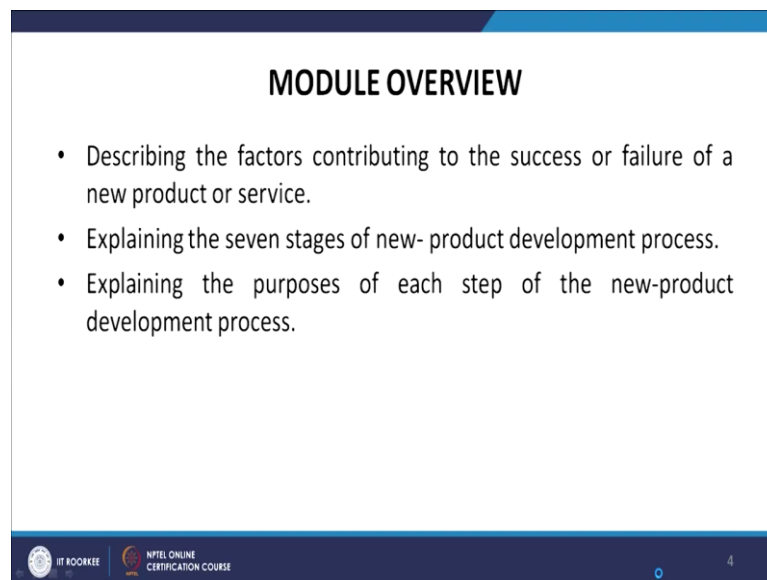


**Introduction to Marketing Essentials**  
**Prof. Zillur Rahman**  
**Department of Management Studies**  
**Indian Institute of Technology, Roorkee**

**Lecture - 21**  
**Developing New Products and Services – III**

Welcome to introduction to Marketing Essentials and now we will talk about module 21st. So, this module 21st is the last module in this topic that is Developing New Products and Services. Now, let us let us see what are the things that will be covered in this module.

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**MODULE OVERVIEW**

- Describing the factors contributing to the success or failure of a new product or service.
- Explaining the seven stages of new-product development process.
- Explaining the purposes of each step of the new-product development process.

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So, we will start with describing the factors that contribute to the success or failure of a new product or service, then we will explain the seven stages of new product development process and thereafter we will explain the purposes of each step of the new product development process.

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The slide is titled "INTRODUCTION" and contains a bulleted list. The third bullet point is highlighted with a red box around the word "protocol". To the right of the list, there is a handwritten note in red ink that says "well defined answers to these questions are". The slide footer includes logos for "IIT ROORKEE" and "NIEL ONLINE CERTIFICATION COURSE" and the number "5".

### INTRODUCTION

- We all know the giant product and service successes—such as Apple’s iPhone, Google, and CNN.
- Yet thousands of product fail every year and slide quietly into oblivion.
- Ideally, a new product or service needs a precise **protocol** a statement that, before product development begins, identifies:
  1. a well-defined target market;
  2. specific customers’ needs, wants, and preferences; and
  3. what the product will be and do to satisfy consumers.

*well defined answers to these questions are*

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As we all know the giant product and service success such as Apple’s iPhone, Google and CNN. Yet thousands of products they fail every year and slide quietly into oblivion that we have seen in the module 20 also. So, ideally a new product or service needs a precise protocol. We are talking of this precise protocol a statement that before product development begins identifies.

So, first we before we start with the new product development process, there is this protocol that identifies what is a well-defined target market. Then it also specifies a specific customer needs wants, and preferences and the third important thing is what the product will be and do to satisfy customers.

So, before we start with this new product development process these three questions these three questions in this protocol are to be answered and the more well defined the answers are answers to these questions are. The more well defined the answers to answers to these questions are the more is more is the likelihood of success of this new product that will come out of this new product development process.

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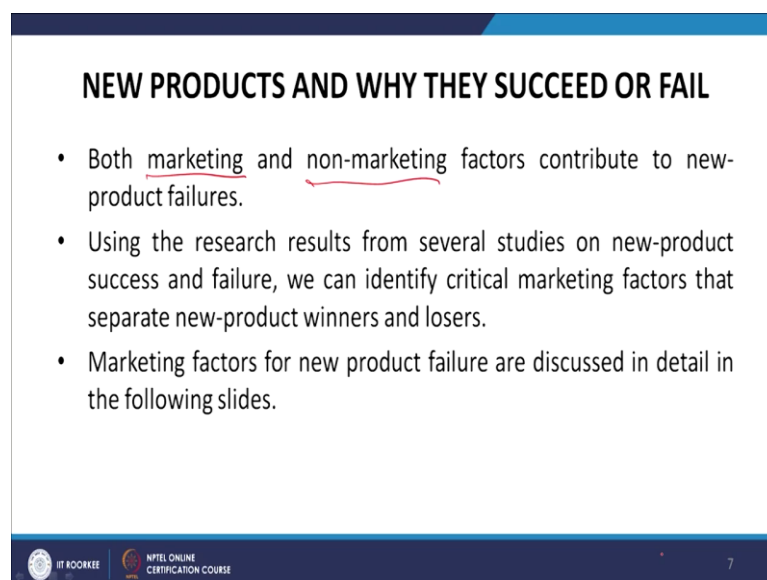
**INTRODUCTION**

- Research reveals how difficult it is to produce a single commercially successful new product, especially among consumer packaged goods (CPG).
- About 30 to 45% of new products fail to deliver any meaningful financial return.
- Most consumers buy the same items over and over again —making it difficult to gain buyers for new products.

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So, the research reveals how difficult it is to produce a single commercially successful new product, especially among consumer-packaged goods which are called as CPG. About 30 to 45 percent of new product fail to deliver any meaningful financial return most consumers buy the same item over and over again making it difficult to gain buyers for new products.

