

# **Applying consumer and market research methods to support the introduction of new library and other central services**

**Prof. Dr. Reinhold Decker**

Department of Economics and Business Administration  
University of Bielefeld

**7<sup>th</sup> International Bielefeld Conference, February 3 – 5, 2004**

# Introduction

## The crucial question:

**What is a new (library) service?**

**Modifications of  
existent services**

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graph TD; A[Modifications of existent services] <--> B["Revolutionary inventions"]
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**“Revolutionary  
inventions”**

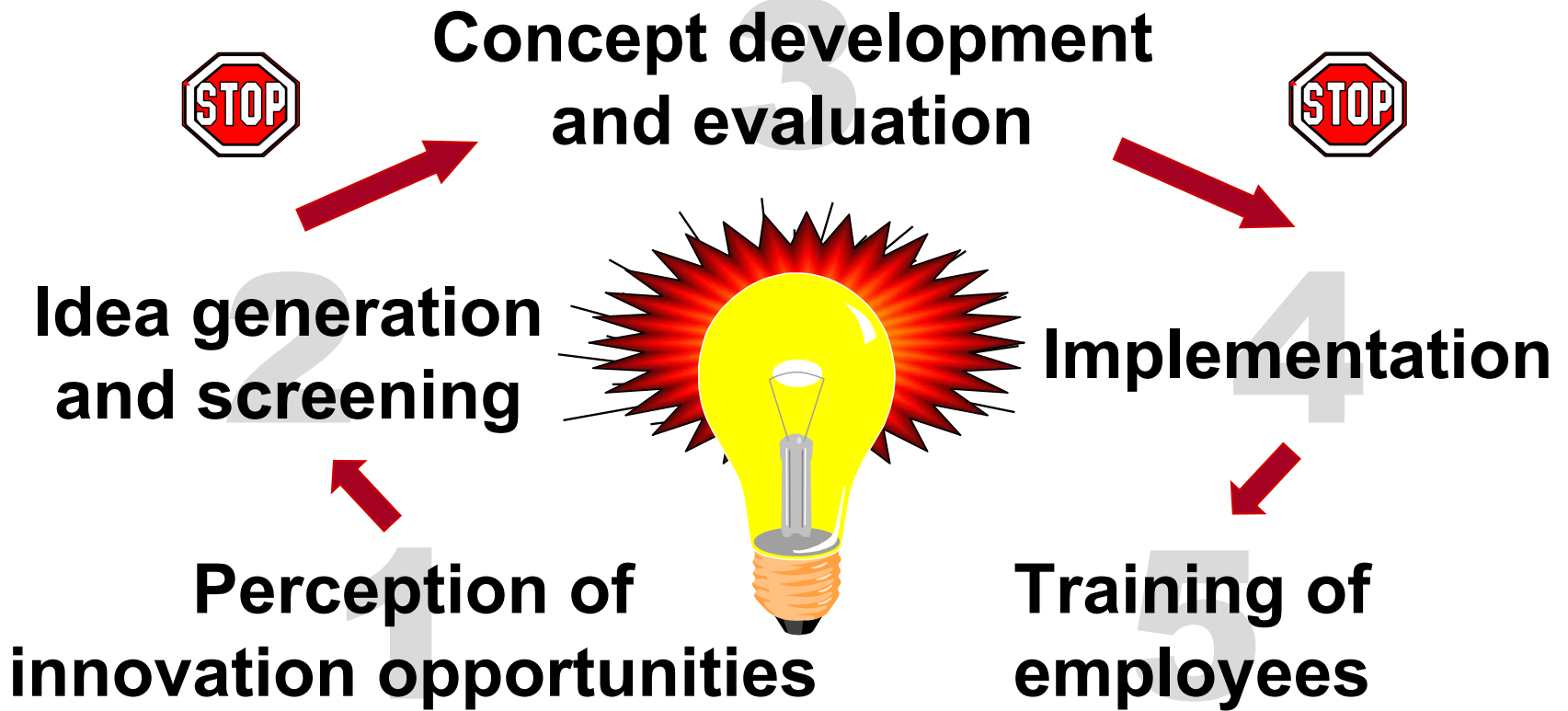
# Introduction

## Why do so many new products and services fail?

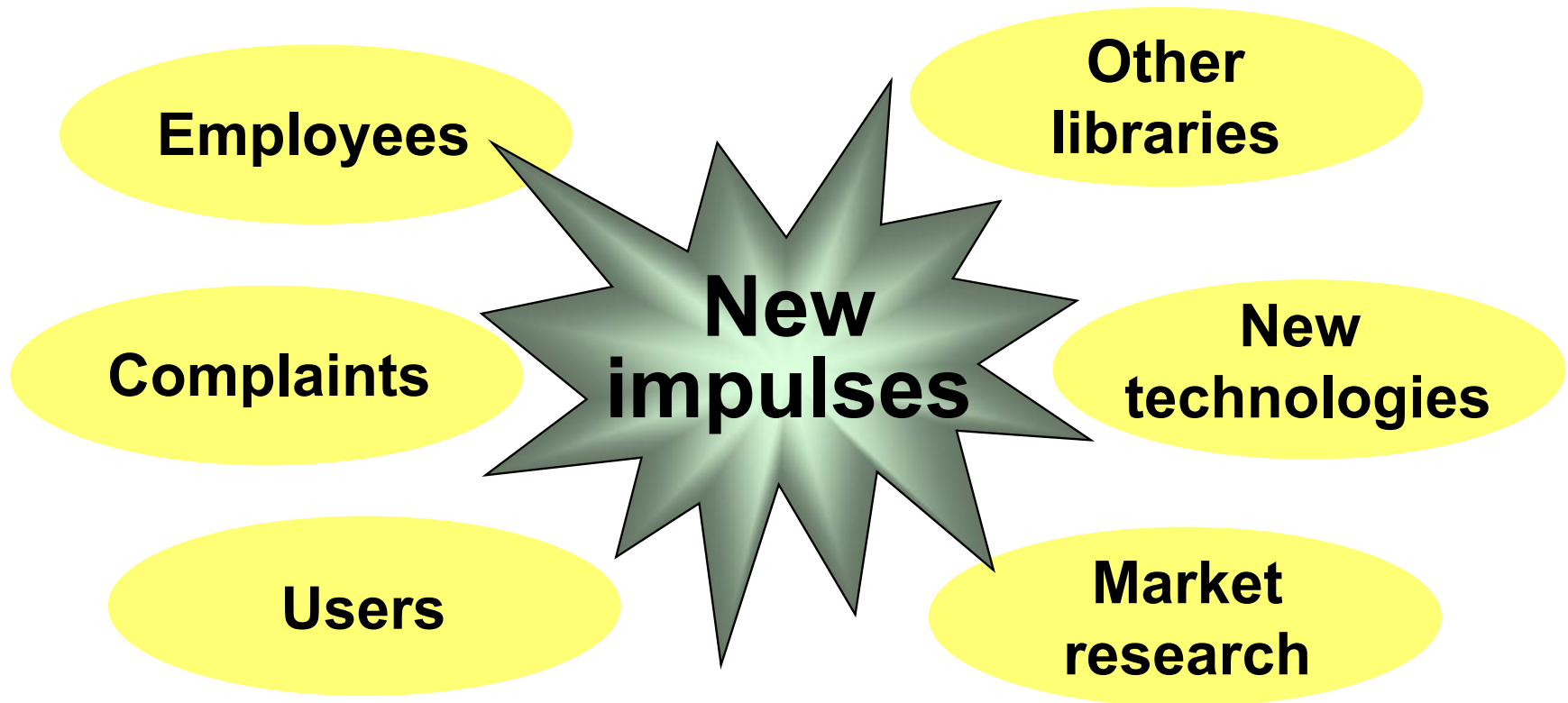
- ↪ Introduction of a “non-superior” p/s
- ↪ Overestimation of the future demand
- ↪ Cannibalization by multi-new p/s strategies
- ↪ Provider- instead of user-driven p/s development
- ↪ Focusing on feasibility instead of utility

# Introduction

## 5 steps in new service development:



# 1. Perception of innovation opportunities



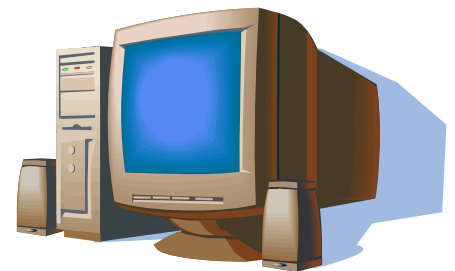
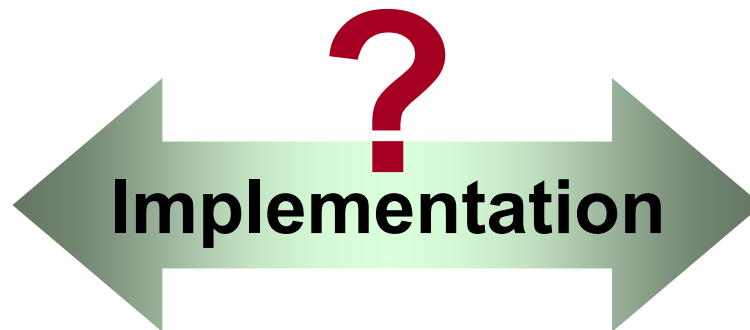
**Environmental scanning (ES)**

