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Ministry of Labor and Skills

GARMENT PRODUCTION

LEVEL – III

Based on November, 2023 Curriculum Version II



Module Title: Cost estimateing for garment product

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Nominal duration: 40hr

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Introduction of the Module

This module consider costing as a list of elements, material, trim and cut and make (MTCM), i.e., labor + factory overhead + factory profit, which together add up to the free on board (FOB) cost. The challenge is that the FOB itself is not relevant. Whatever the cost, the price a buyer will pay is determined by value.

This is particularly challenging in the world of garment sourcing, because the buyer has often already negotiated the price of the fabric at the mill and has designated every trim supplier and price, leaving only the CM to discuss.

Factories that provide only the CMT are finding it increasingly hard to compete. To make money, factories have to provide value in excess of their cost. To do so, they need to go a step beyond their normal operations to find out what the buyer really wants, establish how much it will cost to deliver and how much the buyer is willing to pay.

The capacity to understand and tap into the value demanded by the buyer makes the difference between factories that are fighting day-in, day-out to keep their heads above water, and factories, both big and small, that understand the secret and are building a viable and sustainable future. This guide is a manual for cost-to-value costing. It shows how to quantify both cost and value and in so doing, increase both the profit accrued by both the factor and the buyer this module is designed to meet the industry requirement under the garment production occupational standard, particularly for the unit of competency **Cost estimateing for garments product Module units**

- Associated costs of production
- Calculate labor costs in garment production
- Develop cost sheets for industry standards

Learning objectives of the Module

At the end of this session, the students will able to

- Identify costs associated with each production option
- Identify and calculate labor costs involved in garment product production
- Develop costing sheets to industry standards

Module Instruction

For effective use this modules trainees are expected to follow the following module instruction:

1. Read the information written in each unit
2. Accomplish the Self-checks at the end of each unit
3. Perform Operation Sheets which were provided at the end of units
4. Do the “LAP test” giver at the end of each unit and
5. Read the identified reference book for Examples and exercise

Unit one: costs associated with each production

This learning unit is developed to provide the trainees the necessary information regarding the following content coverage and topics:

- Factors of garment cost.
- Cost of market forces in garment industry.
- Calculate fabric, trim and accessory cost.
- Costs of garment production.

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

- Identify Factors of garment products cost
- Identify Manufacturing cost difference
- Industry Quality standards for design production
- Identify and compare Cost benefits of each option are
- Identify Market forces that affect costing of garment

1.1 Factors of garment cost

The factors of garment costing are the components that make up the total cost of producing a garment. These factors can be broadly divided into two categories: direct costs and indirect costs. Direct costs are those that can be easily and directly traced to a specific garment. These costs include:

1. **Fabric cost:** The cost of the fabric used to make the garment.

   Trims and accessories cost: The cost of trims and accessories, such as buttons, zippers, and labels.

2. **Labor cost:** The cost of wages paid to workers who are directly involved in the production of the garment.
3. **Shipping cost:** The cost of shipping the garment from the factory to the customer.

Indirect costs are those that cannot be easily and directly traced to a specific garment. These costs include:

A. **Overhead cost:** Overhead costs are the general running costs of the business, such as rent, utilities, and insurance.
B. **Administrative cost:** Administrative costs are the costs associated with running the business, such as accounting, marketing, and sales.
C. **Design cost:** Design costs are the costs associated with designing the garment, such as the cost of hiring a designer and creating prototypes.

To calculate the total cost of a garment, garment manufacturers must add up all of the direct and indirect costs associated with producing the garment.

In addition to the direct and indirect costs listed above, there are a number of other factors that can affect the cost of a garment. These factors include:

I. **Complexity of the garment**: More complex garments, such as those with many details or intricate embroidery, will be more expensive to produce than simpler garments.
II. **Quality of the materials:** Higher quality materials, such as organic cotton or fair trade certified fabric, will be more expensive than lower quality materials.
III. **Quantity ordered:** Garment manufacturers can often offer discounts for larger orders.
IV. **Country of manufacture**: Labor costs vary depending on the country where the garment is manufactured. Garments manufactured in developing countries are generally less expensive than garments manufactured in developed countries.

Garment manufacturers must carefully consider all of the factors that affect the cost of a garment in order to set their prices competitively.

1.2 Market forces of garment industry costing

The market forces of garment industry costing are the factors that influence the price of garments. These forces can be broadly divided into two categories: internal factors and external factors.

Internal factors are those that are within the control of the garment manufacturer,

1. **Cost of raw materials**: The cost of raw materials, such as fabric, trims, and accessories, is one of the biggest factors that influence the cost of garments. The cost of raw materials can fluctuate depending on a number of factors, such as the price of cotton, the exchange rate, and the cost of transportation.
2. **Labor costs**: The cost of labor is another major factor that influences the cost of garments. Labor costs vary depending on the country where the garments are manufactured. Labor costs are generally lower in developing countries, which is why many garment manufacturers outsource their production to these countries.
3. **Manufacturing costs:** Manufacturing costs include the cost of overhead expenses, such as rent, utilities, and equipment maintenance. These costs can vary depending on the size and efficiency of the garment factory.

External factors those that are beyond the control of the garment manufacturer

I. **Competition:** The level of competition in the garment industry is another important factor that influences the cost of garments. In a highly competitive market, garment manufacturers are under pressure to keep their prices low in order to remain competitive.

II. **Consumer demand:** Consumer demand for garments also influences the cost of garments. For a particular type of garment is high, garment manufacturers can charge a higher price.