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**NEW PRODUCTS AND WHY THEY SUCCEED OR FAIL**

- Both marketing and non-marketing factors contribute to new-product failures.
- Using the research results from several studies on new-product success and failure, we can identify critical marketing factors that separate new-product winners and losers.
- Marketing factors for new product failure are discussed in detail in the following slides.

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So, new products and why they succeed or fail. Both marketing and non marketing factors they contribute to this new product failures. So, it is not only about the marketing

factors, but also several other factors that are included in non marketing factors that are responsible for these new product failures.

Using the research results from several studies on new product success and failure, we can identify critical marketing factors that separate new product winners and losers. Marketing factors for new product failures are discussed in detail in the upcoming slides.

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**MARKETING REASONS FOR NEW PRODUCT FAILURE**

1. **Insignificant point of difference:** (perceived differences)

- Research shows that a distinctive point of difference is the single most important factor for a new product to defeat competitive ones.
- Point of difference (POD) implies having superior characteristics that deliver unique benefits to the user.
- The POD shall not only be unique but has to be relevant to the consumer as well.

POD  
↓  
unique      ↓ relevance  
                 ↓  
                 target customer

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So, the first reason is insignificant point of difference, so broadly it means that there are no differences no perceived differences between the new product and the old product.

Research shows that a distinctive, point of difference is the single most important factor for new products to defeat the competitive once. Point of differences which are also called as POD implies having superior characteristics that deliver unique benefits to the users. It means that your new product that that is developed does not have any unique benefit to offer to the users. The point of differences shall not only be unique but has to be relevant to the consumers as well.

So, now you see that important for a new product success or failure is how unique this point of differences is. So, the first important characteristic of this is uniqueness and other is the Relevance, relevance to the target customers. So, if a new product has certain attributes which are relevant to the customers, but they are not unique, then the customers will continue to buy the old product.

If the point of differences is only unique and they are not relevant to the customers, then obviously they will not buy this new product. So, in order to make consumers buy a product this PO POD should be unique and relevant both at the same time for the target customers.

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**MARKETING REASONS FOR NEW PRODUCT FAILURE**

**1. Insignificant point of difference:**

- For example, if a new laptop is differentiated on the basis of color, it might differentiate it from the existing competitors.
- But there is no guarantee for success if the point of difference is not important enough to get consumers to stop purchasing competitors laptops.
- We explain this with the help of a real world example in the next slide.

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For example, if a new laptop is differentiated on the basis of color, it might differentiate it from the existing competitors. But there is no guarantee for success if the point of difference is not important enough to get consumers to stop purchasing competitor's laptop.

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## MARKETING REASONS FOR NEW PRODUCT FAILURE

**1. Insignificant point of difference:**

- Xybernaut Poma Wearable PC manufactured by Xybernaut and Hitachi in 2002.
- The point of difference of this early-stage portable personal computer was that it was wearable.
- However, even though the point of difference was unique, it was irrelevant and served no added value to the customer.



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So, we explain this with the help of a real-world example Xybernaut Poma wearable pc manufactured by Xybernaut and Hitachi in 2002 is the case in point. So, this is a wearable personal computer the point of difference of this early stage portable personal computer was that it was wearable. So, that was the main point of difference.

However, even though the point of difference was unique there was there was no other personal computer that could be own by a person. But it was irrelevant and served no added value to the customer. So, for customers that was irrelevant, and it is it was not serving any value to the customers, although the point of difference was unique.

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## MARKETING REASONS FOR NEW PRODUCT FAILURE

**2. *Incomplete market and product protocol*** before product development starts:

- Without a complete protocol, firms try to design a vague product for a phantom market.
- For example the original Segway model a two-wheeled, self-balancing personal transporter; it did not have a clear product protocol when launched initially in 2001.
- All the original models had to be discontinued by 2006.



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The second point is incomplete market and product protocol before product development starts, without a complete protocol firms try to design a vague product for a phantom market.

For example, the original Segway model a two wheeled self balancing personal transporter, it did not have a clear product protocol when launched initially in 2001. All the original models had to be discontinued by 2006.

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## MARKETING REASONS FOR NEW PRODUCT FAILURE

**3. *Not satisfying customer needs on critical factors:***

- This factor stresses that problems on one or two critical factors can kill the product, even though the general quality is high.
- For example, the Japanese, like the British, drive on the left side of the road.
- Until 1996, U.S. carmakers sent Japan few right-hand-drive cars—unlike German carmakers, which exported right-hand-drive models in several of their brands.

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The third reason is not satisfying customer needs on critical factors. This factor stresses that problem on one or two critical factors can kill the product, even though the general quality is high. For example, the Japanese like the British drive on the left side of the road, until 1996 US cars makers sent Japan few right-handed drive car. Unlike German car makers which exported right hand drive models in several of their brands.

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**MARKETING REASONS FOR NEW PRODUCT FAILURE**

**4. Bad timing:**

- This results when a product is introduced too soon, too late, or when consumer tastes are shifting dramatically.
- Microsoft, for example, launched 'Microsoft Bob' which was supposed to be a user-friendly interface for windows.
- Unfortunately, the software demanded more performance than typical computer hardware could deliver at the time, and there wasn't an adequately large market.



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The 4th reason for this product failure is bad timing, this result when a product is introduced too soon or too late or when consumers tastes are shifting dramatically and radically. Microsoft for example, launched Microsoft bob which was supposed to be a user-friendly interface for windows.

Unfortunately, the software demanded more performance than typical computer hardware could deliver at that at that time and there was not any adequately large market for the software. The 5th reason for this product failure is plain simple poor product quality. This factor often results when a product is not thoroughly tested.



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## MARKETING REASONS FOR NEW PRODUCT FAILURE

**5. Poor product quality:**

- This factor often results when a product is not thoroughly tested.
- The costs to an organization for poor quality can be staggering and include the labor, materials, and other expenses to fix the problem apart from the lost sales, profits, and market share.
- For example, Tata Motors launched the Nano for targeting motorcyclists. However, the low price tag led to numerous cut corners in production, which resulted in serious safety flaws.