# 1. Perception of innovation opportunities

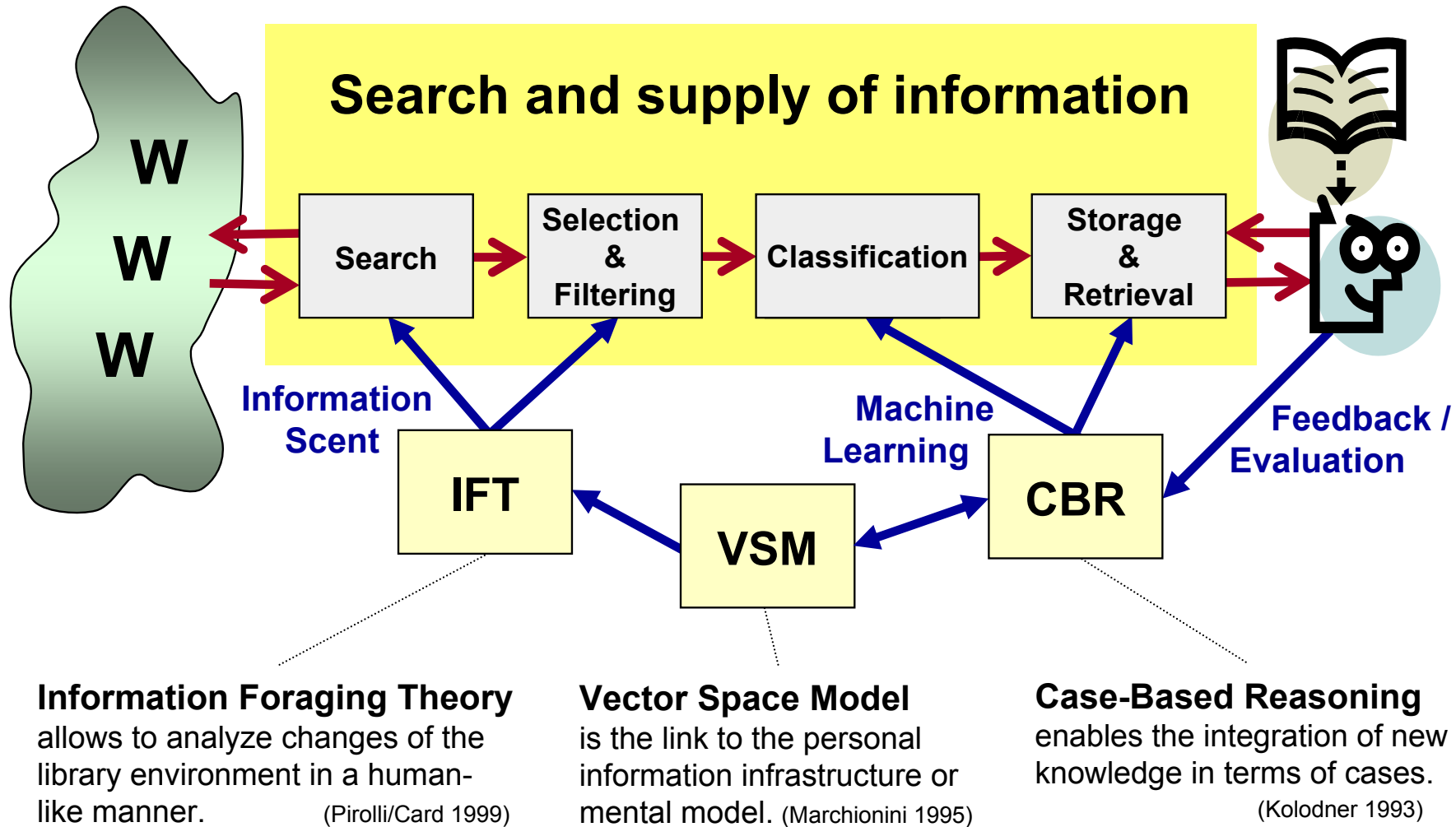
## ES in librarianship:

**Aim:** Attaining enduring **early-mover advantages** by early detecting **future challenges** to new service development from **weak signals** in education, science, technology, politics, and society

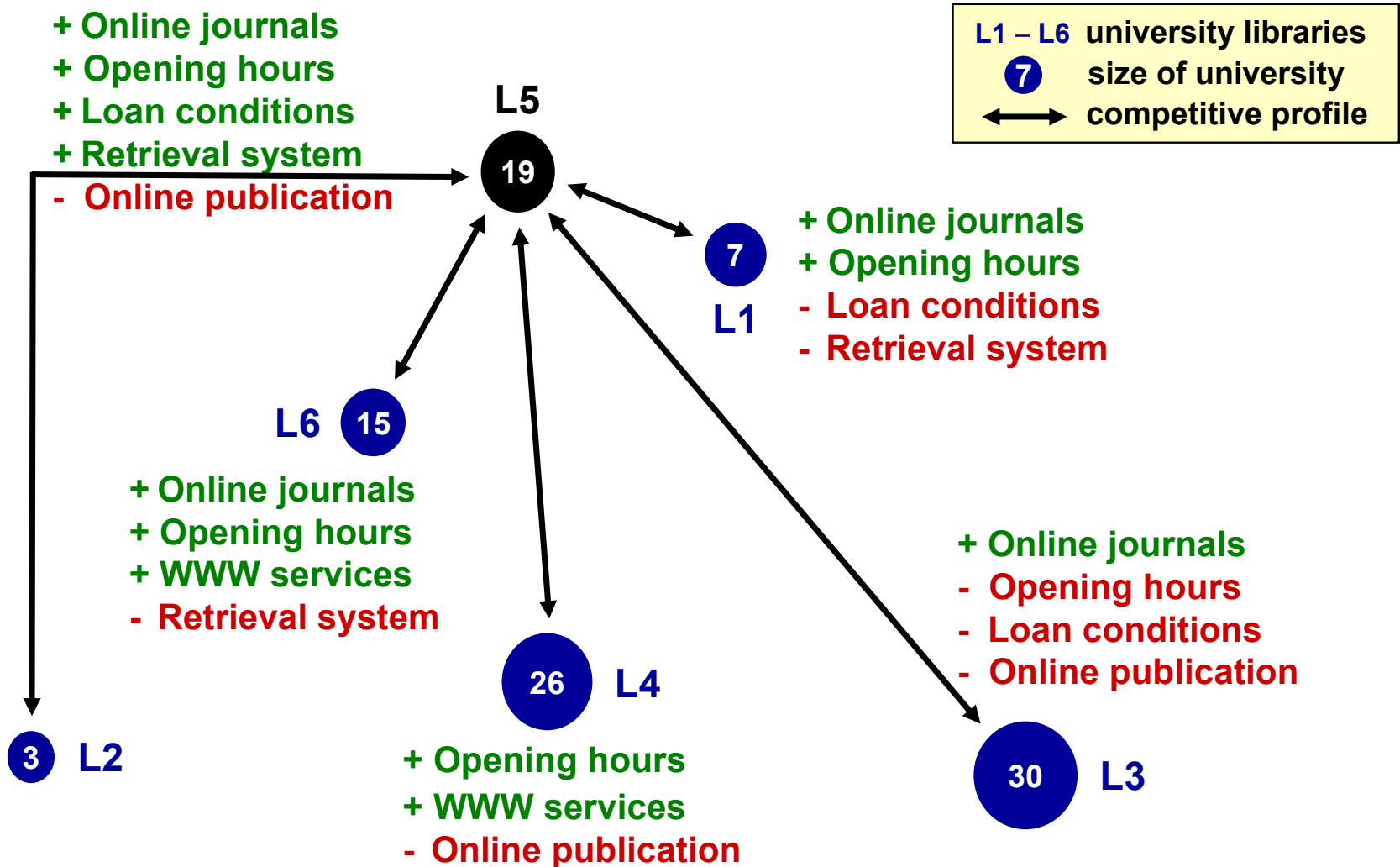
**In brief:** Detecting changing user requests and needs as soon as possible



