



## **EISIC 25**

# **A MODEL FOR CREATING A SHARED PICTURE OF CUSTOMER EXPECTATIONS**

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### **Abstract**

The purpose of this paper was to present a model for creating a shared picture of customer expectations within an organization based on both internal and external perspectives.

**Methodology:** A model was developed in a joint research project between a municipality and the university in a series of workshops followed by discussions and analysis with researchers and project members. The model and its components were designed, tested, and redesigned throughout the whole project.

**Main Findings:** A model based on the PDSA-cycle with components including instructions and templates how to work with capturing perceived customer value, customer expectations and missing value and conduct value analysis, gap analysis and continuous improvements.

**Practical implications:** A model that can be adapted to every organization who wants to create a shared picture of the customer, customer expectations and then base the work with improvements from customers' expectations.

**Originality/value:** A model for none profit organizations to identify values they provide to the citizens, as well as examine if they fulfill citizens expectations. Through the model find areas for continuous improvement in the endeavor to create value for customers.

### **Keywords**

customer value; customer expectations; value analyzes; continuous improvements; interactive research; co-creation.

## 1. Introduction

Creating customer value is said to be one of the most beneficial parts within organizations (Oh, 1999) and is believed to be the basis of other values in an organization (Hammer, 1996). Customer value involves several factors as it varies between different customer types, differs over time and are individual (Kotler, 2000). Customer value derives from customers' learned experiences, preferences and evaluations and contains the desired and later the received value (Woodruff 1997). Customer value is experienced by customers based on using a provider's products and services for their own purpose (Woodruff & Gardial, 1996). Value can be explained by a benefit–cost model where the customer sacrifices a particular sum of time, effort, money and risks in exchange for the received benefits of the offering, resulting in a total customer value (Payne, 1982). According to Zeithaml et al., (2009), customer value is the consumer's overall evaluation of the benefit of a service based on opinions of what is received and what is given. Customers can be found in all organizations, even though some organizations do not label them as customers (Bäckström, 2009). In the public sector the momentum is increasing customer value for citizens and reducing costs for taxpayers (Lee, Hwang and Choi 2012). This is in line with Moore (1995) who maintain that public value is seen as the realization of preferred outcomes by using public resources in the most effective way. A deep relation with the customer to genuinely understand what creates customer value is vital to all business (Khalifa, 2004). Leaders and managers have to emphasize quality and knowledge about customer value to accomplish enhanced performance (Woodruff and Gardial, 1996) and there is agreement upon that perceived customer value and customer satisfaction are positively connected to quality (Collett Miles, 2013). Thus, it is difficult to separate customer value from customer satisfaction as they are directly related to each other (Setijono & Dahlgard, 2007).

In order to gather data and learn about what builds customer value, numerous models have been created for measuring customer satisfaction, (Seth, Deshmukh, and Vrat, 2005). Measuring can be the starting point for continuous improvement but there are challenges to measure and gather the right data (Radnor and Barnes, 2007). At the same time, several researchers have criticized measuring and especially in the public sector since focus often is on the production side instead of soft measurements (Bouckaert and Balk, 2019). A focus on soft aspects can be one way to assess and measure culture and values (Ingelsson et al., 2018) and is an important complement when efficiency and effectiveness are measured (Radnor and McGuire, 2004). Van Thiel and Leeuw (2002) further consider the associations between performance measurement values, analyses, and the area for interpretation in different matters. They also clarify that most products in the public sector are intangible and that performance indicators should reflect quality and reliability rather than 'hard' product attributes by stating: 'Public services are not only about efficiency and effectiveness but also about justice, fairness, equity, and accountability' (ibid.).

Municipalities in Sweden are expected to work as efficiently as possible, in order to give the citizens as much value as possible for their tax funds. At the same time, the municipalities are expected to create and balance several values, such as service, democracy, responsibility, etc. There is also a need to be able to measure or validate whether the activities carried out in the municipalities create the value that is desired and what the municipal residents want, i.e. the customer value.

