METHODODOLOGICAL ASPECTS OF CUSTOMER SATISFACTION: MEASUREMENT AND MODELS

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Abstract
Regarding the now a days competitive battleground it is vital important to focus business units' and other organizational institutions’ attention to the service or product end user. And since the customers are becoming more and more selective, there is a noticeable growing priority in the augmentation of customer satisfaction. But one of the major challenges that business units and organizational institutions face is the integration of suitable model and measurement items in order to assess the key factors and their degree level that drive customer satisfaction. What is interesting, that the selection of suitable measurement implement means the effective tool which fulfils the long-term and fruitful strategy integration. In this study paper, the authors undertook a large portion of research studies across diverse business areas in order to reach a broad overview and understanding what kind of factors are influencing customer satisfaction and how it is considered within the assessment aspects: models and measurement items. It could be constituted that the current study is extensive in terms of displayed past models and measurement of constructs. The findings confirm that there is a great variety of measurement issues of customer satisfaction and it highly hinges on the business area, chosen factors, industry sector, type of the venture. Hence, the significance of the article lies on the fact that it is a systematic measurement issues approach which puts forward an important foundation for future theory and practice investigations.

Keywords: customer satisfaction, satisfaction measurement, models, methodology.
1. Introduction
After a profound analysis of academic and practical study papers it has been noted that business units and public institutions collide with the important issue of customer satisfaction assessment. It is seen a major challenge in designing both an appropriate model and measurement items for customer satisfaction augmentation process, essentially, in the diverse spheres of business units and other organizational institutions.

This article describes the collected methodology issues such as measurement items and conceptual models that were implemented in the past researches. The study paper also provides a great variety of operational tools that could be applied for the distinct customer satisfaction enhancement analysis. It could be assumed that the authors’ established work consolidates the ways of customer satisfaction evaluation with the provision of sophisticated and comprehensive methods. With this in mind, the current article could serve as a help for those who intend to run a unique research project regarding customer satisfaction. Hence, the visualized existing models and displayed examples of measurement items could complement already systemized methodological aspects.

The novelty of the study: this study addresses the gaps that have been left so far by previously analyzed academic and empirical papers which devote their focus on customer satisfaction by delivering a list of methodological approaches. It also defines the nature of multi-faceted concept customer satisfaction that is provided by a great variety of authors. Moreover, this article replenishes a systemized document with united methodological aspects. In addition to this, it highly recommends to bear in mind that previous studies should not be relied fully but taken as a benchmark or a challenge to evaluate the object in a chosen context or type of business venture. Obviously, the present study can be and is offered to be extrapolated in both aspects: theory and practice. It is also believed that the present study would be relevant for the advancement of relationship marketing since customer satisfaction is the significant factor in business field. It has also indicated that customer satisfaction is prudent for creating long-term rapports between the company and client.

The object of this particular study is: methodology of customer satisfaction.
The aim of the study is: to investigate the methodology aspects of customer satisfaction.
The objectives of the study are:
1) to analyze the customer satisfaction through the academic perspective.
2) to investigate the items for customer satisfaction measurement.
3) to present the models that centre their attention on the enhancement of customer satisfaction.

2. Academic approach of customer satisfaction
One research conducted by Sawang (2011) with a sample of SMEs have explored that customer satisfaction belongs to key performance indicator and is perceived as the most importance among non-manufacturing managers. Moreover, it is stated that customer satisfaction is a key element that leads to competitive advantage (Krajňáková, E. Navikaitė, A.; Navickas, V, 2014). In order to examine how clients evaluate the overall performance of the company, customers’ satisfaction as a measurement needs to be taken into account. While Hill, Roche & Allen (2007) suggest an explanation from the company perspective that customer satisfaction is a comfortable phrase which defines the overviews and feelings of customers regarding their perception of organization. Vavra (2002) believes that customer satisfaction is quickly becoming a next competitive factor.

However, attaining customer satisfaction is a tough decision that requires strategic thinking because according to Cochran (2003) it is something company does to stay in business. Driven with this idea the author provides three basic truths:
Customer satisfaction is the ultimate goal,
Customer satisfaction is an investment,
Everyone must be involved (p.2-3).

