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Building a Customer Value Model in Mobile Communication Business

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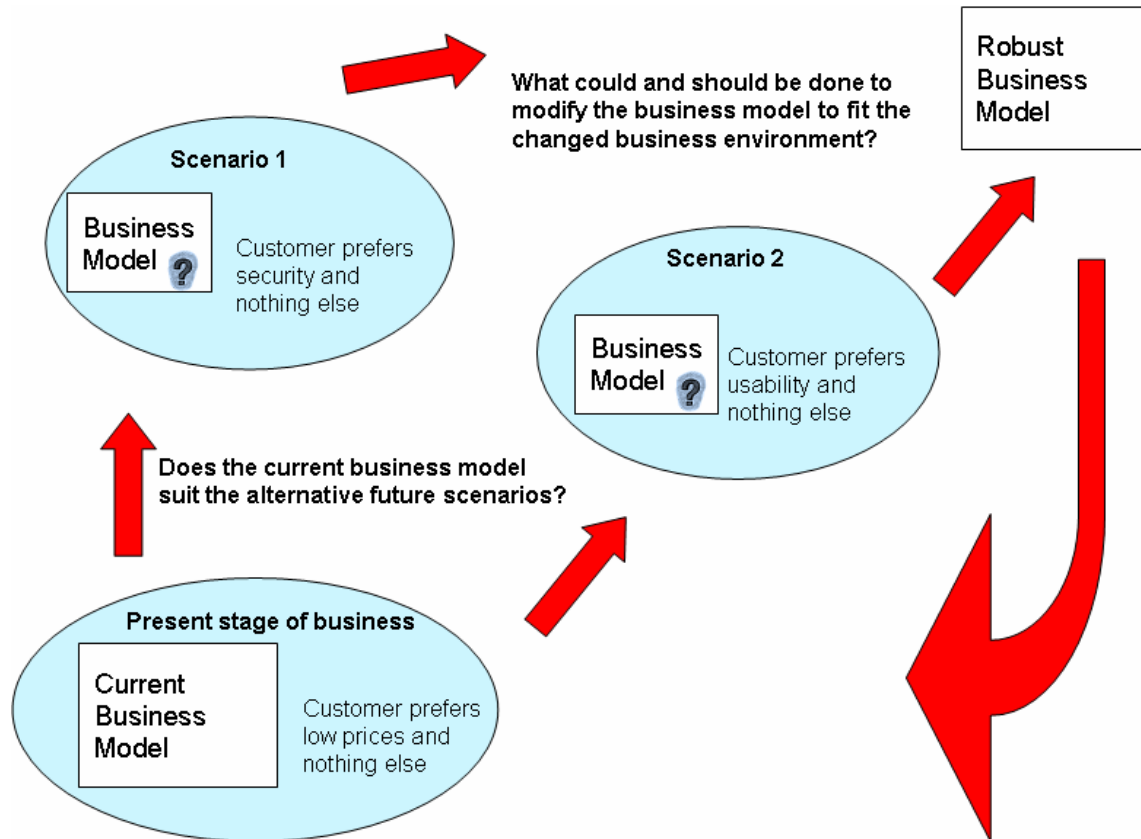
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Objective of the study

- Mobile communication services are currently confronted with large changes due to the price erosion of services and entering new service providers.
- The objective and research problem of this study is to build a model for analyzing the customer's values that drive and explain the changes in the business model and on entire value network levels.
- In the framework, the hypothesis is that the dynamics between present and future business model scenarios are driven by the development of different customer profiles.

Research framework



Creating value in networks

- From the value network perspective, the concept of value creating system has been added in the strategic management literature to illustrate the entire set of activities and companies linked to produce value for both the end-customers and the actors in the system.
- According to Normann and Ramirez (1993), “the focus of strategic analysis is not the company or even the industry but the value-creating system itself, within which different economic actors – suppliers, business partners, allies, customers – work together to produce value.”
- By this definition, customer preferences are an important element in the value network of actors, since the value is captured from customers (Bowman & Ambrosini, 2000)

Business Model

- A concept that is often related to value networks, and especially describing the firms in them, is business model which is briefly a description of how the firm does business (Magretta, 2002).
- According to Cartwright and Oliver (2000), a business model describes “how and where the firm engages in business, who its customers are, and often, who its major competitors are.
- Typically, the firm will also describe the major activities that it performs in the course of its business” (Cartwright and Oliver, 2000).