III. **Government regulations:** Government regulations can also impact the cost of garments. countries have minimum wage laws that require garment manufacturers to pay their workers a certain amount of money. This can increase the cost of labor and therefore the cost of garments. The market forces of garment industry costing are constantly changing.

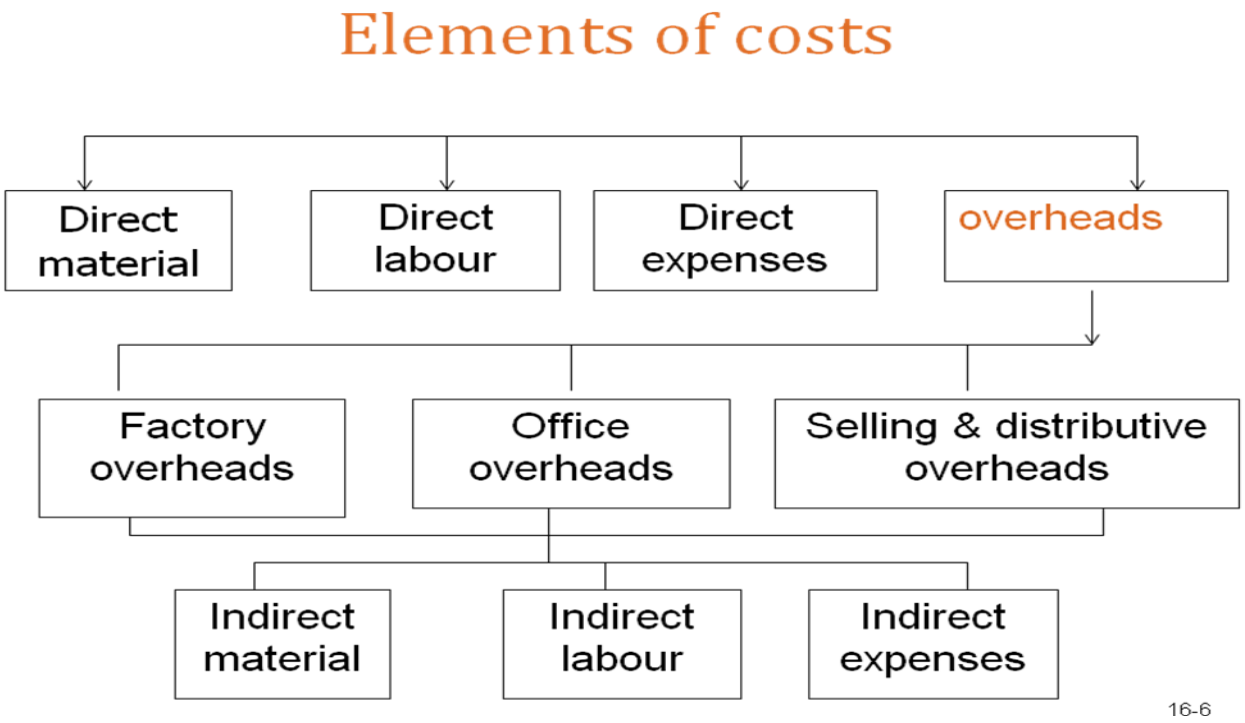
Garment manufacturers must be able to adapt to these changes in order to remain profitable.

Examples of how market forces can impact the cost of garments:

Increase in the cost of raw materials: If the price of cotton increases, the cost of fabric will also increase. This will lead to an increase in the cost of garments.

1. **Rise in labor costs**: the minimum wage in country increases, the cost of labor for garment manufacturers will also increase. This will lead to an increase in the cost of garments.
2. **Increased competition:** a new garment manufacturer enters the market and starts selling similar garments at a lower price, other garment manufacturers will have to lower their prices in order to remain competitive. This will lead to a decrease in the cost of garments.
3. **Change in consumer demand**: consumer demands for a particular type of garment decreases, garment manufacturers will have to lower the price of those garments in order to
4. **Sell them.** This will lead to a decrease in the cost of garments. Garment manufacturers must carefully consider all of the market forces that impact the cost of garments in order to set their prices competitively.

A. Elements of costs



The elements of costs are the components that make up the total cost of a product or service. They can be broadly divided into three categories:

A. **Direct costs:** Direct costs are those that can be easily and directly traced to a specific product or service. For example, the cost of the raw materials used to produce a product is a direct cost.
B. **Indirect costs:** Indirect costs are those that cannot be easily and directly traced to a specific product or service. For example, the cost of rent and utilities for a factory is an indirect cost.
C. **Overheads:** Overheads are a type of indirect cost that is incurred in the general running of a business.

The following are some examples of elements of costs:

I. **Direct materials:** The cost of raw materials used to produce a product.
II. **Direct labor**: The cost of wages paid to workers who are directly involved in the production of a product.
III. **Direct expenses**: Other expenses that can be directly traced to a specific product or service, such as the cost of shipping or packaging.
IV. **Indirect materials**: Materials that are used in the production of a product but cannot be directly traced to that product, such as lubricants or cleaning supplies.
V. **Indirect labor**: Wages paid to workers who are indirectly involved in the production of a product, such as supervisors or maintenance workers.
VI. **Indirect expenses**: Other expenses that cannot be directly traced to a specific product or service, such as rent, utilities, and insurance.

The elements of costs are important for businesses

A. Calculate the cost of their products and services accurately.
B. Set prices competitively.
C. Identify areas where costs can be reduced.
D. Make informed decisions about production and investment.