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The costs to an organization for poor quality can be staggering and include the labor material and other expenses to fix the problem apart from the lost sales profits and market share. For example, Tata motors launched the Nano for targeting motorcyclist. However, the low prices tag led to numerous cut corners in production which resulted in serious safety flaws.

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## MARKETING REASONS FOR NEW PRODUCT FAILURE

**6. Too little market attractiveness:**

- For launching a new product the ideal is a large target market with high growth and real buyer need.
- But often the target market is too small to warrant the huge expenses necessary to reach it.
- One such example can be seen in case of 'Twitter Peek' which was launched (in 2009) as a dedicated device for only sending and receiving tweets.



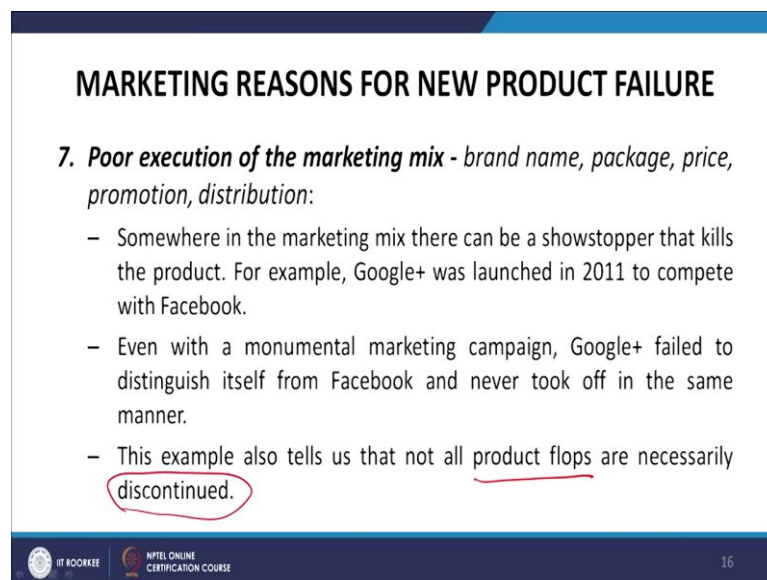
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The 6th reason is too little market attractiveness, for launching a new product the ideal is a large target market with high growth and real buyers need. So, for this large target

market these are the two things that are required one is high growth and another is real buyer need.

But often the target market is too small to warrant the huge expenses necessary to reach it. For one such example can be seen in case of Twitter Peek which was launched in 2009 as a dedicated device for only sending and receiving tweets.

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**MARKETING REASONS FOR NEW PRODUCT FAILURE**

**7. Poor execution of the marketing mix - brand name, package, price, promotion, distribution:**

- Somewhere in the marketing mix there can be a showstopper that kills the product. For example, Google+ was launched in 2011 to compete with Facebook.
- Even with a monumental marketing campaign, Google+ failed to distinguish itself from Facebook and never took off in the same manner.
- This example also tells us that not all product flops are necessarily discontinued.

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The 7th reason for new product failures can be poor execution of the marketing mix, that is we are talking of brand name, packaging, price, promotion and distribution.

Somewhere in the marketing mix there can be a showstopper that kills the product. For example, Google plus was launched in 2011 to compete with Facebook. Even with a monumental marketing campaign Google plus failed to distinguish itself from Facebook and never took off in the same manner.

The example also tells us that not all product flops are necessarily discontinued. So the product may flop for the timing, but it does not mean that the company has to discontinue the product. Another reason is no economical access to buyers.

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**MARKETING REASONS FOR NEW PRODUCT FAILURE**

**8. *No economical access to buyers:***

- Grocery products provide an example of this factor.
- Almost 20,000 new consumer packaged goods (food, beverage, health and beauty aids, household, and pet items) are introduced globally each month.
- Because shelf space is judged in terms of sales per square foot, a new product must displace an existing product on the supermarket shelves.
- The cost to gain access to retailer shelf space is huge.

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So, grocery products provide an example of this factor almost 20000 new consumer packaged goods food beverages, health beauty aid, household and pet items are introduced globally each month. Because shelf space is judged in terms of sales per square foot, a new product must displace an existing product on the supermarket shelves.

The cost to gain access to retailer shelf space is huge, because the retailer has limited shelf space. So, in order to put a new product on the shelf he has to he has to replace the old one.

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**ORGANIZATIONAL PROBLEMS IN NEW-PRODUCT FAILURES**

- Organizational problems also contribute to the marketing reasons for new- product failures described earlier.
- Some organizational problems are as follows (these might overlap in some cases)-

**1. *Not really listening to the “voice of the consumer”:***

- Product managers may believe that they “know better” than their customers or feel they “can’t afford” the valuable marketing research that could uncover problems.

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Now, there are some Organizational problems in new product failures. Organizational problems also contribute to the marketing reasons for new product failures described earlier. Some organizational problems are as follows they might overlap in some cases.

So, what are these organizational problems, the first of this organizational problem is not really listening to the voice of the customer, voice of the consumer. Product managers may believe that they know better than their customers or feel they cannot afford the valuable marketing research that could uncover the problem.

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**ORGANIZATIONAL PROBLEMS IN NEW-PRODUCT FAILURES**

- 2. *Skipping stages in the new-product process:***
  - A seven stage new-product process discussed in upcoming slides is a sequence used in some form by most large organizations. Skipping a stage often leads to disaster.
- 3. *Pushing a poorly conceived product into the market* to generate quick revenue:**
  - Pressure from top management to meet quarterly revenue targets and focus on quick returns often result in overlooking the network of services needed to support the physical product.

