



# Cerial Processing

## Level-III



Based on May 2019, Version 2 OS and March 2021, V1 Curriculum

### **Module Title: - Applying Competitive Manufacturing Practices**

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<b>LG #49</b>	<b>LO #1- Focus on the basic competitive manufacturing concepts</b>
<b>Instruction sheet</b>	
<p>This learning guide is developed to provide you the necessary information regarding the following content coverage and topics:</p> <ul style="list-style-type: none"> <li>Identifying customers and their needs/requirements</li> <li>Identifying suppliers</li> <li>Identifying value contributions along the chain</li> <li>Identifying methods of increasing own contribution and recommending to the value chain.</li> </ul> <p>This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:</p> <ul style="list-style-type: none"> <li>Identify customers and their needs/requirements</li> <li>Identify suppliers</li> <li>Identify value contributions along the chain</li> <li>Identify methods of increasing own contribution and recommending to the value chain.</li> </ul>	

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**Learning Instructions:**

1. **Read the specific objectives of this Learning Guide**
2. **Follow the instructions described below.**
3. **Read the information written in the information Sheets**
4. **Accomplish the Self-checks**
5. **Perform Operation Sheets**
6. **Do the “LAP test”**

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## Information Sheet 1- Identifying customers and their needs/requirements

### 1.1 Introduction

A customer is an individual or business that purchases another company's Products. Customers are important because they drive revenues; without them, businesses cannot continue to exist. customer need establishes the relationship between the organization and the customer.

Requirements are those characteristics that determine whether or not the customer is happy. There are four main customer needs that an entrepreneur or small business must consider. These are price, quality, choice and convenience.

### 1.2 Identify your customers

The first step of customer research is identifying your customers. Your market research should help you understand your potential customers. Further customer research can help you develop a more detailed picture of them and understand how to target them.

It will also highlight key characteristics your customers share, such as:

- Gender
- Age
- Occupation
- Disposable income
- Residential location
- Recreational activities.

#### External customer

External customers are the people that pay for and use the products or services your company offers. To be clear, an external customer is a person who is not directly connected to your organization other than by purchasing your product.

#### Internal customer

Internal customers have a relationship with, and within, your company, either through employment or as partners who deliver your product or service to the end user, the

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external customer. Less obvious but certainly still significant, stakeholders and shareholders are also internal customers. All of these may or may not purchase your product.

### **1.3 Identifying customer needs**

Before you start promoting your products you need to know what your customers want and why. Good customer research helps you work out how to convince your customers that they need your products and services.

#### **What are customer needs?**

A customer need is a motive that prompts a customer to buy a product. In order to identify customer needs, it is important to understand the reasons behind their decision making. Companies often look at the customer need as an opportunity to resolve or contribute surplus value back to the original motive.

In order to understand customer needs better, it's very important to know who your customers are. Understand why they shop Once you've identified who your customers are, you can find out what motivates them to buy products and services

**Here are four simple steps to follow in order to meet customer needs successfully:**

- Identify – Follow customer needs analysis via surveys, interviews, focus groups, or social listening.
- Distribute – Once identified the needs, you can distribute it across the right teams and departments.
- Create – Tailor product features, create detailed content that speaks about customer needs.

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- Collect – Obtain customer feedback regularly to learn how your efforts meet their expectations.

## **Understanding Customer Needs, Requirements and Expectations for products**

The needs and requirements for service and support differ greatly by equipment, by customer, by site, by usage, and by many other aspects too numerous to mention. In fact, it may be said that every piece of equipment, at any particular customer site, has its own requirements for products.

### **To assist in doing so, we suggest the following five easy guidelines:**

- “If you can speak the customers’ language, you can understand their needs better” The only way you can truly understand your customers’ critical needs and requirements for service is to be familiar with the terminology, technology, and “buzz words” they use whenever you interact with one another
- “If you know who to deal with, you can get to the root of the problem quicker” Knowing who to deal with in each customer’s organization is critical to the success of any long-term service and support relationship. However, in order to be in a position where you can effectively identify the principal customer contacts and liaisons, you will first need to have a fair understanding of each customer’s organizational structure and hierarchy.
- “If you know how customers use their equipment, you can help them avoid common problems, and suggest ways to improve productivity”

In many cases, the causes of equipment failures may be more a result of the way in which the customer uses the system than as a result of problems specific to the equipment itself.

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“If you understand the importance of equipment availability to your customer, you will better understand how to provide them with service and support” The best way to address the key components of equipment service and support for an individual customer or segment is to match its services needs and requirements directly against the “cost” of equipment downtime

- “If you understand how your customers’ needs will be changing, you can prepare yourself to support them in the future”

Self-check 1	Written test
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**Directions:** Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

**Test I: Write true if the statement is correct and false if statement is incorrect(each 1.5pts)**

1. The first step of customer research is identifying your customers.
2. External customers are the people that pay for and use the products or services your company offers.
3. In order to understand customer needs better, it’s very important to know who your customers are.

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4. Customer need establishes the relationship between the organization and the customer.

### Test II: Short Answer Questions

1. What is the difference between internal customer and external customer?(5pts)
2. List four simple steps to follow in order to meet customer needs successfully (4pts)

**Note: Satisfactory rating - 15 points      Unsatisfactory - below 15 points**

You can ask you teacher for the copy of the correct answers.

## Information Sheet 2- Identifying suppliers

### 2.1 Suppliers

A supplier is a person or business that provides a product to another entity. The role of a supplier in a business is to provide high quality products from a manufacturer at a good price to a distributor or retailer for resale.

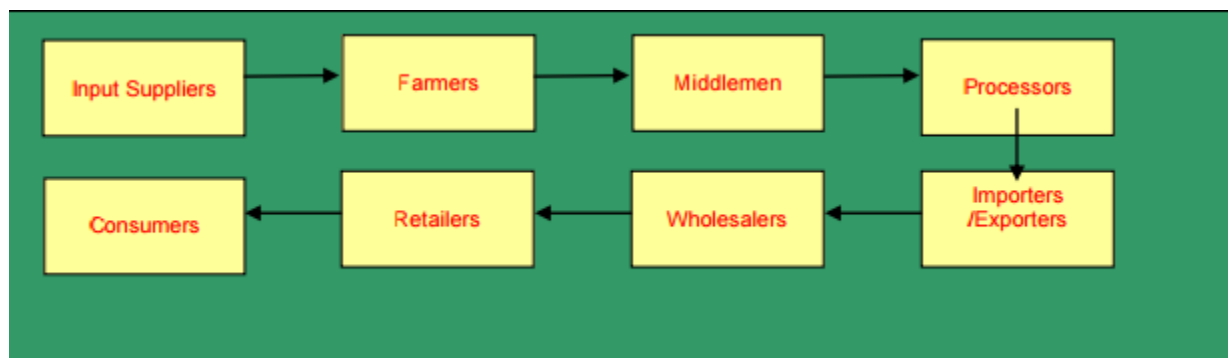
A supplier in a business is someone who acts as an intermediary between the manufacturer and retailer, ensuring that communication is forthcoming and stock is of sufficient quality.

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Choosing the right supplier involves much more than scanning a series of price lists. Your choice will depend on a wide range of factors such as value for money, quality, reliability and service. How you weigh up the importance of these different factors will be based on your business' priorities and strategy.

**Supply chain:** It is taken to mean the physical flow of goods and process that are required for raw materials to be transformed into finished products. Supply chain management is about making the chain as efficient as possible through better flow scheduling and resource use, improving quality control throughout the chain, reducing the risk associated with food safety and contamination, and decreasing the agricultural industry's response to changes in consumer demand for food attributes.



**Figure 1 Simplified supply chain**

## 2.2 Importance of a Supplier in the Product Lifecycle

Suppliers have a hugely important role at every stage of the product lifecycle. From sourcing raw materials to helping ramp up production, and to finding better options for raw materials as the market starts becoming saturated, companies need to work closely with their suppliers to get the best out of their products.

