
Benefit Evaluation of High-Availability Middleware

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Introduction

- Reference point in this survey:
Resilient Telco Platform for Continuous Services (RTP⁴CS)

- The following questions should be answered:
 - What are the essential features of an HA middleware like RTP⁴CS from a customer's point of view?

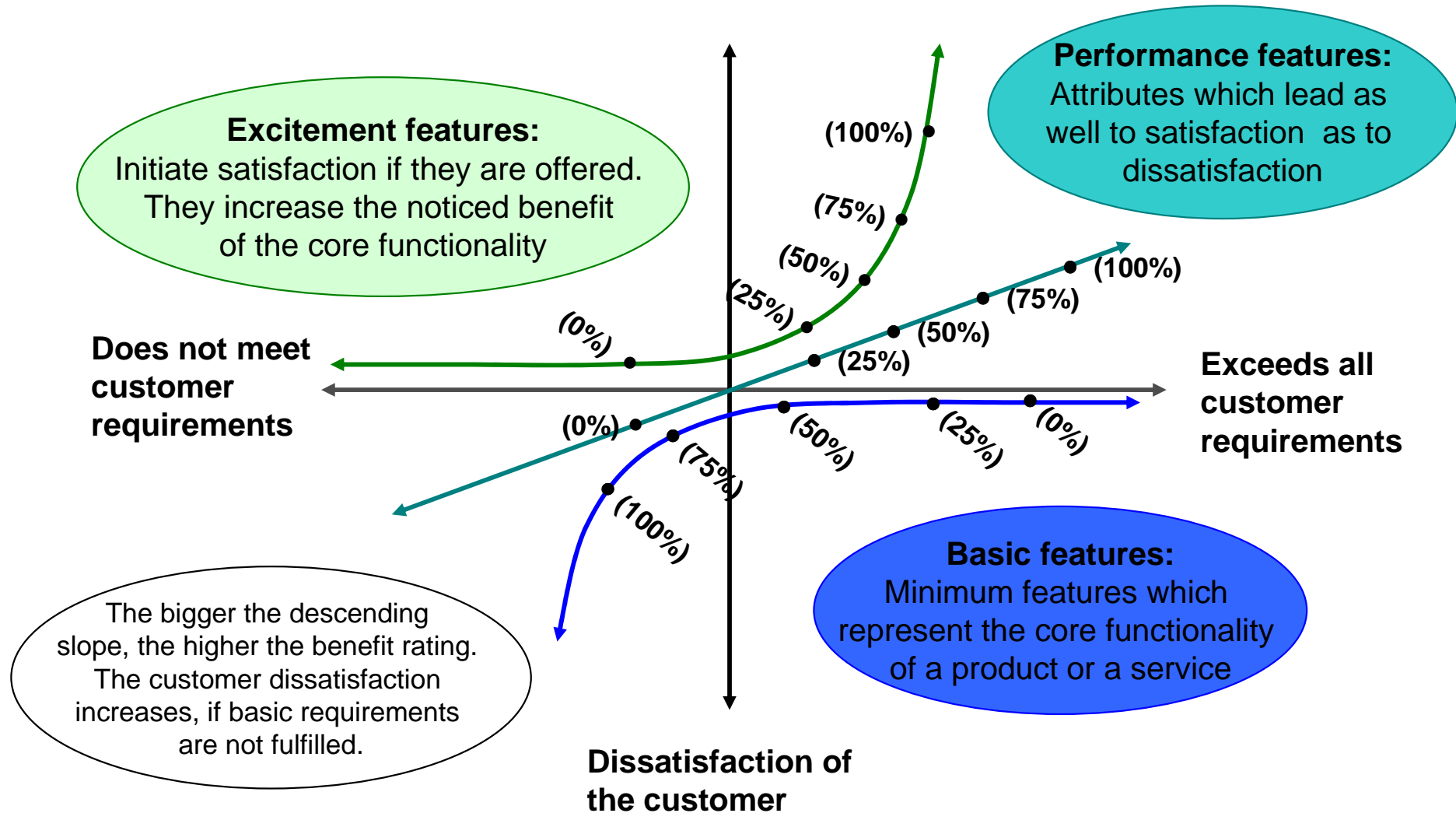
 - What can be the most important next steps of development according to the customer's priorities?

 - Who are the customers who are most interested in HA middleware features and are an optimal target group for marketing activities?

Introduction

- This survey took place within the project SOFTNET, part of the Bavarian research association for software engineering FORSOFT
- Within the cooperation of FORSOFT and FSC the Kano method was used to assess the customer perception of RTP⁴CS.
- The questionnaire consisted of 19 questions related to:
 - General questions
 - Evaluation of usefulness of HA middleware
 - Further important features
 - Options on modularity