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The second of this problem can be skipping stages in the new product process, a 7-stage new product process discussed in the upcoming slides is a sequence used in some form by most large organizations. Skipping a stage often leads to a disaster. The third reason is pushing a poorly conceived product into the market to generate quick revenues.

So, pressure from top management to meet quarterly revenue targets and focus on quick returns often results in overlooking the network of services needed to support the physical product. So, that we had talked about earlier that is supplementary services. So, there are core product and services to be followed by supplementary services.

So, in this case because of the pressure on meeting quarterly revenue targets they launch a product. But without sufficiently supporting it with supporting services, without sufficiently consolidating them that product with supplementary services.

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**ORGANIZATIONAL PROBLEMS IN NEW-PRODUCT FAILURES**

**4. Encountering “groupthink” in task force and committee meetings:**

- Some members in the new-product planning committee might be suspicious of the product concept.
- But the fear of being cast as a “negative thinker” and “not being a team player” act as a deterrent for honest suggestions.
- A strong public commitment to a new product by its key advocate may make it difficult to kill the product even when new negative information comes to light.

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The fourth reason is encountering group think in task force and committee meetings groupthink. So, that is the key word some members in the new product planning committee might be suspicious of the product concept.

But the fear of being cast as a negative thinker and not being a team player act as a deterrent for honest suggestions. A strong public commitment to a new product by it is key advocate may make it difficult to kill the product, even when new negative information comes to light.

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**ORGANIZATIONAL PROBLEMS IN NEW-PRODUCT FAILURES**

**5. Not learning critical takeaway lessons from past failures:**

- The easiest lessons are from “intelligent failures”—ones that happen early in the new-product process.
- At this point these failures are less expensive and immediately give better understanding of customers’ wants and needs.

**6. The “NIH problem”:**

- A great idea is a great idea, regardless of its source.
- Yet in the bureaucracy that can occur in large organizations, ideas from outside often get rejected simply because they come from outside—what has been termed the “not-invented-here (NIH) problem.”

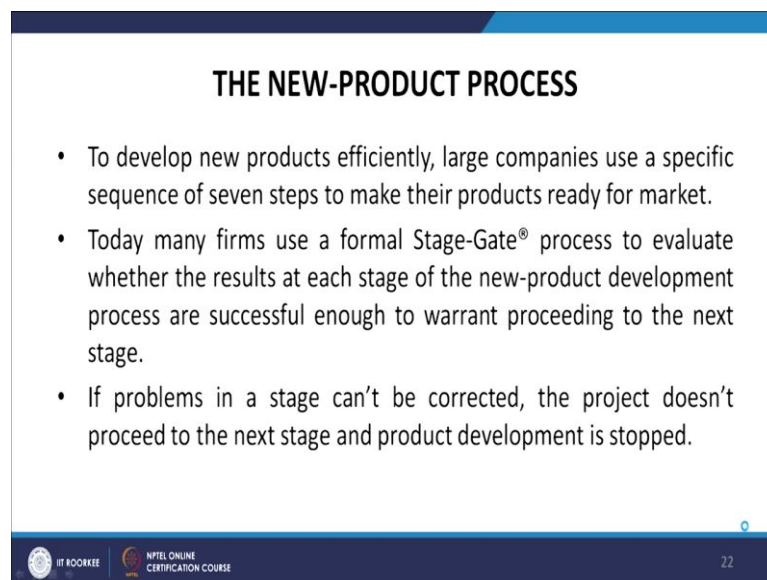
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The 5th reason is not learning critical takeaway lessons from past failures. So, past failures they gave lots of information about why things are failed and that leads to several takeaway lessons.

The easiest lessons are from intelligent failures one that happened early in the new product process. At this point these failures are less expensive and immediately give better understanding of customers wants and needs so it is important, so that is why they are called as intelligent failures because, they happened early in this new product process and because they fail in the early stages. So, that leads to lesser wastage of money and time.

The 6th reason is the NIH problem, a great idea is a idea regardless of it is source. Yet in the bureaucracy that can occur in large organizations idea from outside often get rejected simply because they come from outside, what has been termed as not invented here problem. So, this NIH stands for not invented here. So, large organizations they want that the idea should come from within rather than from outside. Now, let us look at this new product development process.

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**THE NEW-PRODUCT PROCESS**

- To develop new products efficiently, large companies use a specific sequence of seven steps to make their products ready for market.
- Today many firms use a formal Stage-Gate® process to evaluate whether the results at each stage of the new-product development process are successful enough to warrant proceeding to the next stage.
- If problems in a stage can't be corrected, the project doesn't proceed to the next stage and product development is stopped.

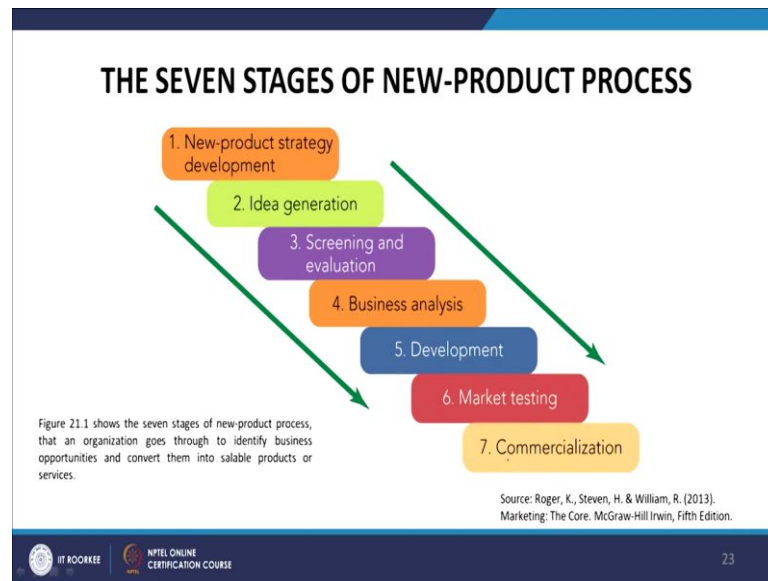
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So, that is that is the process and in most large organization that process is followed. To develop new product efficiently, large companies use a specific sequence of 7 steps to make their product ready for the market. Today many firms use a formal stage gate

process to evaluate whether the results at each stage of the new product development process are successful enough to warrant proceeding to the next stage.