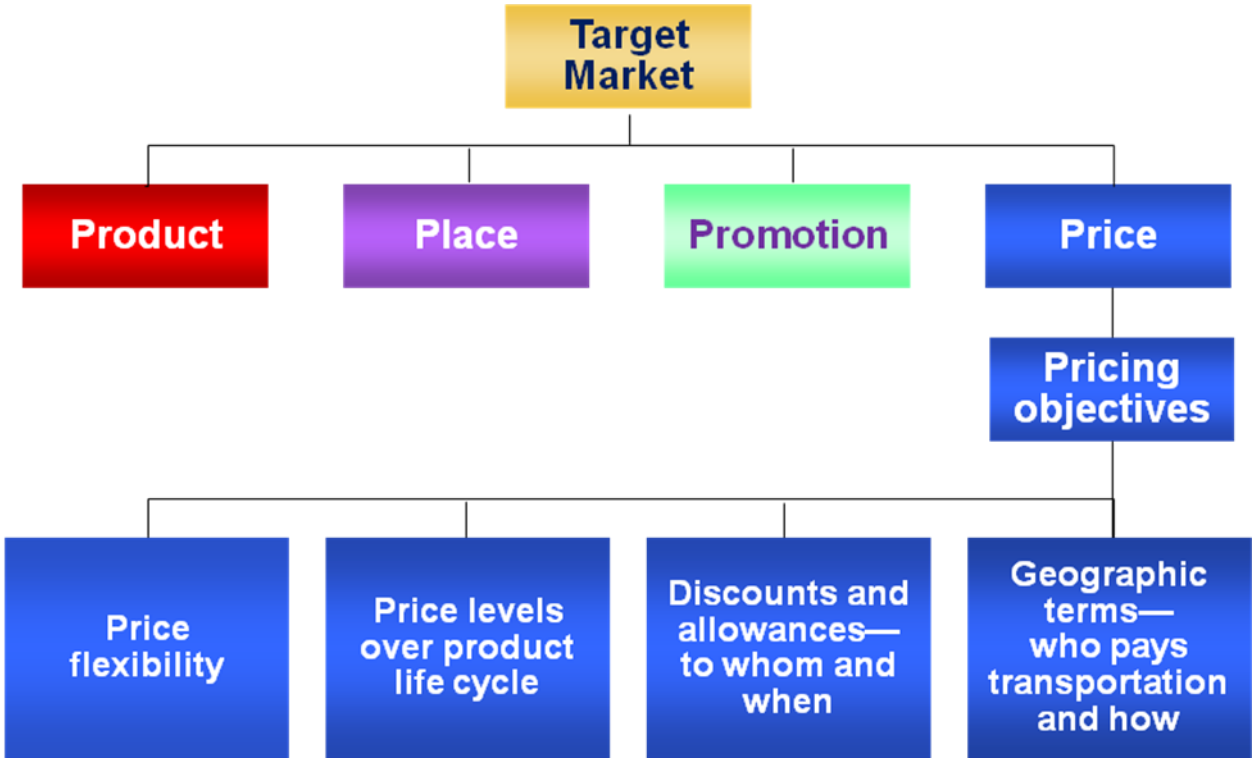
Businesses can use a variety of methods to allocate indirect costs for specific products or services. The most common method is to use an allocation rate. An allocation rate is a percentage

of a direct cost, such as direct labor hours or machine hours that is used to allocate indirect costs to a product or service.

For example, a business might use an allocation rate of 100% of direct labor hours to allocate indirect costs to its products. This means that for every hour of direct labor used to produce a product, the business would also allocate 100% of the cost of indirect costs to that product.

The elements of costs are a complex topic, but they are essential for businesses to understand in order to be successful.

A. Strategic Planning for Price



1.3 calculate fabric, trim and accessory cost

To calculate the fabric, trim, and accessory cost for a garment product, you will need the following information:

o calculate the fabric, trim, and accessory cost for a garment product in ETB, you will need to know the following:

A. The cost of fabric per meter

B. The length of fabric required for the garment

C. The cost of trim per meter

D. The length of trim required for the garment

E. The cost of each accessory

The following formula to calculate the total cost:

Total cost = Fabric cost + Trim cost + Accessory cost

It is important to note that the cost of fabric, trim, and accessories can vary depending on a number of factors, such as the type of material, the quality of the material, and the supplier. However, the formula above can be used to get a general estimate of the total cost.

Some tips for reducing the cost of fabric, trim, and accessories:

I. **Buy in bulk**: producing a large number of garments, often get a discount on fabric, trim, and accessories

II. **Negotiate with suppliers**: must be regular relationship with a supplier, able to negotiate a better price on fabric, trim, and accessories.

III. **Use less expensive materials**: There are many less expensive materials available, such as synthetic fabrics and recycled materials.

IV. **Simplify the design**: Complex designs require more fabric, trim, and accessories, which can increase the cost.

V. **Use less expensive accessories:** There are many less expensive accessories available, such as plastic buttons and zippers.

1.4 Costs of garment production.

The costs of garment production can vary widely depending on a number of factors, including the type of garment, the materials used, the country of manufacture, and the scale of production. However, some of the most common costs include:

A. **Raw materials:** This includes the cost of the fabric, trims, and other materials used to make the garment. The cost of raw materials can vary depending on the type and quality of the materials used.

B. **Labor**: This includes the cost of the workers who sew and assemble the garment. Labor costs can vary widely depending on the country of manufacture.

C. **Overhead:** This includes the costs associated with running the factory, such as rent, utilities, and equipment maintenance.

D. **Shipping and packaging:** This includes the cost of shipping the finished garments to retailers and other customers.

In addition to these direct costs, there are also a number of indirect costs associated with garment production, such as design, marketing, and sales costs.

