DETERMINANTS AND OUTCOMES OF CITIZENS' SATISFACTION WITH PUBLIC SERVICES IN CLUJ-NAPOCA

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Abstract

Customer satisfaction is used more and more in order to assess the quality of a service or product. Two main approaches are presented: Customer Satisfaction Indices and the SERVQUAL model.

Inspired from the American Customer Satisfaction Index and SERVQUAL a study in Cluj-Napoca tried to assess citizens' satisfaction as a result of the perceived quality of different activities or services and of specific quality drivers related to the way in which services were offered. Also citizens' satisfaction was supposed to have, as outcomes, trust in mayor and in City Hall.

The actual results showed weak relationships and most of the factors included were not significant. As possible explanations we can have the difference between citizens and customers and the complex pattern of interactions between citizens and municipalities.

1. Customer Satisfaction Indices

Quality is a more and more discussed topic in the last thirty years. While the literature flourishes, the definition of quality is still an elusive one. Two different types of definitions are usually offered, or sometimes combinations of the following two:[1]

1. Conformity to a set of specifications;
2. Satisfaction of consumers' expectations.

The importance of the latter one has increased over the years, consumer satisfaction becoming more and more the operational definition of quality.

Consumer Satisfaction Indices (CSI) were build either at national scale (Sweden, USA, Germany, Europe etc), or for different types of products and services. A CSI tries to model the interaction between the client and the product or service and its results. Based on economic behavior theories they try to identify which are the determinants of quality, how consumers get to perceive a certain quality and which are the outcomes.

A CSI can capture consumer satisfaction as confirmation-disconfirmation, overall performance, and/or performance against ideal.

Oliver introduced the expectancy-disconfirmation model in 1980[2]. It focuses on the gap between expectations and performance. A latter form of that model is:[3]
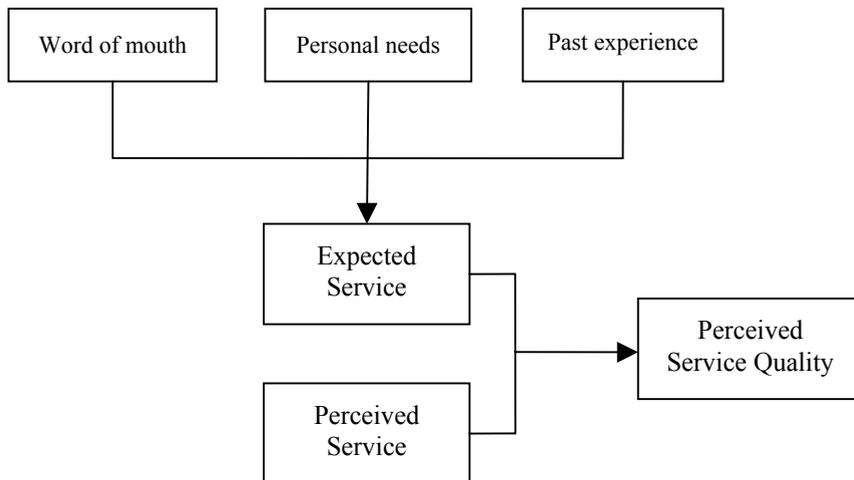

Figure 1: The expectation gap

The above model assumes than when Expected Service (ES) is greater than Perceived Service (PS), quality will be perceived as being less and less than satisfactory, the greater

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[1] Robert W. Hoyer, Brooke Hoyer, *What is Quality*, Quality Progress, July 2001 p. 54

[2] Richard L. Oliver, *A cognitive model of the antecedents and consequences of satisfaction decisions*, Journal of Marketing Research, no. 17, November 1980, p. 460-469.

[3] A.Parasuraman, Valarie A. Zeithaml, Leonard L. Berry, *A Conceptual Model of Service Quality and Its Implications for Future Research*, Journal of Marketing, Vol.49,No.4. (Autumn,1985), p.48

the difference between ES and PS is, when ES=PS quality is satisfactory, when ES<PS, quality will be more and more satisfactory as the difference between PS and ES grows. The relationship between ES and PS has a non-linear nature (Kano, 1984).

One problem may arise from the fact that past experiences and expectations are in a positive relation: if past experiences were good they tend to form higher expectations, if they were bad, expectations are lower. In order to avoid the possibility of having virtuous or vicious cycles totally unacceptable and ideal quality thresholds were introduced – but unacceptable or ideal quality is very different from one customer to another.

For public administration expectations are even a harder issue. While bureaucracy bashing tends to lower expectations, political preferences may distort the perceived quality of services. In Romania's case, there was all the time a significant difference in the perception of the activity of the national government, political partisanship accounting for at least 10% of the difference[4].

