Introduction: As a consumer of product will be one determining factor in whether a product will be sold or not sold, it is imperative to think about the different aspects that may impact a consumer’s choice – product design being one of the aspects in question. However, one may find difficulty defining what product design is. After an analysis of research papers over a fourteen year span, Luchs & Swan (2011) formulate two definitions in regards to product design: one involving the product itself, the other involving the process of product design. In our project, we extend this research of product design through the context of a well-known furniture retailer, IKEA. Using the PESTLE analysis method, we look into the different considerations affecting IKEA product design.

**Product design**: the set of properties of an artifact, consisting of the discrete properties of the form (i.e., the aesthetics of the tangible good and/or service) and the function (i.e., its capabilities) together with the holistic properties of the integrated form and function. (Luchs & Swan, 2011)

**Product design process**: the set of strategic and tactical activities, from idea generation to commercialization, used to create a product design. (Luchs & Swan, 2011)

**Method - PESTLE analysis**: PEST analysis is a convenient method for organizing market research into a cohesive format. The acronym PEST, breaks down into four different components used for assessment: Political, Economic, Social, and Technological. The additional letters of L and E are appended onto the acronym PEST to create PESTLE. Addition of the letters adds two more assessment components into the original method: Legal and Environmental considerations.

**PESTLE Analysis**

- **Political**
  - Government policies
  - Trading policies
  - Regulatory bodies
  - Government change

- **Economic**
  - Economy trends
  - Taxation issues
  - Market & trade cycles
  - Industry Factors

- **Legal**
  - Discrimination law
  - Consumer law
  - Employment law
  - Health & Safety law

- **Social**
  - Lifestyle trends
  - Demographics
  - Brand image
  - Buying Patterns

- **Technological**
  - Competing technology
  - Research funding
  - Innovation potential
  - Information & communication

- **Environmental**
  - Ecological Aspects
  - Climate
  - Sustainability
  - Resource Conservation
Economic:

- IKEA attains a world-wide presence
- Achieves a wide variety of products while maintaining low prices by:
  - Furniture assembly by customer
  - Minimized hardware in products
  - Utilize economies of scale

Social:

- Must overcome different perceptions in new markets
- Design products for different social factors (e.g., age, culture)
- Establish specific design limitations for new markets

Technological:

- Use of specialized technology allows for design of low cost products
- Uses modelling software (e.g., Computer Aided Design) to check for mistakes
- Creation of well-designed product assembly instructions to reduce assembly mistakes
- Use of appropriate materials for the given application

Environmental:

- Material scarcity pushes product design to use material from sustainable sources
- Design products to push for awareness of sustainability
- Refusal of non-certified wood products
- No use of harsh chemicals (e.g., Formaldehyde)
References


IKEA. (2017, 01 17). Make recycling fun (for the whole family).