Analyzing customer value

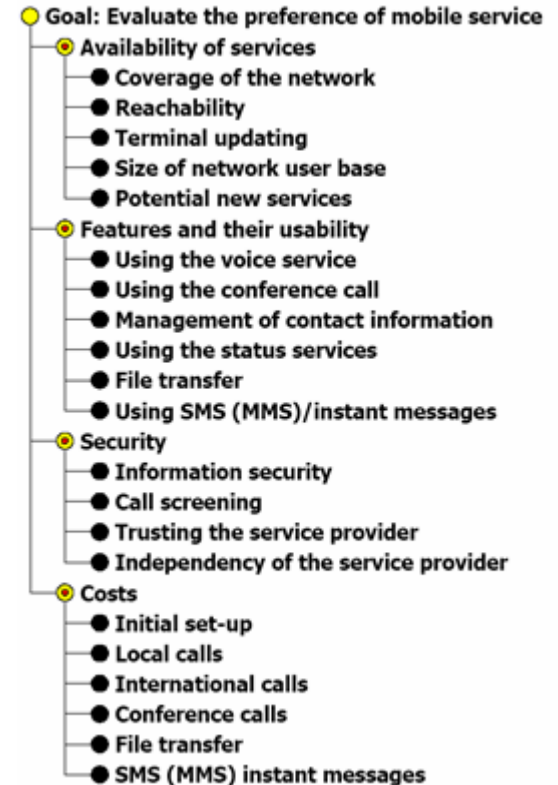
- The aim of the customer value analysis is to integrate the customer with the R&D process of the firm. Although the idea is originally presented in a business-to-business environment, the basic idea can be transferred to the consumer markets as well (Thomke & von Hippel, 2002).
- Building a customer value model helps the firm to recognize the customer values and to modify the business model suitable for capturing them.
- The customer value model is a data-based representation of the worth (in monetary terms) of the product or service to the customer (Andeerson & Narus, 1998).

Research Method

- We used the Delphi method to formulate the customer value model.
- With the Delphi technique, participants state their opinions in an anonymous questionnaire.
- The Delphi iteration rounds were implemented by using the AHP tool.
- The fundamental principle of the AHP is to decompose a decision problem into a hierarchy of parts.

Research Process

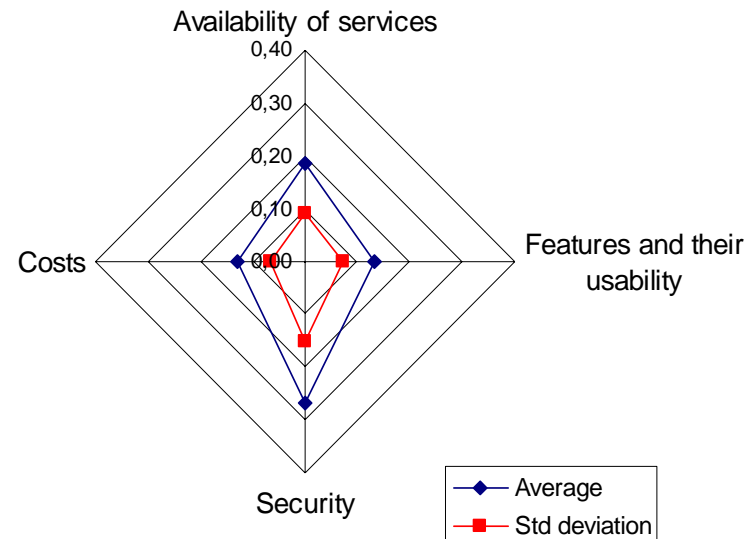
- For the first Delphi round, the model was formed into an anonymous web-based questionnaire where the attributes were placed as pairs so that every attribute was compared to another.
- The aim of this second Delphi round was to analyze the fit between the value attributes and the selected two communication systems



The AHP model of customer value elements.

