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## WEEK 3:

# PRODUCT DEVELOPMENT, MANUFACTURING, MARKET RESEARCH

You may have the idea, but this part is where you actually put “legs” on your brilliant thoughts. Product development crucial as it creates, and manufacturing is very important in an operation because it secures the production of goods that will be sold. What makes this week very exciting is that most people think this is not the most important part, but the reality is that without proper and effective manufacturing, one cannot have the produce to sell. And even if you have an awesome marketing strategy, if your product truly stinks, then it would still not be effective. This needs proper attention and effective theories and strategies are needed to be applied. Lastly, market research becomes an important factor in understanding consumer behavior and culture. No matter how good your product is, if you are selling in the wrong market or if you don’t understand how your target market works it will not sell as effectively. The cycle is now set.

### **1. Lesson Overview**

- a. Lesson Objectives
- b. Estimate Time
- c. Materials Needed
- d. Background for Teachers
- e. Mentor

### **2. Teaching Strategy**

- a. Part 1: What is product development and who does it?
- b. Part 2: Where do you get training?
- c. Part 3: What is manufacturing?
- d. Part 4: What is market research and why is it important?
- e. Questionnaire and Assessment
- f. Your Big Idea Presentation

### **3. Supplemental Videos**

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# LESSON OBJECTIVES

## **Students Should be Able to:**

1. Know what product development needs to be;
2. Understand aspects of the production line that needs training and where to get it;
3. Define manufacturing and the principles and skills behind it;
4. Know what niche market means;
5. Understand what is needed to be done in a basic level about how to effectively research the market a business is in.

## **Estimate Time**

It will be a four-part program, where each topic would need more or less 20-minutes each for class. Each program will also culminate with a 10-minute activity that will synthesize and apply what the students learned.

## **Materials Needed**

1. Business plans and details workbook printed as Chapter 3
2. Printed Questionnaire for the students to answer
3. Copy of a basic worksheet as a sample for each student
4. Presentation materials
  - a. Overhead Project
  - b. Whiteboard and Marker
  - c. Papers

## **Backgrounder for Teachers**

Product creation is where new products or services are made based on characteristics described in the plan. These characteristics may be new or improvements of something else that would benefit their business. Product development involves the formulation of a new product or recreating an existing one. This is intended to make the target market appreciate the product better and may involve understanding more about their behavior. This is where Market research comes in.

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Market Research is all about getting information and data about customer needs and preferences. This may apply to the market as a whole or in its segments – or market niche. The aim for this part of the program is for students to have a grasp on the need to do market research so that their business venture will have a better chance of becoming successful. It also aims to help students strategize on feasible research methods that they can apply on their end with little or no need for external agencies.

Manufacturing is all about the production of a particular product or merchandise. As entrepreneurs, we need to effectively conduct operations that would minimize costs to increase margins. This effort should not affect the quality of goods in the process. This lean and mean strategy requires understanding of manufacturing concepts that will be taught in this part of the program.

## **Mentors**

Our mentors for this session will be

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# TEACHING STRATEGY

## Part 1: What is product development and who does it?

1. Start the discussion by stating some very interesting product development ventures done over the years:

- a. The Coca-Cola contour bottle

Instantly recognizable, the Coca-Cola contour bottle is a masterpiece in industrial design that dates back to 1915 when the Coca-Cola Company asked its bottle suppliers to design a new bottle that would be distinctive and instantly recognizable - even in the dark. Designer Earl R. Dean took up the challenge, and following instructions issued by his boss, aimed to come up with a design based on the ingredients of the drink. Unable to find any reference images for either the coca leaf, or the Kola nut, Dean instead used an image of a cocoa pod from his encyclopedia as inspiration, leading to the iconic ribbed bottle shape we know and love today.

