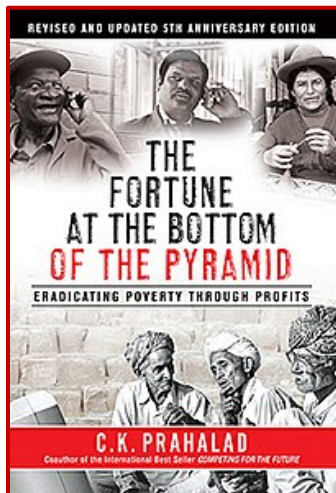
Please make sure you watch these videos before reading the lesson below.

<a href="https://www.youtube.com/edit?o=U&amp;ar=1&amp;video_id=sq38_B5oPtE">https://www.youtube.com/edit?o=U&amp;ar=1&amp;video_id=sq38_B5oPtE</a> (8:47) – “Macro vs. Micro Social Entrepreneurship”
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<a href="https://www.youtube.com/watch?v=jk5LI_WcosQ">https://www.youtube.com/watch?v=jk5LI_WcosQ</a> (9:03) – “Social Entrepreneurs: Pioneering Social Change”
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### The Big Picture

Do you know that nearly half the world’s population of 7.6 billion people live on less than \$2.50 a day? Also, consider this startling fact: 1.3 billion people live in extreme poverty, which is less than \$1.25 per day. Such somber statistics were the subject matter of a book called *The Fortune at the Bottom of the Pyramid*, by Dr. C.K. Prahalad. The main point of Dr. Prahalad’s book is to encourage large businesses to adopt a view of the world that recognizes a tremendous market for corporate goods and services if these corporations change their business models to reflect smaller sizes sold at much lower prices.



Profits from the *private sector*, including profit-seeking, socially responsible businesses (SRBs) and multinational corporations, are a necessary condition to add value to society. Increases in financial wealth are measured by profits. Typically, though, short-term profits are the driving force behind the business, not long-term value to the community.

In the past 40 years, a new type of entrepreneur has been identified—the social entrepreneur. As you learned in Lesson 22, we classify a business that is started by a social entrepreneur as a social enterprise business (SEB). Social entrepreneurs are risk takers, but instead of being driven by a financial bottom line, they primarily exist to address a social problem. However, they must be driven by the financial bottom line, too, in order to achieve their number one goal of addressing societal

problems.

This leads to the question of government's role in creating social value. Government is sometimes called the *public sector*. Government collects taxes from successful businesses and employees and then re-distributes these taxes in various forms. So, isn't it government's responsibility to ensure safety, fairness and efficiency for its citizens?

With the private sector's emphasis on short-term profits, and government's inability to meet many of society's needs, there has arisen the need for a third sector. Famous management guru, Peter Drucker, called this *social sector*. Here, individuals use their business knowledge and skills to create businesses whose primary mission is to create social value. Sounds like social entrepreneurs, right?



In this lesson, we will social entrepreneurs who work to solve large societal problems “Macro SEs.” For those SEs just starting out—like some of you in this class—let us call them “Micro SEs.” After comparing the two types of entrepreneurs, we will examine a Micro SE, and see how it someday might become a Macro SE.

### **Macro vs. Micro Social Entrepreneurs**

Muhammad Yunus, founder of the Grameen Bank, started out small. He provided small loans to impoverished women in Bangladesh to help them start new entrepreneurial ventures. Yunus ultimately provided microloans to poor people around the world, and he became a Macro SE. He was so successful that he won the Nobel Peace Prize in 2006.

Microsoft's founder, Bill Gates, started out as a regular commercial entrepreneur, and he encouraged his employees to be socially responsible. Thus, Microsoft started out as a socially responsible business (SRB). Gates stepped away as Microsoft's chairman of the board in 2014 so that he could devote more time to the Bill and Melinda Gates Foundation, which was founded in 2000. The Gates Foundation's supports projects to improve health, reduce poverty, and increase public access to technology. In this way, Bill Gates and his wife are main supporting Macro SEs.



It is interesting to note that Gates, a dropout from Harvard, was invited to give the [commencement speech](#) to the 2007 Harvard graduating class. While he was appreciative of the things he learned during his brief stay at Harvard, he also left “with no real awareness of the awful inequities in the world—the appalling disparities of health, and wealth, and opportunity that condemn millions of people to lives of despair... I left campus knowing little about the millions of young people cheated out of educational opportunities here in this country. And I knew nothing about the millions of people living in unspeakable poverty and disease in developing countries. It took me decades to find out.”



## Questions and Answers

**Question:** The transcript from Bill Gates’ speech at Harvard can be found [online](#). According to Gates, one of the challenges for him and his wife, Melinda, was to find an answer to this question: How can we do the most good for the greatest number with the resources we have?

How has Bill Gates addressed this challenge? What does he encourage Harvard graduates, faculty and administrators to address this challenge?

**Answer:** He and his wife started the Bill and Melinda Gates Foundation. As you can see from reading the article and visiting the foundation web site, Gates learned how millions of children in developing countries were dying from diseases that are no longer a problem in developed countries. He realized that neither the free market nor the government was addressing this problem effectively. Gates believes that the best way to address this challenge is through what he calls “creative capitalism,” whereby businesses can make a profit by serving the needs of the poor. He also called for more citizen activism, whereby individuals can press the government to make poverty-alleviation a priority. But before business and government will change their behavior, individuals like those at Harvard must turn their CARING about the problem into ACTING on the problem. To do this they must present the problem in a simple manner, because otherwise it is easy for well-intentioned people to quit caring. Gates offered a four-stage approach to reduce complexity:

- determine a goal
- find the highest-leverage approach
- discover the ideal technology for that approach and, in the meantime,
- make the smartest application of the technology that you already have.

Near the end of his speech, Gates left Harvard faculty, alumni and students with this question: “Should our best minds be dedicated to solving our biggest problems?”

### **Feed a Man a Fish, or Change the Fishing Industry?**

Have you ever heard the line, “Feed a man a fish, he eats for a day; teach a man to fish and he eats for a lifetime”? Well, a non-government organization (NGO) may feed the man, and a Micro SE may design an innovative way to teach the man a new way to catch fish, but the Macro SE sees that the fishing industry is in trouble, and designs a system to revolutionize the industry. Let’s expand the saying: “Feed a man a fish, he eats for a day; teach a man to fish he eats for a while; change the troubled fishing industry and he eats a healthier meal for a lifetime.”



Here is another example. Assume a teenager is asked by her school to serve soup at a homeless shelter for a weekend. In doing so, she is providing a service for the community. But what if the teen offers to help the NGO’s manager write a business plan that suggests new ways to generate contributions from donors and streamline operations? Here she is beginning to think like a Micro SE. Finally, what if she discovers that this is her passion in life, and that she wants to find new ways to reduce the causes of homelessness and poverty? If she risks her own cash to do so, she is a Macro SE.

In the next part of this lesson, we will look at an example of a Micro SEB, with the chance to become a Macro SEB. The business is called [Chico Flax](#). We will review its lean canvas, take a look at the pitch deck, and investigate ways for it to obtain startup cash financing.

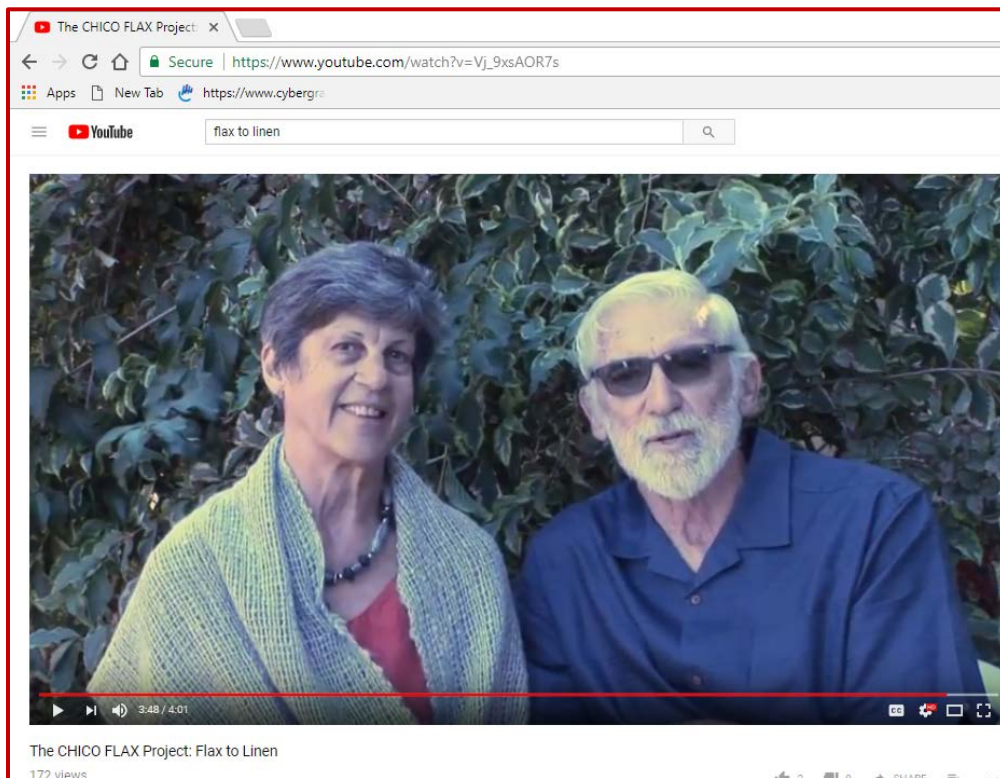
### **Chico Flax – An Example of a Micro SE**

Sandy Fisher is a social entrepreneur and master weaver from Chico, California. Sandy, along with her husband Durl Van Alstyne, created Chico Flax LLC in February 2018. Chico Flax’s main goal is to turn flax seed into linen. Sample linen products made from linen include table runners, placements, napkins, tablecloths and hand towels.





To start their company, Sandy and Durl built a crowdsourcing site on Indiegogo. As a result of the 30-day run on Indiegogo (you can watch the video [here](#)), they raised \$4,000. With the funds, they purchased a special flax seed, called the Suzanna strain, from Belgium, and built some hand-held equipment to turn harvested flax into woven linen.



“Most people don’t know that linen is produced from flax seed,” Fisher said. “And almost no one knows that Northern California is an ideal place to grow flax as a winter crop.” Sandy and Durl have been experimenting with growing flax in their own garden, and nearby community gardens, for the

past five years. Recently, they teamed up with two Chico State agriculture professors to refine further their techniques in a garden at the university farm.



“We are now certain that flax can thrive in Northern California, but we need more people to grow it,” Fisher added. Hobby farmers can now purchase “Suzanna” species flax seeds from Fisher and Van Alstyne’s new company, Chico Flax LLC.

Once enough flax is planted and harvested, Chico Flax processes the flax fiber into spun linen. Nevertheless, this is very hard work, and currently must all be done by hand.

“We consider ourselves to be an ideal social enterprise,” Van Alstyne said. “Eventually, we want build a mill in Butte County to create good, clean jobs that don’t pollute the environment. We strive to produce a local fabric that can represent our place here in Northern California.”

### **Chico Flax’s Lean Canvas**

In Lessons Five and Six, we described the lean canvas business model. Below is Chico LLC’s lean canvas. Take a close look at each of the nice cells below.