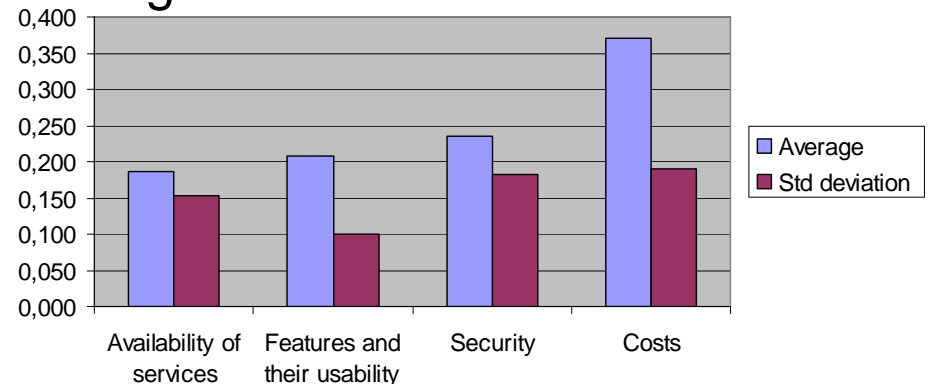
Inconsistency

- The inconsistency ratio for judgments ranges from 0 (= consistent) to 1 (= random).
 - In normal conditions, good inconsistency is under 0.1; however, when the assessment is conducted as a survey, we accept a higher inconsistency ratio in the study.
- The study revealed that comparing the attributes is difficult even for an expert.
- The security element was the most difficult to piece together.
 - The reason can be the ambiguous nature of the subject.



Customer value preferences

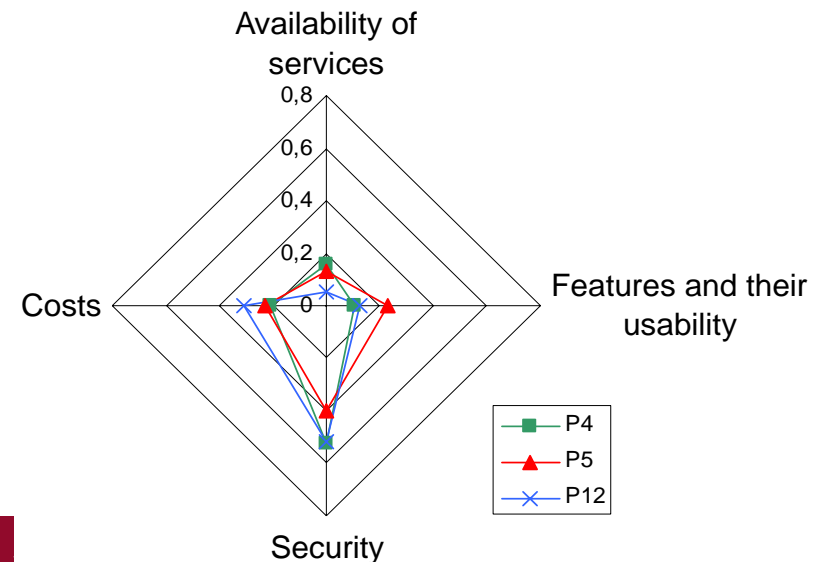
- Inside the availability of services element the reachability and coverage of the network attributes were preferred.
- In the features and their usability element, voice services and messaging dominated with over a 60-percent share of the total.
- The security element is quite interesting because it was ranked second after costs in the total model.
- The costs element revealed that the comparison between initial costs and the costs of usage is difficult.



Average preferences and standard deviations of the elements.