Thus, the purpose of the paper is to present a model for creating a shared picture of customer expectations within an organization based on both internal and external perspective.

## 2. Methodology

The research was conducted in a joint research project between a university and a municipality during a period from the 1<sup>th</sup> of September 2020 to the 28<sup>th</sup> of February 2022. The municipality had a desire to investigate how the residents (their customers) experience what the municipality delivers. Thus, the purpose of the project was to develop a model that made it possible to continuously and systematically examine the value created for the residents and at the same time study how the development of a model that measures created value for municipal residents can be done. A previous joint research project between the same partners, had the purpose of developing a new method of working with performance analysis and dialogues (Mårtensson et al., 2020) and this project is in some way a continuation of that previous project. The municipality serves about 100,000 residents and is located in the middle of Sweden. A project group was composed with three researchers from the university and five co-workers from the municipality. The researchers represented two different subject areas (quality management and technology and information systems) and the co-workers represented three different parts of the municipal administration. The whole research project was an interactive process with collaboration between researchers from the university and co-workers from the municipality see Figure 1.

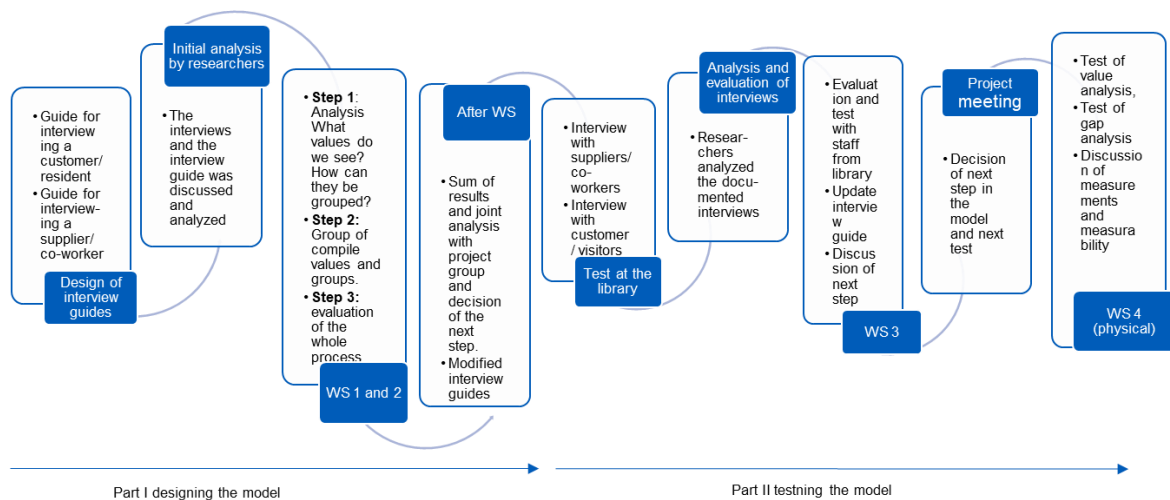


Figure 1 The interactive research process

### 2.1 Part I designing the model in co-creation.

The researchers began by designing two separate interview guides for interviews with co-workers and residents in order to identify value for residents from two perspectives - customer and supplier. The guides were designed using a strength-based approach where the focus was

on identifying what worked well. Interview guides from previous projects were used as an inspiration for and a starting point in designing the guides and the respondents were asked to think of and describe an occasion when the municipality delivered high value to the residents.

Both the researchers and project members from the municipality read and commented on the guides which were improved before they were sent out. The guides were sent out with a missive that described the purpose of the project and the purpose of the interviews.

Co-workers within the municipality conducted a total of 23 interviews (13 suppliers/ co-workers and 10 customers/residents) at five different administrations. The average age of the interviewees was 53 years (youngest 18 years, oldest 83 years) and 11 men and 12 women were interviewed.