# 1. Perception of innovation opportunities



# 1. Perception of innovation opportunities





## 2. Idea generation and screening

### The detection of new ideas:

↙ by means of creativity techniques

**Intuition**



**Analysis**

**TRIZ** = “Theory of inventive problem solving”

**Basis:** analysis of more than 40.000 patents

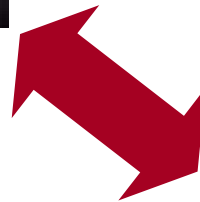
**Applications:** mainly in engineering

## 2. Idea generation and screening

**Industry:**



**Service sector:**



**TRIZ:**

- ↪ Technological trends
- ↪ Ideality
- ↪ Analysis of contradictions

**This approach:**

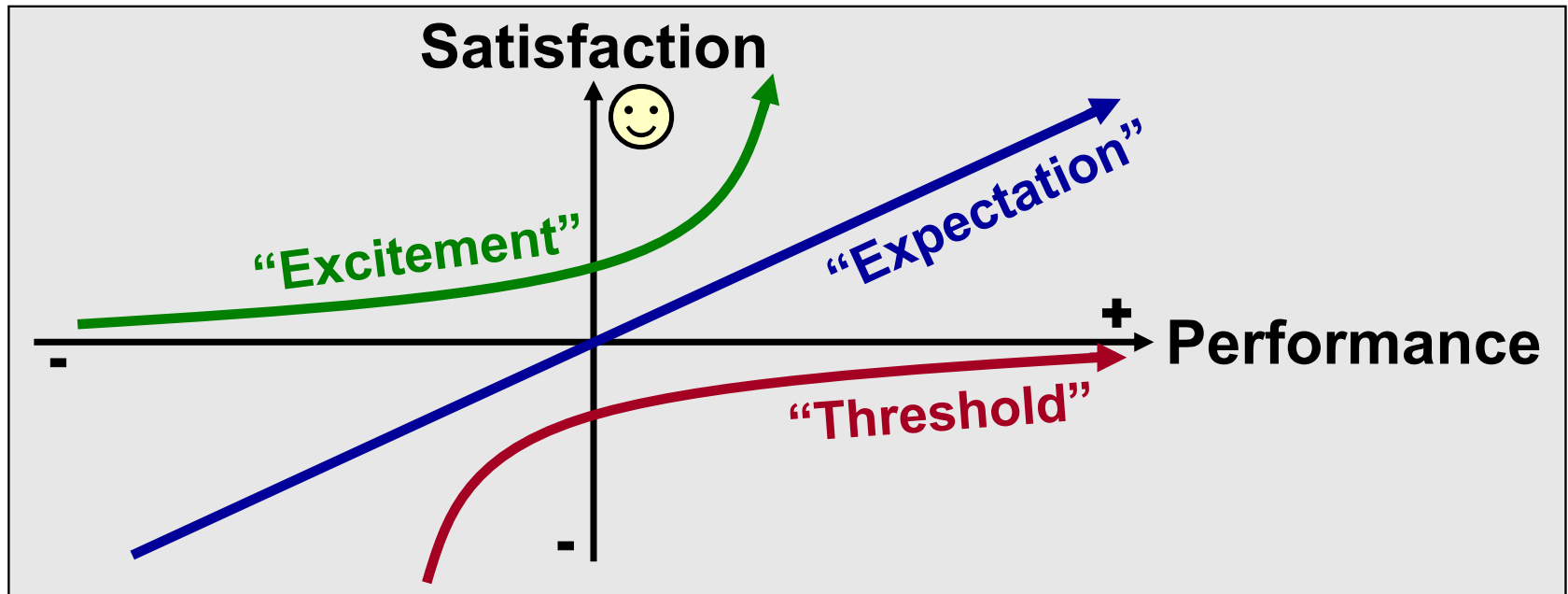
- ↪ Environmental scanning
- ↪ Conjoint analysis
- ↪ Quality function deployment

## 2. Idea generation and screening

### The pre-selection of ideas:

↳ by means of screening techniques

(Scoring methods, Check lists, **Kano model**, ...)