The most influential CSI is the American Customer Satisfaction Index. It was developed at the University of Michigan's Ross School of Business and released for the first time in October 1994. The ACSI model is described by its authors[5] as a cause-and-effect model with indices for drivers of satisfaction on the left side (customer expectations, perceived quality, and perceived value), satisfaction in the center, and outcomes of satisfaction on the right side (for businesses these are customer complaints and customer loyalty, including customer retention and price tolerance, for governments there is no indication).

The expectancy-disconfirmation theory is also present here but perceived quality is compared not only with expectations but also with ideal quality.

We find in the model[6] two determinants of satisfaction, customization, described as "the degree to which the firm's offering is customized to meet heterogeneous customer needs" and reliability, "the degree to which the firm's offering is reliable, standardized, and free from deficiencies". Perceived value comes from the perceived report between quality and price.

The model's path coefficients were significant for 54 out of 56 domains of activity, one of those two exceptions being Public Administration/Government, for which the relationship between expectations and value is not significant[7].

As a result, having also that perceived value is related to the price of service (more important in the private sector) and that customer loyalty or repurchase intention (not characteristic for the public sector, the model was changed into a model for most (but not all) government agencies)[8].

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[4] Sorin Dan Şandor, *România electorală*, Accent, 2005, p. 121-126

[5] See www.theacsi.org

[6] Claes Fornell, Michael D. Johnson, Eugene W. Anderson, Jaesung Cha, Barbara Everitt Bryant, *The American Customer Satisfaction Index: Nature, Purpose, and Findings*, Journal of Marketing, Vol. 60, No. 4. (Oct., 1996), p. 9

[7] *idem*, p. 13

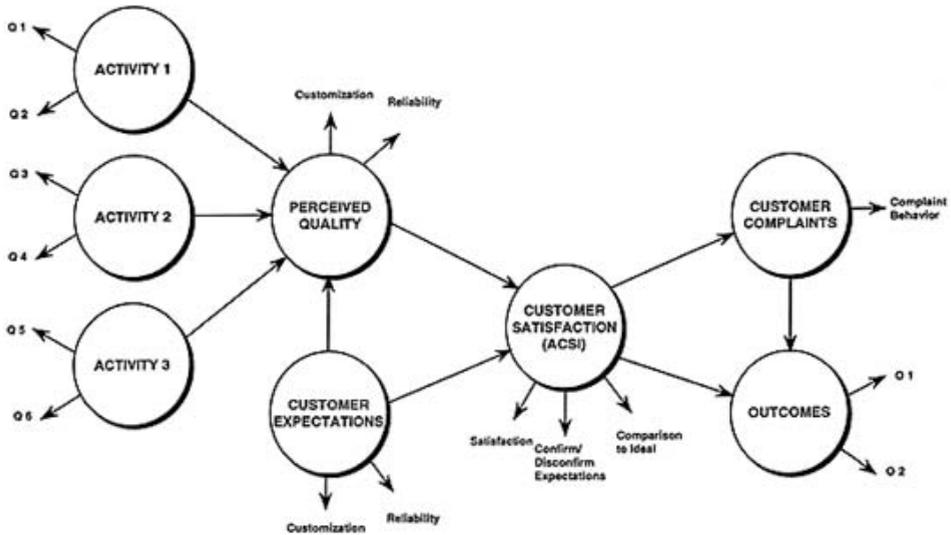[8] http://www.theacsi.org/government/govt-model.html

Figure 2: the ACSI model for most government agencies

We can see that customer loyalty was replaced by outcome and that expectations still have a central place in the model.

The European Customer Index is changing the way in which expectations are seen – not an exogenous variable, but an endogenous one, mainly as a result of the product's or company's image. But image can also be seen as a result of satisfaction[9] (not as a driver for satisfaction, unless we give all the credit for the marketing department and none for production, sales and service). In the case of the public sector image (especially under the form of trust[10]) can be seen as one of the main outcomes of satisfaction.

The Norwegian Customer Satisfaction Barometer (NCSB) went further by eliminating expectations from the model (mainly for weak or non-significant relationships with satisfaction) and introduced a new way of measuring quality, SERVQUAL.

3. The SERVQUAL model

Since 1988 when it was introduced[11], the SERVQUAL has been widely adopted across industries. The core of the model consists of a 22-item scale that allows for indirect comparisons between expectations and perceived performance in order to assess quality.