If problems in a stage cannot be corrected, the project does not proceed to the next stage and in that case the product development is stopped, and these are these 7 stages.

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Starting from 1 and moving to the 7th. So, the first stage is new product strategy development, that is followed by idea generation, then screening and evaluation, the fourth step is business analysis, the fifth is development and sixth is market testing, the last step of this process is commercialization. So, this is figure 21.1 and it shows the 7 stages of new product process that an organization goes through to identify business opportunities and convert them in salable products or services.

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The slide is titled "THE NEW-PRODUCT PROCESS" in bold black text. Below the title, there is a bullet point for "Stage 1: New-Product Strategy Development". This stage is described with three sub-points: it defines the role of a new product in terms of the firm's overall objectives; it involves using SWOT analysis and environmental scanning to assess strengths and weaknesses relative to trends; and it defines a vital "protocol" for each new product idea while identifying its strategic role in the firm's business portfolio. The slide footer includes the logos for IIT ROORKEE and NPTEL ONLINE CERTIFICATION COURSE, along with the page number 24.

## THE NEW-PRODUCT PROCESS

- **Stage 1: New-Product Strategy Development**
  - This stage defines the role for a new product in terms of the firm's overall objectives.
  - During this stage, the firm uses both a SWOT analysis and environmental scanning to assess its strengths and weaknesses relative to the trends it identifies as opportunities or threats.
  - The outcome not only defines the vital "protocol" for each new-product idea but also identifies the strategic role it might serve in the firm's business portfolio.

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Now, let us look at each of these stages. So, stage 1 is New Product Strategy Development this stage defines the role of a new product in terms of the firm's overall objectives. So, now we are talking of the firm's overall objectives what are the firm's objectives.

During this stage the firm uses both a SWOT analysis and environmental scanning to assess its strengths and weaknesses relative to the trends it identifies as opportunities or threats. The outcome not only defines the vital protocol for each new product idea, but also identifies the strategic role it might serve in the firm's business portfolio.



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**THE NEW-PRODUCT PROCESS**

- **Stage 1: New-Product Strategy Development**
  - New-product development in services, such as buying mutual funds or insurance or airline ticket is often difficult.
  - It is difficult because services are intangible and performance-oriented.
  - Nevertheless, service innovations can have a huge impact on our lives.
  - For example, the online payment banks and digital money transfer services have revolutionized the banking services industry through instant money transfer facility.

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New product development and services such as buying mutual funds or insurance, or airline tickets is often difficult. It is difficult because services are intangible and performance oriented. Nevertheless, service innovations can have a huge impact on our lives. For example, the online payment banks and digital money transfer services have revolutionized the banking service industry through instant money transfer facility.

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**THE NEW-PRODUCT PROCESS**

- **Stage 2: Idea Generation**
  - Idea generation stage involves developing a pool of concepts to serve as candidates for new products, building upon the previous stage's results.
  - Many forward-looking companies have discovered their own organizations are not generating enough useful new-product ideas.
  - This has led to open innovation, in which an organization finds and executes creative new-product ideas by developing strategic relationships with outside individuals and organizations.

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Now, another the next stage the next step of this new product development processes Idea Generation. Idea generation stage involves developing a pool of concepts to serve as candidates for new products building upon the previous stages results.

Many forward-looking companies have discovered their own organizations are not generating enough useful new product ideas. This has led to open innovation in which an organization finds and executes creative new product ideas by developing strategic relationships with outside individuals and organizations.

So, when companies they get to know that there are not enough new product ideas coming from within the company, then they form alliances with organizations that are outside and so that they can get ideas for new products.

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**THE NEW-PRODUCT PROCESS**

- **Stage 2: Idea Generation**
- Open innovation helps organizations overcome the not-invented-here (NIH) barriers discussed earlier. Open innovations include the following:
  - 1 – **Employee and Co-Worker Suggestions:** Employees should be encouraged to suggest new-product ideas through suggestion boxes.
  - 2 – **Customer and Supplier Suggestions:** Firms ask their salespeople to talk to customers and ask their purchasing personnel to talk to suppliers to discover new-product ideas.
    - Firms also use *Crowdsourcing* which involves generating insights leading to actions based on massive numbers of people's ideas.

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Open innovation helps organizations overcome the not invented here barrier discussed earlier. Open innovations include the following; the first is Employee and Co-worker Suggestions.

Employees should be encouraged to suggest new product ideas through suggestion boxes. Then customer and supplier suggestions firms ask their salespeople to talk to customers and ask their purchasing personnel to talk to suppliers to discover new product ideas. And firms also use crowd sourcing which involves generating insights leading to

action based on massive numbers of people ideas. Then the third is research and development laboratories.

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**THE NEW-PRODUCT PROCESS**

- **Stage 2: Idea Generation**
  - 3 – **Research and Development Laboratories:** Professional R&D and innovation laboratories that are outside the walls of large corporations are sources of open innovation and can provide new product ideas.
  - 4 – **Competitive Products:** Analyzing the competition can also lead to new-product ideas.
  - 5 – **Smaller Firms, Universities, and Inventors:** Small technology firms and even small, nontraditional firms in adjacent industries provide creative advances. Similarly many universities and inventors partner with business firms to commercialize faculty and individual inventions.