To underpin the importance of these ideas, a bit of elaboration is needed. Firstly, there should be a clear consensus stating that revenues and profit are the outcomes derived from the realized customers’ expectations and needs. It is worthwhile to mention that Yi (1990) classifies satisfaction in two dimensions: as an outcome (end-state resulting from consumption) and process (psychological, evaluative). Nevertheless, which perspective would be regarded either a result of consumption or an action the main task of the service provider is to indulge the client and ensure the maximization of satisfaction. Though, if a human quest is being attained with a positive outcome there is an evidence to gain the financial goodness and this relation is being proved scientifically. As Rich & Orr (2011) also prove the idea that satisfaction always leads to the revenue increase. Moreover, a growing body of literature suggests that non-financial performance measures are leading indicators of financial performance (Chen, 2006). There are also compelling studies detecting the positive relation between customer satisfaction and profitability (Ittner & Larcker, 1998, Banker, Poter & Srinivasan, 2000). Further, Rust & Zahorik (1993) find that customer loyalty is plays a significant mediating role in the linkage between customer satisfaction and financial performance.

Secondly, customer satisfaction should be understood as an investment, which does not produce results in the short period. Definitely, it takes time to identify, analyze, improve or integrate the determinants, which play a key role in the perception of customer satisfaction. And since Rust & Zahorik (1993) describe customer satisfaction through the concept of how customers view organization’s products or services in the light of their experience with that organization (or product), as well as by comparison with what they have heard or seen about other companies or organizations, so since changes never come overnight, we can assume that the process of digesting the experience and comparing it with rivals’ offering requires time.

Thirdly, even though SME’s are driven solely by owner’s creative spirit and ideas but synergy has to be reached among all employees. In addition to this Cochran (2003) stresses that all personnel have the capability to influence the customer satisfaction at some level. So, valuable contribution to customer satisfaction could be reached via clear communication and building close rapports with employees.

What is more, satisfaction is a critical measure of a firm’s success and has been shown to be impactful for the attitude, repeating purchases, and word-of-mouth communication (Sivadas and Baker-Prewitt, 2000). It is a common thought that successful performance of the firm derives from augmented revenues, and in the aforementioned studies, correlation between customer satisfaction and profitability was proved (Ittner, Larcker, 1996, Reichheld & Sasser, 1990). Additionally, an increase in satisfaction should essentially result to either or both of an increase in sales according to Drake, Gwynne & Waite (1998) or mitigate costs and in the meantime improve profitability (Yeung & Ennew 2000). But regarding the opinion of Fogli (2006) it has to be admitted that increased revenues and profit depend not only on customer satisfaction but rather on customer behavior: repeating purchases, larger or more frequent purchases, also a positive word of mouth from friends and colleagues. Customer satisfaction serves as a help to forecast the future behavior and Oliver (1999) indicates that customer satisfaction is an important antecedent of behavioral intentions and actual behavior. So, it can be assumed, that the rise in finance is the consequence of satisfied customer repeating purchase behavior.

Moreover, the positive relation between satisfaction and word-of-mouth was revealed by Hallowell (1996). Liu, Sudharshan and Hamer (2000) add that the importance of word of mouth may well be increasing, at least relatively due to the fact of expanding virtual communication via the internet. However, communal community culture also plays an important role in the existence of word of mouth. Generally, in literature Lithuanians are said to be more collectivistic than individualistic and Huettinger (2008) conducted a
research which revealed the low individualistic rate of Lithuanians. Since cultural medium is deem to be beneficial to incorporate free way of advertising, SME’s should incorporate them in their marketing strategies. However, the correlation between satisfaction and loyalty has been questioned and there is a proof that satisfaction and loyalty are not always highly related (Mittal & Lassar, 1998). And East and Hammond (1999) reinforce this idea by saying that the big portion of academic works showed the weak relationships between customer satisfaction and customer loyalty. Nevertheless, Hill, Roche & Allen (2007) point out that customer satisfaction is the main driver of loyalty, but mere satisfaction is not enough, so customers have to be highly satisfied. And finally, since customer satisfaction is found to be a significant element in the business performance, so, it is vital important to understand the methodological aspects which involve models and measurement items in order to implement them correctly and effectively.

3. Past research on customer satisfaction models and measurement
This section contains a list of previous empirical works on the field of customer satisfaction. The overview delivers models and methods that were incorporated by researchers briefly presenting the findings.
Regarding Angelova & Zekiri (2011) study, it was aimed to measure customer satisfaction with three Macedonian mobile telecom players in the context of service quality through adapting American Customer Satisfaction Index Model (Figure 1). Structured questionnaire was designed and ranked with the 5-point Likert scale. 1048 were collected and analyzed with Excel and SPSS 17. From the overall analysis it was assumed that customers were not satisfied with services and their expectations were higher.