The first workshop was held on December 8 2020 with the employees who had conducted and documented the interviews. The completed and documented interviews were sent to the researchers ahead the workshops for initial analyzes. On March 2, 2021, the second digital workshop was held with the co-workers who had conducted the interviews. They told the stories they had heard and then analyzed the identified values, first in pairs and then all together. They then evaluated the interview guides and the analysis of values. The interview guide and the steps in the workshop were adjusted slightly between the two occasions. Among other things, questions about missing value were added to the interview guide.

The researcher's analyzes of the interviews showed that the identified values were very different and at different levels, which made it difficult to make further analyzes. To be able to do this, further tests of the model were needed within one and the same administration or unit. The researchers were helped to contact the library for a first meeting with the manager, who agreed to participate in the project.

## *2.2 Part II testing the model.*

On April 27, the project was presented to co-workers at the library. The interview guides were updated and sent to the library together with a missive. 12 co-workers at the library conducted 12 interviews with each other, 10 of which could be used for further analysis. The analysis showed that the employees had different views of who they create value for, which meant that the discussion about "Who do we create value for" in the model, was moved to the step before the interviews in the model itself. Nine interviews with visitors/customers were conducted by the co-workers at the library and then analyzed by the researchers. The interview guides were updated again based on the evaluation and analysis.

On the 31th of August 2021, a workshop was held with the staff at the library who conducted the interviews. At this workshop, the interview guides were discussed and evaluated and also how the next step in the model could look like.

At a meeting with the project group on the 9<sup>th</sup> of November 2021, the researchers presented the complete analysis of the interviews with the library's co-workers and an initial analysis of the interviews with the library's visitors/customers. Based on the evaluation and test in the workshop with the library staff and discussion in the project group, it was decided to divide the interviews in the model, i.e. that one half of the working group interviews the co-workers and the other part interviews residents/customers in order to minimize bias. The project group also decided what needed to be tested in the continued work with the model in another workshop with the library.

A physical workshop was therefore held on the 7<sup>th</sup> of December 7, 2021 with six co-workers from the library. They tested and evaluated the last steps in the model, such as value analysis, gap analysis, prioritizing areas to work on as well as discuss measurements and measurability. Based on their evaluation, the steps in the model were further fine-tuned. Among other things,

the discussion part on "Who do we create value for" was expanded into three questions: "Who do we create value for?", "Who do we want to create value for?" and "Who should we create value for?" In dialogue with the entire project group on the 13<sup>th</sup> of December 2021, a decision was made on the final design of the model.