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[9] Michael D. Johnson, Anders Gustafsson, Tor Wallin Andreassen, Line Lervik, Jaesung Cha, *The evolution and future of national customer satisfaction index models*, Journal of Economic Psychology 22(2001), p. 230

[10] See Christopher Pollitt, Geert Bouckaert, *Public Management Reform: A Comparative Analysis*. Oxford: Oxford University Press, 2000

[11] A. Parasuraman, Zeithaml, Valarie A., Berry, Leonard L.,. *SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality*. Journal of Retailing 64 (1988), p. 12–40

The 22 items can be reduced by factor analysis to 10 determinants[12] or 5 dimensions of service quality. These are:

Table 1: SERVQUAL determinants and dimensions

	Determinants	Dimensions	Definition
1.	Competence	Assurance	Inspiring trust and confidence
2.	Courtesy		
3.	Security		
4.	Credibility		
5.	Reliability	Reliability	Performing the promised service dependably and accurately
6.	Responsiveness	Responsiveness	Helping customers and providing a prompt service
7.	Access	Empathy	Providing a caring and individual service to customers
8.	Communication		
9.	Understanding the customer		
10.	Tangibles	Tangibles	The physical facilities and equipment available, the appearance of staff

There are other attempts to identify the dimensions of quality. Grönroos[13] identified six sub-dimensions or determinants of service quality that would be useful for managerial purposes. These are (a) professionalism and skills, (b) attitudes and behavior, (c) accessibility and flexibility, (d) reliability and trustworthiness, (e) recovery and (f) reputation and credibility. Also Grönroos tries to make the difference between the "what" and "how" of the service.

Some of the main critiques brought to the SERVQUAL model rely on the use of perceptions vs. expectations (expectancy-disconfirmation) approach. Even the authors of the model concede that perceptions-only measures have a stronger predictive value[14].

Other critiques address the applicability of these dimensions to every kind of service or product, pointing that each field should develop its own system of drivers of quality.

Sometimes this system should be tailored for a specific population of customers. For example, a study on the drivers of quality in public transportation identified 4 major factors: reliability, trust, safety and comfort. Still these four can apply for only 7 out of 9 cities studied[15].

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[12] A. Parasuraman, Valarie A. Zeithaml, Leonard L. Berry, *A Conceptual Model of Service Quality and Its Implications for Future Research*, Journal of Marketing, Vol.49,No.4. (Autumn,1985), p.47

[13] Christian Gronroos, *Service quality: The six criteria of good perceived service quality*, Review of Business, 9(3)/1988, p. 10-13.

[14] A. Parasuraman, Valarie A. Zeithaml, Leonard L. Berry, *Reassessment of Expectations as a Comparison Standard in Measuring Service Quality: Implications for Further Research*, Journal of Marketing, Vol. 58, No. 1. (Jan., 1994), p. 120

[15] Markus Fellesson, Margareta Friman, *Factors predicting Satisfaction with Public Transport Services in Nine European Cities*, The Service and Market Oriented Transport Research Group, Karlstad University, 2007, http://www2.kau.se/samot/pdf/QUIS2007.pdf

4. Citizens' Satisfaction with Public Services in Cluj-Napoca

In May 2007 in an omnibus survey carried in Cluj-Napoca by the Centrul pentru Studierea Democraţiei (Center for the Study of Democracy) of "Babeş-Bolyai" University several questions regarding satisfaction with public services were introduced.

The model used was inspired by ACSI and SERVQUAL, but focused on perceptions-only measures. Also different drivers of quality were taken into consideration than the dimensions we can find in SERVQUAL.

We included the perception on most common activities or public services offered by the municipality, as drivers of quality: Reliability, Responsiveness, Equity, Courtesy, Professionalism, and Caring and as possible outcomes Trust in City Hall and Trust in Mayor.

Table 2: Variables used in the study

Activities	Question	Scale
Street lights		
Roads		
Transportation		
Order		
Parks		
Pollution	"How much satisfied are you about the way in which the City Hall acts towards the following problems?"	From 1 – very dissatisfied to 7 – very satisfied
Schools		
Housing		
Taxes		
Parking		
Investments		
Aspect		
Drivers		
Reliability	"In which measure are you satisfied about the way in which your problem was solved?"	
Responsiveness	"In which measure are you satisfied about the time in which your problem was solved?"	
Equity	"In which measure do you think that your problem was treated in the same way as for other citizens?"	From 1 – at all to 4 – very much
Courtesy	"In which measure do you think that respect is a characteristic for public servants?"	
Professionalism	"In which measure do you think that professionalism is a characteristic for public servants?"	
Caring	"In which measure do you think that public servants care for citizens' problems?"	
Customer Satisfaction		
Overall Satisfaction	"Generally speaking, how satisfied are you about the City Hall's activity?"	From 1 – very dissatisfied to 7 – very satisfied
Outcomes		
Trust in City Hall	"How much trust do you have in…?"	From 1 – at all to 4 – very much
Trust in Mayor		

The results are showing a not very good perception on the quality of the activity of the city hall. Serious problems were encountered in the field of streetlights, parking

places, housing, and pollution. Better than average results were perceived to be on aspect, transportation, order, parks, investments, roads and schools, for many of them the City Hall being only partially responsible (as order, schools, investments or the aspect of the city). The overall satisfaction regarding the City Hall activity is low: 3.29.