Types of costs involved in garment production:

1. **Raw materials:**
   - Fabric
   - Trims (buttons, zippers, labels, etc.)
   - Packaging materials (polybasic, boxes, etc.)
2. **Labor:**
   - Sewers
   - Cutters
   - Pressers
   - Quality control inspectors
3. **Overhead:**
   - Rent
   - Utilities
   - Equipment maintenance
   - Salaries for factory management and other staff
4. **Shipping and packaging:**
   - Freight costs
   - Packaging materials

Indirect costs:

- Design
- Marketing
- Sales

The total cost of producing a garment is calculated by adding up all of these direct and indirect costs. Once the total cost is known, the manufacturer can then add a profit margin to arrive at a selling price.

It is important to note that the cost of garment production can vary significantly depending on the type of garment being produced. For example, simple cotton t-shirt will be much cheaper to produce than a complex evening gown made from expensive fabrics.

The costs of garment production can be divided into two main categories: direct costs and indirect costs.

Direct costs are those that can be directly attributed to the production of a garment, such as:

- Fabric cost
- Trim cost
- Labor cost
- Packaging cost

Indirect costs are those that support the production of garments but cannot be directly attributed to any one garment, such as:

- Factory rent and utilities
- Machinery and equipment depreciation
- Salaries of administrative and supervisory staff
- Marketing and sales costs

To calculate the total cost of garment production, you need to add up all of the direct and indirect costs.

Example cost of breakdown for t-shirt:

Direct costs:

- Fabric cost: 60 Birr per t-shirt
- Trim cost: 50 Birr per t-shirt
- Labor cost: 80 Birr per t-shirt
- Packaging cost: 25 Birr per t-shirt
- Shipping cost: 10 Birr per t-shirt

Indirect costs:

- Factory rent and utilities: 28 Birr per t-shirt
- Machinery and equipment depreciation: 20 Birr per t-shirt
- Salaries of administrative and supervisory staff: 15 Birr per t-shirt
- Marketing and sales costs: 30 Birr per t-shirt

Total cost:

- Direct costs: 225 Birr per t-shirt
- Indirect costs 93 Birr per t-shirt
- Total cost: 318 Birr per t-shirt

It is important to note that the above calculation is just a simplified example. The actual costs of garment production will vary depending on the type of garment, the materials used, the quantity ordered, and other factors.

Factors that affect the costs of garment production:

1. **Type of garment:** More complex garments, such as suits and dresses, will cost more to produce than simpler garments, such as t-shirts and jeans.
2. **Materials used**: More expensive materials, such as silk and cashmere, will increase the cost of production.
3. **Quantity ordered:** Larger orders will typically receive a lower price per unit.
4. **Country of production**: The cost of labor and other factors varies from country to country.
5. **Shipping costs:** Shipping costs will vary depending on the distance the garments need to be shipped and the mode of transportation used.

A. Garment manufacturer's strategies to reduce their costs, such as:

I. **Sourcing cheaper materials:** Manufacturers can source cheaper materials from other countries or from different suppliers.

II. **Improving efficiency**: Manufacturers can improve their efficiency by using more efficient machinery and processes.

III. **Reducing waste**: Manufacturers can reduce waste by carefully planning their production runs and by using recycled materials.

IV. **Out sourcing some tasks:** Manufacturers can outsource some tasks, such as cutting and sewing, to other companies.

Carefully managing their costs, garment manufacturers can produce high-quality garments at a competitive price. The cost of garment production is a complex issue that is affected by a number of factors. However, by understanding the different types of costs involved, manufacturers can better manage their costs and produce garments at a competitive price.

Estimate the cost of a simple t-shirt in ETB using the standard cost card from the previous example

Material/Labor Item	Quantity	Cost per Unit (ETB)	Total Cost (ETB)
Fabric	1 meter	60 ETB	60 ETB
Thread	1 spool(cone)	15 ETB	15 ETB
Zipper	1 piece	7.5 ETB	7.5 ETB
Cutting	0.5 hours	300 ETB per hour	150 ETB
Sewing	1 hour	300 ETB per hour	300 ETB
Finishing	0.5 hours	300 ETB per hour	150 ETB
Overhead	10%	672.5 ETB	67.25 ETB
Total Cost			1270 ETB

A. Hidden costs

Hidden costs in the garment industry refer to the additional expenses that are not immediately apparent or transparent in the pricing of garments. These costs are often overlooked or not fully accounted for, but they can have significant social, economic, and environmental implications.

Examples of hidden costs in the garment industry:

Labor Exploitation: One of the most significant hidden costs in the garment industry is the exploitation of labor. Low wages, long working hours, unsafe working conditions, and lack of workers' rights are prevalent in many garment-producing countries. Although the cost of labor is included in the garment's price, the true human cost is often not reflected.

Environmental Impact: The garment industry has a substantial environmental footprint. Hidden costs associated with environmental degradation include pollution from textile dyeing and finishing processes, water consumption, chemical usage, and waste generation. These costs are not directly factored into the price of garments but have long-term consequences for ecosystems and public health.

Supply Chain Complexity: Global garment supply chains are complex, involving multiple tiers of suppliers and subcontractors. This complexity can lead to hidden costs related to poor visibility and control over working conditions, quality control issues, delays, and logistical

challenges. Brands and retailers may bear these costs indirectly through reputational damage or lost sales.

Social Welfare: The garment industry often employs vulnerable populations, including women, migrants, and informal workers. Hidden costs may arise from inadequate social protection, such as lack of access to healthcare, education, and social security benefits for workers and their families. These costs are not explicitly considered in the garment's price but have broader implications for social welfare systems.