**Important elements of a supplier's role include:**

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- **Compliance with local laws:** Suppliers should comply with all relevant laws and standards, including human rights protection and child labor.
- **Equitable transactions from all retailers:** Suppliers must provide equal opportunities for all retailers to do business with them. A retailer should not be rejected due to their location, or any other reason.
- **Best price possible:** Suppliers must guarantee the best price and quality to retailers to maintain trust among them. This will help ensure repeat business in the future.
- **No conflict of interest for suppliers:** Suppliers should not do business with those who they may have a conflict of interest with. This would include family members, friends, and new or old colleagues. This is to decrease the likelihood of unfair treatment among other customers.

### 2.3 Identifying suppliers

Supplier identification efforts are emboldened when company's outline the definition and criteria of an ideal supply partner. Once suppliers are identified and qualified effective supplier engagement can convert suppliers to supply partners that will co-create value for your organization.

When most buyers plan on identifying a new supplier, they are usually tempted to focus on the best price. However, concentrating only on low costs can hurt you in the long term.

#### I. Identify Supply Sources

- *Company supplier records - current and past suppliers*
- *Industry organizations, registers and directories*
- *Catalogs, internet and trade journals*
- *Internal suppliers (vertical integration)*

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## II. Compare potential suppliers

When you have got the quotation, compare the potential suppliers in terms of what matters most to you. For example, the quality of their product may be most important while their location may not matter.

When most buyers plan on identifying a new supplier, they are usually tempted to focus on the best price. However, concentrating only on low costs can hurt you in the long term. That's because shaving a few cents off the price of a product is no help if the quality is below standard, and the component or material does not arrive when you need.

### Source to Identify New Suppliers

- Check certifications
- Evaluate the geo-political climate
- Finding reputable suppliers
- Gauge financial stability
- Assess weather-related risk
- Align manufacturing and shipping locations to your needs
- Carefully review product information
- Ask for accessible inventory information.

### 2.4 Classify Your Suppliers

Ultimately you need to choose how classifications should be named and assigned within your organization based on your product. Each product is different and this should just be used as a guide to help divide your suppliers up.

- **Trivial Suppliers**

These suppliers are ones that do not affect product quality. These suppliers often do not even have an associated supplier file or have any requirements.

- **Non-Critical Suppliers**

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These suppliers have minimal affect on product quality or are sometimes large distributors that supply off the-shelf goods.

- **Moderate Suppliers**

Moderate-level suppliers have a direct impact on product quality and supplier issues from these vendors could potentially cause voluntary recalls and/or moderate risk to the customer. These suppliers often provide custom parts that are not found off the shelf.

- **Critical Suppliers**

Critical suppliers have a significant impact to product quality and supplier issues from these vendors could result in recalls, Food and Drug Adiminstratio(FDA) warning letters and/or customer harm. These are the suppliers that require the most amount of attention; metrics and monitoring should be a continuous part of supplier controls for these vendors.

<b>Self-Check – 2</b>	<b>Written test</b>
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**Directions:** Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

**Test I: Choose the best answer from the given alternative(each 2pts)**

1. Which of the following NOT include elements of a supplier's role?
  - A) Compliance with local laws
  - B) Equitable transactions from all retailers
  - C) Best price possible
  - D) No conflict of interest for suppliers
  - E) None
2. Which of the following Not the sources Identify Supply?
  - A) *Company supplier records*
  - B) *Industry organizations, registers and directories*

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- C) Catalogs, internet and trade journals
- D) None

**Test II: Write true if the statement is correct and false if the statement is incorrect(each 1.5pts)**

1. A supplier is a person or business that provides a product to another entity.
2. Suppliers have a Not important role at every stage of the product lifecycle.
3. Critical suppliers have a Not significant impact to product quality and supplier issues.

**Test III Write Short Answer**

1. List the source to identify new suppliers?(5pts)

**Note: Satisfactory rating - 15 points**

**Unsatisfactory - below 15 points**

You can ask you teacher for the copy of the correct answers.

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## Information Sheet 3- Identifying value contributions along the chain

### 3.1 Value Chain

Value is the total amount that buyers are willing to pay for a firm's product. A value chain concentrates on the activities starting with raw materials till the conversion into final product. The sources of the competitive advantage of a firm can be seen from its discrete activities and how they interact with one another.

A value chain is a business model that describes the full range of activities needed to create a product or service. For companies that produce goods, a value chain comprises the steps that involve bringing a product from conception to distribution, and everything in between such as procuring raw materials, manufacturing functions, and marketing activities.

Value chain is increasing competition for unbeatable prices, exceptional products, and customer loyalty, companies must continually examine the value they create in order to retain their competitive advantage. It also can help a company to discern areas of its business that are inefficient, then implement strategies that will optimize its procedures for maximum efficiency and profitability.

### 3.2 Value Chain Analysis

A value chain (VC) can be defined as the full range of activities that are required to bring a product or service from conception, through the different phases of production (involving a combination of physical transformation and the input of various producer services); delivery to final customers. The

Value chain analysis extends traditional supply chain analysis by identifying values at each stage of the chain. It is called a value chain because at each stage of the supply chain, value is being added to the product or service as it is being transformed.

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The value chain analysis is therefore built on a market system (in particular a supply chain), detailing both structural and dynamic factors that affect the contributions of each actor to the chain.

### 3.4 Value chain Structural factors

- The characteristics of a food commodity (e.g. price, quality, quantity etc). The characteristics of the VCA are determined by the end markets (e.g. buyers).
- The enabling environment (laws, regulations, policies, norms, infrastructure), or factors that either facilitate or hinder the functioning of markets, hence the movement of a product or service along its value chain.
- Relationships (i.e. formal and informal linkages and information flows) between the chain actors at different levels of the value chain. These relationships (particularly gender components) are critical for moving food commodities to the end users.
- Along the value chain, supporting markets
- Dynamic factors influencing value chain performance characterize how actors in the market system respond to the opportunities and constraints.

In a simplified food commodity supply chain, the actors include input suppliers, farmers, middlemen (including agents, assemblers/collectors, transporters...), processors, wholesalers (including importers and exporters), retailers and final consumers.

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Self-Check – 3	Written test
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**Directions:** Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

**Test I: write true if the statement is correct and false if the statement is incorrect (each 2pts)**

1. Value chain analysis extends traditional supply chain analysis by identifying values at each stage of the chain.
2. Value is the total amount that buyers are willing to pay for a firm's product.
3. A value chain is a business model that describes the full range of activities needed to create a product or service.

**Test II: Short Answer Questions**

1. What mean value chain? (4pts)

**Note: Satisfactory rating – 10 points**

**Unsatisfactory - below 10 points**

You can ask your teacher for the copy of the correct answers.

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## **Information Sheet 4- Identifying methods of increasing own contribution and recommending to the value chain**

### **4.1 Introduction**

Logistics has been defined as the process of planning, implementing, and controlling the efficient, cost-effective flow and storage of raw materials, in process inventory, finished goods, and related information from point of origin to point of consumption for the purpose of conforming to customer requirements.

Logistics is a sector with great progress that blends into consumer behaviour of customers. Logistics has long been recognized as a potential source of competitive advantage for firms. Leveraging existing or developing new logistics capabilities is one way for firms to create value for customers and themselves. To the logistics process are perceive activities that can be realized for a consideration, i.e. to import, deliver carry send to the place of destination.

Logistics and supply chain management, the process of managing material and information flows from the source, through the firm and to the customer, has been recognized as an important part of organizational strategy. Logistics and supply chain management plays an important role in the ability of the firms to remain competitive in the marketplace.

### **4.2 Identifying methods of value chain**

Value chain analysis is a way to visually analyze a company's business activities to see how the company can create a competitive advantage for itself.

Value chain analysis helps a company understands how it adds value to something and subsequently how it can sell its product or service for more than the cost of adding the value, thereby generating a profit margin. In other words, if they are run efficiently the

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value obtained should exceed the costs of running them i.e. customers should return to the organisation and transact freely and willingly.

Most organizations engage in hundreds, even thousands, of activities in the process of converting inputs to outputs. These activities can be classified generally as either primary or support activities that all businesses must undertake in some form.

#### **4.2.1 Primary Activities**

Primary activities are directly concerned with creating and delivering a product. They can be grouped into five main areas: inbound logistics, operations, outbound logistics, marketing and sales, and service. Each of these primary activities is linked to support activities which help to improve their effectiveness or efficiency

- **Inbound logistics**

Refers to goods being obtained from the organisation's suppliers and to be used for producing the end product.

