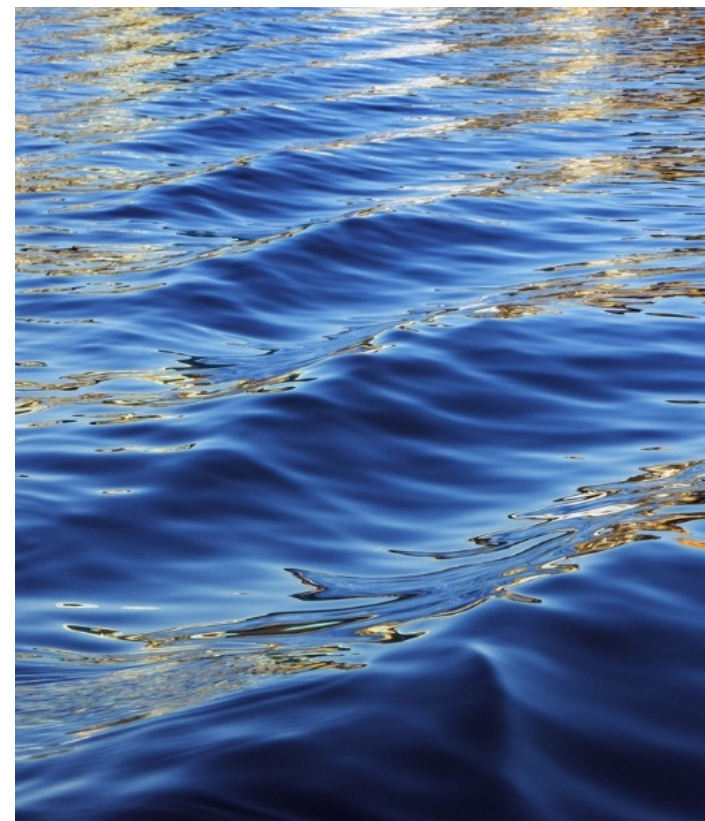


# Development of Market Offerings



# Contents

- Describe Use Case Scenarios
- Clarify Objectives
- Establish Functions
- Set performance requirements
- Determine characteristics
- Generate design alternatives
- Evaluate alternative designs
- Improve details
- Develop training materials

Here, an overview of steps in the development to a market offering is provided.

There are wide range of free online resources for each of the steps, which can be accessed by searching online using the main terms used in the slides.



# Describe Use Case Scenarios



# 1.1 Define market segments

Defining market segments involves the division of a market into sub-groups of customers who have similar characteristics.

For business to consumer (B2C) enterprises, these can be customers' socio-economic status and lifestyles.

For business to business (B2B) enterprises, similar characteristics can be businesses' age, sector, and size.

## 1.2 Describe customer types

Customer types are often described in pictures and words as personas.

These are fictional characters that can be developed through synthesis of information drawn from survey research.

Personas can be developed to represent particular market segments as a typical person in that segment who has behaviors, goals and desires that can be addressed by new offerings in that market segment

## 1.3 Preliminary use case scenarios

Use case scenarios provide detailed descriptions of how a particular type of user will interact with a specific market offering. Free templates for detailing use case scenarios are available online.

Use case scenarios are often structured in accordance with standard elements, including: use case scenario name, actors(s), preconditions, basic flow of events, alternative path(s), exception(s) and post-conditions.

At this early, stage use case scenarios are preliminary and should be revised through iterations as market offering development progresses.

# Question

Q) What are three important methods in describing use case scenarios?

# Question and Answer

Q) What are three important methods in describing use case scenarios?

A) Define market segments; describe customer types; formulate preliminary use case scenarios.





# Clarify Objectives



## 2.1 Objectives table

Analyses of an organization's objectives for introducing a market offering can begin with the formulation of a two-column table.

In the left-hand column can be statements of current problems that the market offering is intended to address.

In the right-hand column can be statements of the objectives for the market offering that will address the current problem.