- b. The mini cooper

The Mini is a design classic that came about because of restrictions in fuel supply during the 1950s caused by the Suez crisis. Designer Alec Issigonis was tasked with designing a car that was more frugal than the large cars of the day, aiming to compete with increasingly popular German bubble cars like the original VW Beetle - itself a design classic. The original design became a true British icon, influencing a generation of car designers, and was revolutionary at the time. Its distinctively diminutive contours remain hugely popular today.

- c. The iPod/iPhone/iPad

Three indisputably game-changing product lines by arguably the world's most iconic and celebrated industrial designer, Sir Jonathan Ive - all of which could easily have made the list on their own. It all started back in 2001 with the original iPod; the first iPhone was released in 2007; the iPad followed three years later; and finally, the iPad Mini in 2012.

2. Discuss the product development process:

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1. Idea generation – brainstorming and coming up with innovative new ideas. See generating ideas for new products and services.
  2. Idea evaluation - filtering out any ideas not worth taking forward. See screening new product or service idea.
  3. Concept definition - considering specifications such as technical feasibility, product design and market potential. See researching new product and service ideas.
  4. Strategic analysis - ensuring your ideas fit into your business' strategic plans and determining the demand, the costs and the profit margin.
  5. Product development and testing - creating a prototype product or pilot service. See concept development and testing.
  6. Market testing - modifying the product or service according to customer, manufacturer and support organizations' feedback. This involves deciding the best timing and process for piloting your new product or service. See how to test the market.
  7. Commercialization – determining the pricing for your product or service and finalizing marketing plans. See pricing your proposed service or product.
  8. Product launch – a detailed launch plan can help ensure smooth introduction to market.
3. References:
- a. <https://www.nibusinessinfo.co.uk/content/product-development-process>
  - b. <https://www.smartsheet.com/all-about-new-product-development-process>
  - c. <http://www.businessdictionary.com/definition/product-development-process.html>

## **Part 2: Where do you get training?**

1. Many of the successful companies and businesses understand the importance of training.  
To start things off, you can begin asking questions about training:
  - a. When was the first time you went in a training seminar?
  - b. What did you learn?
  - c. How did you know about it?
2. Discuss the need for training and how it can benefit them:
  - a. It increases effectiveness
  - b. It motivates you to keep going
  - c. It creates a good habit to you and your team

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3. Key methods in training
    - a. Determine the goals you want to achieve
    - b. Finding the right person to conduct training
    - c. Thinking and planning for the right process
    - d. Doing a knowledge check after the training to check comprehension and retention
  4. References
    - a. <http://www.innovationmanagement.se/imtool-articles/product-development-do-you-know-what-you-really-need/>

### **Part 3: What is manufacturing?**

1. Activity: Doing a production line
  - a. You have a simple drawing using as much colors as the students in your group.
  - b. If the group is large, divide them in groups of 5 or 6
  - c. Give each member of the group 1 paper and crayons in the same amount as the members of the group
  - d. They will draw the image you did. Place a timer on them
  - e. After this activity is finished, give them paper again (1 paper per member)
  - f. Now, instead of drawing it on their own, each member will have a crayon each and they will be doing only the color assign to them
  - g. Ask the students after which was faster and ask them about what they experienced
2. Discuss manufacturing (7 Tips for a Smooth Start to Manufacturing)
  - a. Set-up a mutually beneficial partnership. As a start-up, you may not taken seriously enough by the big manufacturers. The volume of business you bring to their table is not significant either. Consequently, it is imperative for you to create an incentive for the manufacturer to work with you.
  - b. Check references. Finding the right manufacturer is difficult, said Kevin Lavelle, the co-founder and CEO of Mizzen+Main, an innovative men's lifestyle brand. Unlike programmers, few manufacturers have a digital presence. Checking for references is paramount.
  - c. Take baby steps. Setting up your own manufacturing unit takes a lot of time and money. You cannot afford mistakes. Cricket Allen, founder of The Perfect

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Snaque, a nutritious snack company, said entrepreneurs must avoid risks in the initial stages by leasing or renting space and equipment instead of buying them immediately. Depend more on manual labour and low-investment tools in the first few months since the product will undergo several minute changes in that period. “Our mantra in manufacturing, and overall, is crawl, walk, run,” she said.