### *2.3 Method considerations*

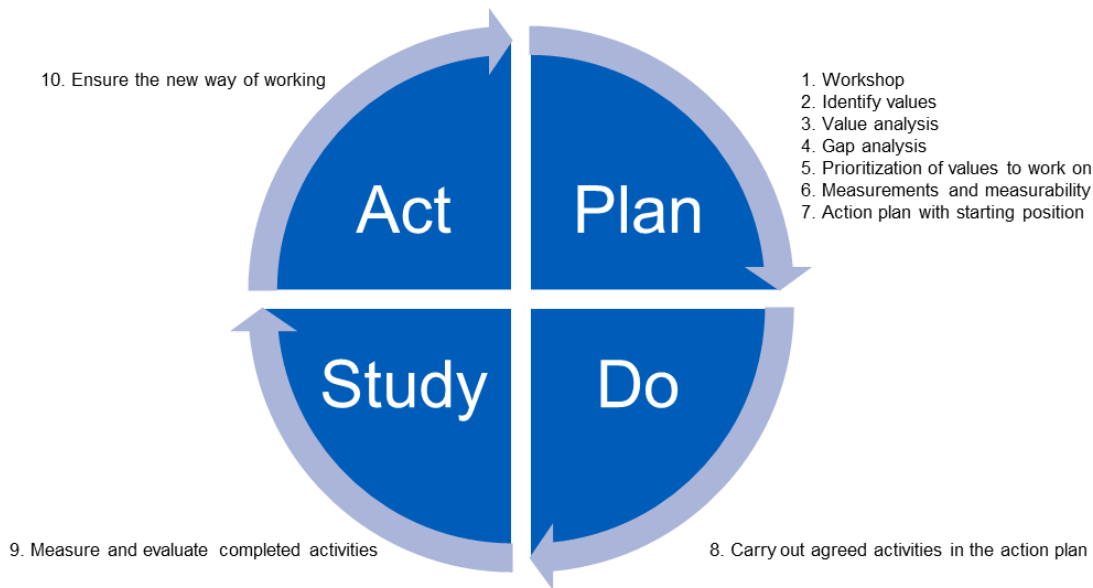
This kind of interactive research with collaboration between co-workers and researchers highlights the importance of separating the roles of practitioner and researcher. It emphasizes reflection and distance, both in time and space, to accomplish the aim of critical research (Shani et al., 2008). Therefore, the researchers have conducted analysis meetings between the workshops and the project meeting before the project members from the municipality was involved. The project time of 18 months have enabled time between the workshops and the project meetings. In addition, several of the project members had worked together in the previous joint project, mentioned above, and trusted each other. The collaborative research approach is typified by the general sharing of responsibility for the other partners learning and knowledge (Shani et al., 2008). Thus, the practitioners benefit if the researchers succeed in developing a model that continuously and systematically examines the value created for the residents. According to Chisholm and Elden (1993) the researcher has a variety of researcher roles with "researcher dominated" at one end and "collaboratively managed" at the other end. In collaboratively managed projects, the research approach is jointly developed, and the information used is created together. Also, the decisions during the process are made by joint agreement (ibid). This project was collaboratively managed, as the researchers prepared the workshops and interview guides, but the co-workers conducted the interviews and the project members participated in the project meetings between the workshops which influenced the outcome.

## **3. Results**

The purpose of this paper was to present a model for creating a shared picture of customer expectations within an organization based on both internal and external perspective. The result is a model for continuously and systematically examining value that the municipality create for their residents. The model can be used to capture the resident's experience of delivered service and missing value. The value that is captured must then be used for future management, i.e. the organization must do more of the activities that create value for residents and less of those that do not create value and work systematically with improvements. The model is a step-by-step guide with associated appendixes which contain templates and descriptions of how to work together in the administration/unit or work group with customer expectations, customer value, analysis, measurement, action plan and continuously improvement.

### *3.1. Description of the model*

The step in the model follows the parts in the PDSA (Plan, Do, Study, Act) improvement circle (Deming 1986, 1993). The overall description of the model is described in Figure 2 and in more detail below.



**Figure 2 The step in the model in relation to the PDSA cycle.**

The work with the model must be carried out in administrations, working groups or departments that are responsible for, or serve, the same or similar resident groups (customer groups).

**Step 1 Workshop.** The purpose of the first workshop is to discuss who/which/whom we create value for, who we want to create value for and who we should create value for.

Discuss two and two: who/ which/whom you in your administration create value for, from the three different perspectives. Write down your answers. Discuss in a larger group and write down what your jointly answer is. **Step 2 Identify values.** The next step is to identify values from a supplier/co-worker perspective and a customer/resident perspective including missing values. Divide the working group in two. Half the group interviews colleagues and identifies values from a supplier/co-worker perspective, the other half interviews customers/residents/citizens (those you create value for) and identifies values from a customer/resident perspective. Each group follows the instructions in the interview guides, conducts structured interviews and record the answers in the guides. **Step 3 Value analysis.** Gather the whole group and review the values identified when the interviews were conducted. Reflect on the stories and discuss whether you as a group see other values from a different perspective. Analyze and compile identified values. **Step 4 Gap analysis.** Based on the identified values in the value analysis, reflect on any gaps. Check over all the values (identified and missing from both perspective) that was compiled in the value analyses. Compare the values from the two perspectives and write down those that have no equivalent in the other perspective. Then, discuss the reasons for, and possibly consequences of, the value being found only in one perspective. **Step 5 Prioritization of values to work on.** Discuss and prioritize a total of 4-6 values that are most important to focus on, based on the Gap analysis. Prioritized values and suggestions for activities that develop that value. **Step 6 Measurements and measurability.** Discuss and reflect on which of the prioritized values / activities that are measurable and which are not. Write down the values/activities that are defined as measurable and describe the measure/measures that best follow up the value/activity. Write down the values/activities that are difficult to find a representative measure of. Reflect and discuss why they are difficult to measure and follow up. Document what effort would be needed and if it would be valuable.

