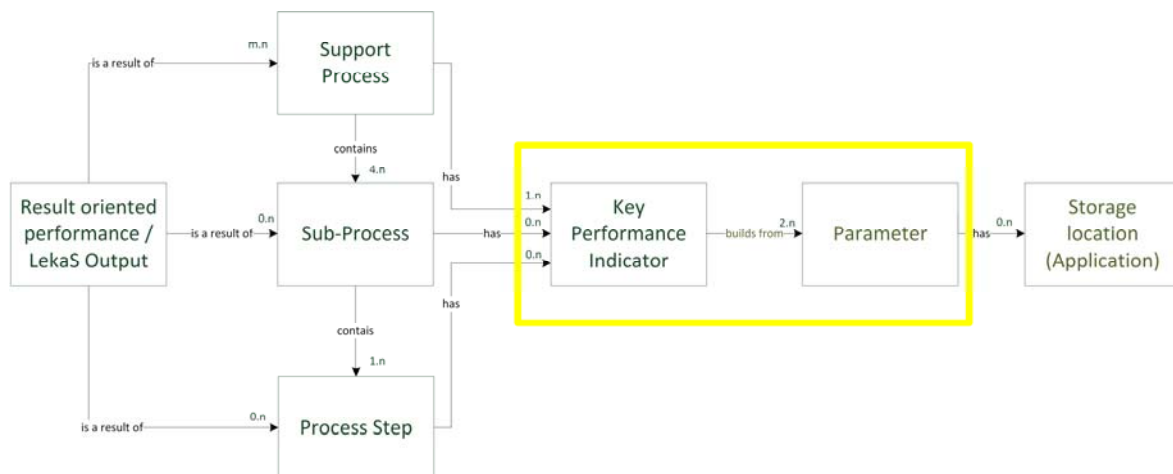


# Measurement of Internal Customer Satisfaction Concerning Facility Management Services in Hospitals - Proposals for the Practice

Supplementary Publication on KenkaS - Key Performance  
Catalogue for Non-medical Support Services in Hospitals

Version 1.0 – based on German original



## Authors:

Nicole Gerber  
Stefanie Lange

## Translation

Carina Tschümperlin  
Paul Schmitter  
John Bennett  
Nicole Gerber

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## Projektpartner

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 **Kantonsspital**  
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## **Abstract**

The measurement of customer satisfaction for facility management services in health care [FM in HC] has rarely been carried out until now, although it is clearly necessary for FM managers in hospitals. The aim was therefore to create, in accordance with the performance allocation model for non-medical support services in hospitals [LemoS], a standardized - and as simple as possible - basis for all departments, so that internal hospital customer satisfaction could be incorporated into future benchmarking initiatives. In an exploratory approach, solutions were developed based on literature research, which were validated in the interim by means of interviewing experts. Three surveying intensities are presented: The first level "Basic" is reduced to the three core questions of satisfaction research and forms the focus of this working paper. The second stage "Service Barometer" contains the 19 questions of the FM Service Barometer. The third level "Customized" is matched to the specific case. The proposals presented provide the first systematic basis for a coordinated approach of customer satisfaction measurements of FM in HC services. These proposals should be validated through use in practice and through dialogue with hospital partners (in the context of benchmarking initiatives).

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## List of Abbreviations

FM in HC	Facility Management in Healthcare
IFM	Institut für Facility Management / Institute for Facility Management
KenkaS	Key Performance Catalogue for Non-medical Support Services in Hospitals [German: Kennzahlenkatalog für nicht-medizinische Supportleistungen in Hospitals]
KPI	Key Performance Indicator
CTI	Commission for Technology and Innovation [German: Kommission für Technologie und Innovation KTI]
ZHAW	Zurich University of Applied Sciences [German: Zürcher Hochschule für Angewandte Wissenschaften]

# 1. Introduction

The initial situation is described, the conceptual foundations stated, the target and the target group are specified, a delineation is made, and the method used is defined.