<b>Problem(s)</b> <ul style="list-style-type: none"><li>• Process: It's hard to turn flax into linen</li><li>• Education: Most people don't know that flax turns into linen</li><li>• Environment: Many people don't like wearing clothes that are made in sweatshops, using toxic dyes</li></ul>	<b>Solution(s)</b> <ul style="list-style-type: none"><li>• Build an environmentally-friendly flax mill in Chico</li><li>• Offer training workshops in the local community</li></ul>	<b>Unique value proposition(s)</b> <p>Sandy Fisher is a well-known weaver in Chico</p>	<b>Unfair advantage</b> <p>Access to free or inexpensive resources at Butte College and Chico State (e.g., students, farm, faculty)</p>	<b>Customer segments</b> <ul style="list-style-type: none"><li>• Hobby farmers</li><li>• Sustainability advocates</li><li>• Local weavers</li></ul>
	<b>Key Metrics</b> <ul style="list-style-type: none"><li>• Newsletter subscriptions</li><li>• Buyers of Suzanna flax</li><li>• Facebook likes</li><li>• Web-page clickthroughs</li></ul>		<b>Channels</b> <ul style="list-style-type: none"><li>• Fibershed Producer Program</li><li>• Social engine marketing</li><li>• Google ads</li></ul>	
<b>Cost structure</b> <ul style="list-style-type: none"><li>• Equipment to harvest, scutch, comb, weave and store flax</li><li>• Advertising and promotion</li><li>• Legal and accounting</li></ul>			<b>Revenue streams</b> <ul style="list-style-type: none"><li>• Sale of flax seed from our seed bank</li><li>• Sale of spun linen to commercial weavers</li><li>• Sale of flax by-product (paper, tow)</li><li>• Fees from education workshops</li></ul>	

<http://chicoflax.com>

## Questions and Answers

**Question 1:** Why is Chico Flax a social enterprise?

**Answer:** Durl and Sandy's main goal is not to make huge profits. Instead, their focus is to create locally-sourced linen fabric as an alternative to buying clothes from commercial weavers and fashion designers who pay poverty wages and pollute the environment. During the startup phase in their business, financial resources include "unearned income" (e.g., donations from Indiegogo, fundraisers, corporate grants, charitable contributions from philanthropists)) and "earned income" from sale of flax seed to local gardeners. Additional earned income is expected from fees from educational workshops.

**Question 2:** Is Chico Flax LLC an example of a Micro SE or a Macro SE?

**Answer:** Currently, as they are just starting out, Chico Flax is a Micro SE. However, since there currently are no mills that turn flax to linen in the United States, they have the possibility of becoming a Macro SE.

**Question 3:** How does a lean canvas for a commercial business, where profits are the most important goal, differ from an SEB?

**Answer:** The business plan for an SEB is a bit more complicated than a SRB business plan, mainly because the SEBs' problems are usually more complicated. Remember Bill Gates' comments? If you're planning to start a social enterprise, you should author a lean canvas like Sandy and Durl have done with Chico Flax LLC. While similar to commercial business plan, an SEB's plan requires additional thought and preparation because it isn't nearly as easy to measure social value as financial profits. The key question to ask is: in three years, how will we know we've been successful? How will we measure our impact?

### **Taking Action: Exercise 1**

Bill Gates has offered a broad approach for social entrepreneurs to take when deciding to start a social venture. One example of such a venture is the KickStart SuperMoneyMaker pump, created by two social entrepreneurs, Martin Fisher and Nick Moon.

1. Go to the following website and navigate it for about 10 minutes: <http://kickstart.org>.
2. After visiting the website, answer the following questions:
  - Describe the KickStart SuperMoneyMaker pump.
  - One of the success stories is Aqwalina Merengue from Tanzania. What makes her story a success?
  - What is KickStart's mission? Are Martin Fisher and Nick Moon Macro SEs or Micro SEs? What about Aqwalina Merengue? Is she a Macro SE or Micro SE?
3. Take 12 minutes to watch the video link here: <http://www.youtube.com/watch?v=nIfhOeSH3j8>. This video shows a PPT presentation by Martin Fisher. What main lesson has he learned in his work in Kenya and Tanzania? According to Martin Fisher, what's the number one need that poor people have?

### **Taking Action: Exercise 2**

As a teenager in the TRIS program, you may be asking yourself, "Can I really make a difference?" The answer is, "You can if you think you can." Though you're "only" a teenager, you have an incredible amount of power.

In his speech at Harvard, Bill Gates also said, "Imagine, just for the sake of discussion that you had a few hours a week and a few dollars a month to donate to a cause—and you wanted to spend that time and money where it would have the greatest impact in saving and improving lives. Where would you spend it?"

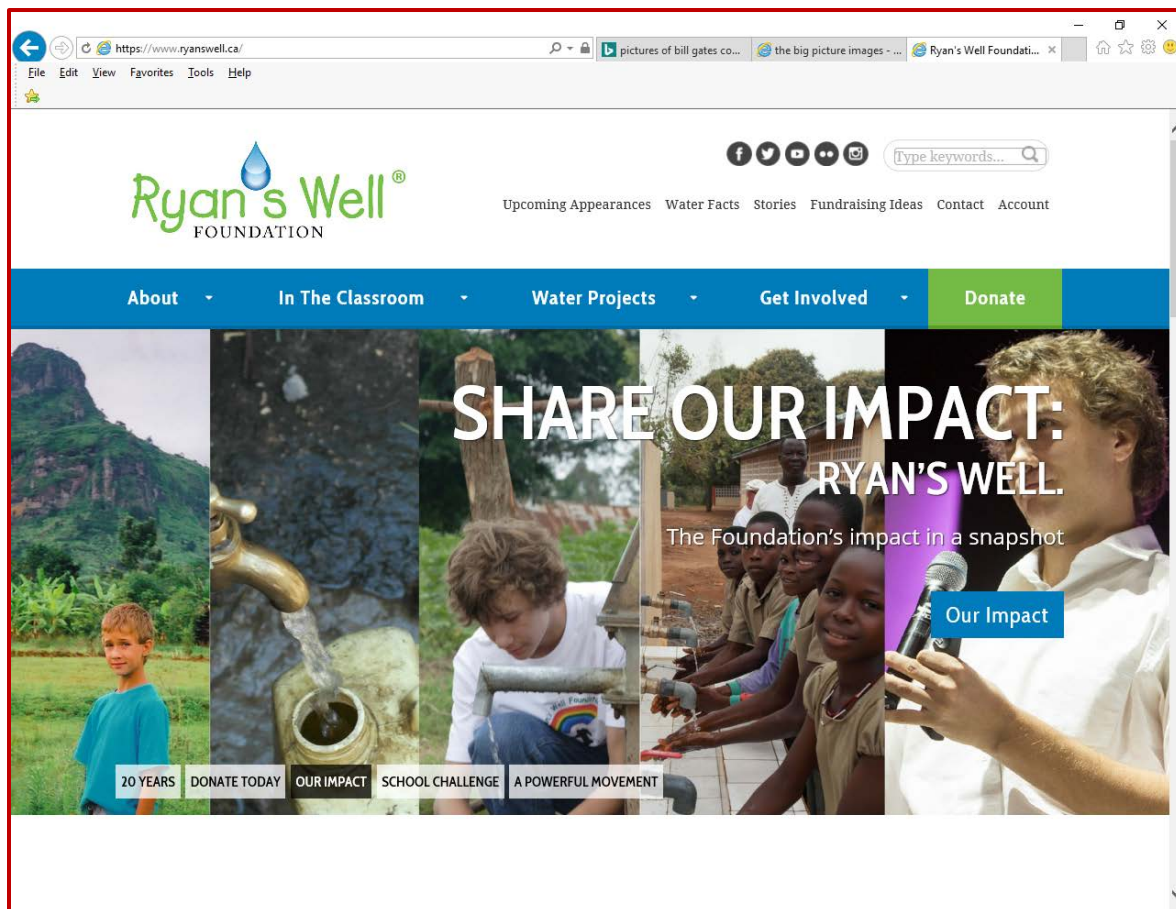
Throughout this course, as you have studied each lesson, we have asked you to create a real business enterprise that either:

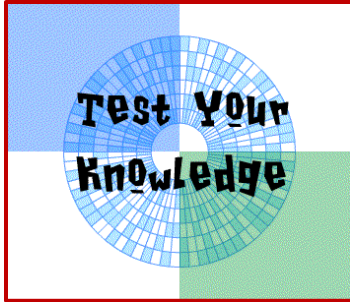
- generates financial profit, in a socially-responsible manner (we call this an SRB, short for a socially-responsible business), or
- generates social value, with a financial profit element (we call this a social enterprise business, or SEB)

- generates social value, but relies entirely on donations and contributions from donors (this is a nonprofit, charitable enterprise; it is **not** an SEB).

One example of the third type of business enterprise was founded by a young man name Ryan Hrelak of North Greenville, Canada, when he was “only” 7 years old. Ryan is now 24 years old, and he was the inspiration behind the Ryan’s Well Foundation. Ryan’s foundation is a wonderful example of a nonprofit, charitable organization.

1. Go to the following website and navigate it for about 10 minutes: <http://www.ryanswell.ca/about>
2. After visiting the website, answer the following questions:
  - What’s the mission and vision of the Ryan’s Well Foundation?
  - Where was the first “Ryan’s Well” completed? When?
  - The Ryan’s Well Foundation has several partners that now help raise money to build wells. Name three or four of them.
  - How do you think the KickStart water pump, where local entrepreneurs buy pumps and use them to irrigate fields and gardens, might work with the Ryan’s Well Foundation? Is KickStart sustainable? How about Ryan’s Well?





1. What do we call social entrepreneurs who work to solve large societal problems?
  - a. Micro SEs
  - b. Macro SEs
  - c. Hero
  - d. Geniuses
  - e. CEOs
  
2. What does the Gates Foundation do?
  - a. Invest in small businesses
  - b. Travel the world
  - c. Support projects that will make them more money
  - d. Support projects that improve health, reduce poverty, and increase public spending
  - e. Provide tax-free services.
  
3. What is Chico Flax's main goal?
  - a. To make money
  - b. Create jobs
  - c. Compete with community gardeners
  - d. Sell overseas
  - e. Turn flax seed into linen
  
4. About half the world's population lives on \$\_\_\_\_ per, or less?
  - a. \$2.50
  - b. \$3.50
  - c. \$250.00
  - d. \$320.00
  - e. \$1.00
  
5. The main point of Dr. Prahalad's book is \_\_\_\_\_.
  - a. About ranking the richest people in the world.
  - b. About teaching young entrepreneurs how to get investors to buy into your idea.
  - c. To encourage pollution so businesses can earn more money.

- d. To encourage large businesses to adopt a view of the world that recognizes a tremendous market for corporate goods and services if they change their business model to reflect smaller sizes sold at much lower prices.
  - e. To emphasis on short-term profits and the government's inability to meet many of society's needs.
- 6. True or False: A unique value proposition for Chico Flax is that Sandy Fisher is a well-known weaver in Chico.
- 7. True or False: An unfair advantage for Chico Flax is they are located in Chico, CA.
- 8. True or False: The three customer segments for Chico Flax are hobby farmers, sustainability advocates, and local weavers.
- 9. True or False: Durl Van Alstyne and Sandy Fisher's main goal is to make profits.
- 10. True or False: Chico Flax started out as a Macro SE.

### **What to Do before the Next Lesson**

Continue working on your business, if it's launched, or continue refining and iterating your lean canvas based on your most recent interviews of prospective customers. Is your business primarily focused on profit? Or is your business a social enterprise?