# 3. Concept development and evaluation

## Four step procedure:

1. Develop the ideas into concrete concepts (“stimuli”).
2. Test these concepts with groups of target users.
3. Choose the one that best matches user preferences.
4. Check its organizational/technical implications.

 **by means of**

**Two step conjoint analysis**  
and  
**Quality function deployment**

# 3. Concept development and evaluation

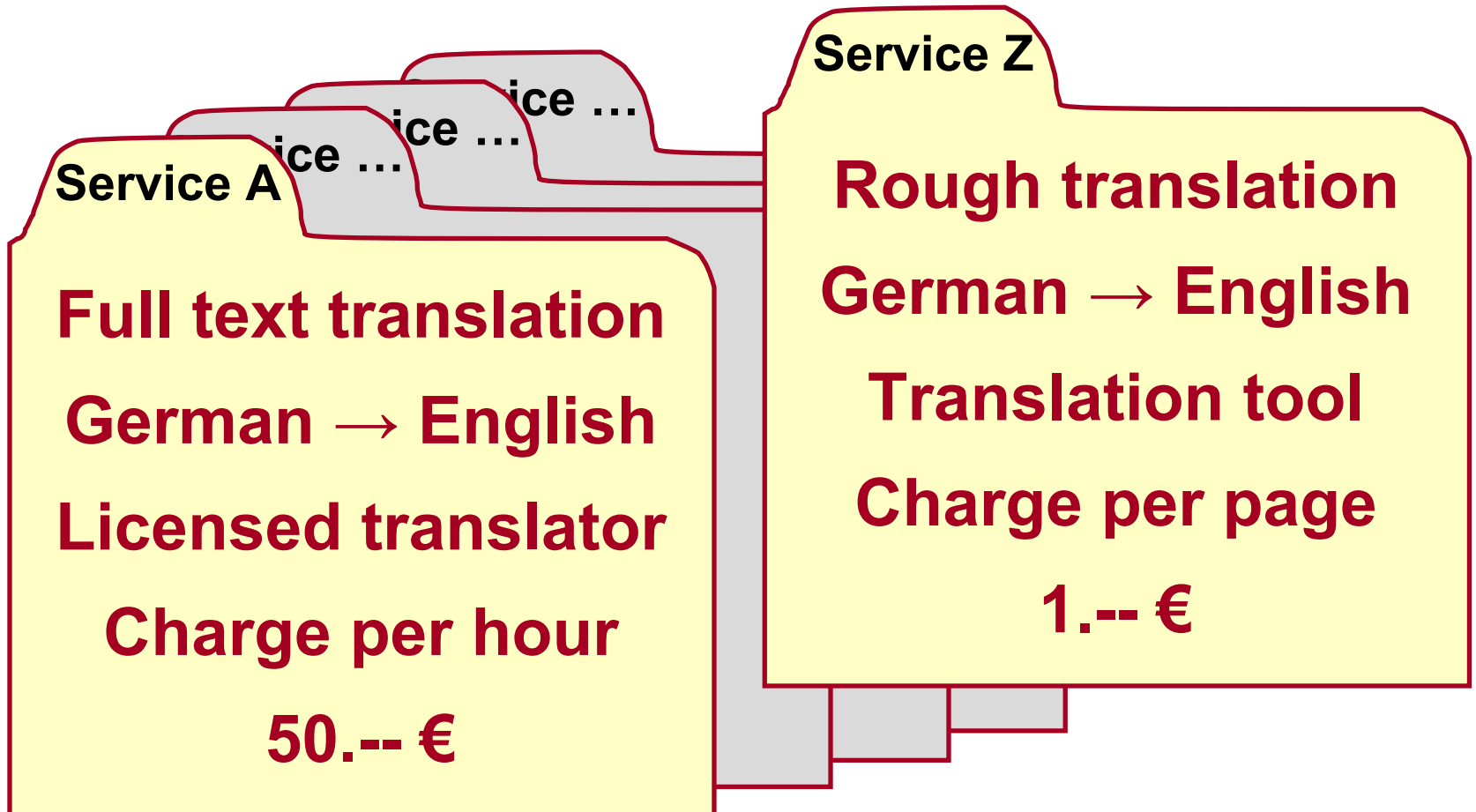
## Conjoint analysis – the search space:

Attributes	Relevant attribute levels
Output	Stylistic correction (of a rough translation) [A1] Full text translation (“deluxe”) [A2] Rough translation [A3]
Translation direction	German → English [B1] English → German [B2] German → French [B3]
Service provider	Licensed translator [C1] Native speaker (in the target language) [C2] “Intelligent” translation tool [C3]
Terms of payment	Charge per hour [D1] Charge per page [D2]
Price	1.-- € [E1] 25.-- € [E2] 50.-- € [E3]

162 possible stimuli!