## 2.2 Objectives tree

After current problems and offering objectives have been written in two-column table, there can be analysis to define causal relationships between problems, and causal relationships between objectives.

This can be done through application of techniques such as the Five Whys. This is an iterative analysis technique that involves getting to the root cause of problems through five iterations of asking the question why.

Findings from the causal analysis can be presented as two corresponding trees: one for problems and one for objectives.



# Establish Functions



### 3. Establish Functions

Define market offering functions and interrelationships between levels of functions such as primary, secondary, tertiary, and quaternary.

The primary function can be the function to achieve the primary objective as stated in the Objectives Tree. Each level of functionality should be essential to enabling the next level.

Definition of subsequent levels of functionality can be informed by making reference to the preliminary descriptions of use case scenarios.



# Set requirements





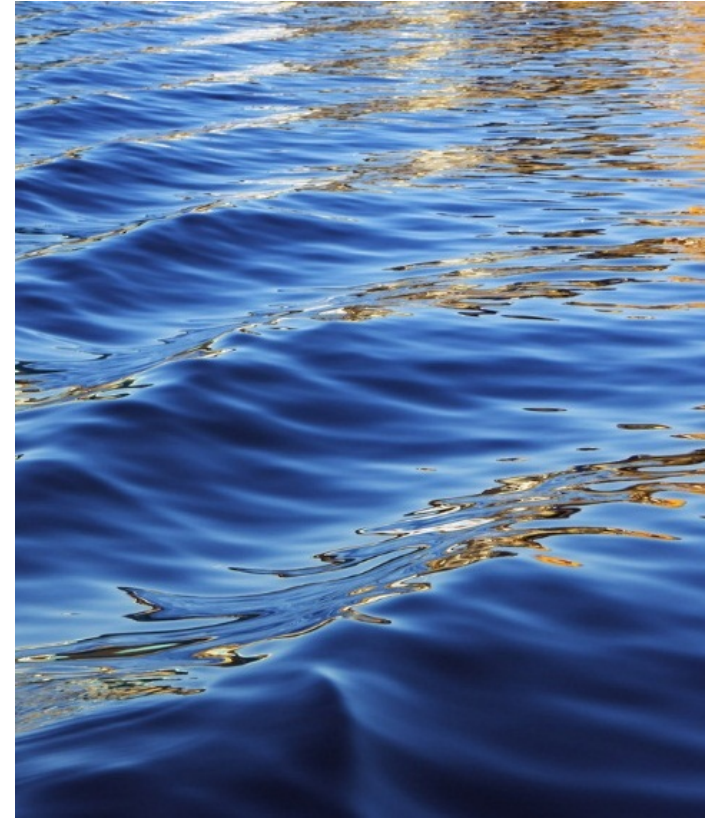
## 4. Set performance requirements

The performance requirements for a market offering can be set out in a performance specification that provides clarity about what the market offering must do, rather than what it must be.

The user's need should be expressed in such a way that it clearly states the problem/desire to be addressed by the market offering.

Performance requirements should be set out in terms of assessment criteria for levels of performance for each functions level,