Approach of Survey – The Kano Model



Approach of Survey

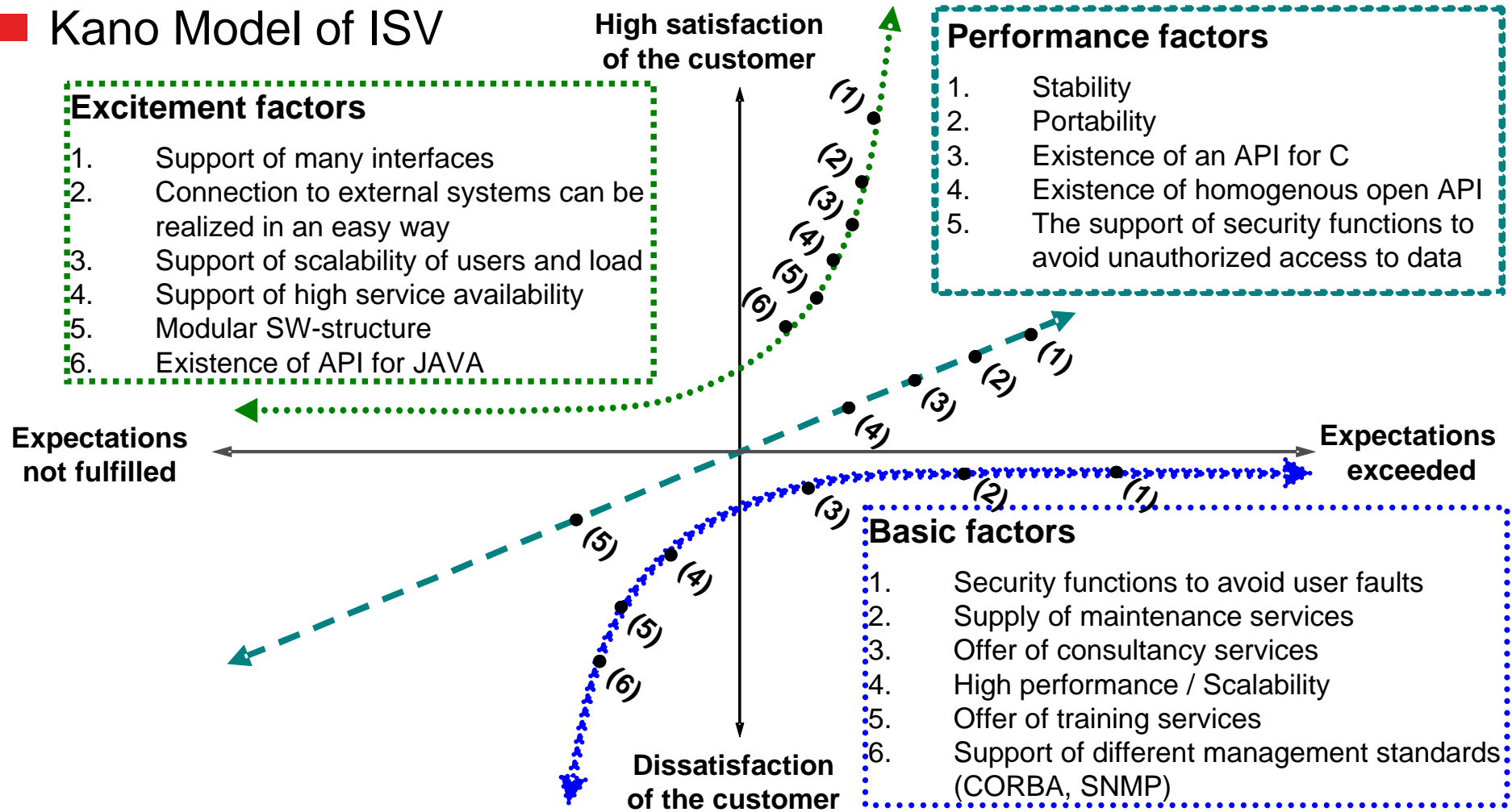
- The Kano analysis is performed in three steps
- Firstly, the scope of the questionnaire has to be defined:
 - Customers` expectations using RTP⁴CS
 - Customers` dissatisfaction with usage of RTP⁴CS
 - Customers` criteria buying RTP⁴CS
 - Features which could fulfil customers` expectations in a better way
 - Improvements the customers would prefer as next steps

Approach of Survey

- Second step: The preparation of a Kano questionnaire
- Two questions belong to each feature
 - The first question is a functional question referring to the customer`s reaction on occurrence of a product feature
 - The second question is dysfunctional and refers to a possible non-occurrence of the same feature
- Third step: A Comparison of the combination of answers to the functional and dysfunctional pair of questions is put into an evaluation table to classify the customer`s requirements.

Classification of Requirements

■ Kano Model of ISV



Classification of Requirements

- The expectations are evaluated using the Kano model according to the following two main customer groups:
 - Companies with customers having availability requirements up to 99.99%. These companies are expected to put emphasis on more general features which are delivered by an HA middleware, i.e. number of supported interfaces.
 - Service availability requirements of more than 99.99%: This group is the main target group of an HA middleware since the service availability targets are above five nines, i.e. service availability of less or equal 5 minutes per year. Thus the participants belonging to these companies determine the features which are required at today's market.

Resumee

- The survey enabled a characterisation of customer requirements regarding HA middleware.
 - Identification of the specific success factors within several target groups.
- Modular structure of SAF compliant HA middleware
 - Participants with required service availability of less than 4 nines:
 - Basic factors: security, connectivity, API
 - Participants with required service availability of 5 nines and more
 - Basic factors: messaging service, context service, online upgrade
 - Performance factors: API, manageability

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Thank you for your attention!