**Step 7 Action plan with starting position.** Compile the values and activities prioritized and the follow-up you have decided in the previous steps in the action plan. Fill in the starting position for the values, when to do it and by whom. It is important that the work is followed up and becomes continuous and systematic. **Step 8 Carry out agreed activities in the action plan.** Follow the agreed activities as described in the action plan. **Step 9 Measure and evaluate completed activities.** Measure, follow up and evaluate the activities continuously versus the starting position according to the action plan. If the follow-up shows a positive development, go to step 10. If the follow-up shows no or negative development, go to step 4. **Step 10 Ensure the new way of working.** Make sure that improvements become part of the daily way of working. New ways of working that increase the value for the residents become permanent, i.e. become the new way of working and/or become the new routines.

The steps in the model should be repeated from step 4 annually. New priorities of activities are made and documented in the action plan and carried out. At regular intervals, approximately every three or four years, the work is carried out from step 1 again.

## 2. Conclusion and discussion

Since the starting point for the project was an identified need from the municipality, the model developed is relevant to the municipality and can generate value for the entire organization and its residents. The developed model can without major changes also be used by other municipalities regardless of size or geographical location since the starting point is individual parts of a municipality that work with "their residents". By using the model and do the work in its every step, the co-workers in an administration or unit will have a more shared picture of customer expectations, the value that are created and what must be done in order to increase the customer value. As customer value is the consumers' overall evaluation ( Zeithaml et al., 2009) the model is one way of investigate the perceived and expected customer value. The model can also help the co-workers to build a deeper relation with the customer which according to Khalifa (2004) is vital to genuinely understand what creates customer value.

To measure customer value have been criticized especially when measuring in the public sector, see for instance Bouckaert and Balk (2019). This model tries to go behind the traditional measurement ideas by letting the co-worker reflect on which values and activities that are measurable and which are not. Furthermore, they have to reflect on and discuss what might be a representative measurement, what effort would be needed and if it would be valuable, see step 9 in the model. The question is if the model really succeeds in this. That is a question that will be answered in the future when the model will be used in a greater extent.

The generic idea behind the model and the process for working with customer value is also useful in other types of businesses, it may then need to be adjusted somewhat. By working according to the model and its process, an understanding and knowledge is created about how customer value is created and can be measured in one particular administration or unit. Working with the model can in a way provide greater value for all customers/residents, which also contributes to increased societal value.

The project has led to increased collaboration between the two research subjects quality management and technology and information systems. Two research subjects with both similar and different views which have led to many and deep discussions and analyses between the researchers. This, in turn, has led to new knowledge in particular regarding value, customer value and measurement. Those discussions and reflections have helped the researchers to distance themselves from the studied object and retain a critical reach approach which Shani et al., (2008) emphasizes in interactive research. The developed model can also serve as a starting point for further research in both the respective subject and interdisciplinary.