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So, there are professional R & D and innovation laboratories that are outside the walls of large corporation or they are also sources of open innovation and can provide new product ideas.

Then new product ideas can also come from competitive products that is analyzing the competition can also lead to new product ideas. Then another source of new product idea is smaller firms, universities and inventors. Small technology firms and even small nontraditional firms in adjacent industries provide creative advances. Similarly, many universities and inventors' partners with business firms to commercialize faculty and individual inventions.

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**THE NEW-PRODUCT PROCESS**

- **Stage 3: Screening and Evaluation**
  - It is the stage that internally and externally evaluates new-product ideas to eliminate those that warrant no further effort.
  - 1 – **Internal Approach:** A firm's employees evaluate the technical feasibility of a proposed new-product idea to determine whether it meets the objectives defined in the first stage (new-product strategy development stage).
  - 2 – **External Approach:** Firms use concept tests, external evaluations with consumers that consist of preliminary testing of a new-product idea rather than an actual product.

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Now, this 3rd step in this process is screening and evaluation, it is the stage that internally and externally evaluates new product ideas to eliminate those that warrant no further effort.

So, there are these two approaches the first is the internal approach, a firm's employees evaluate the technical feasibility of a proposed new product idea to determine whether it meets the objectives defined in the 1st stage, that is new product strategy development stage. In the second is the external approach firms use concept tests, external evaluations with consumers that consists of preliminary testing of a new product idea rather than an actual product.

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The slide is titled "THE NEW-PRODUCT PROCESS" and lists the details of Stage 4: Business Analysis. The text is as follows:

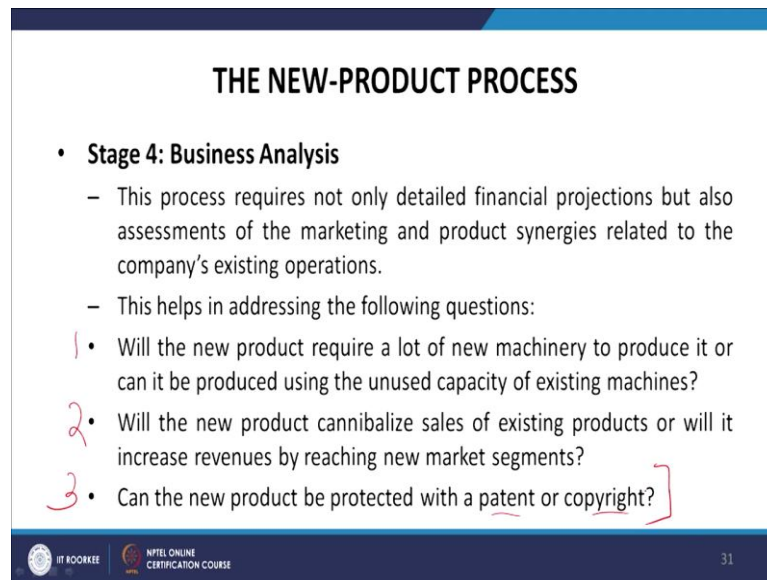
- **Stage 4: Business Analysis**
  - Business analysis specifies the features of the product and the marketing strategy needed to bring it to market and make financial projections.
  - This is the last checkpoint before significant resources are invested to create a prototype—a full-scale operating model of the product.
  - The business analysis stage assesses the total “business fit” of the proposed new product with the company’s mission and objectives.

At the bottom of the slide, there are logos for IIT ROORKEE and NPTEL ONLINE CERTIFICATION COURSE, and the page number 30.

The 4th stage is Business Analysis; this business analysis specifies the feature of the product and the marketing strategy needed to bring it to market and make financial projections. This is the last checkpoint before significant resources are invested to create a prototype that is a full-scale operating model of this product.

The business analysis stage assesses the total business fit of the proposed new product with the company’s mission and objectives. So, at this stage now this business analysis done and we and the companies then they look for whether this new product is in line with the company’s mission and objectives. This process requires not only detailed financial projections, but also assessment of the marketing and product synergies related to the company’s existing operations.

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### THE NEW-PRODUCT PROCESS

- **Stage 4: Business Analysis**
  - This process requires not only detailed financial projections but also assessments of the marketing and product synergies related to the company's existing operations.
  - This helps in addressing the following questions:
    1. Will the new product require a lot of new machinery to produce it or can it be produced using the unused capacity of existing machines?
    2. Will the new product cannibalize sales of existing products or will it increase revenues by reaching new market segments?
    3. Can the new product be protected with a patent or copyright?

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This helps in addressing the following questions, the first question is will the new product require a lot of new machinery to produce it or can it be produced using the unused capacity of existing machines? So, that is the first question.

The second question is willing the new product cannibalize sales of existing products or will it increase revenues by reaching new market segments? And the third is can the new product be protected with a patent or copyright. If the company is not able to protect it is new product by way of patent or copyrights, then the competitors will very soon copy it.

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### THE NEW-PRODUCT PROCESS

- **Stage 4: Business Analysis**
  - For services, business analysis involves using capacity management to find ways to match the availability of the service offering to when it is needed.
  - For example, airlines and mobile phone service providers use off-peak pricing to charge different prices during different times of the day or during different days of the week to help match the supply and demand for their services.

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For services business analysis involves using capacity management to find ways to match the availability of the service offerings to when it is needed. For example, airlines and mobile phone service providers use off peak pricing to charge different prices during different times of the day or during different days of the week to help match the supply and demand for their services.

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The slide is titled "THE NEW-PRODUCT PROCESS" and focuses on "Stage 5: Development". It lists four key points about this stage: turning ideas into prototypes, efficient manufacturing, laboratory and consumer testing, and the importance of safety tests, such as car crash tests.