- d. Research. Regardless if you are looking for a manufacturer or setting up your own manufacturing unit, you need to do extensive research before you make a decision. Trade journals and fairs are good avenues to research and connect with manufacturers.
  - e. Have multiple open partnerships. Have multiple reliable options, rather than zeroing in on just one good vendor. Mary Apple, founder of Pretty Pushers, a firm that makes special labor gowns for women, advised having a list of good vendors and alternating among them for risk diversification and competitive pricing.
  - f. Get the legal details sorted out. Myra Banks of HerbanLuxe advises business owners to visit local government websites and talk to people in the know about the kind of licenses and certifications required to set up shop. Once this is done, you can confidently go ahead with buying equipment and hiring employees for your business.
  - g. Know the people you work with. Your manufacturers are critical to your business. It is imperative that you know them well before working with them. This is true regardless if your manufacturers are in the neighborhood or another country. Nick Paradise, CEO of ThreadBuds, said that it is a good idea to use emails, phone calls and translators in the initial stages, then visit personally to iron out the details.
3. Question and answer for around 15 minutes

#### **Part 4: What is market research and why is it important?**

1. Start with some famous business actions that business did based on market research
  - a. Apple - Their “Apple Customer Pulse” research group is a prime example. Because these are online surveys, the company is able to compile and analyze the data faster, and the surveys are easy to administer, without much effort. This

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makes the market research more appealing to those that participate, as well as to the company.

These surveys have led to different designs and modifications of Apple products. Such modifications include having bigger screens to view videos and games more clearly.

- b. McDonald's - One of the problems addressed by this research was if McDonald's was serving healthy or organic food. As a result, the company has launched a campaign to prove that their meat is real. They also have changed part of their menu to include healthier alternatives, such as apple slices
- c. Youtube - YouTube began as a video dating site called "Tune In Hook Up." Founders Chad Hurley, Steve Chen, and Jawed Karim were disappointed with limited traction, but then they had another idea. After the Janet Jackson Super Bowl fiasco, they realized that finding proper videos online was surprisingly difficult. In addition, even when you could find one, the sites were buggy and unreliable. Plus, sharing was a chore: video email attachments were unreliable, and most sites failed to provide dedicated video links.

The trio set out to solve these problems, instead of trying to compete in an already-crowded space. They researched the market and determined that they had a great shot at solving online video better than anyone else. In 2006, Google bought YouTube for \$1.65 billion.

- 2. Talk about methods on Market research
  - a. Surveys
  - b. Focus groups
  - c. Interviews
  - d. Experiments and field practices
  - e. Observation
- Inform the students that each of these has a pro and con that could determine which method they would use.
- 3. Ask questions: prepare 5 scenarios and answer which of them should use a particular marketing method



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# SUPPLEMENTAL VIDEOS

## Awesome Videos about Jack Ma

1. [https://www.youtube.com/watch?v=hGhhmuws3\\_M](https://www.youtube.com/watch?v=hGhhmuws3_M)
2. <https://www.youtube.com/watch?v=RkVJNOQ7B74>

## Opportunities:

1. <https://www.entrepreneur.com/article/50940>

## Activities:

1. <https://www.youtube.com/watch?v=imcUbbTck7Y>
2. <https://www.youtube.com/watch?v=IZnB8QsZ8QY>
3. [https://www.youtube.com/watch?v=O9\\_EHU5BKnQ](https://www.youtube.com/watch?v=O9_EHU5BKnQ)

## Entrepreneurship

1. <https://www.youtube.com/watch?v=1ecKK3S8DOE>
2. <https://www.entrepreneur.com/article/220694>
3. <https://www.youtube.com/watch?v=Vvq9YgoJabY>