Disposal and Waste Management: Fast fashion and overproduction contribute to a significant amount of textile waste. The hidden costs associated with disposal and waste management, including landfill usage, energy consumption, and recycling efforts, are often not integrated into the pricing structure. These costs burden society and the environment in the long run.

Addressing hidden costs in the garment industry requires a comprehensive approach involving transparency, ethical sourcing, fair wages, sustainable production practices, and responsible consumption. Consumers, brands, governments, and industry stakeholders play a crucial role in driving positive change and ensuring that the true costs of garments are accounted

B. Cost negatives

Social Inequality: The garment industry perpetuates social inequality by maintaining a vast divide between the wages earned by workers in producing countries and the profits of global brands and retailers. This economic disparity exacerbates poverty and income inequality in those regions, contributing to social unrest and a lack of upward mobility for workers.

1. **Fast Fashion Culture:** The rise of fast fashion has led to increased production and consumption of garments, resulting in a throwaway culture. Fast fashion encourages the rapid turnover of clothing, where garments are often discarded after only a few wears. This overconsumption contributes to resource depletion, waste generation, and a lack of consideration for the true value and longevity of clothing items.
2. **Health and Safety Risks:** Inadequate working conditions in garment factories can pose significant health and safety risks for workers. Factors such as poor ventilation, exposure to harmful chemicals, and unsafe machinery increase the likelihood of accidents, injuries, and long-term health issues for garment workers.
3. **Animal Welfare:** The garment industry's use of animal-derived materials, such as fur, leather, and exotic skins, raises concerns about animal welfare. In some cases, animals are subject to inhumane treatment and unethical practices, including fur farming and exotic animal exploitation

Cost negatives include

- High overheads
- Freight/shipping
- Lack of quality control
- Longer lead times
- Larger minimum orders

Self-check-1

PART: **I Say true or false**

1. Fabric cost is the cost of the fabric used to make the garment product.
2. Trims and accessories cost: The cost of trims and accessories, such as buttons, zippers, and labels.
3. Labor cost is the cost of wages paid to workers who are directly involved in of the customer.
4. Shipping cost: The cost of shipping the garment from the customer to factory.

II Give short answer

1. Write factors of garment coste
2. List and explain elements of costs
3. List Types of garment cost

Unit two: Calculate labor cost in garment production

This learning unit is developed to provide the trainees the necessary information regarding the following content coverage and topics:

- Labor involvement in garment product
- Calculate Labor costs.
- Compare methods of labor utilizing

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

- Identify Labor involved in fashion product production
- Calculate Labor costs for production of sample and bulk production
- Identify and compare Different methods of utilizing labor in fashion industry

2.1 Labor involvement in garment product

The labor involved in garment production can be divided into three main categories:

I. **Cutting:** This involves cutting the fabric into the various pieces that make up the garment. Cutters typically use a computer-aided design (CAD) system to generate a cutting plan, and then use electric cutting machines to cut the fabric.

II. **Sewing:** This involves assembling the various pieces of fabric into the garment. Sewing operators typically use industrial sewing machines to sew the pieces together.

III. **Finishing**: This involves inspecting and finishing the garment to ensure that it meets quality standards. Finishers may perform tasks such as ironing, hemming, and attaching labels.

In addition to these three main categories, there is also a variety of support labor involved in garment production, such as:

A. **Quality control**: Quality control inspectors check the garments at various stages of production to ensure that they meet quality standards.

B. **Material handling:** Material handlers transport the fabric and garments from one area of the factory to another.

C. **Packing and shipping**: Packers and shippers pack the finished garments into boxes and ship them to customers.

The amount of labor involved in garment production varies depending on the type of garment, the materials used, and the production methods employed. For example, a simple garment, such as a t-shirt, may require less labor than a more complex garment, such as a suit. Similarly, garments made from expensive materials, such as silk and cashmere, may require more labor than garments made from less expensive materials, such as cotton and polyester.

Garment production is a labor-intensive industry, and the workers involved in the process often work long hours for low wages. In recent years, there has been a growing movement to improve the working conditions and wages of garment workers.

Here are some of the challenges faced by garment workers:

1. **Low wages**: Garment workers in many countries are paid very low wages, often below the minimum wage.
2. **Long hours:** Garment workers often work long hours, sometimes over 12 hours per day.
3. **Unsafe working conditions:** Garment factories can be dangerous places to work, with poor ventilation and fire safety standards.

4. **Child labor:** Child labor is still a problem in some garment-producing countries.

There are a number of initiatives underway to address the challenges faced by garment workers. For example, some brands and retailers are working to improve the working conditions and wages of their suppliers. There are also a number of non-profit organizations that are working to advocate for the rights of garment workers.

2.2 Calculate Labor costs.

To calculate labor costs for production in ETB, you will need the following information:

A. **Hourly wage in ETB:** The hourly wage of the workers involved in the production process in Ethiopian Birr (ETB).
B. **Labor hours:** The number of hours required to produce each unit of output.

Once you have this information, you can use the following formula to calculate labor costs per unit in ETB:

Labor costs per unit (ETB) = Hourly wage (ETB) * Labor hours

For example, let's say that the hourly wage of a worker is 100 ETB and it takes 2 hours to produce each unit of output. The labor costs per unit would be:

Labor costs per unit (ETB) = 100 ETB/hour * 2 hours = 200 ETB/unit

You can also use this formula to calculate the total labor costs for a production run in ETB. To do this, simply multiply the labor costs per unit in ETB by the number of units produced:

Total labor costs (ETB) = Labor costs per unit (ETB) * Number of units produced

Example, let's say that the labor costs per unit are 200 ETB and the number of units produced is 100. The total labor costs for the production run would be:

Total labor costs (ETB) = 200 ETB/unit * 100 units = 20,000 ETB

It is important to note that the above calculation is just a simplified example. The actual labor costs for production will vary depending on a number of factors, such as the type of product being produced, the production methods employed, and the location of the factory.