## Lesson Twenty-Four: Doing Business in the Global Community

Please make sure you have watched the following videos before reading this lesson

<a href="https://www.youtube.com/watch?v=665TPQX5b2g">https://www.youtube.com/watch?v=665TPQX5b2g</a> (10:30) – “Doing Business in the Global Community”
<a href="https://www.youtube.com/watch?v=-KoLWdk5dMs">https://www.youtube.com/watch?v=-KoLWdk5dMs</a> (3:57) – “Global Currencies: What Is Forex? - Foreign Exchange, Currency Trading Market”
<a href="https://www.youtube.com/watch?v=7nl7j0_S8dY">https://www.youtube.com/watch?v=7nl7j0_S8dY</a> (1:50) – “Imports and Exports”
<a href="https://www.youtube.com/watch?v=8-voHl16vFE">https://www.youtube.com/watch?v=8-voHl16vFE</a> (1:29) - The World Trade Organization (WTO) Explained in One Minute
<a href="https://www.youtube.com/watch?v=ZZ3qnxhMaoA">https://www.youtube.com/watch?v=ZZ3qnxhMaoA</a> (4:45) – “Richard Branson: My approach to life”

### The Big Picture

What an exciting time to be alive! We cannot say it any better than [Kairos](#): “We believe the brightest young minds have the potential to innovate in areas where old industries and governments have failed. When a young innovator takes the leap to build a company, we have a stage for them to share their venture with the world.”

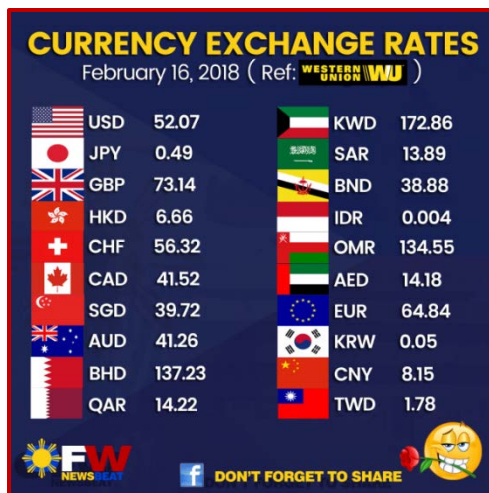
With global opportunities come challenges. There will be new jobs created as robots replace “old” jobs with repetitive tasks. There will be new jobs to protect our privacy from companies who want to exploit us. There will be new jobs in journalism to discern real news from fake news. There will be new jobs when self-driving cars and trucks replace human drivers. The list goes on. There is a tremendous need for socially responsible businesses (SRBs) and social enterprises (SEBs) to fill the void in the social sector, when the public sector and private sector fail to address global problems.





This lesson addresses the issue of doing business in our exciting, but scary, new world. The first place to start in trying to understand how our beautiful planet is to travel to a new country. The old saying goes, “Of all the books in the world, the best stories are found between the pages of your passport.”

If you have ever traveled to another country, you probably exchanged your country’s currency into the local currency. That is usually the first thing you do when you get off the airplane. For example, if you had \$100 U.S. *dollars* (USD) on April 20, 2017, and exchanged it for Great British *pounds* (GBP) at the airport or an ATM, you would have received 78 GBP. One year later, assume you have 78 GBP in your pocket and you wish to exchange this currency for USD on April 20, 2018. You could get \$108.97 for your pounds because the pound got stronger relative to the dollar. This is an example of a foreign currency exchange gain!



In today’s global world, you may soon want to “go global” with your business. Your business might someday want to buy supplies from other countries (i.e., imports). Alternatively, you might you sell your product in foreign markets (i.e., exports). You may well advertise your products on Instagram, YouTube, Facebook, or Twitter. Or you may even want to enter partnerships with friends in another country.



Opportunities abound for entrepreneurs with a global outlook. Doing business with, and within, other countries poses more risk. But there is also the chance of more return. Is the risk worth the return?



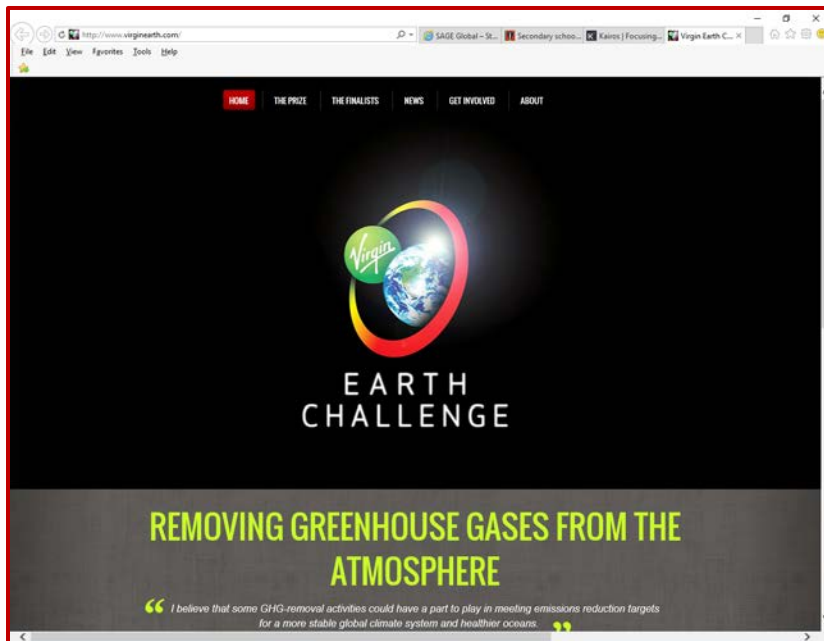
This lesson starts by looking at two famous, global entrepreneurs: Richard Branson and Michael Dell. Then, we will take a brief look at the United Nations' Global Compact and Sustainable Development Goals (SDGs). After that, we will cover the following topics: how entrepreneurship can overcome poverty and reduce terrorism; how free trade, with a free flow of imports and exports, is usually better than trade barriers such as tariffs, subsidies, and quotas; and how some of the world's leading global organizations impact global business. We will end this lesson with a return to the topic of foreign currency exchange gains and losses.

### **Richard Branson and Michael Dell—Global Role Models**

One of the world's most famous entrepreneurs, Great Britain's Sir Richard Branson, founded the Virgin Group, which controls more than 400 companies. The most famous company is Virgin Airlines and Virgin Records. The Queen of England knighted him in 2000 in Buckingham Palace for his "services to entrepreneurship." In 2004, he founded a company called Virgin Galactic, a spaceflight corporation that will soon be selling tickets to outer space!

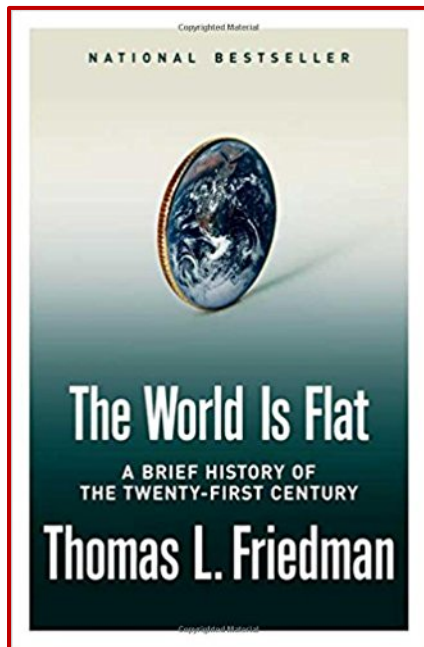


Branson has offered a prize of up to \$25 million to anyone who can figure out a way to reduce carbon dioxide from the air. Eleven finalists have now been selected. You can read about them at <http://www.virginearth.com/>.

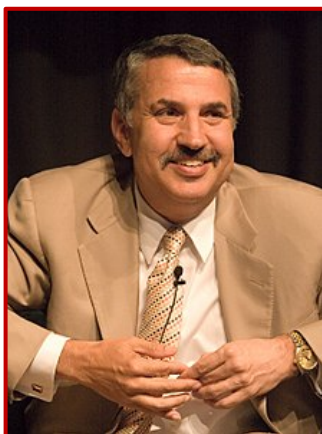


Another global entrepreneur is Michael Dell, who founded Dell Computers. A Dell computer laptop has a “supply chain” of about 400 companies located in three different continents. The Dell story was a case study used by Pulitzer prize-winning journalist, Thomas Friedman, to suggest what he calls the “Dell Theory of Conflict Prevention.” Friedman, who has written several books on globalization and international business, described the Dell Theory in his bestselling book, *The World is Flat*: “No two countries that are part of a major global supply chain, like Dell’s, will ever fight a war against each other as long as they are both part of the

same global supply chain. Because people embedded in major global supply chains don't want to fight old-time wars anymore.”



With today's communication tools and distribution channels, the world has shrunk and, as Friedman says, become “flatter.” New business opportunities abound—even global ones for high school students. One example is a group of students from Buffalo, New York, which has created a barter business with high schools in the West African country of Ghana. The U.S. students purchase water filters manufactured in upstate New York and exchange them for cloth from their Ghana trade partners.



*Thomas Friedman*

The advantages of the information age are somewhat diminished by such new challenges as global warming, energy dependency on fossil fuels, air and water pollution, clear-cutting of

forests, inadequate education systems, and abject poverty and terrorism. Nonetheless, socially-responsible businesses (SRBs) and social enterprise businesses (SEBs) see opportunity in the face of these problems. As C.K. Prahalad said in his book, [\*The Fortune at the Bottom of the Pyramid\*](#), “Market development at the ‘bottom of the pyramid’ can create millions of new entrepreneurs at the grass roots level—from women working as distributors and entrepreneurs to village-level micro enterprises... Entrepreneurship on a massive scale is the key.”

## **Entrepreneurship, Poverty, and Terrorism**

Poverty usually results from inadequate or low productivity, not lack of resources or an unwillingness to work hard. To overcome poverty, resources must be used more effectively, and production must be increased. This cannot happen if the government is corrupt, if businesses do not engage in fair trade, or if current business models are inadequate to meet the needs of the poor.

The late C.K. Prahalad, a renowned professor at the University of Michigan, offered a new philosophy for businesses wanting to make a profit by doing business with impoverished countries. He urged companies to make smaller units, and to sell them at lower profits per units. This would attract a larger market—one with less money to spend, but the increased volume of sales would make it worthwhile. Can companies manufacture quality sunglasses and sell them for under \$2, and still make a profit? Can companies build tiny houses and sell them for less than \$100, and make a profit? What about solar lanterns for less \$10? Bicycles for less than \$20? These are exactly the kinds of products that are waiting to be mass-produced and sold by entrepreneurs like you!



How will people at the bottom of the pyramid get the cash to buy such products? Do you remember Martin Fisher from Lesson 22? He is the person who invented the KickStart SuperMoneyMaker pump. According to Fisher, the number one need that poor people have is to earn cash by becoming entrepreneurs. If Fisher is right, and if this is indeed one way to escape poverty, then what about terrorism? Do you think poverty and terrorism are related?

Laurie DiPadova-Stocks, executive director of the School of Public Affairs and associate professor at a Park University in Missouri, pointed out that peace cannot be addressed without considering poverty. She urges American educators to design lessons that get students out of their classrooms and into the community—very similar to what we are asking entrepreneurial students like you to do.