## 1.1 Starting Position

Within the framework of the project "development of an IT-supported assessment tool and a corresponding introduction manual for relevant facility management process applications in the hospital, a key performance catalogue for non- medical support services in hospitals [KenkaS] was developed (Gerber et al., 2016). It was based on an adaptive reference model", which was sponsored by the Commission for Technology and Innovation [CTI], as part of larger project. Within this framework, it became clear that evaluating customer satisfaction with respect to facility management services in hospitals [FM in HC] is critically important to facility managers. The aspect of customer satisfaction was therefore included, as a basic key figure in all 15 FM in HC disciplines, in the index catalog (see Gerber et al., 2016). In this working paper, the background of this key figure is clarified in more detail and the topic in terms of a basis for further development is specified context-related.

## 1.2 Conceptual Foundations

In terms of FM in HC, LemoS 3.0 is considered as the conceptual basis, which defines the 15 FMs in HC disciplines, as they are also shown in Figure 1:

- Procurement
- Inventory Management
- Transport & Distribution
- Disposal & Recycling
- Maintenance
- Space Management
- Energy
- Safety
- Security
- Cleaning
- Sterilisation
- Catering
- Textiles
- Accommodation Administration & Operation of Properties
- Hotel Various



Figure 1: Excerpt of service allocation model for non-medical support services in hospitals [LemoS] Version 3.0 (Gerber, 2016)

**With reference to customer satisfaction measurement in general**, there are different procedures (see Töpfer, 2008, Coenen et al., 2013, Meffert et al., 2015, Stauss et al., 2006). Thereby it is in particular the depth of detail of the measurement and the concept which distinguishes the various processes. Objective methods use key figures (e.g. sales or buy-back rate) to measure customer satisfaction. Subjective procedures determine customer satisfaction through individual perception of the service or service provider. According to Töpfer (2008), these subjective methods can be "result-oriented" or "feature-oriented". "Result-oriented" means the measurement of satisfaction based on experiences during delivery of the service. This method should be used in conjunction with a contact point analysis and a service blueprint (Töpfer, 2008) to classify the result of the measurement in the performance process and to identify sequence-related relationships. Characteristic-oriented measurement makes use of various relevant characteristics of the service and/or of the service provider; evaluations of these are individually elicited by means of a scale. To some extent, indirect questions are asked, which allow conclusions to be drawn about the satisfaction of the customer, or customers are asked directly about their satisfaction or rather, the extent to which expectations were met.