Here are some tips for reducing labor costs in ETB:

I. **Improve efficiency:** By streamlining production processes and using efficient machinery, you can reduce the amount of time it takes to produce each unit of output.

II. **Automate tasks:** Automating repetitive tasks can free up workers to focus on more complex tasks.
III. **Outsourcing some tasks:** You may be able to save money by outsourcing some tasks, such as packaging and shipping, to other companies.

Carefully managing your labor costs, you can improve your profitability and competitiveness in Ethiopia. It is important to note that the above calculation is just a simplified example. The actual labor costs for production will vary depending on a number of factors, such as the type of product being produced, the production methods employed, and the location of the factory.

Here are some tips for reducing labor costs:

A. **Improve efficiency**: By streamlining production processes and using efficient machinery, can reduce the amount of time it takes to produce each unit of output.
B. **Automate tasks:** Automating repetitive tasks can free up workers to focus on more complex tasks.
C. **Outsourcing some tasks**: to save money by outsourcing some tasks, such as packaging and shipping, to other companies.
D. **Negotiate with suppliers**: have a high volume of orders, to negotiate lower prices with your suppliers.

2.3 Compare methods labor of utilizing

There are a number of different methods of utilizing labor in garment production, each with its own advantages and disadvantages. Some of the most common methods include:

1. **Direct employment:** This is the most common method of utilizing labor, in which the garment manufacturer hires workers directly and pays them a wage or salary. This method gives the manufacturer the most control over the workers and their work. However, it is also the most expensive method, as the manufacturer is responsible for providing the workers with benefits and social security.
2. **Contracting:** This involves hiring a third-party contractor to provide labor services to the garment manufacturer. This method can be less expensive than direct employment, as the manufacturer does not have to provide the workers with benefits and social security. However, the manufacturer has less control over the workers and their work.

3. **Subcontracting**: This involves hiring a third-party subcontractor to perform a specific task in the garment production process, such as cutting, sewing, or finishing. This method can be even less expensive than contracting, as the subcontractor is responsible for their own costs. However, the manufacturer has even less control over the workers and their work.
4. **Freelancing**: This involves hiring freelancers to perform specific tasks in the garment production process, such as design, pattern making, or sample making. This method can be the most flexible and cost-effective, as the manufacturer only needs to pay for the work that is completed. However, freelancers may not be as reliable as direct employees or contractors. The best method of utilizing labor in garment production will depend on a number of factors, such as the size and complexity of the garment manufacturer's operations, the budget, and the company's culture.

Table comparing the different methods of utilizing labor in garment production:

Method	Description	Advantages	Disadvantages
In-house production	The garment manufacturer employs all of the workers who sew and assemble the garment.	* More control over the production process and quality	* Higher labor costs
Outsourcing	The garment manufacturer hires a subcontractor to sew and assemble the garment. This can be done domestically or internationally.	* Lower labor costs	* More flexible and scalable
Subcontracting	A type of outsourcing in which the garment manufacturer hires a subcontractor to sew and assemble a specific part of the garment, such as the sleeves or the hem.	* Can help to reduce labor costs	* Can give the garment manufacturer access to specialized skills and equipment
Sweatshop labor	Labor that is performed in unsafe and unhealthy conditions for low wages.	* None	* Unsafe and unhealthy working conditions
Fair labor practices	The garment manufacturer pays workers a living wage and provides safe and healthy working conditions.	* Ethical and sustainable	* Higher labor costs

The best method of utilizing labor in garment production will depend on a number of factors, including the type of garment being produced, the scale of production, the budget, and the company's ethical values.

It is important to note that there is a growing movement towards more ethical and sustainable garment production. This movement is calling for companies to use fair labor practices and to pay workers a living wage.

Examples utilizing labor in garment production in more ethical and sustainable ways.

A. **Working with Fair Trade certified factories:** Fair Trade certification ensures that workers are paid a fair wage and that they work in safe and healthy conditions.
B. **Partnering with local communities**: Some companies are partnering with local communities to establish garment factories that provide jobs and economic opportunities.
C. **Investing in worker training and development:** Some companies are investing in training and development programs for their workers. This helps workers to develop their skills and earn higher wages.
D. **Transparently reporting on labor practices:** Some companies are transparently reporting on their labor practices, including the wages they pay their workers and the working conditions in their factories.

Consumers can also play a role in promoting more ethical and sustainable garment production by choosing to buy clothes from companies that are committed to fair labor practices.

Self-check-2

PART: **I Say true or false**

5. Labor cost is higher than cost of the fabric used to make the garment product.
6. Labor cost is the cost of wages paid to workers who are directly involved in the of the customer.
7. Shipping cost: The cost of shipping the garment from factory to the customer

II Give short answer

1. Write methods of labor utilizing
2. List and explain Labor costs
3. List Labor involved in garment product

Unit three : Develop costing sheets for industry standards

This learning unit is developed to provide the trainees the necessary information regarding the following content coverage and topics:

- cost sheet components
- Develop cost sheets to industry standard
- Calculate the contribution cost of the variables
- Assesses Quality standards work and receive

Assessing quality standards This unit will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning objective, you will be able to:

- Identify Components of cost sheets
- Develop standards Cost sheets for garment industry
- Complete Cost sheet for a cut, make and trim production run
- Calculate the contribution of variables cost

3.1 Cost sheet component in garment production

A cost sheet is a document that outlines the various components and expenses involved in the production of garments. It provides a detailed breakdown of costs incurred at different stages of the garment manufacturing process. Here are some common components typically included in a cost sheet for garment production:

Direct Materials: This includes the cost of all the materials used in the production of garments, such as fabric, trims (buttons, zippers, etc.), threads, labels, and any other components specific to the garment design.