### **Reference list**

- Bevan, G., & Hood, C. (2006). "What's measured is what matters: targets and gaming in the English public health care system", *Public administration*, 84(3): 517-538.
- Bouckaert, G., & Balk, W. (1991). "Public productivity measurement: Diseases and cures", *Public Productivity & Management Review*, 229-235.
- Bäckström, I., (2009). *On the relationship between sustainable health and quality management: leadership and organizational behaviours from Swedish organizations*. PhD. Östersund, Mid Sweden University.
- Collett Miles, P. (2013). "Competitive strategy: The link between service characteristics and customer satisfaction", *International Journal of Quality and Service Sciences*, 5(4): 395–414.
- Chisholm, R. F., & Elden, M. (1993). "Features of emerging action research", *Human Relations*, 46(2): 275-298.
- Deming, W.E. (1986). *Out of the crisis*. Cambridge University Press, Cambridge, Massachusetts.
- Deming, W.E. (1993). *The new economics for industry, government and education*. MIT press. (A third edition was published in 2018).
- Hammer, M., (1996). *Beyond reengineering: how the process-centred organization is changing our work and our lives*. New York: Harper business.
- Ingelsson, P., Bäckström, I., & Snyder, K. (2018). "Strengthening quality culture in private sector and health care: what can we learn from applying soft measures?.", *Leadership in Health Services*. 31(3): 276-292.
- Khalifa, A. S. (2004). "Customer value: A review of recent literature and an integrative configuration", *Management Decision*, 42(5): 645–666.
- Kotler, P. (2000). *Marketing management* (Millennium ed.). Upper Saddle River, NJ: Prentice Hall.
- Lee, S., Hwang, T. and Choi, D., (2012). "Open innovation in the public sector of leading countries", *Management Decision*, 50(1): 147-162. DOI:10.1108/00251741211194921.
- Moore, M.H., 1995. *Creating public value: Strategic Management in Government*. Cambridge Massachusetts: Harvard University Press.
- Mårtensson, A., Ingelsson, P., & Bäckström, I. (2020). "Co-creation as a success factor in the development of constructive customer-focused dialogues", *Quality Innovation Prosperity*, 24(2): 153-169.
- Oh, H., (1999). "Service quality, customer satisfaction, and customer value: A holistic perspective", *International Journal of Hospitality Management*, 18(1): 67-82. DOI: 10.1016/S0278-4319(98)00047-4.
- Payne, J. W. (1982). "Contingent decision behaviour", *Psychological Bulletin*, 92(2): 382–436.
- Radnor, Z. J., & Barnes, D. (2007). "Historical analysis of performance measurement and management in operations management", *International Journal of Productivity and Performance Management*, 56(5/6): 384–396.
- Radnor, Z. and McGuire, M. (2004), "Performance management in the public sector: fact or fiction?", *International Journal of Productivity and Performance Management*, 53(3): 245-260.
- Seth, N., Deshmukh, S. G., Vrat, P. (2005). "Service quality models: A review", *International Journal of Quality & Reliability Management*, 22(9): 913–949.

- Shani, A. B., Mohrman, S. A., Pasmore, W. A., Stymne, B., & Adler, N. (Eds.). (2007). *Handbook of collaborative management research*. Sage Publications.
- Setijono, D., Dahlgard, J. J. (2007). "Customer value as a key performance indicator (KPI) and a key improvement indicator (KII)", *Measuring Business Excellence*, 11(2): 44–61.
- Van Thiel, S. and Leeuw, F., (2002). "The performance paradox in the public sector", *Public Performance and Management Review*, 25(3), 267-281. DOI: 10.1080/15309576.2002.11643661.
- Woodruff, R. (1997). "Customer value: The next source for competitive advantage", *Journal of the Academy of Marketing Science*, 25(2): 139–153.
- Woodruff, R. B., Gardial, S. F. (1996). *Know your customer – new approaches to understanding customer value and satisfaction*. Blackwell Business, Wiley.
- Zeithaml, V. A., Bitner, M. J., Gremler, D. D. (2009). *Services marketing: Integrating customer focus across the firm* (5th ed.). Boston, MA: McGraw-Hill/Irwin.