# Determine characteristics





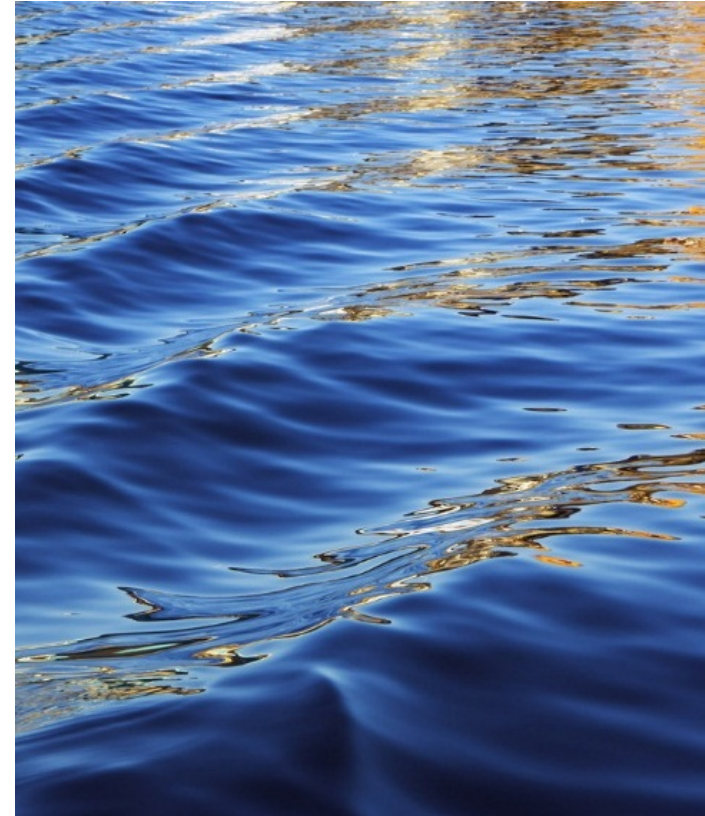
## 5. Determine characteristics

Quality Function Development (QFD) is a method that is widely used to transform qualitative requirements into quantitative characteristics.

Applying QFD involves prioritizing customer needs and product requirements for the planning of subsequent processes.

Applying QFD can facilitate collaboration between different departments to enable the alignment of performance specifications with market offering characteristics that appeal to potential customers.

# Generate alternatives



## 6. Generate alternative designs

The multi-faceted customer needs for a market offering can be structured in a morphological chart.

This type of chart can show different facets and design options for each facet in a grid.

Alternative design options can be represented visually in design drawings and/or in written descriptions.



# Evaluate alternative designs



# 7. Evaluate alternative designs

Alternative designs can be evaluated by following these steps:

List the different choices (i.e. solutions)

Determine the influencing criteria (e.g. effort, price, match with user need)

Rate the criteria to evaluate the relative importance (e.g. from 1-5)

Rating each choice for each criterion (e.g. from 1-5)

Calculating the weighted scores

Calculating the total scores

Making a decision

# Question

Q) What are the first seven steps in market offering development?

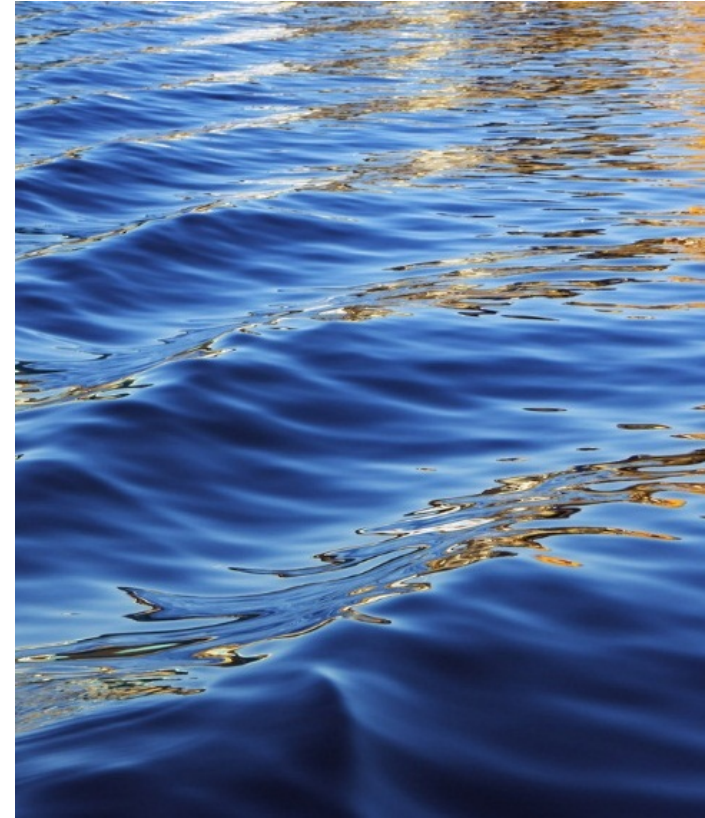
# Question and Answer

Q) What are the first seven steps in market offering development?

