Food Product Development

Food product development is an integrated system involving expertise in the fields of *marketing* and *manufacture*.

Syllabus Dot-Point

Factors which impact on food product development

- External factors (macro-environment) that impact on food product development, including the:
 - Economic environment
 - Political environment
 - Ecological environment
 - Technological development
- Internal factors (micro-environment) that impact on food product development, including:
 - Personnel expertise
 - Production facilities
 - Financial position
 - Company image

External Factors

- Economic environment
- Political environment
- Ecological environment
- Technological development

Economic Environment

- The fluctuating state of the Australian economy affects food product development.
 - Exchange Rates: The demand for Australian food products is impacted by the fluctuating value of the Australian dollar (e.g. If the Australian dollar is strong, there is a lower demand for food; alternatively, if the Australian dollar is weak there is higher demand for food).
 - Interest Rates: Fluctuating interest rates create uncertainty for investors (e.g. a low interest rate encourages investment in capital, such as equipment, expansion and improved technology).
 - Inflation and Recession involve an increase or decrease in the cost of living, influencing people's purchasing power (e.g. high inflation results in the consumption of more value-added foods and more meals being eaten out of the home, whereas low inflation or recession result in the increased consumption of generic food brands and staple foods).

Economic Environment cont.

- The fluctuating state of the Australian economy affects food product development.
 - **Unemployment** leads to an increase in the number of people living on social security which means that their food purchases are likely to be limited to: less processed products, foods in season, and less expensive food products.
 - **Taxation**: GST (goods and services tax) aims to ensure that equal tax is paid by all consumers on food purchases.
 - For more information, see: https://www.ato.gov.au/Business/GST/In-detail/Your-industry/Food/GST-and-food/?anchor=GSTfreefood
 - Salary Negotiation and Award Wages: The income a person has impacts on their purchasing power (e.g. a higher salary gives a person a greater range of food choices).
 - **Droughts** and **Natural Disasters** affect and disrupt crop and animal production in Australia.

Economic Environment cont.

- The Economic Cycle:
 - 1. Recession is a downturn in the economy resulting in high unemployment, interest rates and inflation, which results in less people buying food and manufacturers producing less food.
 - **2. Expansion** refers to the economy gaining confidence, which increases employment opportunities and interest rates and inflation fall.
 - **3. Boom** is characterized by low unemployment, low interest rates and increased spending.
 - **4. Contraction** occurs as confidence declines with increasing interest rates and spending slows, at this point a recession appears inevitable.

Political Environment

- The political systems (federal, state and local) influence the following factors which impact on food product development:
 - **Price**: the level of taxation applied to food, subsidies, tariffs etc.
 - The Environment: air, water and noise pollution and the use of chemicals and food additives in food production.
 - **Education**: food and nutrition education, food standards, food handling and safety.
 - Working Conditions: trading hours, Work Health and Safety etc.
- Community influences and lobby groups are able to *lobby* politicians to bring about changes in the food industry. This often results from organized groups with a *vested interest* or from the *widespread* concern of the community.

Ecological Environment

- **Ecological Environment** refers to the use of *natural resources* and *energy* to produce a 'clean green' food supply.
- There is growing concern about the environment and ecological issues in regard to:
 - The use of natural resources
 - Farming procedures
 - Waste management and packaging
- Businesses pursue environmentally responsible decisions rather than decisions that are purely motivated by profit, failing to act in an environmentally responsible way may result in legal or political consequences
 - E.g. biodegradable and recyclable packaging, air pollution control, and environmentally friendly processing and transport for production are strategies used by companies that address consumer environmental concerns.

Technological Development

- Developments in processing technology often arise from **Research** and **Development** (e.g. the CSIRO).
- Technology has led to improved productivity and increased choice (new foods).
- However, technological development can also lead to decreased employment opportunities, retrenchments or costs to retrain staff.

Internal Factors

- Personnel expertise
- Production facilities
- Financial position
- Company image

Personnel Expertise

- Personnel that work within the food industry include:
 - Management staff
 - Finance staff
 - Product development staff
 - Marketing staff
 - Testing and quality assurance staff
 - Production staff
 - Maintenance staff
- Education and training are important to ensuring that personnel are highly skilled and flexible.
- Staff often require on the job training and/or ongoing training to keep up with new technology or adapt to changes in the company (e.g. changes in equipment).
- The need for technology increases as production increases.

Production Facilities

- The need for production facilities and the type of production facilities will often depend on the *volume of production*:
 - One off production: have limited production facilities and may use domestic resources (e.g. Wedding Cakes).
 - **Batch production**: the variations in production may result in minor changes in production facilities (e.g. jam and ice-cream).
 - **Continual or mass production**: continual production results in the use of automation and computerization to meet the large volume (*e.g. continual = Coca Cola and mass = dried apricots*).
- Businesses acquire production facilities through:
 - Buying using company finances
 - Borrowing/leasing
 - Outsourcing production to external organisations

Financial Position

- Business want to manage their expenditure well and increase profitability
- Influences on the financial success of a business include:
 - Investment capital
 - Resource management
 - The quality of the product
 - The market share competition

Company Image

- The company image is reflected in market segment and consumer attitude. It is influenced by:
 - **Reputation** of the company in comparison to their competitors.
 - **Product quality**: the value for money in comparison to their competitor's products.
 - Marketing strategies: ability to reach the target market and effectively use the marketing mix the 4 Ps: Product Planning, Price Structure, Place and Distribution System, Promotional Program.
 - Packaging: presentation of the product and environmental concerns.
 - **Price**: value for money in comparison to their competitor's products.

Company Image cont.

- **SWOT Analysis** is the most useful way of assessing the likely success or failure of a new food product:
 - <u>Strengths</u> INTERNAL
 - Weaknesses INTERNAL
 - Opportunities EXTERNAL
 - <u>Threats</u> EXTERNAL
- SWOT Analysis What is SWOT? Definition, Examples and How to Do a SWOT Analysis
 - https://www.youtube.com/watch?v=JXXHqM6RzZQ