- **Operations**

Raw materials and goods are manufactured into the final product. Value is added to the product at this stage as it moves through the production line.

- **Outbound logistics**

Once the products have been manufactured they are ready to be distributed to distribution centres, wholesalers, retailers or customers. Distribution of finished goods is known as outbound logistics.

- **Marketing and Sales**

Marketing must make sure that the product is targeted towards the correct customer group. The marketing mix is used to establish an effective strategy, any competitive advantage is clearly communicated to the target group through the promotional mix.

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- **Services**

After the product/service has been sold what support services does the organisation offer customers. This may come in the form of after sales training, guarantees and warranties.

#### **4.2.2 Support Activities**

Support activities assist the primary activities in helping the organisation achieve its competitive advantage. There are four main areas of support activities: procurement, technology development, human resource management, and infrastructure (systems for planning, finance, quality, information management etc.).

- **Firm infrastructure**

Every organisations needs to ensure that their finances, legal structure and management structure work efficiently and helps drive the organisation forward. Inefficient infrastructures waste resources, could affect the firm's reputation and even leave it open to fines and sanctions.

- **Human resource management**

The organisation will have to recruit, train and develop the correct people for the organisation to be successful. Staff will have to be motivated and paid the 'market rate' if they are to stay with the organisation and add value.

- **Technology development**

The use of technology to obtain a competitive advantage is very important in today's technological driven environment. Technology can be used in many ways including

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production to reduce cost thus add value, research and development to develop new products.

- **Procurement**

This department must source raw materials for the business and obtain the best price for doing so. The challenge for procurement is to obtain the best possible quality available (on the market) for their budget.

#### **4.2.3 Link between Primary and Support Activities**

As mentioned before, primary activities add value directly to the production process, but they are not necessarily more important than support activities.

Nowadays, competitive advantage mainly derives from technological improvements or innovations in business models or processes. Therefore, such support activities as 'information systems or 'general management' are usually the most important source of differentiation advantage. On the other hand, primary activities are usually the source of cost advantage, where costs can be easily identified for each activity and properly managed.

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Self-Check – 4	Written test
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**Directions:** Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

**Test II. Choose the best answer from given alternative(each 2pts)**

1. Which of the following includes primary activities methods of value chain?
  - A) Inbound logistics
  - B) Operations
  - C) Marketing and Sales
  - D) Outbound logistics
  - E) All
2. Which of the Following includes support activities?
  - A) procurement
  - B) technology development
  - C) human resource management
  - D) infrastructure
  - E) All

**Test II: Write true if the statement is correct and false if the statement is incorrec(each 2pts)**

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1. Support activities assist the primary activities in helping the organisation achieve its competitive advantage.
2. After the product/service has been sold what support services does the organisation offer customers.
3. Competitive advantage mainly derives from technological improvements or innovations in business models or processes.

**Note: Satisfactory rating - 10 points**

**Unsatisfactory - below 10 points**

You can ask you teacher for the copy of the correct answers.

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<b>LG#50</b>	<b>LO #2- Improve the product/process value</b>
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### Instruction sheet

This learning guide is developed to provide you the necessary information regarding the following **content coverage** and topics:

- Identifying customer features/benefits in the product
- Identifying items contribute to customer features/benefits
- Identifying things do not contribute to customer benefits/features
- Recommending methods of increasing features/benefits

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, **you will be able to:**

- Identify customer features/benefits in the product
- Identify items contribute to customer features/benefits
- Identify things do not contribute to customer benefits/features
- Recommend methods of increases features/benefits

### Learning Instructions:

1. Read the specific objectives of this Learning Guide
2. Follow the instructions described below.
3. Read the information written in the information Sheets



4. Accomplish the Self-checks
5. Perform Operation Sheets
6. Do the “LAP test”

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## Information Sheet 1-Identifying customer features/benefits in the product

### 1.1 Introduction

Product benefits are the things a product offers to satisfy the needs, desires and wants of a consumer. They are what a consumer hopes to get, feel or achieve when he/she uses a product. Product benefits can either be actual or perceived

Actual benefits – these include the performance of the product, its design as well as its cost-effectiveness.

Perceived benefits include the products popularity, its image or its reputation.

Features are characteristics that your product or service does or has. Benefits are the reasons customers buy the product or service.

### 1.2 Identifying Product Benefit

Identifying product benefits involves finding out what the customer really wants and needs, not just listing a variety of product features.

- **Features and Benefits**

You've just seen the difference between features and benefits. Features tell you what the product is a chicken sandwich made with organic ingredients and whole grain bread. The benefit I'm starving and I need something to satisfy my hunger is what sells it.

Product features include such factors as form, color, size, weight, odor, material, and tactile qualities of cereal products. A new products can offer thousands of alternatives when one considers the exterior and interior options. Features are important as they

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may help back up the benefit. But consumers will not buy the products unless it provides them with a benefit.

The distinction between the terms benefits and features is an important concept in developing and marketing a product. Features are characteristics that your product does or has.

Benefits are the reasons customers buy the product. For example, the benefits of some ovens to buyers include safety, ease of use, affordability, or in the case of many ovens that feature stainless steel casings prestige.

### **1.3 Consumer Product Categories**

A product is a bundle of attributes (features, functions, benefits, and uses) that a person receives in an exchange. In essence, the term “product” refers to anything offered by a firm to provide customer satisfaction, tangible or intangible.

Consumer products are often classified into four groups related to different kinds of buying decisions: convenience, shopping, specialty, and unsought products.

- **Convenience Products**

A convenience product is an inexpensive product that requires a minimum amount of effort on the part of the consumer in order to select and purchase it. Examples of convenience products from cereal are bread soft cookies, etc.

- **Shopping Products**

In contrast, consumers want to be able to compare products categorized as shopping products. Shopping products are usually more expensive and are purchased occasionally. The consumer is more likely to compare a number of options to assess quality, cost, and features.

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- **Speciality Products**

Specialty goods represent the third product classification. From the consumer's perspective, these products are so unique that it's worth it to go to great lengths to find and purchase them. Almost without exception, price is not the principle factor affecting the sales of specialty goods. Although these products may be custom-made or one-of-a-kind, it is also possible that the marketer has been very successful in differentiating the product in the mind of the consumer.

- **Unsought Products**

Unsought products are those the consumer never plans or hopes to buy. These are either products that the customer is unaware of or products the consumer hopes not to need.

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Self-Check – 1	Written test
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Name..... ID..... Date.....

**Directions:** Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

**Test I: Fill the blank space**

1. \_\_\_\_\_ is an inexpensive product that requires a minimum amount of effort on the part of the consumer in order to select and purchase.(2pts)
2. Consumer products are often classified into four groups related to different kinds of buying decisions: i.e \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.(8pts)

*Note:* Satisfactory rating - 10 points      Unsatisfactory - below 10 points

You can ask you teacher for the copy of the correct answers

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## Information Sheet 2- Identifying items contribute to customer features/benefits

### 2.1 Items of customer benefits

Understanding your customers helps you to sell more. The more you know about them and their needs, the easier it is to identify opportunities to sell them new products and target them with appropriate offers.

However, you must make sure that you comply with data protection regulations for any personal information on existing and potential customers that you collect, keep and use. Factor analysis has revealed the following factors that influence on purchasing bakery products.

- **Product & Brand Recognition:** The Products are necessary to be tasty, fresh, healthy With nutrition values. Well-known brand available with suitable quantity (in packs/sizes) influence on consumers preference for bakery products.
- **Affordability & Available:** In the line of other studies the study underlines the importance of pricing in bakery products. Bakery products are perishable products and there are number of alternative products available hence customers give importance for price of the products. Customer prefers those products that are available at lower price near to their home.
- **Efficient packaging:** It is evident that packaging has the most important factor that influence on customer preference for bakery products. Packaging work as a promotion tool for the product. A well packed product attracts customers. It create the visual appeal to the customer.
- **Hypothesis testing:**

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Further it is checked whether the factors influencing on preference for bakery products differs to the customer preference for the product In this blog, we will outline some of those trends, and show why they are important to the success of any bakery business.