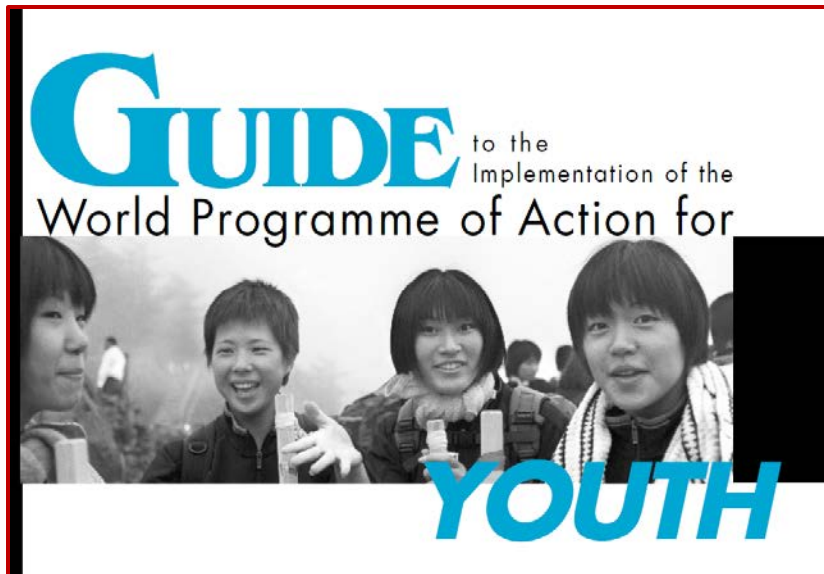
Thomas Friedman, who wrote, *The World is Flat*, also believes terrorism can be reduced through youth entrepreneurship. He said, “Give young people a context where they can translate a positive imagination into reality, give them a context in which someone with a grievance can have it adjudicated in a court of law without having to bribe the judge with a goat, give them a context in which they can pursue an entrepreneurial idea and become the richest or the most creative or most respected people in their own country, no matter what their background, give them a context in which any complaint or idea can be published in the newspaper, give them a context in which anyone can run for office—and guess what? They usually don’t want to blow up the world. They usually want to be part of it.”

DiPadova-Stocks and Friedman are not merely idealists or dreamers. They truly believe that commercial and social entrepreneurship can reduce poverty and terrorism.

Social entrepreneurs are a vital new part of the social sector to help address some of the world’s most challenging problems. They join foundations and nonprofits as key players in world, to help the public sector and the private sector create solutions to poverty and sustainability of our earth’s natural resources.

### **United Nations Youth Action Program and Sustainable Development Goals**

Teens interested in starting a business with a global perspective can find some great ideas by skimming the United Nations booklet called the [\*World Programme of Action for Youth\*](#) (WPAY). This document recognizes the importance of youth, because they are “a major human resource for development and key agents for social change, economic development and technological innovation. The empowerment of youth depends on and reinforces the empowerment of society at large.” Fifteen priority areas were identified.



## Taking Action

**Exercise 1:** Go to the WPAY's booklet. Review the first five or six pages. Page 2 lists the 15 priority areas. After you have done so, choose two or three of the priority areas above. Does your business address any of the areas you have identified?

## Sustainable Development Goals (SDGs)

Similar to the WPAY's priorities, the UN identified 17 Sustainable Development Goals (SDGs) as part of its agenda to transform our world by encouraging people to develop a plan to increase the well-being of people and the planet, with a special emphasis on eradicating poverty. Here is a list of the 17 SDGs.



SDG 1: End poverty in all its forms everywhere.	SDG 10: Reduce inequality within and among countries.
SDG 2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture.	SDG 11: Make cities inclusive, safe, resilient and sustainable.
SDG 3: Ensure healthy lives and promote well-being for all at all ages.	SDG 12: Ensure sustainable consumption and production patterns.
SDG 4: Ensure inclusive and quality education for all and promote lifelong learning.	SDG 13: Take urgent action to combat climate change and its impacts.
SDG 5: Achieve gender equality and empower all women and girls.	SDG 14: Conserve and sustainably use the oceans, seas and marine resources.
SDG 6: Ensure access to water and sanitation for all.	SDG 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss.
SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all.	SDG 16: Promote just, peaceful and inclusive societies.
SDG 8: Promote inclusive and sustainable economic growth, employment and decent work for all.	SDG 17: Revitalize the global partnership for sustainable development.
SDG 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation.	



## Taking Action

**Exercise 1:** Read this brief article: [3 Ways Your Business Can Act Locally and Impact Globally](#) by Saudia Davis. She describes three ways that companies can change the world by starting with local actions. What are these actions?

**Exercise 2:** Three ambitious teens from Ireland created a company called Greener Globe. Who are these three young men and what did they invent? You can find their website at <http://greenerglobe.eu>.

## Free Trade, Imports, and Exports

Usually, international trade between two countries helps boost the economies of both countries—as long as the trade is legal and fair. Before doing business in another country, do you think it is important to be aware of the human rights and environmental policies there? Do you want to import goods from India or Bangladesh, if you knew that slave laborers or young children made these goods? Would you want to buy a product from China if you knew that the company was illegally polluting the nearby river? Would you want to buy a diamond from Sierra Leone if you knew that people died because of the illegal trading of that diamond?



To reward or punish countries for desired behavior, countries can create special tariffs, subsidies or quotas on targeted goods. *Tariffs* are “add-on” taxes placed on the price of imported goods. Tariffs give domestic manufacturers an advantage because they can sell their products at a lower price than their foreign competitors can. Tariffs, while favoring the industry within the country, are unfavorable to foreign companies.

Alternatively, governments can give domestic businesses a *subsidy*, which money is given by the government to a domestic business, which in turn lowers its production costs. The subsidy thereby allows the domestic manufacturer to lower its selling price to domestic buyers, giving it an advantage over producers. Finally, a *quota* is a fixed amount, or number, of goods that a government allows its domestic companies to buy from another country, thereby controlling the overall supply of goods in the domestic market. Consider Country A limiting the number of widgets imported from Company B. This limits the overall number widgets in the market, thereby driving up the selling price of domestic goods.

Consider a real example, where the U.S. government limits the amount of aluminum to be purchased from China by charging tariffs or assigning quotas. This would punish China, but it would also cause the price of aluminum to increase in America. As a rule, tariffs, subsidies, and tariffs are hurdles to the free flow of international trade. However, governments often use these tools to send foreign countries a message that they should change their behavior. The World Trade Organization (WTO) “is the only global international organization dealing with the rules of trade between nations. At its heart are the WTO agreements, negotiated and signed by the bulk of the world’s trading nations and ratified in their parliaments. The goal is to help producers of goods and services, exporters, and importers conduct their business.” Essentially, the WTO helps governments sort out trade problems.



Two other international organizations are worth noting here. The International Monetary Fund (IMF) is a global institution consisting of 188 countries. Its main purpose is to try to keep the economies of each country operating smoothly. In certain cases, when a country’s economy is in a crisis, the IMF acts as a short-term bank, lending the government money so that it can overcome the crisis. To learn more about the IMF, go to <http://imf.org/external/about.htm>.

The World Bank is another global institution, and its members are the same 188 members of the IMF. The World Bank is not a bank in the common sense; rather, its mission is to provide assistance to countries in their efforts to reduce poverty. It provides low-interest loans and grants to developing countries to support health, infrastructure (e.g., roads, electrical plants, dams and sewage systems), communications, etc. To learn more about the World Bank, go to <http://www.worldbank.org/>

### **Foreign Currency Exchange Gains and Losses**

We started this lesson with an example of you traveling to Great Britain and experiencing a foreign currency exchange gain. We will end this lesson with a similar example, and introduce several new terms, such as denomination, foreign currency unit, indirect quote, direct quote, foreign currency gains and losses.



Assume your business, which is located in the U.S., sells your product to a customer in France, today, April 1, 2018. Your selling price is \$10,000, which is 8,105.70 EURO on April 30, 2018. You and your customer agree that he will pay you back in 8,105.70 EURO, thirty days from now. This contract is *denominated* in euros.

How did we get 8,105.70 EURO? From the table below, we see that the *indirect quote* on April 1 is \$1 for .8105670 EURO. The inverse .8105670 is 1.2337, as follows:

$$1/.810569831 = 1.2337$$

This gives us the *direct quote* (i.e, spot rate). The direct quote is the ratio of 1 FCU divided by the indirect quote. Look at the table below showing indirect and direct quotes on April 1 and April 30.

		Indirect quote		Direct quote	
		US \$	FCU	FCU	US\$
		US \$	EURO	EURO	US\$
4/1/2018	Historical	\$1	0.810569831	1 pound	1.2337
4/30/2018	Current	\$1	0.813140348	1 pound	1.2298

Has the dollar gotten weaker or stronger? Do we have a foreign currency transaction gain or loss?

On April 1, it looks like we will collect 8,105.70 Euro on April 30. But on April 30, when the customer wires us this amount of Euro, we can exchange it at a rate of \$1.2298 per Euro. So, we convert the transaction as follows:

$$8,105.70 \text{ Euros} * 1.2298 \text{ Dollars} = \$9,968.39$$

Because the dollar has gotten a little bit stronger relative to the EURO, we have a foreign currency transaction loss of \$31.61.



## Taking Action

You can find several currency calculators on the Internet. We suggest you go to this one and answer the following questions. <https://www.bloomberg.com/quote/USDPHP:CUR>

**Exercise 1:** Using the Philippines peso as your FCU, and the US dollar as the domestic currency, fill out this table:

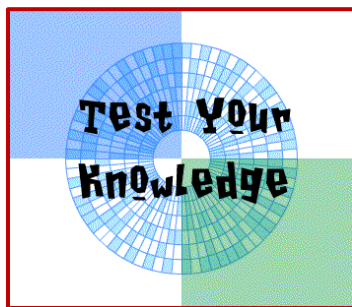
		Indirect quote		Direct quote	
		US \$	FCU	FCU	US\$
		US \$	PHP	US \$	PHP
3/30/2017	Historical	\$1	50.2	1 peso	0.0199
4/20/2018	Current	\$1	52.114	1 peso	0.0192

Has the dollar gotten weaker or stronger?

**Exercise 2:** Fill out the following table using the South African rand (ZAR) as the FCU and the US \$ as the domestic currency.

		Indirect quote		Direct quote	
		US \$	FCU	FCU	US\$
		US \$	ZAR	US \$	ZAR
3/30/2017	Historical	\$1		1 rand	
4/30/2018	Current	\$1		1 rand	

Relative to the rand, has the dollar gotten stronger or weaker between April 30, 2017 and April 30, 2018?



1. What is a foreign currency exchange gain?
  - a. When you lose money in a foreign country.
  - b. A change in the exchange rate where the money in the foreign country gets stronger and you get more money back.
  - c. Gaining pounds while traveling.
  - d. International trade
  - e. A change in the exchange rate where the money in the foreign country gets stronger and you get less money back.
2. About how many companies does Virgin Group control?
  - a. 100
  - b. 200
  - c. 300
  - d. 400
  - e. 500
3. Poverty usually results from \_\_\_\_\_.
  - a. Lack of resources
  - b. Government oppression

- c. Inadequate or low productivity
  - d. Not having a house
  - e. Being broke
4. The UN identified \_\_\_\_ Sustainable Development Goals (SDGs).
- a. Zero
  - b. Three
  - c. Fifteen
  - d. Seventeen
  - e. Twenty
5. How do governments usually reward or punish countries for desired behavior?
- a. By not talking to them
  - b. By going to war
  - c. By sending a lengthy email
  - d. By tweeting
  - e. By creating special tariffs or subsidies.