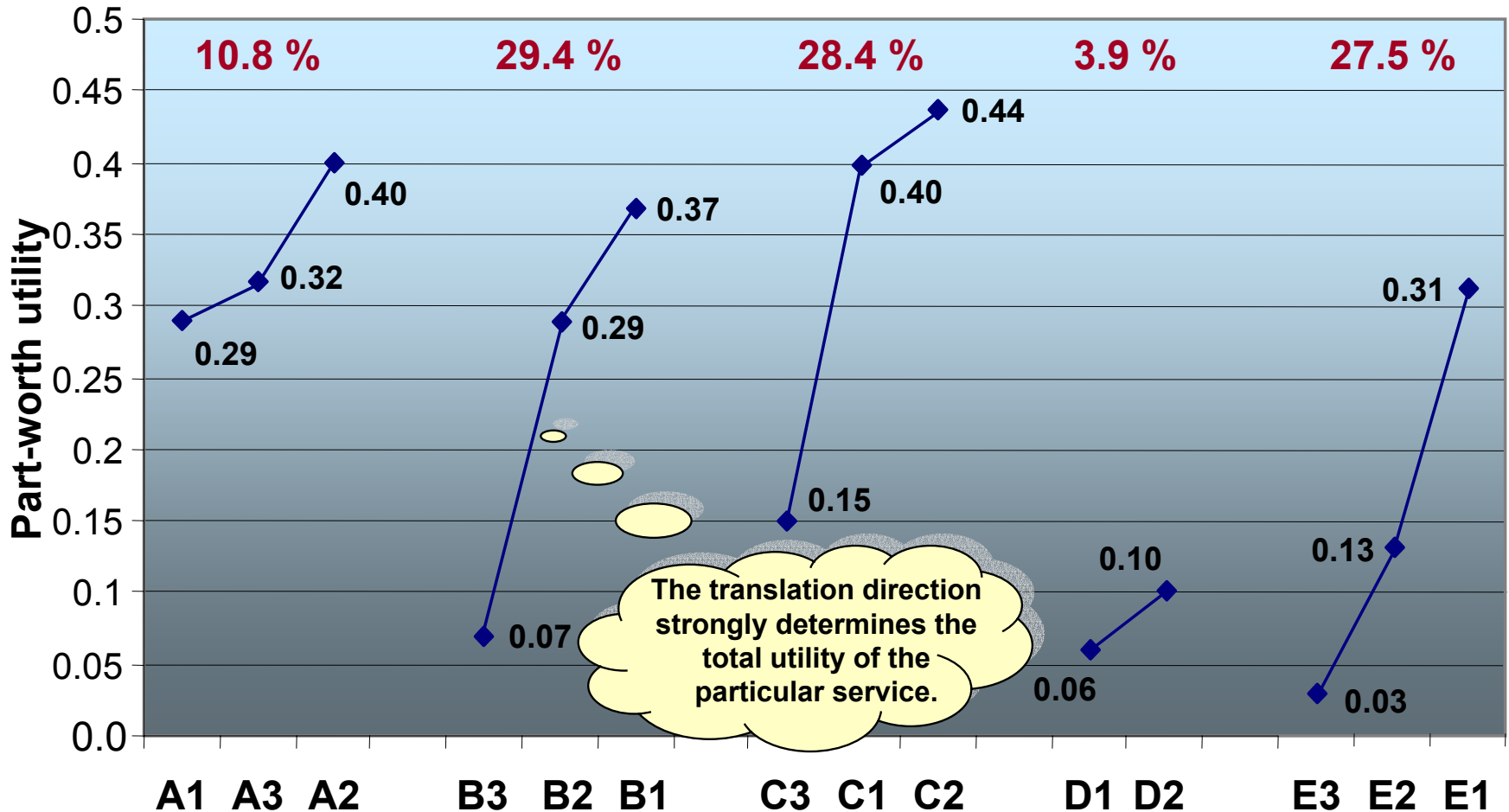
# 3. Concept development and evaluation

## Conjoint analysis – the stimuli:



# 3. Concept development and evaluation

## Conjoint analysis – the utility values:



# 3. Concept development and evaluation

**Conjoint analysis** – the basis of decision making:

## Service A:

Full text translation	0.40
German → English	0.37
Licensed translator	0.40
Charge per hour	0.06
50.-- €	0.03
<b>Total</b>	<b>1.26</b>

## Service Z:

Rough translation	0.32
German → English	0.37
Translation tool	0.15
Charge per page	0.10
1.-- €	0.31
<b>Total</b>	<b>1.25</b>