Profiling existing customers also makes it easier to find new ones. You can look for similar prospects, and sell to them in a similar way.

### **2.1.1 Starting with existing data**

You most likely have existing data at your fingertips. Review past surveys, customer interviews, and customer-support call logs. There's no point in funding an extensive and expensive research campaign if the data you need is already collected.

### **2.1.2 Interviewing stakeholders**

Why not begin with the data you don't have to pay for: the collective knowledge stakeholders have. Start with sales and support teams. They know the product and the customer. They often have a list of feature requests, bug reports, and enhancements straight from the customer's mouth.

Combine these to generate a preliminary list of requirements. Look for patterns, but don't automatically dismiss one-offs look to corroborate them with findings from other methods.

### **2.1.3 Mapping the customer journey**

A customer journey map is a visualization of the process a customer goes through when engaging with a product or service. It takes process mapping to a new level by including

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multiple phases and touchpoints a person goes through from prospect to loyal customer. It's a document meant to unify fragmented efforts and identify points of friction and opportunities for improvement.

#### **2.1.4 Conducting “follow me home” research**

Follow me home research relies on observation by literally following a customer home or to work. You follow a customer to her workplace, spending the day watching her do her job. You observe process pain points and then look for opportunities for improvement.

#### **2.1.5 Interviewing customers**

Go right to the source: Ask customers what problems they have and what features they want. Even when customers can't articulate their needs clearly, you can often gain insights that lead to successful innovations. Conducting voice of customer surveys.

Voice of Customer surveys collect data, from email or from a pop-up on a website, about the attitudes and expectations of existing or prospective customers. Use a mix of open- and closed-ended questions to see what produces the most useful data.

Although customers aren't necessarily good at identifying their needs, this type of survey often yields data from which you can discern customer goals, challenges, problems, and attitudes, and then recommend opportunities for improvement.

#### **2.1.6 Analyzing your competition**

Consider using research firms that might present a more objective face to customers. who engage with your organization and its competition. Consider using the SWOT rule: Identify your competitors' strengths, weaknesses, opportunities, and threats. You can use a SWOT for,product, or even an experience.

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### 2.1.7 Analyzing cause-and-effect relationships

No one will disagree that it's usually products to think positively, but sometimes, negative thinking can solve problems more effectively. Through observations, surveys, and other data sources, you may find problems that are actually just symptoms of other root cause problems.

Task failures, errors, and long task times are usually the symptoms of multiple underlying problems. These can be problems in the interface or a disconnection with the user's goals.

<b>Self-Check – 2</b>	<b>Written test</b>
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Name..... ID..... Date.....

**Directions:** Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

#### Test I: Short Answer Questions

1. Discuss about to analyzing your competition?6pts)

*Note:* Satisfactory rating - 6points      Unsatisfactory - below 6 points

You can ask you teacher for the copy of the correct answers

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## Information Sheet 3- Identifying things do not contribute to customer benefits/features

### 3.1 Things do not contribute to customer benefits

Your customers don't care about your business. How your bakery can stand apart in a competitive industry. Competition is huge for small bakery owners. You should ask yourself if your customers are happy.

Delivering great customer service means that all your customers are treated with respect. Here are some big ways to consistently win and keep customers.

#### 3.1.1 Express sincere interest

As a bakery owner, you know that being kind to your customers has a lasting effect. To succeed in the market place you need to have truly special customer service. You should consistently use your customer's name throughout the conversation.

It will make your interaction more personal and it will be interpreted as being thoughtful. Tell your staff to always be attentive by listening to feedback and by taking notes to make sure that they understand what their customers want. As a bakery, you need to take on the role of the friendly, neighbourhood bakery shop where customers always feel welcome.

#### 3.1.2 Offer free samples

There are many reasons why you should give away free samples to your customers. One of the main reasons is that it will help you attract new customers immediately and introduce people to your bakery products.

Give your customers free samples by placing some out on the front counter, or you might even stop people in the street outside your shop with a plate filled with small bites. It will help your potential customer to get a taste before buying, and spread word of mouth.

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Involve your customers in new bakery product offerings. Perhaps you are thinking of adding or changing out a few of your bakery items. Use your social media pages to interact with your customers and get information from them.

### **3.1.3 Be consistent**

If you want to keep your customers happy, you need to be consistent in providing quality services. If you want to succeed, consistency matters. It's not just from one cake to the next but also from one store location to the next. When your customers like your bakery products, they want to be able to get the same exact thing again and again.

I'm sorry, but it's true. Even your biggest brand evangelists don't really care about your brand. They care about how it benefits them. The second your business stops giving them value, they're gone.

#### **This is never the experience you want them to have:**

- Tell Customers They're Wrong.
- Withhold Empathy.
- Fail to Seek Clarification.
- Ignore Feedback.
- Treat Customers Like Numbers.
- Argue With Their Complaints.
- Make Promises You Can't Keep.
- Disregard Customer Support Metrics.

### **3.2 Reasons product that not customer benefits/features**

If you are spending time marketing your product but not selling as much as you would like, it's important to evaluate why and make adjustments. All consumers have needs and steps that they go through before deciding to buy. If your marketing is not meeting those requirements, that probably is the reason your product is not selling.

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In addition to price, consumers are persuaded by the benefits of products and what they can do. For your marketing efforts to be effective, consumers need to be persuaded that they're useful and provide good value.

Evaluate how you can do better at marketing your products in a way that converts consumers into your customers. There are five areas where you are most likely to find a need for changes in your approach.

### **I. Lack of Awareness**

Consumers cannot purchase products they are not aware of. If you are marketing, but consumers still don't know about your product, it may be time to evaluate why it's not working. It's important to remember that the solution is not always more marketing, because the problem may lie with where you are marketing and what marketing vehicles you are using. Assess the key demographics of your target market and research where your marketing efforts are most likely to reach them.

### **II. Lack of Understanding**

Consumers don't buy products solely based on price. They do factor in price, but they buy based on the benefits your product brings them. Your marketing must be centered on the benefits of your product in order for consumers to take an interest in purchasing your product. Create a list of the top three benefits of your product and use those in your marketing message.

### **III. Lack of Perceived Value**

Consumers will not buy products that they perceive as having no value. You can use the benefits of your product to create perceived value and it is that perceived value that helps in the sales of your product. If a customer cannot see the value they will simply pass your product by. To create that perceived value in your marketing message, actually show people using their product through advertisements, demonstrations, or other means.

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#### **IV. Unnecessary**

Tell them and help educate them on why they need your product. Much like your marketing efforts should show how your products bring value, they also should show how the absence of your product can create problems for consumers.

#### **V. Inaccessible**

Consumers cannot buy what is not available to them. If they hear about your product but it is not accessible, forget it. Consumers want to experience ease in obtaining and using your product. Evaluate the accessibility of your product and see if you need to make changes.

Take into account the nature of your product and your target demographic. Some items sell better online with certain demographics, while others are more likely to sell where customers can view them or see how they work in person at a store.

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Self-Check – 3	Written test
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Name..... ID..... Date.....

**Directions:** Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

**Test I: choose the best answer from given alternative(each 2pts)**

1. Which of the following includes things do not contribute to customer benefits?

- A) Express sincere interest
- B) Offer free samples
- C) Be consistent
- D) All

2. which of the following is Not include never the experience you want them to have a be consistent ?

- A) Fail to Seek Clarification.
- B) Ignore Feedback.
- C) Treat Customers Like Numbers.
- D) Argue With Their Complaints
- E) None

**Test II: Write short answer**

1. List areas where you are most likely to find a need for changes in your approach to product benefits?(6pts)

Note: Satisfactory rating - 9 points

Unsatisfactory - below 9 points

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You can ask your teacher for the copy of the correct answers

#### **Information Sheet 4- Recommending methods of increasing features/benefits**

### **4.1 Recommended methods of product features/benefits**

#### **I. Offer nutrition information for your products**

As wheat products are becoming more and more health conscious, it's a smart move to consider providing nutrition information for your breads, pastries, and sweets.