Customer profiles

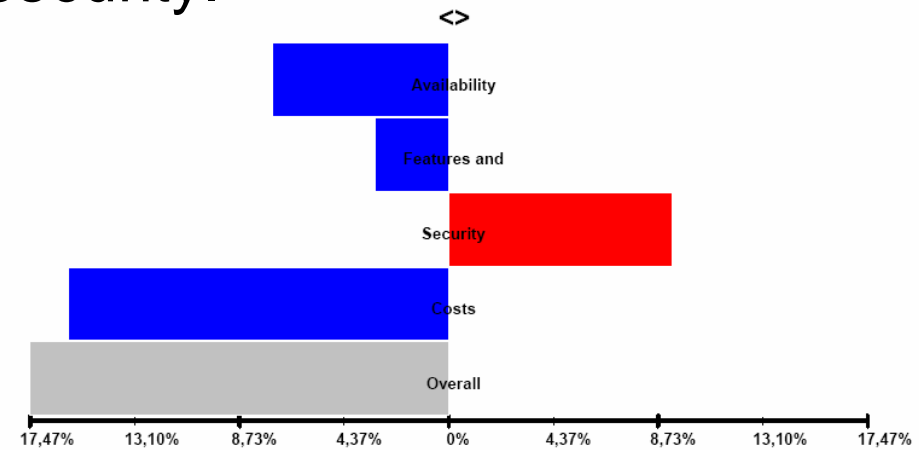
- The results indicate that there are similar preference combinations among different persons, and the customers can be profiled based on the CVA process. The answers tend to form similar patterns according to the similar preferences of the respondents.



Security profile.

Performance of case services

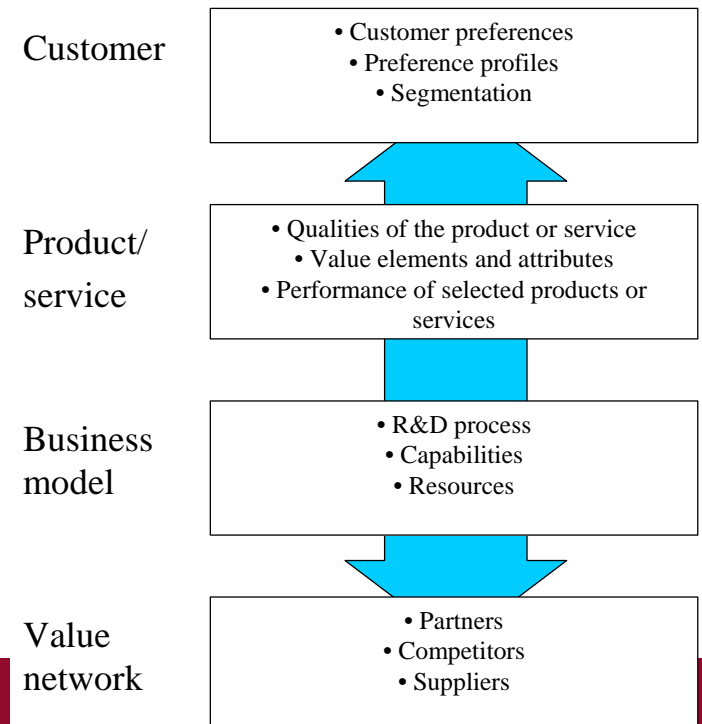
- To link the value elements back to the firm's R&D process and furthermore to the business model, we tested the performance of the case communication systems Smart Phone and Skype Mobile against the customer values.
- Skype Mobile performed better than Smart Phone in every element except security.



Performance of the case services.

Summary of the findings

- To summarize the findings, we have combined the main results and important issues mentioned in the literature into a conceptual model that includes four levels.



Discussion

- The contribution of this paper is a model for analyzing customer value preferences and their realization in different communication systems.
- The reliability of the assessment is then automatically calculated by the AHP software.
- This inconsistency ratio calculates the degree of inconsistency in the judgments. We used the inconsistency ratio to improve the reliability of the study and reveal the areas that are the most difficult to perceive.

Future Steps

- Future studies on this area should address the role of the business model in capturing value from customers.
- The capabilities and resources of the firm should be connected to the customer value elements to produce higher customer value.
- The relations of the business model and value network as enablers for the value creation and capture should be examined.



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