The following questions are all true or false.

One of the Sustainable Development Goals (SDGs) is to:

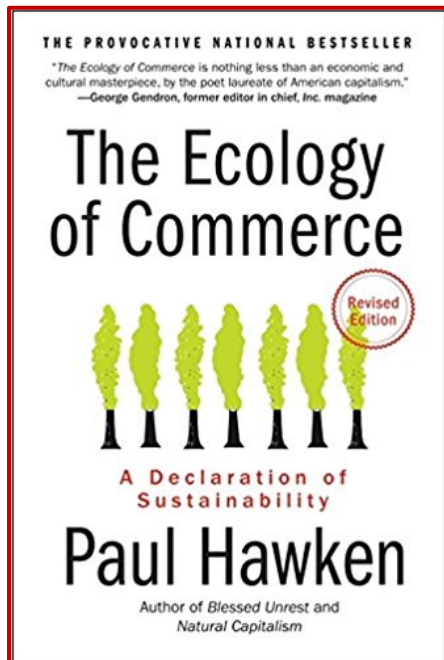
- 6. End poverty in all its forms everywhere.
- 7. End hunger, achieve food security and improved nutrition, and promote sustainable agriculture.
- 8. Achieve male dominance around the world.
- 9. Ensure access to water and sanitation for all.
- 10. Reduce inequality within and among countries.

## Summary

As Paul Hawken said in his 1993 book, *The Ecology of Commerce*: “The ultimate purpose of business is not, or should not be, simply to make money. Nor is it merely a system of making and selling things. The promise of business is to increase the general well-being of humankind through service, a creative invention and ethical philosophy.” Traditional capitalists may disagree with Hawken, but today’s world is more interconnected and interdependent than ever, creating an even greater need for businesses and policymakers to work together to find an “ecological model of commerce” so that everything that is produced can be reclaimed, reused, or



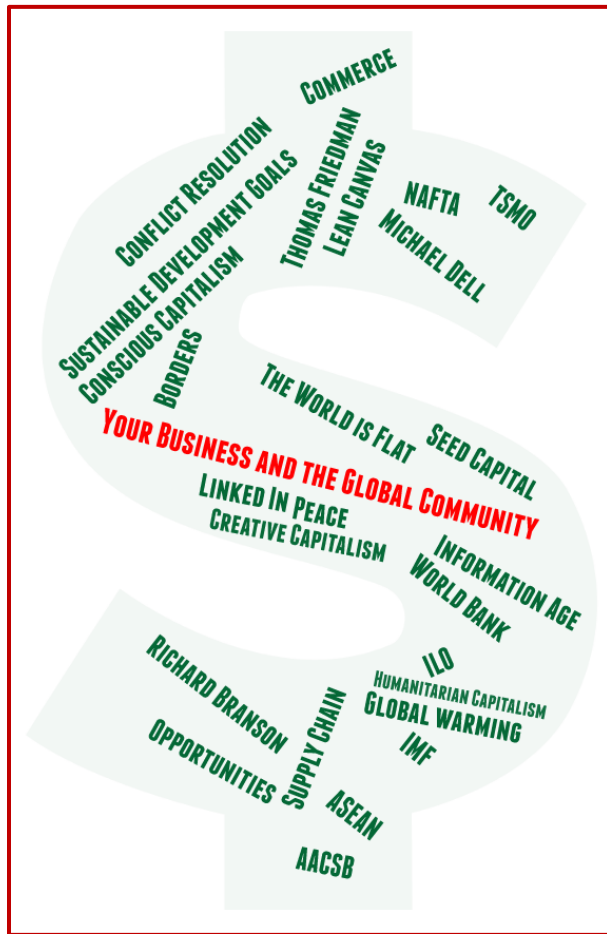
recycled. If the Dell Theory proves true, then youth entrepreneurship could be a secret weapon against terror—and global poverty. Hawken, in essence, is calling for a new brand of capitalism. Not a capitalism that believes that the only role of business is to make a profit; rather, a capitalism that sees that business also being socially responsible and good environmental stewards. In this course, let's call this humanitarian capitalism.



## What to Do Before the Next Lesson

Sir Richard Branson is a shining example of a social entrepreneur and a humanitarian capitalist. Please spend ten minutes [here](#) and learn more about why Branson is regarded as a social entrepreneur.

Please continue working on your business plan. At this point in the TRIS program, you probably have a good idea if you want to become an entrepreneur. The next lesson describes several career options in business. If you have doubts about becoming an entrepreneur, the knowledge and skills you have learned so far in the TRIS course will serve you well, whether you get a job right out of high school or whether you go to community college or a university.





## Lesson Twenty-Five: Going to College and Majoring in Business

Before reading this lesson, make sure you watch these videos:

<a href="https://www.youtube.com/watch?v=6NdtNBxda_M">https://www.youtube.com/watch?v=6NdtNBxda_M</a> – (9:23) Lesson 25 – “Going to College and Majoring in Business”
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<a href="https://www.youtube.com/watch?v=8lPbkHVxenU">https://www.youtube.com/watch?v=8lPbkHVxenU</a> (10:25) – “Economics of Education”
--

### The Big Picture

Going to college may or may not be in your plans, but consider this. A four-year degree is a solid investment. For example, the [Bureau of Labor Statistics](#) reported that the median wage of a full-time worker 25 years or older was \$1,286 a week for anyone with a bachelor’s degree, and \$713 for anyone with only a high school degree—a difference of \$573 a week.

That is a big number. Let’s look at it another way. Consider a woman named Mary, age 25, with a diploma from California State University, Sacramento. Next, let us take a man, Anthony, age 25, with a high school diploma from Anywhere High School.

Assume we expect both people to work until they are 65, giving them a 40-year career. Finally, assume that Mary will always earn about \$573 per week more than Anthony will throughout her career.

Taking 52 weeks a year, times 40 years, yields 2,080 weeks. Next, multiplying 2,080 weeks by \$573 per week yields a \$1,191,840 difference!

The moral of the story is this: a college degree is usually better than just having a high school degree. If you want to become an entrepreneur, we strongly encourage you to go to college first! You will learn a lot about business theory, and you will expand your social network.



What are the most popular business majors? The most sought-after bachelor’s degree in the U.S. is in the area of business. Specialties (and example jobs) in the business major category include:

- Accounting (CPA, IRS agent, FBI agent)

- Finance and Financial Services (stock broker, CFO, insurance adjuster)
- Management (any executive who makes key decisions for a company)
- Marketing (public relations, advertising, sales)
- Human Resources (employee benefits, pensions, hiring practices)
- Management Information Systems (data base management, enterprise resource planning, network administrator, supply chain management)



Even though you may not want to be an entrepreneur, almost all employers are looking for employees with an entrepreneurial attitude. Someone with this attitude has a can-do spirit; he or she likes to solve problems; they are creative and hardworking; they deal well with uncertainty; they perform well under pressure; and they plan. Sometimes these employees are called *intrapreneurs*.

Before we look at business careers, though, we want to teach you some very important concepts and skills about Einstein's second greatest theory, "The Theory of Compound Interest." You might recall from Lesson 20 that this theory is also known as the *time value of money*. By learning about compound interest, you will be empowered to make useful financial calculations, like car payments, mortgage payments, credit card interest expense, return on investment, and the monetary value of getting a college degree! While you are at it, you will also get more practice using Excel spreadsheets, which you learned about in Lesson 8, and received more practice in Lesson 20.

### **A Review of Einstein's Second Greatest Theory**

In Lesson 20, we learned that an amount invested today would grow, exponentially, to a future value based on the interest rate and the number of periods you plan to leave the money in the bank. Mathematically, this can be written as:

$$PV * (1 + i)^n = FV$$

Where: PV= Present Value

i = interest rate

n = number of "compounding" periods

FV = Future Value

Assume Sarah, on her 20<sup>th</sup> birthday on January 1, 2019, receive \$1,000 as a gift from her grandmother. She invests this money at an annual interest rate of 8%. She plans to leave her interest in the bank until age 40. How much will her \$1,000 grow to until she turns 40?

$$1000 * (1 + .08)^{20} = \$ \underline{\hspace{2cm}}$$

Answer: \$4,660.96

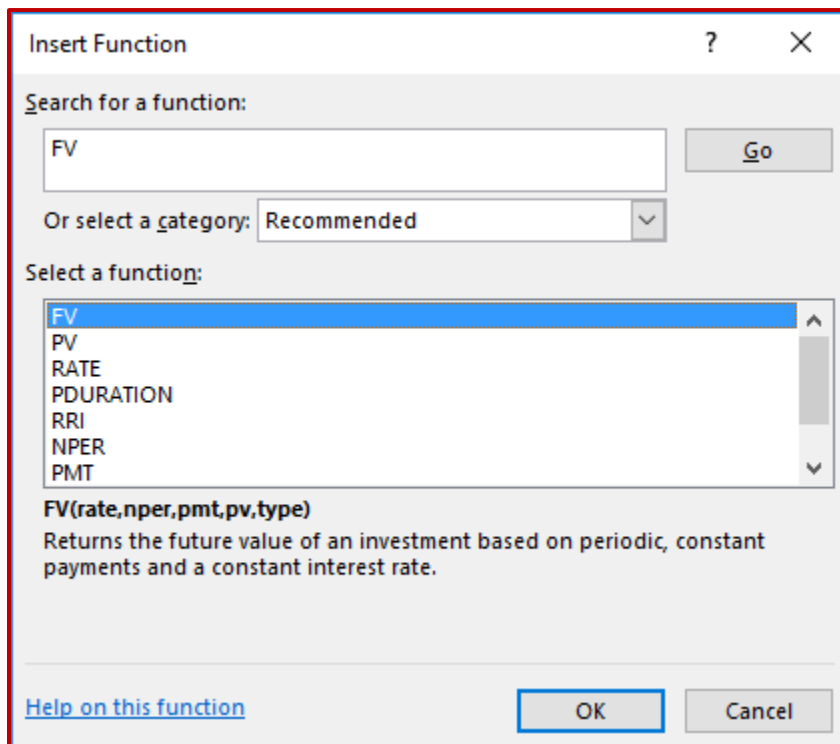
### **Saving for the Future**

Assume Sarah's grandmother (who is very wealthy!) gives her another \$1,000 when Sarah turns 21. Sarah invests that amount at an 8% rate, for 19 years. How much will this \$3,000 grow until she turns 40?

$$1000 * (1 + .08)^{19} = \$ \underline{\hspace{2cm}}$$

Answer: \$4,315.70

Her grandmother says that she will continue to contribute \$1,000 a year until she turns 40 years old. If this is the case, we can make another 18 calculations, add up all 20 amounts, and get her future value at age 40. Instead of doing this, however, we will use Excel's Insert Function command to do this in five minutes rather than two hours!



Function Arguments
?
X

FV

Rate	0.08	= 0.08
Nper	20	= 20
Pmt	-1000	= -1000
Pv		= number
Type	1	= 1

= 49422.92144

Returns the future value of an investment based on periodic, constant payments and a constant interest rate.

**Rate** is the interest rate per period. For example, use 6%/4 for quarterly payments at 6% APR.

Formula result = \$49,422.92

[Help on this function](#)
OK
Cancel

The answer is \$49,422.92! [Note: The “Pmt” is listed as negative \$1,000 above, because Sarah takes money out of her pocket each year in order to put money back in her pocket when she turns 40. In addition, the “Type” field is marked with a “1” to indicate that the first installment of \$1,000 is made at the beginning of each period, not the end.