Additionally, many consumers underestimate the calorie and fat content in foods and attest that they would like to see more nutrition labeling at places where they eat away from the home

#### **II. Have healthier options available**

consumers are becoming more and more interested in the availability of healthier options. Different research said for healthier options when baking at home, which leads industry experts to believe that consumers may be interested in healthier options from their local bakery as well.

#### **III. Feature different portion sizes**

As we found in the local industry, offering smaller or non standard portion sizes is a great way to bring in new customers and make more money from your existing customers. The snacking trend is growing, and bakeries are set to play a huge role. This provides consumers with built-in portion control, which is a growing trend.

Baking Business found that bite-sized desserts are a “must-have” for bakeries. Carly

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#### **IV. Offer allergen-free products**

While sales of gluten-free products may have slowed, research shows that allergen-free baked goods are still in demand.

In general, sales of allergen-free products have risen steadily and continue to rise. Moreover, food allergies are on the rise as well, which means more and more people will be searching for allergen-free products.

#### **V. Pay attention to packaging**

Not only will unique packaging make your products memorable, but packaging has been found to be one of the most important aspects when it comes to a customer's decision to buy a product. Having beautiful packaging adds an authentic human touch that consumers love, as it sets handmade, local products apart from mass produced generic offerings.

The current business ecosystem is very competitive. Customers have access to a broad spectrum of products and the choices are limitless. More importantly, new products hit the market on a daily basis, because no two consumers are identical. They all have different needs, interests, and pain points.

#### **4.2 methods to increase product features/benefits**

Your current customers are your best bet to increase sales and should be the focus of your sales and marketing efforts. They already use your products or services, so they trust you enough to purchase your solutions. If you provide them with high-quality customer service, they will be more likely to purchase from you again, which will help to increase your business features.

#### **I. Acknowledge current customer behavior**

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Conduct research on how your customers use your products and services. Your products might have a lot of features, but your customers might only use one or two of those features.

## **II. Request customer feedback**

Whether or not you conduct research on your current customers, it's always a good idea to ask them for feedback on your products and services, as well as how they feel about your customer service. Find out where you might be lacking or where they are having problems. Also, determine what makes them happy about your customer service.

Customer feedback can identify opportunities you had not considered, which can turn into new sales.

Customer feedback can help you to broaden your offerings, increase your sales and strengthen the relationship with the customer. If you don't ask the customer for their feedback, you miss out on these sales opportunities

## **III. Run promotions for current customers**

Running sales and marketing promotions just for current customers is a great way to reward them for their loyalty and business. Some customers are disgruntled or disappointed when they see a company run offers just for prospects and new customers.

Ideally, you should run sales and marketing promotions for current customers on a regular basis, such as monthly or quarterly. Scheduling your promotions like this will make your current customers look forward to each one, increasing your interactions and grow your sales. Regular promotions for current customers also encourage them to share this "insider information" by referring people they know,

## **IV. Provide excellent customer service**

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Rather than always trying to sell to your customers, you should work on serving your customers. Consider their needs and how to make things better for them. Providing excellent customer service includes doing things for your customers outside of the sales experience to show how much you appreciate them. This helps to grow customer loyalty, which will increase sales.

<b>Self-Check – 4</b>	<b>Written test</b>
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Name..... ID..... Date.....

**Directions:** Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

**Test I: Write true if the statement is correct and false if the statement is incorrect(each 1.5 pts)**

1. Running sales and marketing promotions just for current customers is a great way to reward them for their loyalty and business.
2. Rather than always trying to sell to your customers, you should work on serving your customers.
3. Customer feedback can identify opportunities you had considered, which can turn into new sales.
4. Customer feedback can Not help you to broaden your offerings, increase your sales and strengthen the relationship with the customer.

**Test II: Write short answer**

1. List the methods to increase product features/benefits(4pts)

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Note: Satisfactory rating - 10 points

Unsatisfactory - below 10 points

You can ask your teacher for the copy of the correct answers.

LG #51	LO #3- Use competitive manufacturing tools		
Instruction sheet			
<p>This learning guide is developed to provide you the necessary information regarding the following <b>content coverage</b> and topics:</p> <ul style="list-style-type: none"><li>• Selecting appropriate tools for the job/process</li><li>• Applying tools to the job/process</li><li>• Monitoring the job/process and making adjustments</li><li>• Identifying skill requirement and seeing skill development</li><li>• Selecting tools to <i>competitive manufacturing</i> process</li></ul> <p>This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, <b>upon completion of this learning guide, you will be able to:</b></p> <ul style="list-style-type: none"><li>• Select appropriate tools for the job/process</li><li>• Apply tools to the job/process</li><li>• Monitor the job/process and making adjustments</li></ul>			
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- Identify skill requirement and seen skill development
- Select tools to *competitive manufacturing* process

### Learning Instructions:

1. Read the specific objectives of this Learning Guide
2. Follow the instructions described below.
3. Read the information written in the information Sheets
4. Accomplish the Self-checks
5. Perform Operation Sheets
6. Do the “LAP test”

### Information Sheet 1-Selecting appropriate tools for the job/process

#### 1.1 Introduction

A continuous improvement strategy is any policy or process within a workplace that helps keep the focus on improving the way things are done on a regular basis. This could be through regular incremental improvements or by focusing on achieving larger process improvements.

Facilities that focus on improving continuously become more competitive over time and can maintain their advantages in their industry, but only if the improvement efforts are

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done correctly. Taking good baseline measurements and taking ongoing measurements will help identify the effectiveness of the efforts being made.

## 1.2 Selecting tools for the process

### I. Application of 5S

The 5S methodology is a systematic approach to workplace organization. This method includes the five steps of Sort, Set in Order, Shine, Standardize, and Sustain. Generally speaking, the steps of 5S involve going through items in a workspace, removing what's unnecessary, organizing items, cleaning, performing maintenance, and making sure these things become habits.

These steps should occur in this order, and there must be a plan in place for performing the tasks associated with these steps on a regular basis.

The 5S methodology was applied on several workstations in the bakery industry during processing. Firstly, a detailed analysis was made on each of the workstations, evaluating of using equipment and tools and documents were needed to perform most common operations.

Main identified issues were materials disorganized, equipment parts on the floor, lack of identification of storage places, equipment sharing between workstations and excess of materials.

These issues were affecting productivity and were in some cases serious health risks: broken glass bottles, metal bottle caps and lighters could be found in storage boxes.

Cleanliness was also a problem, being noticed the lack of inspection norms in the works places and general dirtiness of some storage places, parts and of the floor.

After the analysis on the current status of the shop floor, an evaluation checklist was produced for each workstation with the main issues requiring addressing in each of the 5S steps. In a brainstorm session with the team, the evaluation checklist was analysed

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and corrective measures were proposed to solve the issues. Finally, corrective measures were implemented, consisting in tidying up, organizing, cleaning, normalizing and establishing control measures in workstations.

Although benefits of this methodology are not easily measurable, the following advantages were identified:

- less risk of work accidents
- better working conditions
- employees more engaged and with an overall better working attitude
- organized workstations
- optimized storage space
- less movements from employees
- reduction of unproductive times.

## **II. Application adding Safety to 5S : Lean 6S**

Adding safety to 5S can be as simple as remembering to keep safety in mind at each of the 5S steps. 6S is most popular method to improve the efficiency and safety of any company or organization. The 6S method can be implemented in all type of industries or organization like small scale industries, medium scale industries and large scale industries etc.

The 6S is a method for sorting, cleaning, organizing and doing necessary improvement in workplace.

This method helps to increase the efficiency and reduces wastage and optimizes quality of any work environment. The 6S method gives good results for required improvement in an organization or company.

By implementing 6S method we can get good improvement in the production process and safety in any company. The 6S method is highly support the objectives of

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organization to achieve continuous improvement and higher performance in quality and safety.

The steps of 6S method are as follows:

- Sorting
- Set in order
- Shine
- Standardization
- Sustain
- Safety

The 6S is the methodology of creating and maintaining well organized, neat and clean, high effective, high quality and safer workplace in any organization. The 6S method also increases the work efficiency of workers in any organization. After implementation of 6S in any organization, workers feel more comfortable and safer in the work environment. This results in improvement in the work efficiency of workers in that organization.