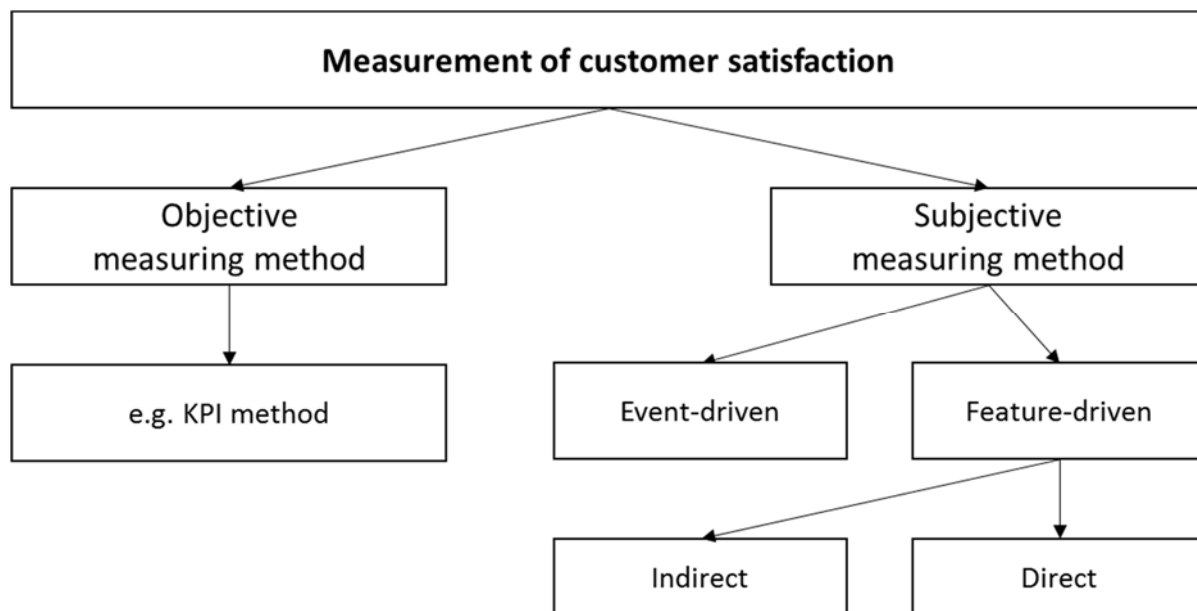


Figure 2: A method for measuring customer satisfaction (own depiction based on Töpfer, 2008)



With regard to **depth of detail**, the satisfaction measurement can be reduced to a minimum of three questions. The three questions are then aimed at satisfaction in general, the willingness to recommend the service to others and the readiness to buy again themselves (Coenen et al., 2013). The "FM Service Barometer" was developed for a detailed satisfaction survey at the Institute for Facility Management. This approach is relatively young; previously, mostly objective procedures were used, with which cost- or technology-relevant variables were measured. With the "FM Service Barometer" according to Coenen et al. (2013) three dimensions are addressed in the context of measuring customer satisfaction: 1. Perceived Service Quality, 2. Customer Satisfaction, 3. Customer Retention:

1. Indicators of internal service quality

- a) Indicators related to FM contact person: e.g. contact person accessibility; contact person availability; or contact person advisory competence
- b) Indicators related to FM employee: e.g. FM employee friendliness; FM employee committed or willing reaction to requests and FM employee service orientation
- c) Indicators related to FM processes: e.g. FM processes match between order and outcome; or FM processes process transparency

2. Indicators of internal customer satisfaction

e.g. overall satisfaction; satisfaction in comparison to expectations; or satisfaction in comparison to ideal

3. Indicators of internal customer retention

e.g. repurchase intention in case of free supplier choice; switching intention in case of free supplier choice; or recommendation intention

With **regard to scales**, it can be stated that the number of scale points is a very frequent (controversial) discussion with all its advantages and disadvantages. Since the beginning of the nineties, the five-year scale has been used in cross-industry (B2C) satisfaction studies for customer monitoring in Germany, Austria and Switzerland. Since these are independent benchmarking studies on the topics of customer satisfaction and loyalty, studies which have also been adopted by numerous experts as well as by public and private organizations, the selection of the scale can be seen as a success. Most of the questions used in the customer monitor are also based on a verbalized 5-scale scale. For the questions pertaining to customer satisfaction, the individual scale expressions are "1 perfectly satisfied", "2 very satisfied", "3 satisfied", "4 less satisfied" and "5 dissatisfied". For the approval questions (eg customer retention): "1 Defined", "2 Probably Yes", "3 Probably", "4 Probably Not", "5 Not Determined". When it makes sense to do, these are supplemented with an additional "do not know" option.

### **1.3 Purpose and Benefit of Customer Satisfaction Surveys (for FM in HC)**

The measurement of customer satisfaction can be used as a qualitative factor in assessing performance. Developed over a longer period of time, developments and trends can be identified. Using the same measuring method, the performance of different fields or between different hospitals can be compared, the prerequisite being that the measurement parameters and the use of the survey are precisely defined.

The aim is therefore to define an internal customer satisfaction survey, which is uniform for all 15 FMs in HC disciplines and adapted to the needs of FM in HC, on the basis of existing basic data in the context of the code index KenkaS (Gerber et al., 2016). It should be possible to get a first impression with a simple method and then to carry out more detailed analyses only in individual areas if necessary. In the future, this will also make it possible to carry out a more comprehensive interpretation of key figures by supplementing the quantitative key figures with qualitative ones.

#### **1.4 Target Group of Customer Satisfaction Survey**

The target group of the internal customer satisfaction surveys defined here are intra-company service recipients of FM services and/or FM customers in the hospital.