Sarah invested \$20,000, total, in the bank over 20 years. If she wanted, she could withdraw it all when she turns 40 years old, and get two and a half times much money!

What if the interest rate was only 6 percent?



Function Arguments
?
X

FV

Rate	0.06	= 0.06
Nper	20	= 20
Pmt	-1000	= -1000
Pv		= number
Type	1	= 1

= 38992.72668

Returns the future value of an investment based on periodic, constant payments and a constant interest rate.

**Rate** is the interest rate per period. For example, use 6%/4 for quarterly payments at 6% APR.

Formula result = \$38,992.73

[Help on this function](#)

OK
Cancel

The answer is \$38,992.73.

Here, you can see that the higher the interest rate, the greater the return. It should be noted, however, that whoever is paying her 8% interest is likely a much more risky investment than the entity paying her 6%!



## Taking Action

**Exercise 1:** Using Excel's Insert Function command, how much would Sarah have in the bank if she invested at 10%?

**Exercise 2:** Using Excel's Insert Function command, how much would Sarah have in the bank if she invested at 4%?

### Twin Sister Example

Now assume Sarah has an identical twin sister, Laura, whose grandma loves her just as much as Sarah. Laura, on her 20<sup>th</sup> birthday on January 1, 2019, also receives \$1,000 as a gift from her grandmother. But she spends it on clothes and travel.

Each year, she receives \$1,000 from her grandmother, and each year she spends it. Therefore, when each girl turns 40, Sarah has \$49,423 in the bank and Laura has nothing (assuming Sarah can earn 8% on her investment). Sarah put \$20,000, total, in the bank, and if she wanted, she could withdraw it all when she turns 40 years old, and get two and a half times much money! Alternatively, she could leave this nest egg in the bank and let it grow another 20 years.



Assume that each girl is now 40 years old. Sarah keeps her money in the bank another 20 years at an interest rate of 8 percent. Laura, on the other hand, now sees the importance of saving. Therefore, like her sister did 20 years ago, Laura starts investing \$1,000 a year, and continues to do so for 19 more years.

How much would Sarah have in the bank when she turns 60?

$$PV * (1 + i)^n = FV$$

$$\$49,423 * (1.08)^{20} = \$230,358$$

Yes, that's right. By putting in a total of \$20,000 in the bank when she was age 20 to 40, and then leaving that money in the bank to grow for 20 more years, she will have \$230,358. Do you see why Einstein's theory is so impressive?

The moral of the story: save while you are young. The money will grow exponentially so you can travel the world when you retire, and spoil your grandchildren.

Function Arguments
?
X

FV

Rate	.08		= 0.08
Nper	20		= 20
Pmt	0		= 0
Pv	-49423		= -49423
Type	0		= 0

= 230358.4849

Returns the future value of an investment based on periodic, constant payments and a constant interest rate.

**Type** is a value representing the timing of payment: payment at the beginning of the period = 1; payment at the end of the period = 0 or omitted.

---

Formula result = \$230,358.48

[Help on this function](#)

OK
Cancel

Sarah would have \$230,358, while Laura has only \$49,423.

## Taking Action

**Exercise 1:** Using Excel's Insert Function command, how much would Sarah have in the bank if she invested \$49,423 at 10% for 20 more years?

**Exercise 2:** Using Excel's Insert Function command, how much would Sarah have in the bank if she invested \$49,423 at 4% for 20 more years?

## The Real Monetary Value of a College Degree

Earlier, we saw that a college degree would earn the average graduate \$1,191,840 more than a high school degree. To be fair, though, we should take the *present value* of each weekly amount of \$573. Let's use 4% interest. For example, the present value of \$573 one week from now is \$572.56. The present value of \$573 two weeks from now is \$572.12.

We could make 2,078 more calculations, and add the results up, but let us use Excel again.

The present value of 2,080 weekly payments (e.g., 40 years \* 52 weeks) discounted at a rate of .04/52 is shown below.

The image shows the 'Function Arguments' dialog box for the PV function in Excel. The dialog box has a title bar with a question mark and a close button. Inside, the function name 'PV' is listed. Below it, there are five input fields with their corresponding values and formulas:

Argument	Value	Formula
Rate	.04/52	= 0.000769231
Nper	2080	= 2080
Pmt	-573	= -573
Fv		= number
Type		= number

Below the input fields, the formula result is displayed: **Formula result = 594414.7534**. Below this, there is a description of the function: 'Returns the present value of an investment: the total amount that a series of future payments is worth now.' and a note: '**Nper** is the total number of payment periods in an investment.' At the bottom, there is a 'Help on this function' link and 'OK' and 'Cancel' buttons.

Note that **Nper** is 52 weeks a year, times 40 years, yields 2,080 weeks. Also note that **Rate** is 4 percent divided by 52 weeks equals .000769231 weeks rate.

The real monetary value of a college degree is \$594,415.

That is a big number. Even though college may not be something you want to do, please don't rule it out. A university degree is worth a lot of money.

## Taking Action

**Exercise 1:** Using Excel's Insert Function command, how much would be the present value of \$573 weekly payments for 2,080 weeks if the interest rate is 6% per year, not 4 percent.

**Exercise 2:** Using Excel's Insert Function command, how much would be the present value of \$573 weekly payments for 2,080 weeks if the interest rate is 2% per year, not 4 percent.

## Careers in Business

Not everyone wants to be an entrepreneur, and that's okay. The world needs doctors, scientists, mechanics, truck drivers, teachers, hair stylists, and salespersons, and not everyone wants to be the owner. In fact, most people are perfectly happy working for someone else. But as we learned in Lesson One, there are many benefits.

As we have shown you above, it pays to get an education beyond high school. If you choose to major in business, you have many options. At the beginning of this lesson, we listed several types of careers in business, such as accounting, finance and financial services, management, etc. The average salary for business majors with a bachelor's degree was estimated to be \$56,720 in 2018. Compare this with other majors. Engineers, computer science majors, and math majors do even better, largely because these degrees are much more math-intensive.

### *Average Salary by Discipline, Bachelor's Degrees*

<i><b>BROAD CATEGORY</b></i>	<i><b>AVERAGE SALARY</b></i>
<i>Engineering</i>	<i>\$66,521</i>
<i>Computer Science</i>	<i>\$66,005</i>
<i>Math &amp; Sciences</i>	<i>\$61,867</i>
<i>Business</i>	<i>\$56,720</i>
<i>Social Sciences</i>	<i>\$56,689</i>
<i>Humanities</i>	<i>\$56,688</i>
<i>Agriculture &amp; Natural Resources</i>	<i>\$53,565</i>
<i>Communications</i>	<i>\$51,448</i>

*Source: Winter 2018 Salary Survey, National Association of Colleges and Employers*

You can go online to almost any college or university's web page and learn more about each of these majors, and you will see the kinds of classes you must take. In the rest of this lesson, we will briefly describe each of the main business degrees.

## Finance and Financial Services

Students majoring in Finance and Financial Services find jobs in investments-related or personal financial planning. Employers looking for this type of major include companies in the areas of insurance, risk management, real estate, banking wealth management, retirement planning, and

pension-fund management. You will learn to read financial statements in order to recommend the best decisions for your clients. Further, if you are a finance major, you will become more adept at electronic spreadsheets.

The Option in Finance provides students with a core curriculum that addresses investments, financial management theory, financial markets, and institutions. Students can select upper division electives in international finance, financial management application, investment analysis and policy, estate planning, risk and insurance, economics, and real estate finance. Career opportunities for a specialization in finance include working for investment brokerage firms, insurance companies, banking institutions, as well as non-financial corporations. Finance is a 24-unit option, which includes three, core required courses, and five elective courses.



## Accounting

You have learned a great deal about financial accounting in this course. Do you remember Larry's Lawn Service? Annette's Tutoring Business? Kayla's Flower Shoppe? We prepared a balance sheet and income statement for all of these companies. Accounting is often called the *language of business*, because once you understand the accounting framework of the fundamental accounting equation,  $\text{Assets} = \text{Liabilities} + \text{Equity}$ , you will know what a business owns, and how these assets are financed. In addition, once you understand that  $\text{Revenues} - \text{Expenses} = \text{Net Income}$ , then you can get an idea of how well a business performed over one time. You may also remember how Kayla's Flower Shoppe prepared a statement of cash flows, sorted into operating, investing, and financing activities.



If you have enjoyed learning about financial statements in this program, you may want to consider majoring in accounting when you go to college. With an accounting degree, a variety of exciting and well-paid careers awaits you. Accounting majors learn the major rules that companies must follow (these rules are called generally accepted accounting principles) in preparing their financial statements. Examples of accounting career opportunities include:

- public auditing (e.g., Certified Public Accountants (CPAs) go to a client company's place of business and examine their financial statements to determine if they have followed the accounting rules),
- managerial accounting (these accountants work for a company, like a manufacturing company or a software company, and they provide information that helps managers control expenses and costs in order to make decisions),
- tax accounting (these accountants must be knowledgeable about the IRS rules for taxpayers, which can be very complex; many tax accountants work for the IRS, the FBI, and other government agencies).

Other jobs for accountants include environmental accounting. If you are interested in science, you may want to consider this area; environmental accounting focuses on calculating the costs and benefits of environmental protection programs. Forensic accounting deals with "white collar crime" An example of a white collar crime is when a CEO or owner of a business "fudges" the numbers in order to make themselves look good to the shareholders. Another example is a case where an employee embezzles money from a company. Forensic accounting involves performing financial detective" work to support legal cases.

## Taking Action

Take ten minutes and go watch this video: ["The 5 Types of Accountants."](#) This is a good video. It explains the difference between bookkeeping and accounting, and what kind of an accountant an entrepreneur will want to hire.

## Marketing



Marketing is an exciting and diverse field, especially in the area of digital marketing. A marketing degree allows students to work for companies in several different capacities, such as:

- Advertising
- Customer Service
- International Marketing
- Marketing Research
- Product/Brand Management
- Public Relations
- Retailing
- Sales and Sales Management
- Strategic Personal Selling
- Service Marketing
- Small Business Management.

## **Management**

Management graduates work in a variety of industries from high tech to consulting to retail to financial services. Careers include analysts of all types, managers in all organizational functions, and entrepreneurs who start their own businesses. Project management is particularly hot in fields ranging from real estate development to software development to e-commerce.

## **Human Resource Management (HRM)**

If you like working with, and for, people, HRM may be for you. HRM includes attracting and hiring talented people, possibly training them, and developing a performance review system. Some people who work in HRM are also lawyers, because of its heavy legal emphasis. As we learned earlier, when an employer hires at least one employee, the employer is responsible for abiding by a host of federal and state laws, such as worker safety, equal opportunity, sexual harassment and workmen's compensation. Employment and labor laws can significantly affect both employee and employer rights and responsibilities. In general, students who graduate with a degree in HRM may begin their careers as HRM generalists in smaller organizations, HRM specialists (e.g., in recruitment, in larger organizations, or as consultants in HRM outsourcing firms.) Many larger consulting firms also offer HRM services to their clients. Although starting salaries are not as high as compared to more technical fields in business, a career in HRM can prove more lucrative later on, because of broader organizational responsibilities.