Á) Describe use case scenarios; clarify objectives; establish functions; set performance requirements; determine characteristics; generate design alternatives; evaluate alternative designs



# Improve details





# 8.1 Value Engineering

The method of value engineering is an efficient way to design products in a cost-effective manner without compromising functionality.

The approach aims at providing all necessary functions of a product at a minimal cost by substituting materials and methods with less expensive alternatives.

As opposed to a simple cost-cutting strategy, value engineering ensures that the quality of the product is not sacrificed.

## 8.2 Design for Manufacturing and Assembly

If a market offering is a physical good, Design for Manufacturing and Assembly (DFMA) can be applied to improve details.

The goals are reducing costs and complexity of the products by focusing on the design phase of the market offering.

It is much easier to optimize a market offering while it is still in the design phase. Moreover, approximately 70% of the manufacturing costs of a product are determined by design decisions, while only 20% are related to production decisions.

## 8.3 Failure Mode and Effects Analysis

Failure Mode and Effects Analysis (FMEA) is a tool used to identify potential sources of failure throughout a process or product.

Finding and acknowledging the key source of a failure and analyzing their consequences enables the development of preventative actions that avoid the occurrence of high costs related to production or process failures.

Through the application of risk analyses in critical elements of the production process, failure rates in the production as well as at the customer can be reduced and the quality of the product can be increased.

# Question

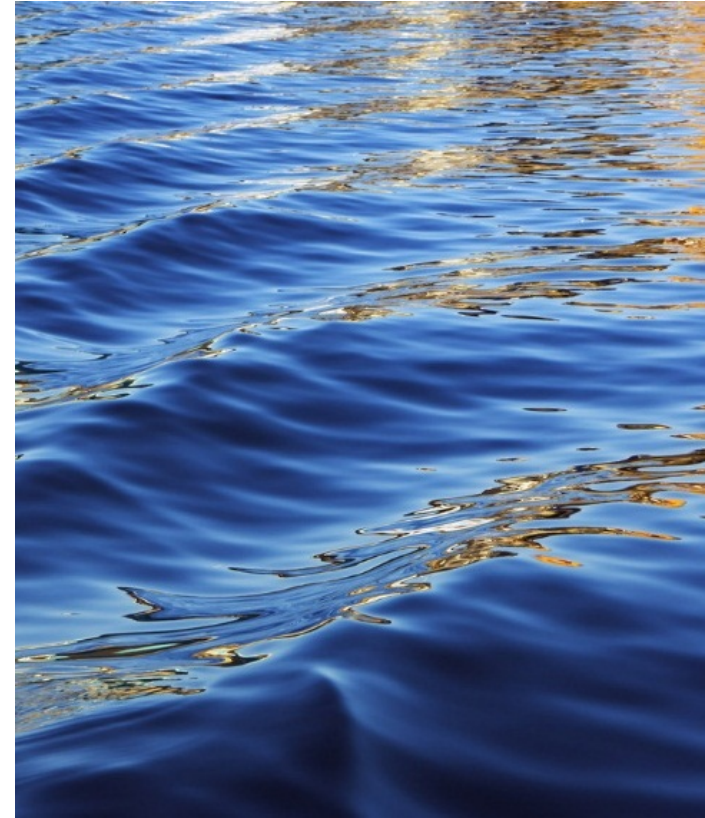
Q) What are three important methods in improving the details of a market offering's design?

# Question and Answer

Q) What are three important methods in improving the details of a market offering's design?