**Minimum = 0.60 ↔ 1.62 = Maximum**



# 3. Concept development and evaluation

**Conjoint analysis** – the choice simulation:

**Real world simulations often require ...**

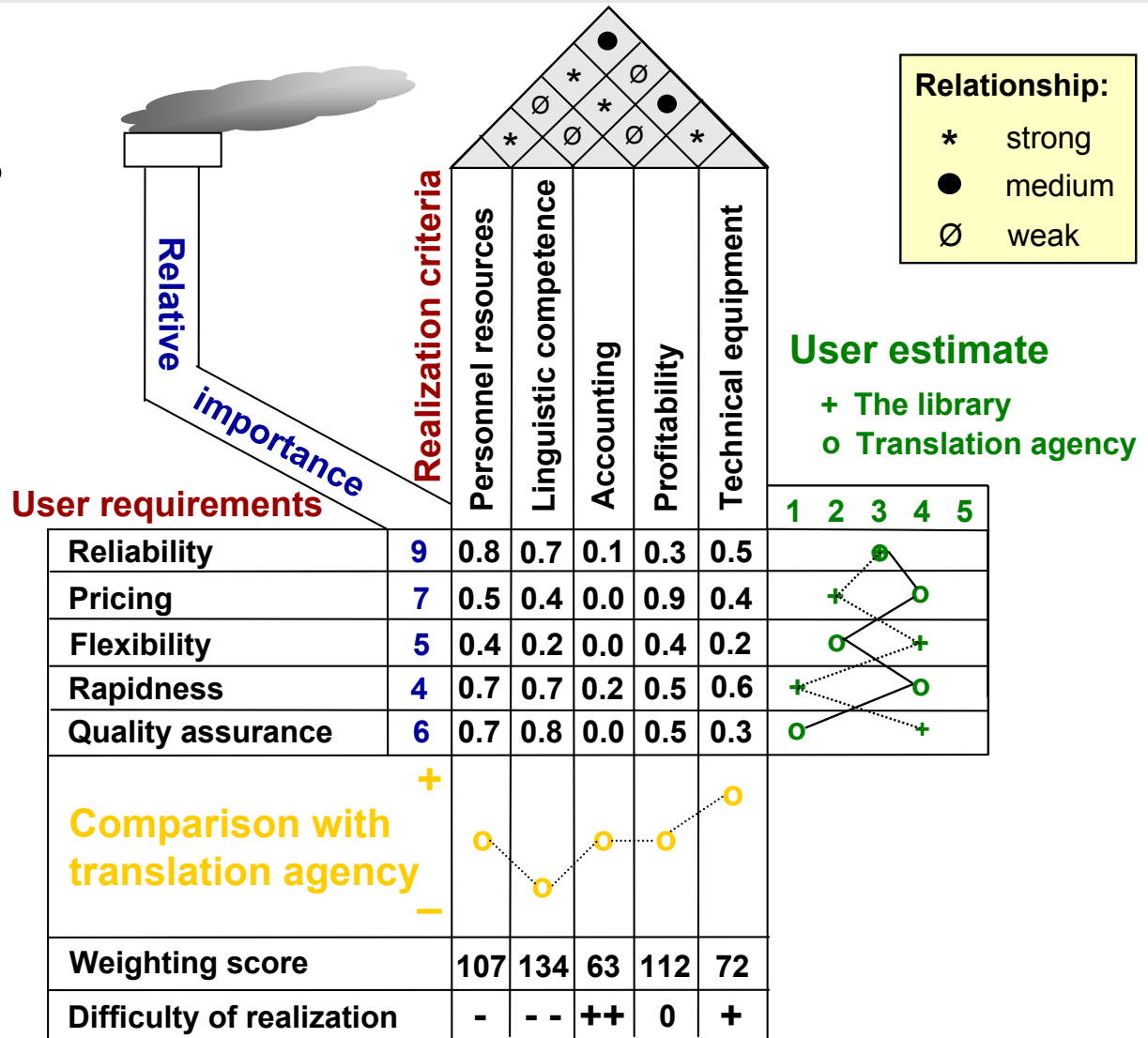
- ↪ the inclusion of a “None” option
- ↪ the consideration of service-specific attribute levels
- ↪ the consideration of interactions

**Choice-based conjoint analysis**

**Optimal new service regarding user utility**

# 3. Concept development and evaluation

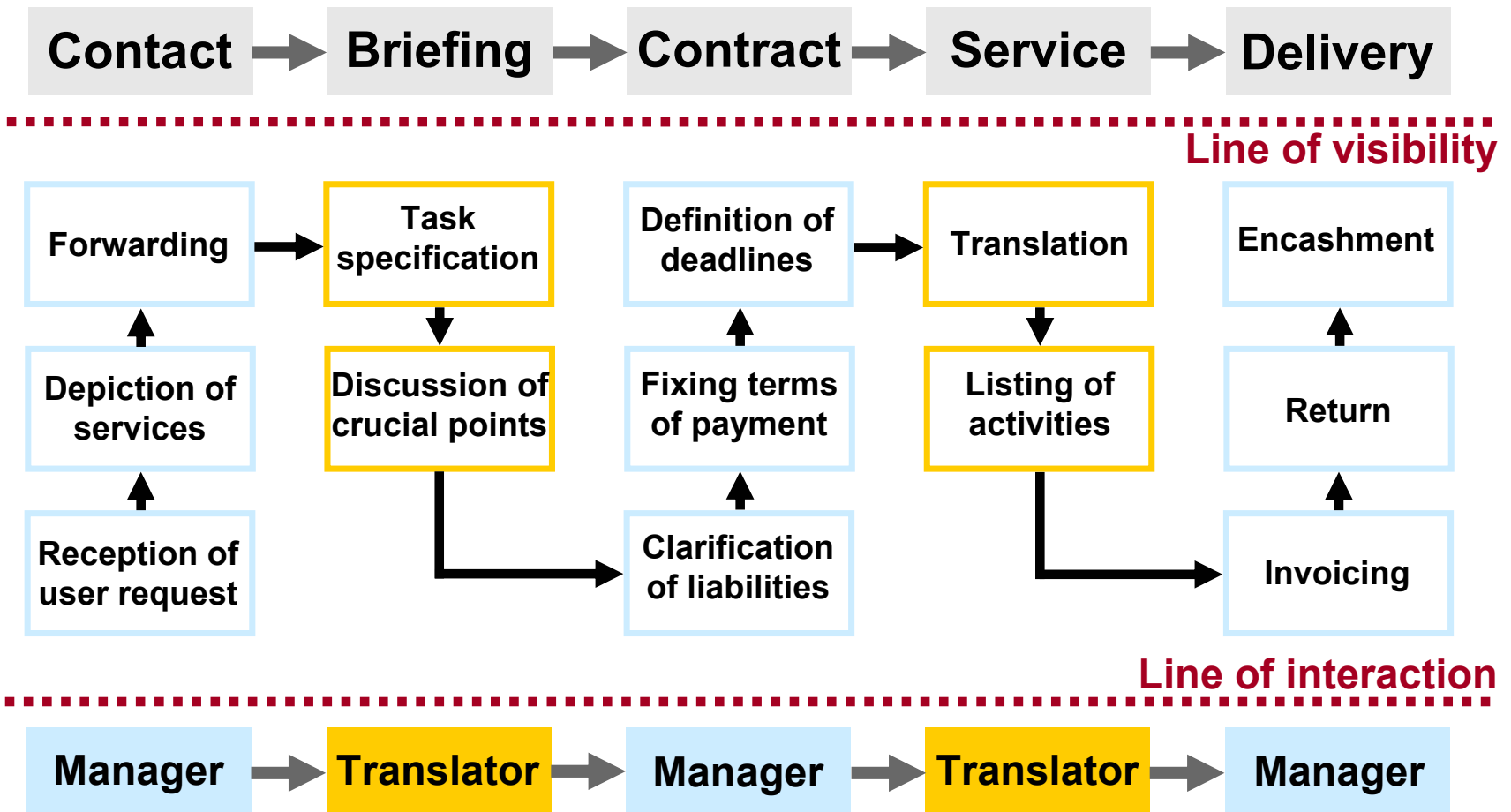
Do user requirements match with realization criteria?



