# LESSON 1 NATURE AND SCOPE OF PRODUCT DEVELOPMENT

Products can be either physical products or services.

Product development is the process that is undertaken from the generation of a product idea through to its release into the marketplace as a commercial product. It may also include renewing an existing product or introducing a product into a new market. A product itself can be a manufactured item (e.g., vacuum cleaner, motor vehicle etc.) or a service (e.g., banking, financial advisory services, insurance products etc.).

Considerations within the process will relate to the product and customer type, for example:

- What type of product is it?

  - Goods
  - Services

- Who is your target audience?

- The development process.

Let's now consider these in more detail.

## What Type of Product Is It?

There are many factors to consider when developing a new product or idea for market. These may range from developing a new product in an area that your business is already well established in, producing a product for an existing market area, entering a new field or market environment etc. It could even be development of a product which already exists but that needs changes to keep up with market expectations and demands. As you can see there are lots of different scenarios.

When we refer to a product, many people initially think that this is just something to sell outside of the company. However, there may also be situations where products are designed for internal customers i.e., employees. This has different connotations in terms of cost and design since money will not be paid for the item directly though it will benefit the overall operation.

Although product development as a term may suggest reliance on a specific department or business function, in reality it will involve input from different areas of the business. The initial idea may have come via direct customer feedback, market research or as a response to the launch of a competitor's product does not have an existing competing product in the marketplace.

Product development will inevitably have input from marketing, production, and finance departments. As plans are laid to actually produce the product, other departments such as Personnel/HR will need to be involved as well to ensure that sufficient resources are in place to support the production.

## Who is Your Customer?

Without customers, there is no product to sell. Identifying your customers and locating your market will help to improve product development and establish a mareting strategies for future sales.

A carefully designed product will appeal to the majority of its potential consumers. Product developers need to have a clear understanding of the characteristics that define particular segments of the market. The overall market is divided into groups with common characteristics. The group most likely to buy your product is called the target market for the product.

A target market is defined by the following characteristics:

- Demographics - are statistical measures like age, income and level of education that defines a market segment.

- Geography - refers to where the product will be used or where your customers are located.

- Lifestyles - can be classified according to a person's beliefs, behaviours, and socioeconomic class. Shopping habits, leisure habits, familiarity with technology and religious practices are lifestyle characteristics.

# The Development Process

The product development process begins with the initial idea. There will then follow a number of steps to bring the product or service to the marketplace.

Research → Product Planning → Prototype → Pre-Production → Release

## Research and Development

The development process begins with research to identify the potential demand for the product. This research may involve identifying needs for new products, assessing competitor's products or assessing current and projected trends in the sector. For example, do competitors offer products with all the features desired by customers? Do competitors offer the most appealing product/package that could be produced?

This research can come in different guises, for example it may be very informal chats with customers gaining feedback on an existing product range. Equally it could be a more formal questionnaire delivered to a much larger group of people to gain insights into expectations within a particular field. This might involve a marketing research company being employed to gather the most reliable information.

This stage of the process is not to be underestimated, whilst many will skip this stage due to lack of funds, or thinking that they know what the consumer wants, this is likely to impact on the success of the overall acceptance of the product.

## Product Planning

Product Planning will involve both the physical realities of planning how to produce a product, and how it will be marketed. Whether a business is to produce a physical product or a service, they need to determine how it will actually be made. For example, manufacturing a car will involve raw materials and plant equipment. Production partners may also contribute ready made elements to complete the final product. Specialist firms may produce braking or gearbox systems which will be used in the resultant motor vehicle. This avoids extensive research and development costs in these areas for your company, as the specialist firms will already have undertaken this. For an investment or financial services product, this may mean selecting a partner company to, for example, provide insurance or underwriting elements to a service.

The development process also needs to consider the costs of the product launch and ongoing marketing strategies. This will include deciding how to pitch the product to customers and any pricing constraints in the marketplace. For example, the product might be positioned as an economical option, and undercut competitors on price. The product could

also be positioned as unique, innovative and highly valuable - demanding a higher price tag. The producing company will also need to examine budgets to make the product a reality.

## Prototypes and Testing

Having completed the planning stage, the organisation will now be ready to put together a prototype product. This will need to be assessed in terms of, ease of production, ease of use, suitability for purpose, wearability, etc.

The extent of the test phase will be dependent on the product type. More complex products can take a lot longer to go through this phase particularly if the product is completely new. Those products which are being updated in some way should still go through this phase to ensure that the changes are appropriate to the target market.

Real customers are the ideal testers for prototypes ad they are most likely to buy and use the product. This gives valuable feedback to enable improvements and alterations to be made.

The complexity of the prototype will be dependent on what needs to be validated through the testing process. The testing phase may be repeated with multiple changes to design until the product meets the design teams specifications and the testers approval. While this process can seem expensive and time consuming, it is essential to the long term success of the product and the company. It's important to have a clear goal for this process, it shouldn't be just about testing a prototype, there should be a specific objective to be achieved.

## Pre-Production Phase

Lessons learned from the planning, prototype and testing phases will have a bearing on how the product should now be appearing. At this stage we are