### Why Include Safety in 6S?

We know that Safety is the top most priority in every workplace. Having a safe and clean working environment helps:

Create a positive impact on productivity and quality; encourage a stress-free and healthy atmosphere where workers can feel safe and secure; and make it easy to recognize potential hazards and install safety controls.

<b>Self-Check – 1</b>	<b>Written test</b>
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Name..... ID..... Date.....

**Directions:** Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

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**Test I: Write true if the statement is correct and false if the statement is incorrect(each 1.5pts)**

1. A continuous improvement strategy is any policy or process within a workplace.
2. 5S methodology was applied on several workstations in the bakery industry during processing.
3. 6S is most popular method to improve the efficiency and safety of any company or organization.
4. By implementing 6S method we can Not get good improvement in the production process and safety in any company.

**Test II: Write short answer**

1. List the advantages 5s methodology in processing area?(4pts)

*Note:* Satisfactory rating - 10 points

Unsatisfactory - below 10 points

You can ask you teacher for the copy of the correct answers.

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## Information Sheet 2- Applying tools to the job/process

### 2.1 Introduction

5S has been shown to be an effective for increasing operational efficiency along with improving food safety and quality in food processing plants. The main goal of 5S is to help companies create safe, neat, clean, and structured workplaces with reduced waste. Because over 85 percent of food safety issues in a site are generally caused by failures in Good Manufacturing Practices (GMPs) rather than Hazard Analysis and Critical Control Points plan shortcomings, 5S has gained prominence industry wide as a way to comply with Food Safety Modernization act-based regulations that focus on prevention.

### 2.2 Applying tools to process

#### 2.2.1 5S in the bakery Industry

5s is Sort, straighten, shine, standardize, and sustain. These five principles comprise the 5S lean manufacturing method that originated in Japan. While 5S can help any organization, the principles contained in the alliterative method should especially appeal to those in food processing for its ability to promote food safety through a clean, safe, and organized workplace.

5S principles are based on the idea that a well organized and clean workplace increases employee satisfaction, promotes worker safety, and decreases product waste. 5S relies on everything having its own place that's easily identifiable. Like color-coding, 5S uses the idea of a “visual factory” that lets workers know at a glance where tools are and where they should be put back after they're cleaning.

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## **I. Sort**

For the sort step, work areas should be cleared of things that aren't needed daily. Discard junk that's broken or simply not needed, along with broken tools. Items that are needed, but only on an infrequent basis, should be moved to storage. If an item is misplaced or stored illogically, it should be moved to a more convenient location.

Sorting can help minimize chances of cross-contamination and cross-contact by sorting food contact and non food contact items apart from each other.

## **II. Set in Order**

To set a processing plant in order, it's important to remember the goal is to increase efficiency in the work environment. This makes it easy for the employee to find the right tool at the right time, thus minimizing chances cross-contamination between raw and finished product. Items should be organized logically, with like items together.

Color coding can be introduced to keep food contact and non food contact items in separate zones and to keep allergens apart where needed. Shadow boards can be used to give every tool a place.

## **III. Shine**

Tools, machinery and the work area itself should be cleaned as a part of the shine step, which should be repeated as frequently as necessary. Regular cleaning prevents biofilm build-up and increases the facility's overall hygiene.

Factories that deal with particularly sensitive material such as meat or ready to eat foods should consider using hygienically designed tools, which are easier to thoroughly clean and sanitize, than standard tools.

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#### **IV. Standardize**

To standardize, you must first observe the natural flow of workers' movements. Before writing procedures, watch employees to see where they have consistent methods that work. Take notes on what works, and problem-solve with workers to find solutions to inconsistent and inefficient steps in the process.

When you write Standard Operating Procedures or SOPs, consult with employees again on how the entire process should work. The process should feel natural to workers and not be forced. Come up with a training program for new employees, and refresh current employees on the procedures at least yearly, or when there are changes.

#### **V. Sustain**

There are generally three different methods to sustain 5s improvements:

- **Daily checks**

Supervisors should be on the floor and check to make sure procedures are followed daily and to help employees with any process problems.

- **Periodic checks**

Using a 5S checklist, supervisors can perform quarterly or monthly checks to make sure 5S is being followed. They can find and address any problems in these checks.

- **Change-only checks**

Supervisors can check to make sure 5S is being followed only when a process change is being implemented. They can revisit SOPs to integrate the change and to make sure it's working well for employees.

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Supervisors can check to make sure 5S is being followed only when a process change is being implemented. They can revisit SOPs to integrate the change and to make sure it's working well for employees.

Implementing 5S can help food processing facilities increase hygiene in their organization, as well as increasing their efficiency.

- **6s methodology**

6S Methodology Steps	Meaning
<b>SORT</b>	Sort the all useful material and throw away the waste material from workplace.
<b>SET IN ORDER</b>	Keep the all things in a proper order and place to quick and easy access them,
<b>SHINE</b>	Clean the all machine, equipment and workplace. Maintain the workplace neat and clean regularly.
<b>STANDARDIZE</b>	Uses the standards in the workplace. Constantly keep order at workplace and make it habitual.
<b>SUSTAIN</b>	Implement this process regularly and make it compulsory for everyone in the workplace.
<b>SAFETY</b>	Install all needed safety equipment at workplace and make compulsory the wearing of safety equipment at the workplace.

### Advantages of using 6S Method

- Reduction in material handling cost
- Neat and Clean workplace is available
- Easy to find tool and use it.
- Easy to access the all equipment's and files in the
- Always neat and clean tools are present at the workplace.
- organized order.
- Increase productivity of plant.
- Increase quality of products.
- Reduce possibility of workers injury.
- ate a safe work environment.

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- Improve communication between employees.
- Reduce manufacturing cost.
- Increase workplace safety
- Increase efficiency of industry
- Increase work speed at the workplace
- Reduces wastage in the industry

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<b>Self-Check – 2</b>	<b>Written test</b>
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Name..... ID..... Date.....

**Directions:** Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

**Test I: Write short answer**

1. List and explain 5S principles?(6pts)
2. Write the importance of 6s?(4pts)

*Note:* Satisfactory rating - 10 points      Unsatisfactory - below 10 points

You can ask you teacher for the copy of the correct answers.

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### Information Sheet 3- Monitoring the job/process and making adjustments

#### 3.1 Monitoring the process/job

Beyond optimizing baking industry efficiency and the processing Line, what else can bakers do to improve bakery process efficiency. We recommend a three phase approach:

- I. Embrace Lean Manufacturing
- II. Improve Planning and Documentation
- III. Institute Benchmarking
- IV. Learn to Test and Optimize

#### I. LEAN MANUFACTURING

Lean Manufacturing is a proven methodology to reduce waste and increase process efficiency. Below are several resources which recommend implementing a lean manufacturing process or that demonstrate the results that can be achieved for bakery process efficiency using lean methods.

One of the improvement technique is Lean Manufacturing and this is based on continuous reduction of waste and increasing the quality of the products. Looking for more productivity, best quality, less time spent, less money invested, to obtain more revenues.

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In the food industry, the key factor to implement Lean techniques is the managerial commitment and leadership and economical support, the application of these techniques in the industry is beginning and due to the consumers and competitors pressure present a good experience in the implementation of Lean Manufacturing techniques, with an incremental tendency due to the competition and customer demand.

## **II. PLANNING & DOCUMENTATION**

In the article Tips for Reducing Bakery Production Costs, they review some useful steps including embracing Lean Manufacturing techniques such as Just in Time inventory management. They also recommend having a well documented production process for each product that includes an ingredients plan for each production run.

You can not only compare total production costs against planned production costs, you can also calculate actual yield vs planned yield for each set of ingredients.

## **III. BENCHMARKING**

Once you've established your documented process and production plan, you can now set a benchmark for your existing bakery production. From the Snack and Bakery article Improving Snack and Bakery Operational Efficiency, while many larger bakeries will look to automation to improve efficiency, it's better to establish a benchmark of your existing performance, to implement a lean methodology and then look to automate the optimal process, leaving some process steps to workers while you automate others.

