8.3  Product design

Product design includes all measures taken to determine or change product features.

An enterprise has several options available:
- **Product innovation**: A new product is developed.
- **Product variation**: An established product in the market is changed slightly.
  The number of products offered remains the same.
- **Product relaunch**: One or more properties of a product established in the market are comprehensively changed. The goal is to revitalize the declining or stagnant sales of a product in the saturation phase of the product life cycle.
- **Product elimination**: An unsuccessful product is withdrawn from the market.

**Example** B&O – Product innovation

B&O was the first company to market a remote control that could operate everything from CD players to televisions to room lighting. The remote control exceeded the minimum requirements for the product and was considered a symbol of technical innovation.

The design of a product consists of three dimensions:

**Dimensions of product design**

- **Design of the product core**:
  - Size
  - Weight
  - Material
  - Technical performance
  - Ease of use

- **Design of extrinsic characteristics**:
  - Design (shape, color)
  - Packaging
  - Branding

- **Extended services (customer service)**:
  - Advice
  - Training
  - Delivery
  - Installation
  - Repair and warranty service

**Design of the product core**

The **product core** embodies the actual product and offers the buyer intrinsic value with its functional properties.

An enterprise should distinguish itself from the competition through the design of the product core, taking into account the conditions of the market.
Example B&O – Product core

The BeoLab A11 speaker can play music from mobile phones, computers, or media players with full sound depth and perfect fidelity. Through the use of parallel surfaces, the so-called “silent wave” has been eliminated. The speaker can be placed in the bedroom, guest room, kitchen, or any room. In addition, a switch on the back adjusts the bass response of spatial situations – from a wall mounting to a corner position to the middle of a room. The latter option gives the bass much more weight. The speaker can be controlled with its handy round remote control of BeoLab A11 – or any other Bang & Olufsen remote.

Extrinsic characteristics

Extrinsic characteristics provide the extended value that can, in some circumstances, push the intrinsic value of a product into the background and play a decisive role in the buying decision of a customer. When deciding on extrinsic characteristics, questions of design, packaging, and branding become relevant.

Which design is suitable for the products?

From the customer’s point of view, good design means a product is attractively designed and user-friendly. These aspects have to be considered by the product designer. Compromises are inevitable: The designer is faced with the question, for example, of whether it is better to fulfill the customer’s expectations for light weight or greater sturdiness.

Example B&O – Design

The conical shape of the BeoLab A11 speaker ensures that it blends in with its surroundings. To perfectly fit in the room, the speaker is available in either white or black. Those who delight in color can choose from eight colors of speaker grill cover.

What functions does packaging have?

Many products, especially food, could not be stored, distributed, or sold without packaging. With the help of packaging, a logistical characteristic may be formed from one or more product characteristics.
Packaging has technical and communicative functions.

**Transport function:** Packaging should keep the product from being exposed to excessive stresses during shipping. This is often accomplished with the use of multiple levels of protection (e.g., carton and pallet). In addition, standardized packaging results in smaller space requirements for transport. The size of packaging materials (e.g., pallet) depends on the size of the means of transport. This allows for the optimum utilization of means of transport and speeds up the loading and unloading process.

**Warehouse function:** Each item will be transported and stored several times between completion and use or consumption. Using appropriate packaging will facilitate, secure, and accelerate the warehousing at the manufacturer or importer, wholesaler or retailer, transporter, and consumer.

**Protection function:** The packaging protects not only the item from damage, contamination, and loss of volume but also people from being injured by sharp-edged or toxic objects. The design of the packaging helps to protect from damage caused by transport, the environment, and other goods (for example, from leaking fluids).

**Information function:** The packaging indicates the product type, quantity, weight, and price as well as informing customers of potential hazards, expiration dates, and correct use of the product. In addition, the packaging carries encrypted data (barcodes), allowing for rapid reading with a scanner at checkout.

**Advertising function:** The sales packaging allows the buyer to recognize a product, be it by the name, logo, color, or shape of the packaging. Attractive retail packaging promotes purchases, increases sales, and possibly appeals to new customers.

**What brands come to mind?**
The identification of products with a characteristic package design, using names and symbols, is becoming increasingly important in marketing. Brands are, in many areas, a prerequisite for building solid customer relationships and a certain image.

→ Exercise 3

→ P.340 Brand management

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Functions of packaging

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Branded products are products that are distinguished in the market by a high level of awareness. These are characterized by widespread distribution in the market, consistent quality and appearance, and brand-related consumer advertising (e.g., McDonald’s).

Private labels are similar to the branded products and are usually offered at lower prices by major retailers. The aim of own-brand suppliers (e.g., Coop with Prix Garantie) is to help enterprises to bond with customers. No-name products are products not connected to a specific brand name (e.g., food at Aldi). They are labelled simply and matter-of-factly. Their prices are often up to 50% lower than respective branded products, but their quality is usually also lower. Such products are only rarely advertised.

Extended services

All extended services of a product can be grouped under the term customer service. This includes all services provided by a manufacturer or a retailer before and/or after the sale of a product. These should make a product attractive to a potential buyer and/or strengthen satisfaction after the sale. Extended services can be divided into four main groups:

- Information and advice when shopping
- Training and instruction after purchase
- Delivery and installation of goods
- Repair, replacement parts, and warranty service

These play an important role with high-quality and technically complex consumer goods. Different prices are paid for equivalent products with or without extended services.

Example B&O – Extended services

Quality and flawless execution are also of utmost importance for customer service at B&O.

Service: To ensure the best possible after-sales service, B&O has authorized a line-up of highly qualified service centers and service partners to perform maintenance and service according to the standards demanded by B&O.

Installation: After the purchase, products are delivered on request to the customer’s home, where they are set up according to the customer’s requirements.

Warranty: All B&O products have a 2-year warranty on workmanship and material defects.

1 After-sales service: Service after the sale: P.353 After-sales management

Exercise 4

Exercise 5