![Figure 1. American Customer Satisfaction Index model](source: B. Angelova, J. Zekiri (2011, p. 242))

While, the authors Yeung & Ennew (2000) aimed to assess empirically the linkage between customer satisfaction and a list of measures of financial performance. American Customer Satisfaction Index (ACSI) and a proprietary financial database, Standard and Poors’ CompuStat were chosen to collect the data. Linear regression was adapted to check the association between customer satisfaction and sales, operating income, net income (loss) and retained earnings. The outcomes revealed that satisfaction has a positive influence on financials, nevertheless, the direct impact was relatively small. Another important methodological approach was presented by Kaveh, Mosavi & Ghaedi (2012) who applied the European customer satisfaction index (ECSI) for the hotel industry. The conceptual model included these determinants: customer satisfaction, functional dimensions, technical dimensions, image, price, and trust, repurchase intention, perceived value (Figure 2), each variable was evaluated with a 7 point Likert scale. It was revealed that image, technical dimension, functional dimension and price have an impact on perceived value. It was also found out that perceived value effects customer satisfaction. Meanwhile, customer satisfaction has an impact on trust and repurchase intention.
Figure 2. A conceptual model of customer satisfaction adapting ECSI in determining the antecedents of satisfaction, trust and repurchase intention in five-star hotels in Shiraz, Iran

![Conceptual Model](source.png)

**Source:** M. Kaveh, S.A. Mosavi, M. Ghaedi (2012, p.6105)

Through adapting customer handling index which embraced nine items measured on a 10-point scale with the inclusion of questions about satisfaction with various aspects of a service encounter Rogg, Schmidt D.B., Shull & Schmitt N. (2001) investigated 351 small businesses. Surveys were filled by human resource managers, manager-owners. The model below (Figure 3) is visualized. It is clearly seen that in this particular case, climate as a construct plays a mediator role between HR practices and customer satisfaction. The researchers concluded that human resource activities are closely and indirectly related with the one of organizational outcomes, essentially, with the variables of customer satisfaction.

**Figure 3. Customer satisfaction relation with HR practices and climate.**

![Customer Satisfaction](source.png)


In addition to this, the comparison of both Maximum Likelihood (ML) and Partial Least Squares (PLS) adapting Customer Satisfaction Indices (CSI) format were used by O’Loughlin & Coenders (2002) inorder to evaluate the perceptions of postal services (Figure 4).
The Isle of Man Post Office postal survey with pertaining 28 questions and including these constructs: quality of products, quality of customer service, perceived value, image, customer satisfaction, customer loyalty, customer complaints. It was found out that maximum likelihood estimation is more beneficial than partial least squares because it is robust and biased. So, the authors offer to use partial least square method in the cases of weak theories, small sample and large number of variables. What is interesting, product quality as the construct was found out to be the key factor that drives customer satisfaction. While, service quality was proved to be not significant factor for satisfaction, loyalty and value in this empirical research.

Another interesting research was done in the field of high speed railway in China by Canming & Jianjun (2011). Structural equation model was chosen as the basis of methodology. It is give or take the analogical to previously presented model except the fact that in the current one the construct value does not play a mediator role between constructs of service quality, image and customer satisfaction. So, service quality was found to have the highest impact on customer satisfaction, meanwhile, the positive impact of image on customer satisfaction was also noticed. Moreover, in this particular case, customer satisfaction influenced customer loyalty indirectly. However, customer satisfaction affected customer complaints directly.

For instance, Viulet (2008) conducted a research with 364 guests of two similar huge city hotels in order to examine whether the satisfied customers tend to be loyal. For the assessment of respondents’ satisfaction with the various aspects of the services and facilities of the hotel thirteen items were selected. The full list of construct measurement are: overall satisfaction, satisfaction, involvement, repeat purchase. Responses were based on a 5-point Likert-type scale ranging from “very dissatisfied” to “very satisfied”. The association between satisfaction and loyalty was found to be weak. Of interest was the conclusion that key elements engaging loyalty of hotel guests were the amenities and hotel design. The author also revealed that satisfying hotel clients would not ensure to repeat the visits; therefore, it was offered to reformulate the loyalty programs and training staff members who showcase the pluses of the hotel.

The research of Huddleston, Whipple, Mattick & Lee (2009) aimed to compare customer perceptions linked to satisfaction with conventional grocery stores and specialty grocery stores. 630 respondents indicated their agreement with 27 questions on a five-point Likert scale and results were analyzed using SPSS. The adopted questions demonstrated the wide range of measurement items the assess the constructs: satisfaction, prices, product assortment, quality, employee service, loyalty-building service. In the overall findings it was emphasized that nevertheless what type the store is – either conventional or specialty, the attributes such as price, product assortment, quality, and employee service influence store satisfaction.