### Management Information Systems (MIS)

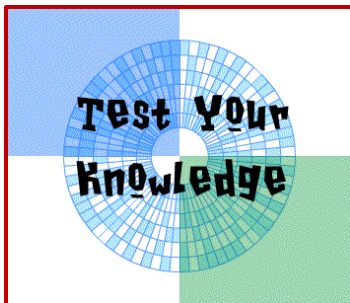
MIS is software, computer-based business degree, where information technology is used to help managers make decisions. In today's "information age," it is crucial that MIS professionals provide senior management with reliable information on a moment's notice. The MIS degree focuses on: 1) analyzing and managing the flows of information within and across the organization's business processes; 2) effectively managing the acquisition and utilization of information technology; and 3) using both information and information technology to enhance the organization's strategic advantage.

The knowledge and skills developed in the curriculum lead to careers in programming, systems analysis and design, database administration, e-commerce, telecommunications, network administration, and project management. Often, students will double major in accounting and MIS, for which employers often pay a hefty—and well-deserved premium to new graduates.



### Concluding Comments

A business major gives you many options, but we must conclude with a startling statistic. The World Economic Forum estimates that 65% of today's elementary school students might ultimately work in jobs that do not exist today (page 20, *BizEd*, AACSB, March/April 2018 edition). If this is true, then we urge you to get a good liberal arts education while taking general education courses. Critical thinking skills, the ability to adapt to change, and an attitude of life-long learning are prerequisites to a successful career.



1. Which of the following is true if you major in business in college?
  - a. Financially, a college degree is usually better than just having a high school degree
  - b. You will learn a lot about business theory
  - c. You will expand your social network.

- d. You will have several different options to major in
  - e. All of the above are true
2. What is true about intrapreneurs?
- a. They have a can-do spirit
  - b. They like to solve problems
  - c. They are creative and hardworking
  - d. They deal well with uncertainty
  - e. All of the above
3. The theory of compound interest formula is \_\_\_\_\_.
- a.  $PV * (1 + i)^n = FV$
  - b.  $PV * (i)^n = FV$
  - c.  $PV * (1 - i)^n = FV$
  - d.  $n * (1 + i)^{PV} = FV$
  - e.  $(1 + i)^n = FV$
4. The Option in Finance provides students with a core curriculum that addresses:
- a. Investments
  - b. Financial management theory
  - c. Financial markets
  - d. Institutions
  - e. All the above
5. A marketing degree allows students to work for companies in several different capacities. One of those ways is \_\_\_\_\_.
- a. Accounting
  - b. Customer service
  - c. Managing employees
  - d. Human Resource Management
  - e. Management Information Systems
6. True or False: The Bureau of Labor Statistics reported that the median wage of a full-time worker 25 years or older was \$1,286 a week for anyone with a bachelor's degree, and \$713 for anyone with only a high school degree.
7. True or False: The most sought-after bachelor's degree in the U.S. is in the area of business.
8. True or False: The average salary for business majors with a bachelor's degree was estimated to be \$100,000 in 2018.

9. True or False: Students majoring in Finance and Financial Services usually find jobs in public auditing.
10. True or False: Environmental accounting focuses on calculating the costs and benefits of environmental protection programs.

## What to Do Before the Next Lesson

The next lesson describes the international student organization devoted to teen entrepreneurs: Students for the Advancement of Global Entrepreneurship (SAGE). After you have launched a social enterprise business (SEB) or a socially responsible business (SRB), you are eligible to pitch your business in a live presentation to an outside panel of influential judges. These judges evaluate your business and select the top teams to advance to a national and international competition. Go to <http://sageglobal.org> and take 15 or 20 minutes to learn more about SAGE.



## Lesson Twenty-Six: Pitching Your Business at a SAGE Competition

Before reading this lesson, please watch these videos:

<a href="https://www.youtube.com/watch?v=UwW8o01_sRs">https://www.youtube.com/watch?v=UwW8o01_sRs</a> (3:08) – “SAGE Global wins SVP Sacramento's Fast Pitch”
<a href="https://www.youtube.com/watch?v=8bL5QjeGk-Y&amp;t=152s">https://www.youtube.com/watch?v=8bL5QjeGk-Y&amp;t=152s</a> (5:32) – “SAGE is...2016”
<a href="https://www.edutopia.org/students-make-business-learning">https://www.edutopia.org/students-make-business-learning</a> (10:49) - “Student Entrepreneurs Change Their Community”
<a href="https://www.youtube.com/watch?v=4J9fCyyy5hc">https://www.youtube.com/watch?v=4J9fCyyy5hc</a> (20:27) – “Professor Curt DeBerg explains the SAGE Program”

### The Big Picture

By now, we hope you have a great business idea and that you have already launched your new venture. You should be proud of your accomplishments, and you probably want to expand your network. Have you heard about this international education organization called Students for the Advancement of Global Entrepreneurship ([SAGE](#))? From their website, you can see that you can participate in a national competition, highlighting your business and making new contacts. Before you compete, though, you can get assistance for university student “SAGE mentors” to help prepare your annual report and get ready to present to influential judges.

This sounds almost too good to be true, but it is true! SAGE has been in business since 2002, and its vision is to create better futures through social enterprises, socially responsible businesses and community service. Its mission is to create the next generation of entrepreneurial leaders whose innovations and social enterprises address the major unmet needs of our global community.

This lesson will provide an overview of SAGE, along with details of the two categories of competitions. Then, we will show you what actually happens at a SAGE competition. We will also explain the role of SAGE mentors during the year. Finally, we will provide details about how to sign up for a SAGE competition.

## What is SAGE-An Overview

SAGE has three key components: (1) curriculum, (2) mentoring, and (3) competition. This course, “Turning Risk into Success,” is the first leg of our three-legged stool. After taking the TRIS course, we are confident that you are now an entrepreneur or that you have the “entrepreneurial mindset.” Second, SAGE links teen entrepreneurs all over the world to university students who coach and mentor them throughout the year. The main university serving SAGE students is [California State University, Chico](#).

### **SAGE's Vision and Mission**



#### **SAGE Vision**

– *Creating better futures through social enterprises, socially responsible businesses and community service.*

#### **SAGE Mission**

– *To help create the next generation of entrepreneurial leaders whose innovations and social enterprises address the major unmet needs of our global community.*

The third key SAGE component is competition. At the end of each academic year, usually in May or June, SAGE teams travel to a regional or national competition to determine which teams are the most creative and innovative. The eventual champions in each country advance to a global competition. Here, the national winners gather in a host country to crown the SAGE World Cup champion. SAGE is pleased that Ndaba Mandela, the second oldest grandson of Nelson Mandela, is its [global ambassador](#).



## SAGE Competition

Starting in fall 2018, there is one category of competition: the best SAGE business. Judges from the business community and the civic community are recruited to evaluate how well the students met the specific criteria.

Judges evaluate a SAGE business based on its four-page annual report and its 13-minute oral presentation. Listed below are the five criteria for a SAGE team. Each criterion is worth 20 points.


- Business Operations



- Social Impact
- Creativity and Innovation
- Sustainability
- Overall Presentation

## Detailed criteria:

<ol style="list-style-type: none"> <li>1. Business Operations <ul style="list-style-type: none"> <li>• Sales and Marketing (5 points)</li> <li>• Accounting and measuring business operation results (5 points)</li> <li>• Strategic Planning (5 points)</li> <li>• Structure and organizational management (5 points)</li> </ul> </li> <li>2. Social Impact <ul style="list-style-type: none"> <li>• Measuring Results of Impact (5 points)</li> <li>• Serving a local or global community need (5 points)</li> <li>• Primary business focus serving a community need (5 points)</li> <li>• Addressing the U. N. SDGs (5 points)</li> </ul> </li> <li>3. Creativity and Innovation <ul style="list-style-type: none"> <li>• New or improved business model (5 points)</li> <li>• Meeting an unmet need in a market or community (5 points)</li> <li>• Demonstrating critical thought and problem solving (5 points)</li> <li>• Potential to inspire change (5 points)</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>4. Sustainability <ul style="list-style-type: none"> <li>• Teamwork (5 points)</li> <li>• Succession Planning (5 points)</li> <li>• Market Viability (5 points)</li> <li>• Ethics and Integrity (5 points)</li> </ul> </li> <li>5. Overall Presentation <ul style="list-style-type: none"> <li>• Annual Report (7 points)</li> <li>• Oral Presentation (5 points)</li> <li>• Questions &amp; Answers (8 points)</li> </ul> </li> </ol>
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SAGE is pioneering the field of youth entrepreneurship. Our board of directors has concluded that no business will survive in the 21st century unless it:

- a. is socially responsible,
- b. employs sustainable business practices, and
- c. makes a social impact.

Therefore, we encourage teens who start for-profit businesses, social enterprises, or nonprofit organizations to join the SAGE network.

### **What Happens at a SAGE Competition?**

In April or May, SAGE teams prepare for the regional and/or national competitive tournament. Each team has the option of working closely with a pair of university student mentors from California. The mentors schedule periodic on-site visits or they communicate via video teleconference. At the tournament, each team provides a four-page written annual report and a verbal presentation to panel of jurists/ evaluators/judges that are recruited from leading members in the community.



Each SAGE team is given a 35-minute time block at the competition. In the first 10 minutes, a SAGE team will immediately hand out their annual reports to the judges. While the judges are reading the annual report, the team will set up its equipment, set up props, etc. The annual report counts 40 points maximum. Written annual reports are limited to four printed pages on 8 ½ by 11 paper. If a team uses a cover or back page it counts as one of those four pages. *Teams may NOT distribute copies of business plans, letters of commendation, or sample products.* Teams may include copies of newspaper articles, newsletters, and other media as evidence of media attention; presenters may also distribute personal business cards.



In the next 13 minutes, a team gives their oral/audio-visual presentation. The oral presentation counts 40 points maximum. Teams are allowed to demonstrate their products during the presentation, but they cannot hand them out to judges for individual inspection. Finally, during the next seven minutes there is a mandatory question and answer period. The Q&A counts 20

points maximum.

Judges look for three qualities during the Q&A session:

- Overall Effectiveness - Based on questions from the judges, overall, how well did the students demonstrate knowledge of the projects described in the written report and oral presentation?
- Balance – Did students share responses, or did one or two students dominate?
- Poise - Were the students confident and polished?

Each SAGE team has five more minutes to remove all its equipment and exit the room while the judges score the team.



SAGE judges are instructed to base their scoring based solely on how well the team met the five judging criteria. We emphasize that the SAGE tournament is not a contest based on who made the best presentation, or who used the most advanced technology, or who received the most social media, TV, radio or newspaper coverage, or who made the most profit. We are looking for the team that does the best job of *integrating* all five criteria into their business ventures during the year. For a SAGE team to participate in a SAGE tournament it must operate a business venture that meets as many of the SAGE judging criteria as possible.

This judging process is a unique form of benchmarking, where students can calibrate their own projects with those of peer schools for future improvement. The top two teams are invited to participate in an international tournament. This is called the SAGE World Cup (the most recent SAGE World Cup took place in Durban, South Africa from August 9-13, 2018). The rules and format of each tournament are identical.