- **Stage 5: Development**
  - Development is the stage of the new-product process that turns the idea on paper into a prototype.
  - This results in a demonstrable, producible product that involves manufacturing the product efficiently.
  - It also includes performing laboratory and consumer tests to ensure it meets the standards established for it in the protocol.
  - Safety tests are also critical for ensuring that the product meets the standards. For example, car manufacturers conduct extensive safety tests by crashing their cars into concrete walls.

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The 5th stage is Development, development is the stage of the new product process that turns the idea on paper into a prototype. This results in a demonstrable producible product that involves manufacturing, the product efficiently. It also includes performing laboratory and consumer tests to ensure it meets the standard established for it in the protocol.

Then safety tests are also critical for ensuring that the product meets the standard. For example, a car manufacturer conducts extensive safety test by crashing their cars into concrete walls

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**THE NEW-PRODUCT PROCESS**

- **Stage 5: Development**
  - For services, improving the delivery of customer service is critical.
  - This involves analyzing the entire sequence of steps or “service encounters” to improve the interactions between consumers and the service provider.
  - High-contact services such as hotels, car rental agencies, and web providers use this approach to serve customers better.

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For services improving the delivery of customer service is critical, this involves analyzing the entire sequence of steps or service encounters to improve the interaction between consumers and the service provider.

High contact services such as hotels, car rental agencies and web providers use this approach to serve customers better.

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**THE NEW-PRODUCT PROCESS**

- **Stage 6: Market Testing**
  - Market testing is a stage of the new-product process that involves exposing actual products to prospective consumers under realistic purchase conditions to see if they will buy.
  - If the budget permits, consumer packaged goods firms do this by test marketing, which involves offering a product for sale on a limited basis in a defined area for a specific time period.

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The next stage is market testing, market testing is a stage of the new product process that involves exposing actual productive prospective consumers under realistic purchase



conditions to see if they will buy this product. If the budget permits consumer packaged goods firms do this by text marketing which involves offering a product for sale on a limited basis in a defined area for a specific time period.

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**THE NEW-PRODUCT PROCESS**

- **Stage 6: Market Testing**
  - The three main kinds of test markets are:
    1. Standard
    2. Controlled
    3. Simulated

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Now in this stage of market testing there are 3 main types of test markets which are standard, controlled and simulated.

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**THE NEW-PRODUCT PROCESS**

- **Stage 6: Market Testing**
  1. **Standard Test Markets**
    - In a standard test market, a company develops a product and then attempts to sell it through normal distribution channels in a number of test-market cities.
    - Test-market cities must be demographically representative of markets targeted for the new product, have cable TV systems that can deliver different ads to different homes, and have retailers with checkout counter scanners to measure sales.

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Standard test markets in a standard test market a company develops a product and then attempts to sell it through normal distribution channels in a number of test market cities.

Test market cities must be demographically representative of market targets for the new product, have cable TV system that can deliver different ads to different homes and have retailers with checkout counter scanners to measure the sales.

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**THE NEW-PRODUCT PROCESS**

- **Stage 6: Market Testing**
  1. **Standard Test Markets**
    - A distinguishing feature of a standard test market is that the producer sells the product to distributors, wholesalers, and retailers, just as it would do for other products.
    - Because standard test markets are so time-consuming and expensive and can alert competitors to a firm's plans, some firms skip test markets entirely or use controlled or simulated test markets.

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A distinguishing feature of a standard test market is that the producer sells the product to distributors wholesalers and retailers just as it would do for other products. Because the standard test markets are so time consuming and expensive and can alert competitors to a firms plan some firms skip test market entirely or use controlled or simulated test markets.

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**THE NEW-PRODUCT PROCESS**

- **Stage 6: Market Testing**

**2. *Controlled Test Markets***

- A controlled test market involves contracting the entire test program to an outside service.
- The service pays retailers for shelf space and can therefore guarantee a specified percentage of the test product's potential distribution volume.
- In some cases the effectiveness of different TV commercials and other direct-to-consumer promotions can be measured.

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Now, what happens in control test markets? It involves contracting the entire test program to an outside service.

The service space retailers for shelf space and can therefore guarantee a specified percentage of the test products potential distribution volume. In some cases, the effectiveness of different TV commercials and other direct to consumer promotions can also be measured.

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**THE NEW-PRODUCT PROCESS**

- **Stage 6: Market Testing**

**3. *Simulated Test Markets***

- To save time and money, companies often turn to simulated (or laboratory) test markets (STM), a technique that somewhat replicates a full-scale test market.
- STMs are often run in shopping malls, to find consumers who use the product class being tested.

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What happens in simulated test market? It is to save time and money; company often turns to simulated or laboratory test markets a technique that somewhat replicates a full-scale test market. So, STMs are often run in shopping malls to find consumers who use the product class being tested, qualified participants are shown the product or the product concept and are asked about usage reasons for purchase and important product attributes.

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**THE NEW-PRODUCT PROCESS**

- **Stage 6: Market Testing**

**3. Simulated Test Markets**

- Qualified participants are shown the product or the product concept and are asked about usage, reasons for purchase, and important product attributes.
- They then see the company's and competitors' ads for the test product.
- Finally, participants are given money to decide to buy or not buy the firm's or the competitors' product from a real or simulated store environment.

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They then see the company's and competitors' ad for the test product; finally, participants are given money to decide to buy or not to buy a firm or the competitors product from a real or simulated store environment.

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**THE NEW-PRODUCT PROCESS**

- **Stage 6: Market Testing**
- **When Test Markets Don't Work**
  - Not all products can use test markets.
  - Test marketing a service is very difficult because consumers can't see what they are buying. For example, how do you test market a new building for an art museum?
  - Similarly, test markets for expensive consumer products such as cars or costly industrial products such as jet engines are impractical.

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Now, let us look at when test markets do not work, not all products can use test markets test marketing a service is very difficult because consumers cannot see what they are buying.

For example, how do you test market a new building for an art museum. Similarly, test markets for expensive consumer products, such as cars or costly industrial products such as jet engines are impractical.