A challenge could be that the role of the clients, customers and users is defined differently or not at all from company to company and from department to department. If this suspicion were to be confirmed, the specific evaluation of the data would potentially be more difficult.

In the present context, it is not about the satisfaction of patients. Surveys of this group are already conducted as standard by the National Association for Quality Development in Hospitals and Clinics (ANQ, 2016).

#### **1.5 Method / Procedure of Questionnaire Processing**

The present work was developed used deductive approach on the basis of literature research in the area of customer satisfaction. The interim results were validated in the interim on the basis of an expert survey. It is an explorative approach, which is to be validated through the use in practice and through dialogue with hospital partners (in the context of benchmarking initiatives).

## 2. Measurement of Internal Customer Satisfaction for all FM in HC Services: Proposal for Practice

Following the literature study and the expert discussion, a proposal has been made to survey satisfaction levels in three stages. The scope of the various disciplines, as well as the variably broad customer profile (number of stakeholder groups involved), are decisive for the gradation. As explained in the objective, it should be feasible to make a rough estimate of the satisfaction of internal customers with regard to FM in HC as simply as possible. If, as a result, the need for further analyses is determined in individual departments, the use of resources and internal decisions is to be deepened further. On the basis of this objective, the following three levels of internal customer satisfaction survey are proposed:

1st level: Basic

2nd level: Service barometer

3rd Level: Customized

The different stages are localised in Figure 2.