Quality function deployment

# 4. Implementation

## Starting with the blueprint:



# Outlook: a current DFG project

## Relevant topics:

- Conditions of media use
- Information retrieval
- Advisory services
- User training



**Analysis of library services**  
**Development of concepts**  
**Preference measurement**  
**Simulation study**  
**Generalization**  
**Validation**



## Target users:

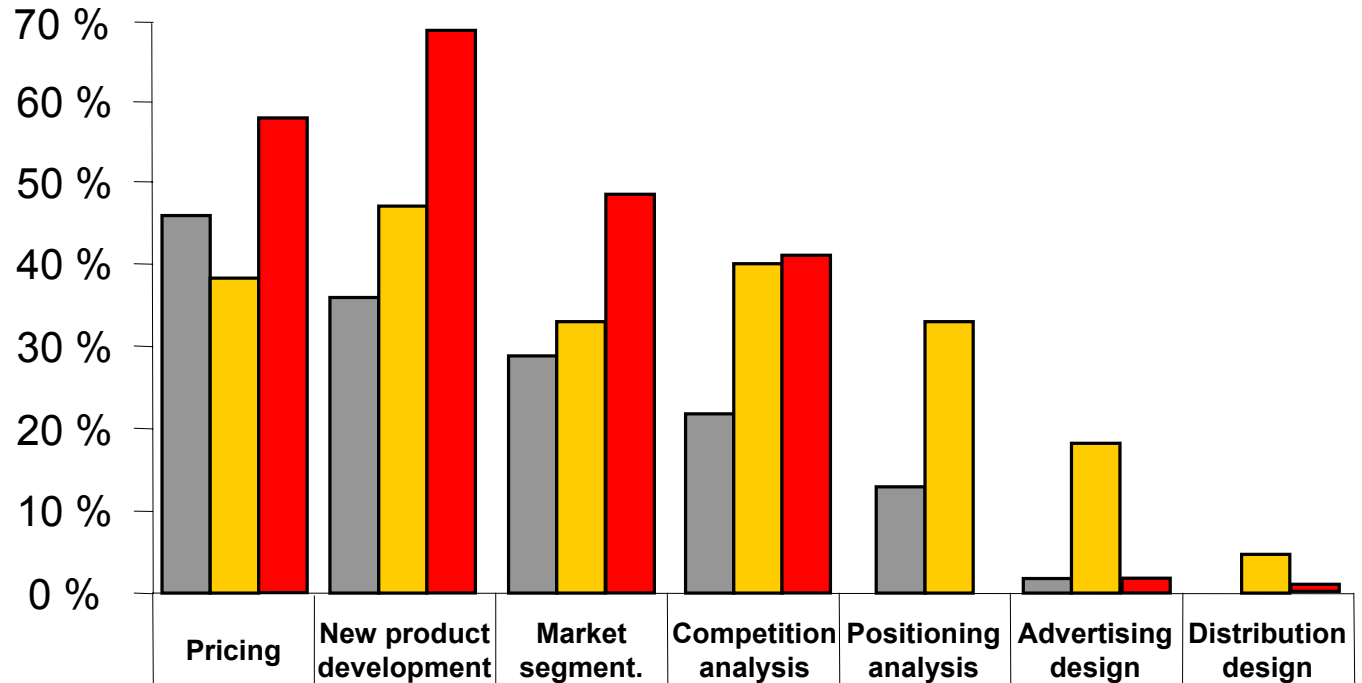
- Students
- Sc. assistants
- Professors
- Administrative staff
- Residents of Bielefeld & OWL

**Economically and organizationally justifiable services with a high probability of utilization**

**A general framework for systematically developing new services**

# Background

## Commercial applications of conjoint analysis:



■ Europe (1986 - 1991)	46 %	36 %	29 %	22 %	13 %	2 %	
■ USA (1981 - 1985)	38 %	47 %	33 %	40 %	33 %	18 %	5 %
■ Germany (1993 - 1998)	59 %	74 %	48 %	41 %		2 %	1 %

*“There is always a way to  
do it better ... find it!”*

*Thomas A. Edison*