A) Value engineering; design for manufacture and assembly; failure mode and effects analysis.

# Training Materials Design



# 9.1 Task analysis

Task analysis involves the examination of the steps and actions involved in completing a specific task, including the time it takes to perform each element, the frequency of the task, its complexity, the environment in which it takes place, and the necessary equipment and clothing needed.

This information can be utilized for various purposes, such as selecting and training personnel, designing tools, creating procedures such as checklists or decision support systems, and automating the task.

## 9.2 Job design

There are the following five aspects of work that are essential to job design: skill variety; task identity; task significance; autonomy; feedback.

Strategies to improve job design include job rotation, job enlargement, job enrichment and job simplification.

In addition to a top-down-approach, organizations may also engage in a bottom-up approach where employees are able to design their tasks through so called job-crafting.



## 9.3 Instructional systems design

Instructional design (ID) involves methodically designing, developing, and delivering instructional materials and experiences to facilitate the acquisition of knowledge.

The process should involve assessing the learner's needs and abilities, defining the learning objectives, and creating an intervention to facilitate learning.

There are several instructional design models, but most of them are based on the ADDIE model, which comprises five phases: analysis, design, development, implementation, and evaluation.

# Question

Q) What are three important methods in training materials design?

# Question and Answer

Q) What are three important methods in training materials design?

A) Task analysis: job design; instructional system design.

# Question

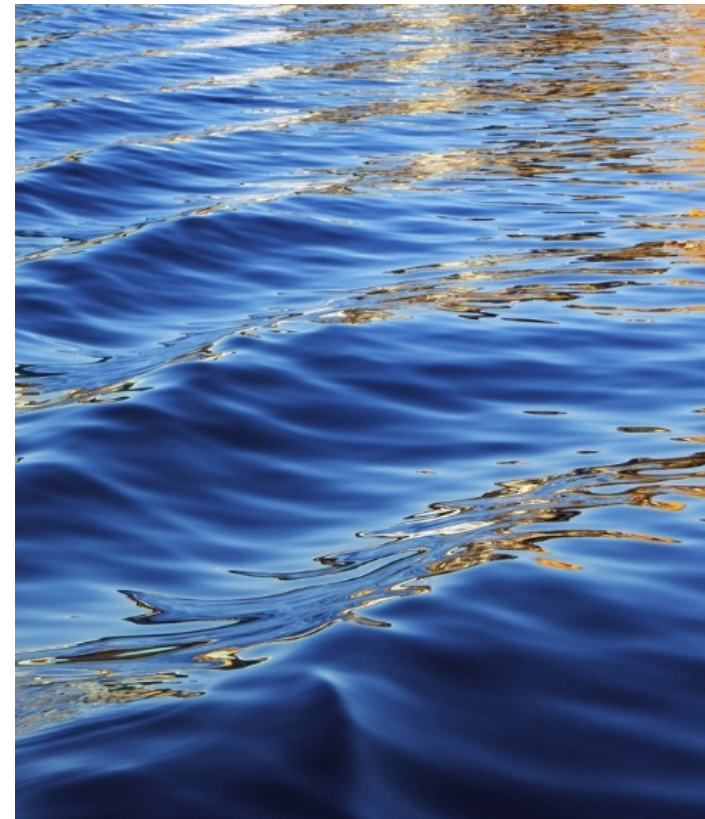
Q) What are all the steps in market offering development?

# Question and Answer

Q) What are all the steps in market offering development?

Á) Describe use case scenarios; clarify objectives; establish functions; set performance requirements; determine characteristics; generate design alternatives; evaluate alternative designs; improve details; instructional system design.

# Reference



**Access more detailed information via this link:**

**<https://idoc.pub/download/nigel-cross-engineering-design-methods-strategies-for-product-design-3rd-ed-klzz5wz9vqlg>**

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Nigel Cross, Engineering Design Methods - Strategies For Product Design 3rd Edition