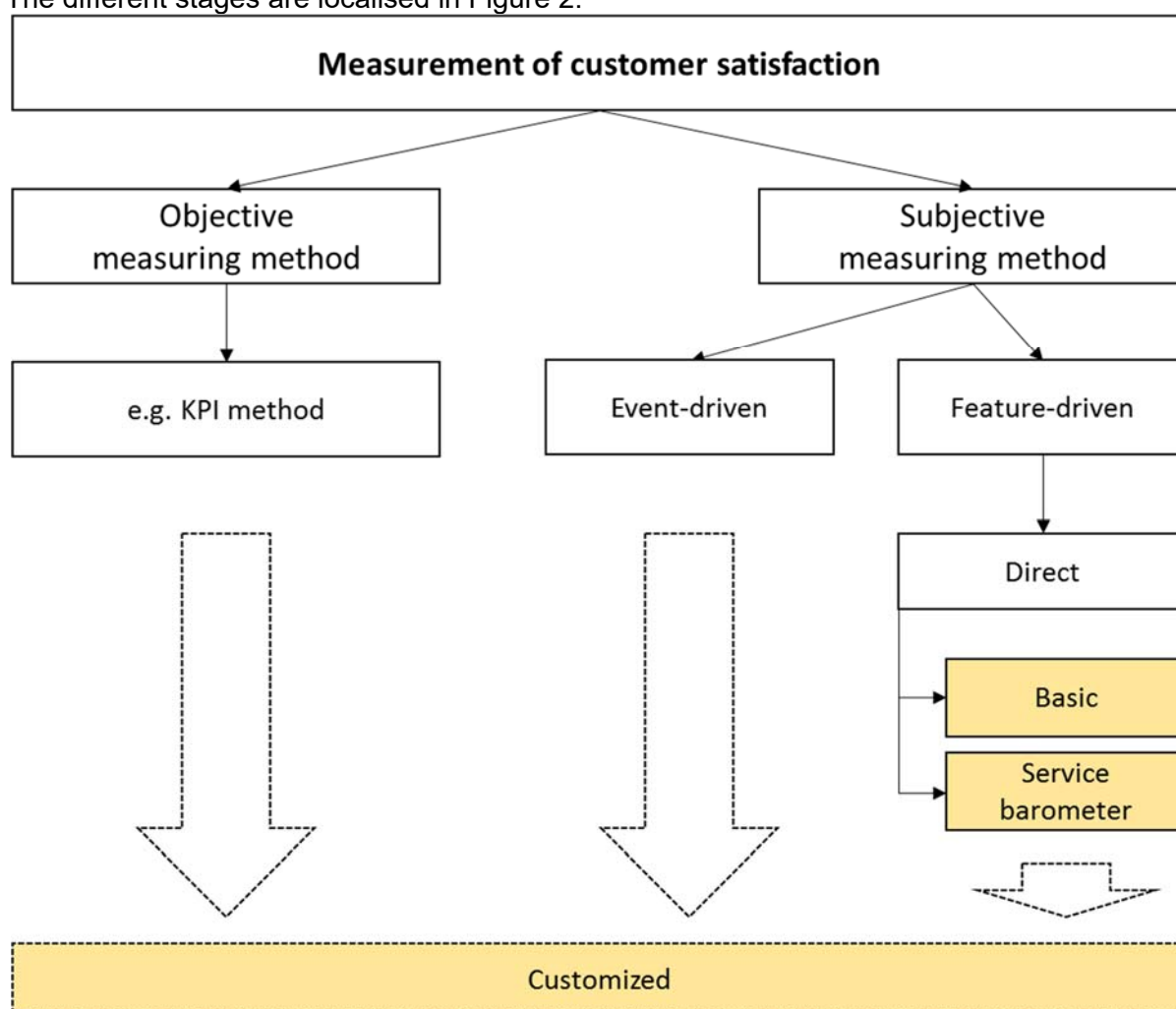


Figure 3: Localisation of the various application levels for the measurement of customer satisfaction (own depiction based on Töpfer, 2008)

The first level "Basic" is used for the code catalogue KenkaS (Gerber et al., 2016). This working paper therefore focuses on this 1st level. The next, second level "Service Barometer", can be considered for further benchmarking initiatives and must then be further specified according to the individual benchmarking definitions. The 3rd level "Customized" can be developed individually in the form of service agreements.

## 2.1 Level 1 Internal Customer Satisfaction Survey: „Basic“

The approach of this first questionnaire level is:

- brief, concise and standardized
- reduced to the core questions regarding research into satisfaction
- generic and does not clarify framework conditions or service goals / plans in advance
- subjective, feature-oriented and explicit / directly based on Töpfer (2008)

Justification of the approach: Only through this reduction to the lowest common denominator can a comparison baseline be established for all areas and hospitals (Töpfer, 2008).

The questionnaire for the internal customer satisfaction survey "Basic" contains the following questions and answers and is summarized in Table 1:

- How satisfied are you with the service(s) generally in the field / department? (Completely satisfied, Very satisfied, Satisfied, Less satisfied, Dissatisfied, I do not know)
- I would recommend the service in principle (Definitely, Probably yes, Probably, Probably not, Definitely not, I do not know)
- If I had the choice (and could freely buy in the market), I would again assign my service provider (Definitely, Probably yes, Eventually, Probably not, Definitely not, I do not know)

Table 1: 1st level of internal customer satisfaction survey "Basic"

No.	Question	Scale	Remark
1	How satisfied are you with the service(s) generally in the field / department?	Completely satisfied Very satisfied Satisfied Less satisfied Dissatisfied  I do not know	
2	I would recommend the service in principle.	Definitely Probably yes Probably Probably not Definitely not  I do not know	According to the Net Promoter Score (NPS) by Reichheld (2008) the most important question
3	If I had the choice (and could freely buy in the market), I would again assign my service provider	Definitely Probably yes Eventually Probably not Definitely not  I do not know	

Notes on the questionnaire:

- These three questions should be answered in all 15 FM in HC disciplines according to LemoS 3.0 (Gerber, 2016) in order to get an overall picture of FM in HC (see also chapter Conceptual Foundations).
- In order to avoid survey fatigue, a coordinated survey is proposed over all 15 areas and in a clearly defined cadence.
- There is currently no fully ascertain statement about a meaningful cadence within the scope of FM in HC; but it is recommended to begin an annual survey.

- With regard to the questionnaire, making it available in such a way that the interviewees select the services they receive is recommended, so that only services which are effectively addressed are requested.
- Within the services provided, it should be possible to prioritize according to frequency or importance so that the most important subject areas appear first, thus avoiding premature abandonment of the survey.