“By conducting an analysis of current facility variables, utilizing lean manufacturing tactics, operations can better determine which tasks would see improvement through automation. This frees personnel to carry out jobs more tailored to their particular skill set.

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### **3.2 making adjustments in baker industry**

The work can be stressful because bakers follow time-sensitive baking procedures and often work under strict deadlines. For example, bakers must follow daily production schedules to bake products in sufficient quantities while maintaining consistent quality. In manufacturing facilities, they often work with other production workers, such as helpers and maintenance staff, so that equipment is cleaned and ready.

Bakers are exposed to high temperatures when working around hot ovens. They stand for hours at a time while observing the baking process, making the dough, or cleaning the baking equipment.

Bakeries, especially large manufacturing facilities, are filled with potential dangers such as hot ovens, mixing machines, and dough cutters. Although their work is generally safe, bakers may endure back strains caused by lifting or moving heavy bags of flour or other products. Other common risks include cuts, scrapes, and burns. To reduce these risks, bakers often wear back supports, aprons, and gloves.

#### **I. Work instructions**

Work instructions are an important tool in maintaining quality, as they ensure tasks are carried out in the same way each time, thereby controlling task deviations. ... Workplace personnel who are competent and skilled in a task/s may be the authors of work instructions.

The work instructions are the documents on which the operator relies on to perform all the operations within his position. These are the work instructions to perform in order to achieve a given result, respecting the predefined standards.

#### **II. Regulatory Overview**

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Regulatory overview deals with the regulatory landscape concerned with food safety. Maintaining clear food safety guidelines allow bakers to take proactive and preventive measures to manage risks associated with everyday operations.

Aspects involved in food and bakery regulatory landscape include:

- Good manufacturing practices and plant hygiene prerequisite programs
- HACCP plan (hazard analysis critical control point)
- FSMA(food safety management system)

The regulatory overview for food safety might be tricky and is often complex but nothing is more important than offering safe food products to consumers while maintaining efficient production operations.

FDA rules do not change much in short periods of time but once they are revised and updated. Some aspects change drastically and bakers must understand the details of such changes and make all the necessary corrections and adjustments to ensure regulatory compliance and avoid negative market consequences.

- **Good manufacturing practices and prerequisite programs**

Any food safety system starts with a solid foundation of programs that manage the basic environment hygienic conditions where safe food can be produced.

Without GMPs, it would be challenging for bakeries to ensure a safe food processing environment. Such principles and practices are implemented through a series of prerequisite programs (e.g. cleaning and sanitation programs).

- **HACCP**

This food safety system is focused on critical control points and operational prerequisites identified through hazard analysis as being essential to maintain food safety of the products and food processing environment. To properly execute the principles of this system, a detailed HACCP plan needs to be documented and

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implemented. This plan is the playbook for the bakery to make sure the system is working properly.

- **FSMA (food safety management system)**

The keystone of FSMA, like HACCP, is the development of risk-based preventive controls for food facilities. Bakeries are required to develop and implement written plans for preventive controls.

<b>Self-Check – 3</b>	<b>Written test</b>
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Name..... ID..... Date.....

**Directions:** Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

**Test I: Write true if the statement is correct and false if the statement is incorrect(each 1.5pts)**

1. Lean Manufacturing is a proven methodology to increase waste and reduce process efficiency.
2. Workplace personnel who are competent and skilled in a task/s may be the authors of work instructions.
3. The work instructions are the documents on which the operator relies on to perform all the operations within his position.
4. The keystone of FSMA, like HACCP, is the development of risk-based preventive controls for food facilities.
5. Regulatory overview deals with the regulatory landscape concerned with food safety.

**Test II :Write short answer**

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1. List the aspects that involved in food and bakery regulatory landscape?(4.5pts)

Note: Satisfactory rating - 12points

Unsatisfactory - below 12 points

You can ask you teacher for the copy of the correct answers.

#### Information Sheet 4- Identifying skill requirement and seeing skill development

### 4.1 SKILLS REQUIREMENT

#### I. Organization

The most successful bakers in the industry know that the process of baking requires careful timing, so having your baking station prepared with everything you'll need including all the tools and pre-measured ingredients close at hand – is vital. In the industry, this is called “mise en place.”

If you have to pause in the baking process while you shave some chocolate or wait for butter to come up to room temperature, you're probably changing the recipe slightly because the order and timing are so important.

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There's a great deal of science involved in baking generally, it's more precise than cooking in that regard. The order of the ingredients matters, so attention to detail and organization will make a big difference.

## **II. Communication**

Like other cooks in the kitchen, bakers most often work in a fast-paced environment with other culinary professionals alongside them. Having a clear manner of communication so you can keep pace with your task is extremely important. This can mean quickly getting another cup of flour while you stick to your task, or asking a colleague to give you some space to roll out your dough so you can keep the process going smoothly.

## **III. Attention to Detail**

As we mentioned, baking is a science that relies on precise measurements and temperature conditions. All ingredients must be weighed and measured accurately. A few extra grams or an oven that's 25 degrees hotter than the recipe dictates and your baking will suffer. The best bakers in the world have a keen eye for detail while creating consistent pastry art.

## **IV. Curiosity and Creativity**

Baking is an interesting combination of science and art. The best bakers in the world consistently create new crowd-pleasing pastries, as well as time honored favorites.

You probably won't come up with the next big pastry sensation on a whim as you hone your baking skills it will take planning, trial and error, and detailed notes to perfect a new creation. Good bakers stick with the classics. Great bakers are curious and will experiment with different combinations and accept the failed experiments as a learning experience.

### **4.2 Skill development**

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- Monitoring - Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.
- Coordination - Adjusting actions in relation to others' actions.
- Active Listening - Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
- Speaking - Talking to others to convey information effectively.
- Critical Thinking - Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
- Active Learning - Understanding the implications of new information for both current and future problem-solving and decision-making.
- Judgment and Decision Making - Considering the relative costs and benefits of potential actions to choose the most appropriate one.
- Time Management - Managing one's own time and the time of others.
- Operation Monitoring - Watching gauges, dials, or other indicators to make sure a machine is working properly.
- Quality Control Analysis - Conducting tests and inspections of products, services, or processes to evaluate quality or performance.
- Reading Comprehension - Understanding written sentences and paragraphs in work related documents.
- Social Perceptiveness - Being aware of others' reactions and understanding why they react as they do.

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Self-Check – 4	Written test
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Name..... ID..... Date.....

**Directions:** Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

**Test I: Fill the black space(2pts)**

1. \_\_\_\_\_ is adjusting actions in relation to others' actions.

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2. \_\_\_\_\_ is giving full attention to what other people are saying, taking time to understand the points being made
3. \_\_\_\_\_ is watching gauges, dials, or other indicators to make sure a machine is working properly
4. \_\_\_\_\_ is conducting tests and inspections of products, services, or processes to evaluate quality or performance.

### Test II: Write short answer

1. List the components of skill requirements?(5pts)

Note: Satisfactory rating - 13 points

Unsatisfactory - below 13 points

You can ask you teacher for the copy of the correct answers.

<b>Information Sheet 5- Selecting tools to <i>competitive manufacturing</i> process</b>
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### 5.1 Introduction

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Compete with others means having in mind to mix well for elements of marketing mix, product, price, place and promotion and make everything work in a strong circle and interaction between them.

## 5.2 Competitive analyses

Competitive analyses should progress through the following stages:

- Identification- Identify all current and potential brand, product, generic, and total budget competitors
- Characteristics- Focus on key competitors by assessing the size, growth, profitability, objectives, strategies and target markets of each one
- Assessment- Assess each key competitor's strengths and weaknesses, including the major capabilities and vulnerabilities that each possesses within its functional areas (marketing, research and development, production, human resources, and so on).
- Capabilities- focus the analysis on each key competitor's marketing capabilities in terms of its products, distribution, promotion and pricing.
- Response- estimate each competitor's most likely strategies and responses under different environmental situations as well as its reaction to the firm's own marketing efforts. Based on these stages, every company should pay attention to their competitive environment and take all necessary steps toward the creation of comparative advantages in the market and give strong reasons to their customers why should they buy from them and not from their competitors.

