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Subject : Apparel Manufacturing

Unit 1 Introduction to Apparel Manufacturing

Quadrant 1 – e-Text

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Learning Objectives

The learning objectives of this unit are:

- Understand the scale of operations.
- Identify the suitable method for funding an apparel business.
- List the techniques required to run a business.
- Identify an appropriate organizational structure for the business.
- Determine the importance of budget, cost and incentives.
- Understand the role of Operations, Human Resource Management and Administration.

1.1 History and Origin of the Apparel Manufacturing Industry

Food, Apparel and Shelter are at the base of the pyramid of needs for life. Apparel is one of the basic necessities of a human being.
Before the invention of the sewing machine, almost all apparel products were locally made with hand stitch. Apparel was manufactured by tailors in most towns that could use the make through process or single garment for customers.

Ready to Wear apparel though present was limited in variety. During that time jackets and coats also known as outerwear and under garments were purchased using predefined sizes.

Sewing machines emerged in the 19th century. They helped streamline the production of clothing. During the industrial revolution, apparel production was mechanized with sewing machines. Soon, manufacturing shifted from small setup's and small-scale industry based production to mass manufacturing. Production systems became more sophisticated with the introduction of assembly line based manufacturing. Clothing production, on the other hand, continued to be made by hand. After the introduction of the sewing machine, there was rapid growth of the ready to wear apparel business.

The American Civil War was a crucial event in the chronological development of men's ready to wear apparel.

At the beginning of the Civil War, most uniforms were custom-made in workers' homes under government contract.

As the war continued, apparel manufacturers started building factories to increase production to meet the growing demands of the military. This mass production of military uniforms compelled

the expansion of standard sizes.

After this war, military measurements were considered to create the commercial sizing for men's apparel. The bulk production of women's apparel developed slowly. During the 1920s, generally, women's apparels continued to be made-to-order.

During that decade, factors such as the development of industrial production techniques, the rise of the advertising industry, the growth of an urban professional class, and the development of national markets accessed through chain stores and mail order catalogues, contributed to the success of the women's ready-made apparel industry. RTW apparel was depicted as up-to-date and fashionable during those days, as the new consumer industries swiftly redefined the way American customers viewed mass-produced products.

American women began accepting ready-made garments for their wardrobes as these ready to wear merchandise were cheaper, affordable and up to date. Most importantly they were in tune with current fashion which could keep changing with fashion trends.
However, RTW garments were found to fit poorly. The main problems faced during that time with ready to wear garments were regarding the fitting, drape and silhouette of these garments. Inadequate data about body shape and measurements resulted in the absence of a standard size chart and sizing system. Thus, each manufacturer produced its own sizes.

Manufacturers were using the same size for different dimensions of apparel. This eventually led to additional cost of alteration, correction of merchandise and also return and replacement of large volume of products. Ultimately, this resulted in increased cost for end users of RTW garments. This problem in standard sizing led to the first large scale scientific study technique of women's body measurements for pattern making and garment construction.

The main purpose of this survey was to find out key measurements of a female body.

These measurements were important to predict other body measurements. This technique of measurement provided the basis for the standard sizing system for women's apparel.

1.2 Apparel Industry in India

The United States of America, The European Union, China, Japan and India are the biggest markets for apparel. This is also the major hub for apparel consumption.
On the other hand, apparel production is primarily concentrated in China, India, Bangladesh, Vietnam and Turkey. Demand for MMF yarns will grow faster than demand for natural fiber yarns.

Knit fabric and apparel are performing better than their woven counterparts in global trade. Asian countries like China, India, Pakistan, Bangladesh, Thailand and Indonesia are among the leading countries in terms of installed machinery capacity.

China alone has a share of around half of the world's total installed capacity for spinning and weaving machinery. The T &A industry continues to be the second largest employment generating sector in India. It offers direct employment to over 35 million in the country and with an additional employment of 60 million in the allied sector, total employment figures stands at 105 million. The consumer wardrobe has changed from only 'need-based clothing' to 'occasion specific dressing' and is gradually becoming more 'detail oriented'. Women shoppers are gaining more importance with their higher spending power and requirement of specific clothing for different purposes. The growth of apparel e-tailing is fueled by the changing lifestyles of domestic consumers and increasing penetration of technology.

The Indian domestic apparel market is expected to grow at a CAGR of 9%.
Higher per capita consumption, favorable consumer demographics and increase in prices will drive the growth of the apparel market in India. Currently, menswear is the biggest segment of the apparel market. Kids wear and women's wear are growing faster than men's segments. Among kids wear, girls segment has the highest growth rate.
Denim, Active wear and T-Shirts are high growth categories in the Menswear segment.
In the women's wear segment, Denim, Innerwear and T-shirts are expected to demonstrate relatively higher growth rate. In the Boy's wear segment, growth rate is highest for Denims followed by winter wear and Tee/Shirts. In the Girl's wear segment, growth rate is highest for Denims followed by winter wear and Tee/Shirts.

1.3 Conclusion

To summarize, in this unit, you have learnt about how the manufacture of apparel began and the impact of the industrial revolution. You have also received an overview of the global market, country-wise share of global production, apparel's contribution to India's GDP, the size of the apparel industry in India both domestic and export - segment wise, product wise and category wise as well as the market projection. You have also got a glimpse of the employment scenario in the Indian apparel sector and reviewed recent developments in the Indian apparel industry.