Table 3: Perceived quality

Overall Satisfaction	3.29
Street lights	2.23
Roads	4.40
Transportation	4.92
Order	4.72
Parks	4.55
Pollution	3.46
Schools	4.17
Housing	3.38
Taxes	3.73
Parking	2.88
Investments	4.53
Aspect	4.98

A linear multiple regression shows us that the influence of perceived quality of these activities explains only 10.7% of the overall satisfaction, only one factor being significant: transportation.

The perceived quality of municipal services does not depend on socio-economical factors, with only one exception: education. We found significant (but small) correlations between education and the perceived quality of Transportation, Parks and Aspect, showing a more critical assessment from those with more education. This may be a possible hint that more education may lead to greater expectations and also to smaller satisfaction with public services.

Table 4: Perceived quality and education

Activity	Transportation	Parks	Aspect
Correlation coefficient	-.143[**]	-0.108[*]	-.182[*]

[**] Correlation is significant at the 0.01 level (2-tailed).

[*] Correlation is significant at the 0.05 level (2-tailed).

Only 18% of the Overall Satisfaction can be explained by what we labeled as drivers of quality. Only two of them (see below), Professionalism and Reliability have a significant influence over it.

Table 5 Quality Drivers' influence on Overall Satisfaction

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.210	.513		12.105	.000
	Caring	.021	.124	.012	.172	.863
	Courtesy	.128	.155	.068	.828	.408
	Professionalism	.465	.159	.238	2.925	.004
	Reliability	.311	.149	.199	2.087	.038
	Responsiveness	.113	.150	.074	.755	.451
	Equity	.005	.128	.003	.042	.966

We assumed that Overall Satisfaction has two major outcomes: Trust in City Hall and Trust in Mayor. There is a significant (but not strong) correlation between Overall Satisfaction and these two outcomes.

Table 6 Outcomes of Overall Satisfaction

Correlations

		Overall Satisfaction	Trust in City Hall	Trust in Mayor
Overall Satisfaction	Pearson Correlation	1	.364**	.413**
Trust in City Hall	Pearson Correlation	.364**	1	.488**
Trust in Mayor	Pearson Correlation	.413**	.488**	1

**. Correlation is significant at the 0.01 level (2-tailed).

Conclusions

The results are mixed: while we were able to found significant relationships between the perceived quality of municipal services and the overall satisfaction, the quality drivers also played a significant role in creating satisfaction and trust (in City Hall and in Mayor) can be seen as an outcome of satisfaction, the model is a weak one and only some of the factors included were significant.

A major issue with this type of research is identifying citizens with customers. While public services are offered to every citizen, not all citizens are customers of public services. Public transportation is open to all citizens, but some of them are using their own cars or bikes or are walking. For each public service we can find citizens that are not using this service, or very little – while we can have opinions on the quality of the service. For some services the situation is a little bit confusing: what can we say about schools? All citizens were clients of this service, but several or many years ago, some of them have children in schools – can we consider them as clients or just discard their opinions?

Another issue regards the complex activity of a City Hall. Besides providing municipal services the City Hall must also to issue licenses, permits and authorizations, to control different activities and also to play a significant role in keeping the community

together. Each citizen has a complex pattern of interaction with the municipality, not only as a customer of some public services.

The issue of quality drivers may be also a factor for the weak performance of the model. The drivers chosen were from the "how" part of the service, and the "what" was ignored, due to the different nature of the services included.

The relationship between satisfaction and trust is a much-debated issue in the literature. Many had blamed the decrease of trust in public administration on poor quality services. The empirical data seems to show only a weak or moderate relationship, satisfaction with the performance of administration being only one factor in creation of trust.

Finally, we should make a point about the nature of the provider of these public services – we are discussing about a political institution. In expressing their opinion about the City Hall citizens are not as neutral as when speaking about a hotel or a shoe manufacturer – they have political beliefs, ideas and partisanships that may influence perceptions and satisfaction.

More than two decades ago some authors tried to look at elections as a purchase decision[16]. As it was showed elections are a different thing and voting and supporting a party or a politician is different from buying a product or a service. Political institutions and private firms are not judged in the same way.

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