## 2.2 Level 2 of Internal Customer Satisfaction Survey: „Service-Barometer“

The approach of this second questionnaire level

- is deeper and more comprehensive than the 1st level "Basic"
- is based on the FM service barometer according to Coenen et al. (2013) (see also the chapter on Conceptual Foundations)
- comprises the three dimensions: customer satisfaction, service quality and customer loyalty
- Should be developed further with regard to scales with the benchmark participants involved
- Is subjective, feature-oriented, and explicit / directly based on Töpfer (2008)

The questions are listed in Table 2.

Table 2: 2nd level of internal customer satisfaction survey "Service Barometer"

No.	Question	Scale	Remark
<b>Questions regarding customer satisfaction</b>			
1	How satisfied are you with the service(s) in general?	to be defined	Overall question; Question 1 corresponds to Question 1 in the level "Basic"
2	Does the service meet your expectations?	to be defined	
3	Does the service correspond to an ideal performance?	to be defined	
<b>Questions regarding service quality</b>			
4	How satisfied are you with service quality in principle?	to be defined	
5	Is it clear who is responsible for your concern?	to be defined	Definition of contact person
6	To what extent is the contact person available if required?	to be defined	Accessibility and availability
7	Do you feel the contact person is competent, open and tactful?	to be defined	Targets on consulting competence
8	Are the responses / behaviour of the employees accommodating and helpful?	to be defined	"committed reaction"
9	How kindly do you feel the service staff?	to be defined	
10	Can you rely on service employees delivering fast and good solutions / service?	to be defined	Solution-oriented
11	How appropriately and professionally do you feel the service staff conduct themselves?	to be defined	
12	How satisfied are you with the response to complaints?	to be defined	
13	Do the service employees keep to the service plans?	to be defined	
14	Does the service correspond to your order or the agreements of the contract?	to be defined	
15	Do you feel the service processes are transparent and comprehensible?	to be defined	



<b>Questions about customer loyalty</b>			
16	Would you like to hire another service provider?	to be defined	
17	Would you generally recommend the service?	to be defined	Corresponds to question 2 in the level "Basic"
18	If you had the choice, would you hire your service provider again?	to be defined	Corresponds to question 3 in the level "Basic"
<b>Open questions</b>			
19	Do you have any further requests?	Open / text box	

Notes on the questionnaire:

The exact form of the questionnaire and, in particular, the scales used, must be developed in practice in the context of consortium research in cooperation between the ZHAW IFM and the benchmarking partners, depending on the needs and objectives.

### **2.3 Level 3 of the Internal Customer Satisfaction Survey: “Customized”**

The approach of this 3rd questionnaire level

- is tailored to the particular application and can take into account the individual situations and circumstances
- uncovers the backgrounds and reasons behind the results obtained and investigate specific problems
- can be objective and / or subjective, feature and / or event-oriented based on Töpfer (2008)
- is the premium variant, which is available as an additional service individually, e.g. defined by ZHAW IFM and purchased as a consulting service

### **3. Conclusion, Limitation and Outlook**

The present proposals provide the first systematic basis for a coordinated approach of internal customer satisfaction measurements of FM in HC services. Due to the extensive range of activities and fields of the FM (in HC), it is essential that the later extended implementation is introduced by means of first, simple steps, and by discussions in the (benchmarking) community accompanied by scientists. For a successful implementation within the hospitals, a coordinated approach is essential for all FM in HC disciplines and, in addition, the joint development in cooperation between practice and science.

The present proposal with regard to the customer satisfaction of FM in HC services is initially focused on the 1st level "Basic". As already stated, the validation of the first stage must be done through its real-life use in practice and especially in the context of the benchmarking community. The ZHAW IFM will test the implementation of the questionnaire in a pilot phase. The resulting findings are then to be further processed and published.

The second level must be further developed within the framework of the benchmarking initiatives in the various (subject) areas in order to achieve a general validity.

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