## **Mentoring**

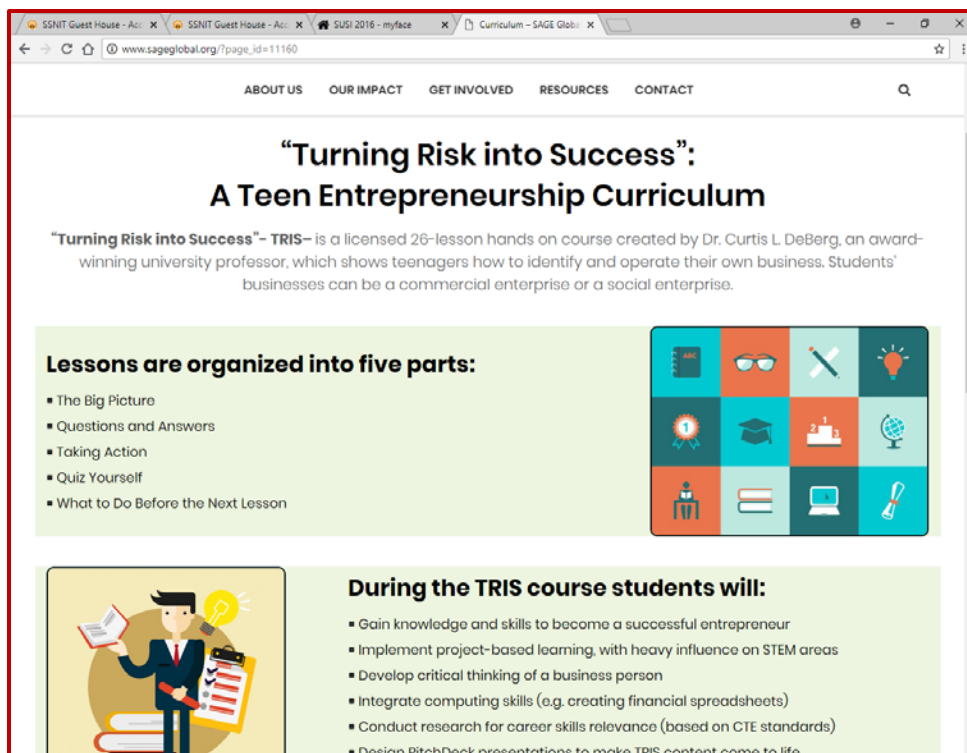
We have covered two of the three parts of SAGE's three-legged stool: curriculum and competition. Now let us turn to the third leg—*mentoring*. Each country with an active SAGE program usually has a nearby university and/or SAGE alumni that can assist teens who start businesses. In the US, SAGE's home office is located at California State University, Chico.

Chico State has a large group of talented university students who are always available to provide help. We call these students SAGE mentors, and they participate—free of charge—as part of their community service-learning activities.



All SAGE mentors are certified to teach the [“Turning Risk into Success”](#) (TRIS) course. Students are primarily undergraduates from the College of Business, although other majors include Mechanical Engineering, Education, and Communications. SAGE was founded at California State University, Chico, in 2002. As an official student organization, SAGE provides mentoring services to teenage entrepreneurs. Under the direction of university student mentors/business consultants and business advisers, SAGE teens use their school learning to become self-reliant, create wealth, and help others.





The word *sage* is defined in *Webster's Dictionary* as “wise, proceeding from wisdom, well-judged.” SAGE has a successful and dynamic method for imparting business skills and wisdom to youth. Under the direction of their Chico State mentors, our participating SAGE teens launch and run their own real business ventures in teams. The result? Our teachers become empowered entrepreneurship instructors. Our teens become social change agents. And our business leaders and university students become mentors in their own communities and help support the local education system.

## Questions and Answers

**Question 1:** Is there a booklet or information guide to help me learn more details about SAGE?

**Answer:** We invite you to visit this <http://sageglobal.org> and download the 2018-2019 SAGE Information Handbook. Skim it. This document provides you with every possible detail about SAGE. Pay special attention to the Frequently Asked Question (FAQs).

**Question 2:** Is there a YouTube video that I can visit that tells me how to start a team?

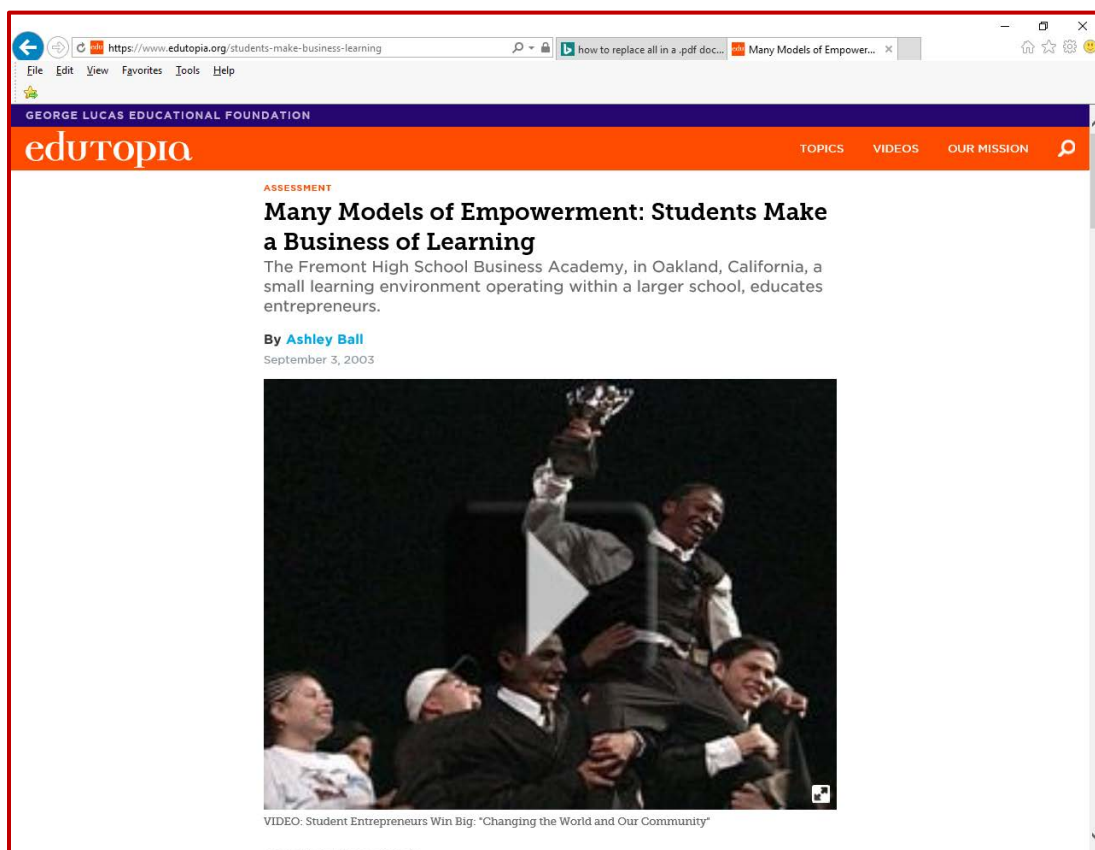
**Answer:** Yes, go [here](#). It's a five-minute video that gives you a quick overview about SAGE. The main takeaway is that it takes at least three students to start a SAGE team at a school, or as part of a community organization (e.g., Boys and Girls Club). The SAGE team can be an after-school program, or it can be part of an existing class. Or it can be connected to an existing student organization (e.g., Future Business Leaders of America, DECA, or other extracurricular club). SAGE is not a competitor for existing high school business organizations. The key to starting a team is to find an enthusiastic group of student leaders who are interested in

entrepreneurship, along with a teacher who is willing to encourage and support their participation in SAGE.

**Question 3:** SAGE sounds like a lot of fun, but will there be time for it? After all, students must focus on school work, and many of them have part-time jobs or they have other extracurricular activities.

**Answer:** SAGE is not just another project. It is a new way of thinking about how high school students get involved in hands-on, real-world activities. Like the TRIS program, SAGE encourages student to create social and business ventures under the direction of consultants from the community. At the same time, students expand their networks and make new connections to facilitate such ventures. This network can help students become better prepared for life, a life that will be increasingly more dependent upon interaction with people from other countries.

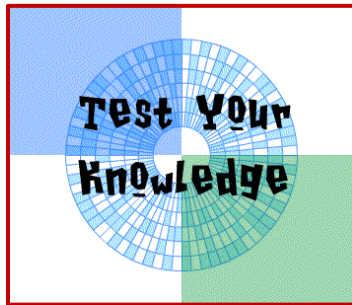
The first team to ever win a SAGE USA tournament came from Fremont High School in Oakland.



The screenshot shows a web browser window displaying an article on the Edutopia website. The browser's address bar shows the URL <https://www.edutopia.org/students-make-business-learning>. The Edutopia logo is at the top left, and navigation links for 'TOPICS', 'VIDEOS', and 'OUR MISSION' are at the top right. The article is categorized as an 'ASSESSMENT' and is titled 'Many Models of Empowerment: Students Make a Business of Learning'. The text below the title states: 'The Fremont High School Business Academy, in Oakland, California, a small learning environment operating within a larger school, educates entrepreneurs.' The author is 'Ashley Ball' and the date is 'September 3, 2003'. Below the text is a photograph of a group of students in business attire, with one student in the center holding a trophy high in the air. Below the photo, a video player interface is visible with the text 'VIDEO: Student Entrepreneurs Win Big: "Changing the World and Our Community"'.

## Taking Action

Sign up to become a SAGE team. Compete in a tournament! There are many advantages to becoming a teen entrepreneur and competing in SAGE. Consider this your formal invitation.



## Quiz Yourself

1. What does SAGE stand for?
  - a. Students Are Great Entrepreneurs
  - b. Social Agents Gather Energy
  - c. Students for the Advancement of Global Excellence
  - d. Students Are Global Entrepreneurs
  - e. Students for the Advancement of Global Entrepreneurship
2. How much total time is each SAGE team given at the competition?
  - a. 10 minutes
  - b. 30 minutes
  - c. 45 minutes
  - d. 35 minutes
  - e. 25 minutes
3. Who is SAGE's global ambassador?
  - a. Richard Branson
  - b. Ronaldo
  - c. Lebron James
  - d. Ndaba Mandela
  - e. Lady Gaga
4. What is SAGE defined as in the Webster's Dictionary?
  - a. Future entrepreneurs
  - b. Money maker
  - c. Fearless
  - d. Wise
  - e. Outgoing
5. What do judges most look for during the competition?



- a. Successful Business Operations
  - b. Social Impact
  - c. Creativity and Innovation
  - d. Sustainability
  - e. All of the above
6. True or False: SAGE has been in business since 2005.
  7. True or False: SAGE has three key components: (1) curriculum, (2) mentoring, and (3) competition.
  8. True or False: SAGE's vision is to create better futures through social enterprises, socially responsible businesses and community service.
  9. True or False: SAGE's mission is to make money.
  10. True or False: Written annual reports are limited to four pages.

## **A Final Word**

This concludes the formal part of the TRIS program. We wish you well. Your next step is to apply what you have learned (1) to actually become an entrepreneur, (2) to succeed in college, and/or (3) to work for someone else as a valuable, intrapreneurial employee. Throughout this program, our goal has been to show you that you can shape your own future with the power of your ideas and willingness to take action. You may not succeed the first, second or third time, but if you learn from your experience, you will ultimately prevail.

The world has many problems that need solving, and entrepreneurs use their "third eye" to see opportunities to tackle them. Will you manufacture and sell the first \$100 home? Will you invent a new water pump like the KickStart pump? Will you invent a cure for malaria? Will you be the one to develop a solar-powered vehicle that replaces the gasoline engine? Will you develop renewable energy sources that may someday replace gas, oil or coal? Will Richard Branson invest in your biofuel energy company someday?

We wish you well.