Direct Labor: Direct labor costs encompass the wages and benefits of the workers directly involved in the garment production process, such as cutting, sewing, and finishing. It is the cost associated with the actual hours worked on the production line.

Overhead Costs: Overhead costs are the indirect expenses incurred in the production process that cannot be directly attributed to specific garments. These costs include factory rent, utilities, maintenance, and depreciation of machinery, administrative expenses, and other overheads necessary for running the production facility.

Indirect Materials: Indirect materials refer to the consumables and supplies used in the production process that are not directly incorporated into the final garment. Examples include packaging materials, maintenance supplies, and other miscellaneous items.

Sampling and Development Costs: These costs include expenses related to creating garment samples, prototyping, and development processes. It covers the cost of sample fabrics, trims, labor, and any other expenses incurred during the design and development stage.

Quality Control and Testing: Quality control costs involve inspections, testing, and quality assurance procedures to ensure that garments meet the required standards. It includes the cost of quality control personnel, equipment, and any external testing services.

Freight and Shipping: This component includes the cost of transporting the finished garments from the manufacturing facility to the distribution center or the buyer's location. It covers shipping charges, customs duties, insurance, and any other related logistics costs.

Markup and Profit: This factor represents the margin or profit added to the production cost to determine the selling price of the garments. It accounts for the desired profit margin of the manufacturer or the brand.

Miscellaneous Costs: Miscellaneous costs encompass any other expenses that are not covered by the above categories but are relevant to the garment production process. These may include legal fees, certifications, taxes, and other miscellaneous expenses.

3.2 Develop standard cost sheets for garment industry

Developing standard cost sheets for the garment industry requires a detailed understanding of the specific production processes, materials, and labor involved in garment manufacturing.

Here is a general framework to help you create standard cost sheets for the garment industry:

I. Garment Identification: Begin by identifying the garment for which you are creating the cost sheet. Include relevant details such as the style name, item code, and description.

II. Bill of Materials (BOM): Create a comprehensive list of all the materials required to produce the garment. This includes fabric, trims, labels, threads, and any other components specific to the garment. Specify the quantity and cost of each material item.

III. Material Consumption: Calculate the material consumption for each component of the garment, such as the main fabric, lining, interlining, and trims. This can be done based on standard measurements or technical specifications provided by the design team

IV. Direct Labor: Determine the labor hours required for each operation involved in the garment production process. This includes cutting, sewing, finishing, and any other relevant operations. Assign labor costs to each operation based on the applicable wage rates.

V. Overhead Costs: Estimate the overhead costs associated with garment production. This includes expenses such as factory rent, utilities, maintenance, administrative costs, and depreciation of machinery. Allocate these costs based on a predetermined allocation method, such as machine hours or labor hours.

VI. Sampling and Development Costs: Account for the expenses incurred during the sampling and development stage of the garment. This may include sample fabric costs, trims, labor, and any other costs specific to the prototyping and development process.

VII. Quality Control and Testing: Consider the costs associated with quality control measures, inspections, testing, and quality assurance procedures. This includes the cost of quality control personnel, equipment, and any external testing services.

VIII. Freight and Shipping: Estimate the transportation costs involved in delivering the finished garments to the distribution center or the buyer's location. This includes shipping charges, customs duties, insurance, and any other logistics costs.

IX. Markup and Profit: Determine the desired profit margin or markup percentage to calculate the selling price of the garment. This is typically a percentage added to the total production cost to cover profit and other business expenses.

X. Miscellaneous Costs: Account for any other miscellaneous expenses that are relevant to the garment production process but not covered by the above categories. This may include legal fees, certifications, taxes, and other miscellaneous overheads.

It's important to note that the specific costs and cost structure may vary depending on factors such as the location of production, complexity of the garment, scale of operations, and other industry-specific considerations. Customizing the cost sheet based on your specific production setup will provide more accurate cost estimates.



Kranked Designs

Description: WOMEN'S FITTED SHIRT

Style Number: SH02345

Key Finished Garment Measurements		XS	S	M	L	XL	XXL
a	CB LENGTH	24 3/4	25 1/4	25 3/4	26 1/4	27 1/4	28 1/4
b	CHEST	37	39	41	43 1/2	46 1/2	49 1/2
c	WAIST	30	32	34	36 1/2	39 1/2	42 1/2
d	HEM OPENING - STRAIGHT	35 3/4	37 3/4	39 3/4	42 1/4	45 1/4	48 1/4
e	SHOULDER	15	15 1/2	16	16 1/2	17 1/4	18
f	ARMHOLE - ALONG CURVE (1/2)	8 5/8	9	9 3/8	9 3/4	10 1/8	10 1/2
g	BICEP 1" BELOW ARMHOLE (1/2")	6 1/8	6 1/2	6 7/8	7 1/4	7 5/8	8
h	CUFF (EDGE TO EDGE)	9	9 1/4	9 1/2	9 3/4	10	10 1/4
i	CB SLEEVE LENGTH	30 1/4	31 1/4	32 1/4	33 1/4	34 1/4	34 1/4
j	NECK CIRCUMFERENCE	14 7/8	15 3/8	15 7/8	16 3/8	16 7/8	17 3/8
k	STAND HEIGHT	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8
l	COLLAR WIDTH (of c to)	2 1/8	2 1/8	2 1/8	2 1/8	2 1/8	2 1/8
m							