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**THE NEW-PRODUCT PROCESS**

- **Stage 7: Commercialization**
  - This stage positions and launches a new product in full-scale production and sales.
  - Companies proceed very carefully at the commercialization stage because this is the most expensive stage for most new products.
  - If competitors introduce a product that leapfrogs the firm's own new product or if cannibalization of its own existing products looks significant, the firm may halt the new-product launch.
  - Speed or Time to Market (TtM) is another vital factor in introducing a new product.

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The last stage of this process is commercialization, this stage positions and launches a new product in full scale production and sales. Companies proceed very carefully at the commercialization stage, because this is the most expensive stage for the new products. If competitors introduce a product that leapfrogs the firm's own new product or if cannibalization of its own existing products look significant. The firm may halt the new product launch. Speed or time to market is another vital factor in introducing a new product.

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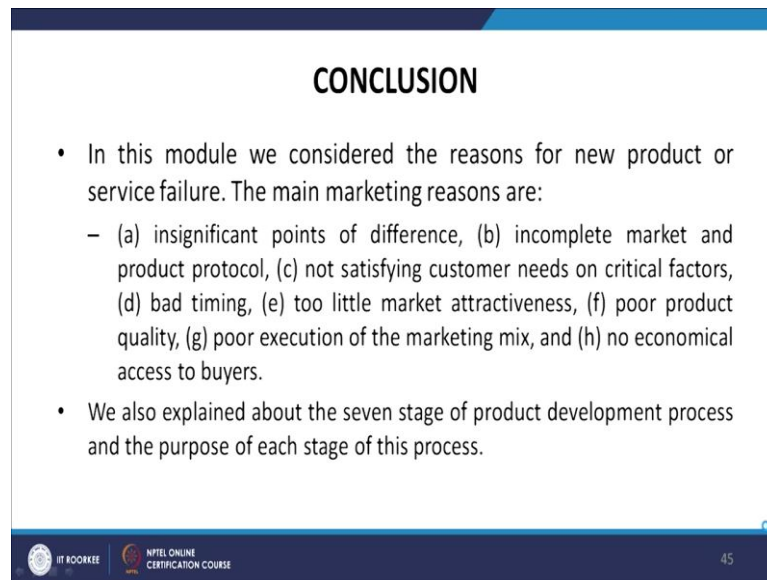
**THE NEW-PRODUCT PROCESS**

- **Stage 7: Commercialization**
  - Products coming to market on time are more profitable than those arriving late.
  - To reduce the risk of new product launch large companies use regional rollouts, introducing the product sequentially into geographical areas of a country.
  - This allows production levels and marketing activities to build up gradually to minimize the risk.
  - Grocery product manufacturers and telephone service providers use this strategy.

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Products coming to market on time are more profitable than those arriving late, to reduce the risk of new product launch. Large companies use the regional rollouts introducing the product sequentially into geographic areas of a country; this allows production levels and marketing activities to build up gradually to minimize the risk. Grocery product manufacturers and telephone service providers use this strategy.

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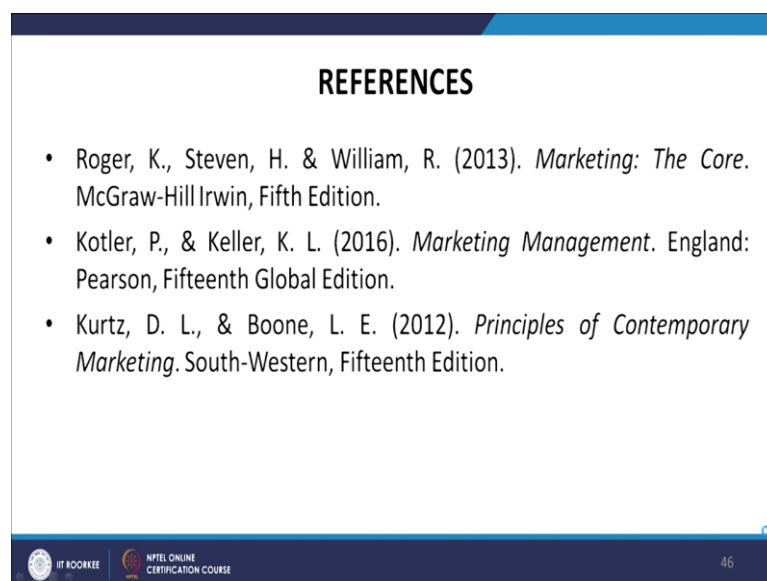
**CONCLUSION**

- In this module we considered the reasons for new product or service failure. The main marketing reasons are:
  - (a) insignificant points of difference, (b) incomplete market and product protocol, (c) not satisfying customer needs on critical factors, (d) bad timing, (e) too little market attractiveness, (f) poor product quality, (g) poor execution of the marketing mix, and (h) no economical access to buyers.
- We also explained about the seven stage of product development process and the purpose of each stage of this process.

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So, in order to conclude in this module we have talked about the reasons for new product or service failures and the main marketing reasons for that are the insignificant point of differences, incomplete market or product protocol, not satisfying customer needs on critical factors, bad timings, too little market attractiveness, poor product quality, poor execution of the marketing mix and no economic access to buyers. We also explained about the seven-stage process of new product development and the purpose at each stage of this process.

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**REFERENCES**

- Roger, K., Steven, H. & William, R. (2013). *Marketing: The Core*. McGraw-Hill Irwin, Fifth Edition.
- Kotler, P., & Keller, K. L. (2016). *Marketing Management*. England: Pearson, Fifteenth Global Edition.
- Kurtz, D. L., & Boone, L. E. (2012). *Principles of Contemporary Marketing*. South-Western, Fifteenth Edition.

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And these are the three books from which the material for this module was used.

Thank you.