## 5.3 Tools of competitive manufacturing process

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Lean and agile manufacturing are production concepts, which become more and more popular at the modern market. The success of companies depends on customers' satisfaction and the correct cost management. Lean manufacturing focuses on removing waste and 'dropping weight', agile is more focused at using the current resources intelligently and that the organization has the right data to implement changes in manufacturing.

**The main features of the agile manufacturing can be summarised as follows:**

- *Products: They are solutions to customer' individual problems. Agility is centred on the satisfaction of customer's individual needs and the quickly changeover of equipment.*
- *Virtual organisation: Internal and external co-operation are the strategies of choice. The aim is to bring agile products to market in minimum time by leveraging resources through co-operation.*
- *Entrepreneurial organisation: Companies must “organize to thrive on change”. Agile manufacturers must have personnel who can convert change to the growth.*
- *Knowledge-based organisation: The key differentiators in tomorrow's world will be people and information. Thus, agility contains the decentralization of authority and leverages the value of human and information resources.”*

- **Preventative Maintenance in the Food Industry**

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The HACCP (hazard analysis and critical control points) system requires food processing plants to maintain food manufacturing equipment. The most efficient plants opt for a combination of preventative, reactive, proactive, and predictive approaches.

All these approaches are valid, but each has a few pros and cons. This article looks at preventive maintenance which, when done right, is a time and cost saving process. Preventive maintenance can also reduce machine downtime, prevent and minimise damage, and extend the useful life of the equipment.

### Preventive Maintenance

You're most likely familiar with preventive maintenance (PM). The theory behind preventive maintenance is to take regular steps to prevent problems before they occur. Preventive maintenance has several characteristics:

- Is planned at regular interval
- Requires machine downtime to carry out
- Often consists of a checklist including equipment and component inspection, calibration, cleaning, repair and replacement

- **Importance of Equipment Maintenance**

An effective maintenance routine makes sure that operations continue, repair costs are minimised, and downtime is reduced.

Preventative maintenance is the checking of machines and equipment on a planned, regular basis.

The aim is to prevent costly downtime and lessen the likelihood of faults. It requires more planning and effort than other methods – but has long and short-term benefits in cost-reduction and efficiency of machine performance.

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Preventative checks are made before a machine breaks and while it is still running. Generally, the strategy leads to good food hygiene and prevents foreign materials entering food produce.

Organisations that use the preventative method, check machines at specified time intervals. This method tends to save energy as machines are maintained at a peak level of performance.

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**Self-Check – 5****Written test**

Name..... ID..... Date.....

**Directions:** Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

**TestI: Choose the best answer from given alternative(each 2pts)**

1. Which of the following progress through stages of competitive analyses?

A)Identification

D)Capabilities

B)Characteristics

E)

All

C)Assessment

2. Capabilities focus the analysis on each key competitor's marketing capabilities in terms of \_\_\_\_\_

A) Products

D) Pricing

B) Distribution

E) All

C) promotion

3. Which of the following are main features of the agile manufacturing?

A)Products

D)Entrepreneurial organization

B)Virtual organisation

E)

All

C)Knowledge-based organisation

Note: Satisfactory rating - 6 points

Unsatisfactory - below 6 points

You can ask you teacher for the copy of the correct answers.

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## Reference Materials

### Book:

Working Within the Value Chain to Get Financial Services to Micro & Small Enterprises.

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E. Hofmann, and J. Bosshard, "Supply chain management and activity-based costing: Current status and directions for the future," *International Journal of Physical Distribution and Logistics Management*, vol. 47, no. 8, pp. 712-735. 2017.

D. Kovačić, and M. Bogataj, "Net present value evaluation of energy production and consumption in repeated reverse logistics," *Technological and Economic Development of Economy*, vol. 23, no. 6, pp. 877-894. 2017.

D. S. Rybakov, "A process model of a logistics system as a basis for optimisation programme implementation," *International Journal of Logistics Research and Applications*, pp. 1-22. 2017

### WEB ADDRESSES

<<http://www.slideshare.net/Hammaduddin/agile-manufacturing-is-an-operational-strategy-focused-on-inducing-velocity-and-flexibility-in-a-make>>

[http://www.microlinks.org/ev\\_en.php?ID=7098\\_201&ID2=DO\\_TOPIC](http://www.microlinks.org/ev_en.php?ID=7098_201&ID2=DO_TOPIC).

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## **Answer for LG Code: IND CRP3 M13 LO (1-3) LG (49-51)**

### **LG: 49 LO1**

- **Self check 1**

#### **Test I True or False**

1. True
2. True
3. True
4. True

#### **Test II short answer**

1. External customers are the people that pay for and use the products or services your company offers.

Internal customers have a relationship with, and within, your company, either through employment or as partners who deliver your product or service to the end user, the external customer.

2. Identify, Distribute, Create and Collect

- **Self-check 2**

#### **Test I : Choose**

1. E
2. D

#### **Test II: True or False**

1. True
2. False
3. False

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### **Test III: Short Answer**

- Check certifications
- Evaluate the geo-political climate
- Finding reputable suppliers

- Gauge financial stability
- Assess weather-related risk
- Align manufacturing and shipping locations to your needs
- Carefully review product information
- Ask for accessible inventory information.

- **Self-check 3**

### **Test I: True or False**

1. True
2. True
3. True

### **Test II: Short Answer**

1. Value is the total amount that buyers are willing to pay for a firm's product. A value chain concentrates on the activities starting with raw materials till the conversion into final product.

- **Self-check 4**

### **Test I: Choose**

1. E
2. E

### **Test II: True or False**

1. True
2. True
3. True



## LO2

- **Self-check 1**

### Test I

#### Fill the black

1. Convenience product
2. convenience, shopping, specialty, and unsought products

- **Self-check 2**

### Test I Short answer

Consider using research firms that might present a more objective face to customers. who engage with your organization and its competition. Consider using the SWOT rule: Identify your competitors' strengths, weaknesses, opportunities, and threats. You can use a SWOT for, product, or even an experience.

- **Self-check 3**

### Test I: Choose

1. D
2. E

### Test II: Short answer

1. Lack of awareness, Lack of understanding, Lack of perceived Value, Unnecessary and Inaccessible

- **Self-check 4**

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### Test I: True or False

1. True
2. True
3. False
4. False

### Test II: Short answer

1. Acknowledge current customer behavior, Request customer feedback, Run promotions for current customers and Provide excellent customer service.

### LG:51

### LO3

- **Self-check 1**

### Test I: True or False

1. True
2. True
3. True
4. False

### Test II: Short answer

1. less risk of work accidents, better working conditions, better working attitude organized workstations, optimized storage space, less movements from employees, reduction of unproductive times ,etc.

- **Self-check 2**

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### Test:I short answer

#### 1. Sort, straighten, shine, standardize, and sustain

For the sort step, work areas should be cleared of things that aren't needed daily

Sorting can help minimize chances of cross-contamination and cross-contact by sorting food contact and non-food contact items apart from each other.

To set a processing plant in order, it's important to remember the goal is to increase efficiency in the work environment

Tools, machinery and the work area itself should be cleaned as a part of the shine step, which should be repeated as frequently as necessary.

To standardize, you must first observe the natural flow of workers' movements.

There are generally three different methods to sustain 5s improvements: Change-only checks, Periodic checks and Daily checks

2. Reduction in material handling cost, Neat and Clean workplace is available, Easy to find tool and use it, Easy to access the all equipment's and files in the, Always neat and clean tools are present at the workplace, organized order, Increase productivity of plant, Increase quality of products, Reduce possibility of workers injury, safe work environment.

#### • Self-check 3

#### Test I: True or False

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1. False
2. True
3. True
4. True
5. True

#### Test II: Short answer

1. Good manufacturing practices and plant hygiene prerequisite programs, HACCP plan (hazard analysis critical control point) and FSMA (food safety management system)

- **Self-check 4**

#### Test I: Fill Black

1. Coordination
2. Active Listening -
3. Operation Monitoring
4. Quality Control Analysis

#### Test II: Short answer

1. Organization, Communication, Attention to Detail and Curiosity and Creativity

#### Self-check 5

#### Test I: Choose

1. E
2. E
3. E

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