NOTIONS

	Material Detail	QTY	length	UNIT	notes
1	BUTTONS	11		LINE 10	
2					
3					
4					
5					
6					

Fabric Consumption

A	POPLIN	1 SFT = 1.72 yards	yards	Labels / Markings:
B	FUSING	1 SFT = 0.18 yards	yards	Size M
			yards	
			yards	Content: 98% COTTON / 2% SPANDEX
			yards	
			yards	Inside label

Construction Notes

- Fabric type –piece
- Fabric color—White
- Stitch type_ single needle lock stitch

Style –casual shirt

Unit- cm

Scale-1:1

Prepared by_.....

Date……..

Body measurement

Position	Bust	Half shoulder	Back shoulder	Breast tip to breast tip	Shoulder to breast	Shoulder to waist	Sleeve length	Jacket length	cuff
Size	88	12	38	20	24	40	56	58	20

1. Casual t-shirt raw material cost

No.	**Material list**	**Unit**	**Quantity**	**Unit price**	**Total price**
1	Fabric	Meter	1.50	60 Birr	90.00 Birr
2	Thread	Spool	1	5 birr	5.00 Birr
3	Zipper	Pieces	1	8 birr	8.00 Birr
4	Button	number	6	50 cents	3.00 Birr
5	Interlining	meter	½ meter	20 birr	10 birr
Total raw material Cost					**114.00 birr**

Wastage= 3% =114x3/100 = 3.42%

2. **Direct Labor cost** = 23,000 -Direct labor cost includes (cutting, sewing and finishing)
   Direct Labor cost/year = 23,000 = 1916.67 (labor cost per month)

   Direct labor cost/month = 1916.67 = 73.71 (labor cost per day)

   Day/month 26
3. **Over Head cost – indirect cost** = 20,000 (over head costs are Electric power, water, telephone, transportation, manager salary)
   OH cost/year = 20,000 = 1666, 67 (OH per month)

   OH cost/month = 1666.67 = 64.10 (OH per day)
4. **Administrative cost** –5,000 (Administrative cost includes Guard, secretary, accountant, finance
   Ad. Cost/year = 5,000 = 416.67 (Ad.cost per month)

Ad. Cost/month = 416.67 = 16.02 (Ad. Cost per day)

5. **Production cost =** (Raw material cost + wastage + direct labor cost + Over head cost + Administrative cost)

   =(114+ 3.42+ 73.71/5 + 64.10/5 + 16.02/5)

   = (114 + 3.42 + 14.74 + 12.82 + 3.2)

   = 148.18 Birr

6. **VAT(tax) = 15 %**

   = Production cost X 15/100

   = 148.18 X 15/ 100 = 22.23 Birr

7. **Profit = 25%**

   = (production cost + tax) X 25 / 100

   = (148.18 + 15) X 25/100

   = 4079.5 /100

   = 40.795 Birr

   = (production cost + tax) X 20/100

   = (148.18 + 15) X 20/100

   = 3263.6/100

   = 32.64 birr

8. **Selling Price**

   = Production cost + VAT + Profit

   = 148.18 + 22.23 + 40.80

   =211.20 Birr

Self-check-3

PART: I Say true or false

1. Cost sheet component in garment is garment component
2. make the garment product means make Cost sheet
3. Labor cost is the cost of wages paid to workers who are directly involved in the of the customer.
4. Shipping cost: The cost of shipping the garment from the customer to factory.

PART:II Give short answer

1. Develop cost sheets to industry standard
2. Write Cost sheet components
3. How does fabric tension affect fabric performance?

Operation sheet-1

Operation Title: Develop costing sheets to industry standards

Note: complete the work by using necessary procedures or instruction to do the operation sheet

Materials

TASK 1. Prepare the material

TASK 2. Prepare tools & equipments

TASK 3. Identify direct cost

TASK 4. indirect cost

PROCEDURES

1. prepare & clean the table
2. prepare & tools and equipments
3. Prepare the A4 paper

Safety Precautions:

1. Always chose suffcient light
2. Be careful not to over confidence
3. Use caution when calculating.

QUALITY CRITERIA:

1) All steps were completed in the correct sequence,
2) All safety precautions were followed during calculation ,
3) calculation again repeated more than two .
4) Recheck accurate as much as possible.

LAP Test	Practical Demonstration

Operation Title: Develop costing sheets to industry standards

Time given 4hrs

Reference

1. Prasanta Sarkar is a garment costing expert and the author of several books on the subject, including Garment Costing: A Complete Guide and Garment Costing for Merchandisers and Sourcing Professionals.
2. Harold Carr and Louise Bell are the authors of the book Apparel Costing and Manufacturing.
3. Michael D. Richardson is the author of the book costing for the Apparel Industry.
4. John R. Corrigan is the author of the book Garment Costing and Pricing: A Practical Guide.
5. Techpacker is a company that provides garment costing software and resources. They have a number of blog posts and articles on their website about garment costing, including "How to Perform Cost Estimating for Garments".

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2. Developer's profile

No	Name	Qualification	Educational background	Region	College	Mobile number	E-mail
1	MELKIE ERKYIHUN	MSC	Garment Technology	A.A	Bole manufacturing college	0925755581	merkyhun826@gmail.com
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4	FUFA DIRIBA	MSC	Garment Technology	Oromia	Adama polytechnic college	0912006604	fdiriba86@gmail.com
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