While, Von Freymann & Cuffe (2010) conducted telephone interviews with consumers of grocery stores in the Charlotte, NC area. U.S. Census metropolitan area (MA). The response rate was 5.00% or 292 usable surveys for 5,840 calls. Answers for 29 service quality questions were rated with 0–11 scale and where
meant “don’t know”= “no opinion”. The findings revealed the possible connection between service quality and ongoing revenue, also, store pricing, store formats, and shopping satisfaction may mitigate. Moreover, location of customer’s work and living place could affect the service quality demands and resulting profits. Mahapatra, Kumar & Chauhan (2010) adapted seven point interval scale for evaluating 13 automobile attributes, data was collected from actual car users from Dehradun city in order to identify the features providing satisfaction. It was found out that customers are highly satisfied with such traits like ignition, vibration, wiper performance and pickup and the performance of the product has an impact on future purchasing decision.

In addition to this, Hsu, Huang & Swanson (2010) demonstrated a conceptual model of inter relationships among grocery store image, travel distance, customer satisfaction, and behavioral intentions (Figure 5). 400 respondents assessed 25 statements with seven point Likert scale and SPSS-AMOS 17.0 was employed to conduct structural equation. It was concluded that total distance has a positive impact on satisfaction and it was also found out that even though store image is an important construct, but it’s indirect influence which stems from customer satisfaction to behavioral intention is weigh more bigger than the direct effect.

**Figure 5. The conceptual framework of grocery store image, travel distance, satisfaction and behavioral intentions.**

Moreover, Al-Wugayan & Pleshko (2011) used path analysis to examine the relationship among constructs. The model was proposed consisted of satisfaction, loyalty and market share in the banking sector of Kuwait (Figure 6). Sampling frame was comprised of bank 327 clients from 36 banks. The study firstly revealed the existence of positive relationship between customer satisfaction and loyalty, and secondly, it was supported a significant positive association between loyalty and market share.

**Figure 6. Model of Satisfaction, Loyalty and Market Share.**

Choy, Lam & Lee (2011) displayed the conceptual model (Figure 7) which served as a guide to have an understanding, how essential the relationships among these three objects are and develop long-term...
strategies that enable companies to stay competitive. The provision of the conceptual model contributes for practitioners. It offers a positive relationship between customer satisfaction and service quality and its both dimensions (technical and functional qualities), also provides the positive impact of customer satisfaction towards behavioral intentions.

![Figure 7. A conceptual model and hypotheses development.](image)

Source: J.Y. Choy, S.Y. Lam, T.C., Lee (2011)

The authors Navikaite, Navickas (2014) also presented a study that aimed to identify the factors which generate customer satisfaction and in the same time serves as a tool for the Lithuanian small and medium enterprise performance improvement. After the examination of literature review, the conceptual research model has been designed incorporating seven constructs with causal relationships that embody: customer satisfaction, trust, perceived price fairness, perceived product quality, reputation of small and medium enterprises, prior experience and service quality.

So, finally, this section of the literature review examined studies that had focused on customer satisfaction interrelationships with other constructs, also investigated the conceptual models and the findings of researches. After a brief analysis of empirical studies it could be concluded that the inquiry of customer satisfaction bears on industry sector, type of the venture and scholars’ distinguishing variables, which have an impact on overall perception of this object.

4. Conclusions

1. Taking into consideration the academic approach of customer satisfaction it could be noted that literature agrees on the fact that it is becoming the next differentiation factor for business units. It is also perceived to be a major element for customers to indicate the quality of activities that are provided by organization. From the clients’ perspective customer satisfaction is described as a sum of collected feelings and overviews regarding business venture. While, from the business venture perspective, customer satisfaction should be incorporated as a part of long-term strategy. And of course, a suitable measurement system should be taken into account. Moreover, there are distinguished three-fold truths about customer satisfaction. Firstly, it should be regarded as the ultimate goal. Secondly, it should be understood as an investment. And thirdly, each member of organization should be involved. Finally, it is proved correlation between word-of-mouth, customer loyalty and customer satisfaction.

2. After the examination of prior conducted research, it was found out that majorly the quantitative research method through incorporating the multi-item manner measurement was utilized. In addition to this, generally the questionnaires were designed with close-ended questions to evaluate the chosen constructs. In order to apply the scale items for customer satisfaction in other contexts, different industry sectors or other types of business units it is recommended to refine the measurement items with minor modifications to the wording in order to be as accurate as possible for the chosen environment.

3. With respect to previously designed models it could be stated that proposed frameworks offered a differentiated view in the great variety of contexts. And they can be incorporated in other environment. Holding the data on the proposed possible constructs also enables to investigate the relationships among the chosen elements and make a definite contribution to business units. By delivering a wider range of
elements’ combination in the analysis new insights that have not been covered in the existing literature can be applied in other kind industry sector, business venture. Moreover, the provision of designed past frameworks can serve as a guide to lead the researches in other contexts.

References