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A Welcome Note from the Managing Editors:

Amid continued global economic turmoil, recent signs of optimism but also brewing controversies on what should be next in the face of weak economic growth and high joblessness. Thanks to the current political season in the United States, and many European, African, Latin American, Asian countries and particularly in Middle East countries, candidates for national, state, county, or local office have already started weighing in on the issue of how best to promote and experience economic growth again.

Long before the current political vuvuzelas on this policy issue gained in decibels, JIBE's scholars were at work. Indeed, the last two issues of JIBE have abundantly explored the question of how we got into this global mess. So, now we thought appropriate to frame a singular challenge for your next contribution and pose to you the proverbial $64 million question: how do we get out of this mess?

Do you trust that fiscal consolidation (i.e. spending cuts to reduce budget deficits) can boost economic growth under certain set of conditions? Or, do you rather agree with the IMF that the pursuit of consolidation is most likely to stunt economic growth and raise unemployment in the short term (never mind that the same IMF has recommended similar fiscal austerity policies to developing countries for years that they decry today)?

Not matter your own inclination on these important matters, we hope that your country, state, or university/organization will make the right decision so their budgets allow you to continue your research agenda, attend our future conferences and submit your work for consideration for publication in future issues of this journal.

Arguably, more than economics or finance got us into this global economic mess. Thus, it seems reasonable to assume that more than economics and finance will get us out of it. Indeed the word "greed" has been evoked so many times in describing the root causes of the current crisis that we want to hear more from all the psychologists, sociologists and other scholars out there.

Your current and future contributions are greatly appreciated and valued. Write up your views; share your wisdom on the above and other global issues.

As is now customary, all work submitted to JIBE has gone through a rigorous blind review process of experts in the functional areas of business, economics and public administration. We are infinitely grateful to all authors who submitted their work and anonymous reviewers and board members who contributed to shaping the JIBE, Volume 13, Number 3, 2013 presenting you with research papers for your reading.

We expect you to personally contribute to our next issues!

Finally, we would like to express our sincere gratitude to Dean Dr. Phapruke Ussahawanitchakit of the Mahasarakham Business School, Mahasarakham University, Thailand for the sponsorship and invaluable contribution to JIBE.

Warm Regards,

Tahi J. Gnepa, Ph.D.
Phapruke Ussahawanitchakit, Ph.D.

Managing Editors

TABLE OF CONTENTS

Journal of International Business and Economics®
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PRIORITIZING SERVICE QUALITY IMPROVEMENT INITIATIVES FOLLOWING SERVICE QUALITY MEASUREMENTS

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ABSTRACT

The aim of the research is to explore how to prioritize service quality improvement initiatives using different methods. The methodology is quantitative in the form of a survey done among students at the University of Iceland in the spring of 2011.In total 1.683 students participated. Gap analysis, correlation analysis and regression analysis were used to examine different ways to prioritize service quality improvement initiatives. The results show that even though the methods are different there is good congruency between them. Thus the results strongly indicate which service attributes can be classified as strengths and which service attributes can be classified as weaknesses. The latter should have priority over the former when it comes to service quality improvement initiatives. When interpreting and utilizing the findings it is important to keep in mind that the student group is not homogeneous. That especially applies to the level of study, i.e. whether the students are undergraduate or graduate students but no less to the department where the students are enrolled.

Keywords: Service quality; Improvement initiatives; Prioritization

1. INTRODUCTION

This paper deals with the prioritizing of service quality improvement initiatives following service quality measurements. It can be said that the basic purpose of service quality measurements is to obtain information with the aim of improving performance and therefore it is important to prioritize service quality improvement initiatives. The research question is:

> *Is there congruency between different ways of prioritizing service quality improvement initiatives and is it more appropriate to use more than one method?*

This paper is split into three main sections. It starts with a discussion on the service concept and service quality. Common methods of assessing service quality will be introduced. Next the research will be discussed. That section is split up into two parts a discussion on the research's methodology and its findings. In the third and last section the results of the various methods to prioritize service quality improvement initiatives are discussed and compared followed by a discussion on managerial implications.

2. THE SERVICE CONCEPT AND SERVICE QUALITY

There are many definitions of services. Lovelock (2001) for example defines services as deeds, processes and performances and that it is important to assess all three. Zeithaml, Bitner and Gremler (2006) in essence define services as economic activities that are generally consumed at the time they are produced, and provide those who receive it added value which is essentially intangible. Services are also said to be multi-dimensional. Brady and Cronin (2001) talk about three dimensions; outcome, interaction and physical environment quality. Parasuraman, Zeithaml and Berry (1985) laid the foundation for SERVQUAL (Parasuraman, Zeithaml and Berry, 1988). The original SERVQUAL had ten dimensions but the number was later reduced to five (see Zeithaml, Bitner and Gremler, 2006). They have been dominant in the definitions of service quality dimensions (see Finn and Kayande, 2004; Garvin, 1988; Kasper, Helsdingen and Gabbot, 2006). The five dimensions are known as the RATER dimensions. The acronym is made up of the first letters in the names of the dimensions. They are:

1. Reliability. Ability to perform the promised service dependably and accurately.
2. Assurance. Employees' knowledge and courtesy and their ability to inspire trust and confidence.
3. Tangibles. Appearance of physical facilities, equipment, personnel and written materials.
4. Empathy. Caring, individualized attention given to customers.

5. Responsiveness. Willingness to help customers and provide prompt service.

Behind each dimension there are three to six statements which are intended to assess each dimension. The number of statements differs according to the context and the subject matter each time.

It can be said that formal assessments of service quality can be traced back to the papers of, on the one hand, Olshavski and Miller (1972) and the other Oliver (1977) but both were greatly influenced by researches done by Carlsmith and Aronson (see Kasper, 2006;183). Many other approaches to assessing service quality have been introduced. Some have been especially adapted to the study of service quality in universities (see for example Christensen, 2004; Harvey, 2001; Sevier, 1996; Wright and O'Neill, 2003) and University of Iceland in particular (see for example Gudlaugsson, 2005; Þórhallur Guðlaugsson, 2005; Gudlaugsson, 2006; Gudlaugsson, 2007a: Gudlaugsson 2007b; Gudlaugsson, 2008; Þórhallur Guðlaugsson, 2010a; Þórhallur Guðlaugsson, 2010b; Þórhallur Guðlaugsson, 2011).

3. PRIORITIZING SERVICE QUALITY IMPROVEMENT INITIATIVES

In the first part of this section the methodology used will be discussed. In the second part the results of the research will be presented.

3.1 Methodology

The research is based on a survey done among students at the University of Iceland in February and March 2011. In total 1.683 students participated. An adapted version of SERVQUAL was used. Sixteen statements were used to assess service quality, six to assess image, one to assess overall satisfaction and two to assess loyalty (attitudinal and behavioral). This paper only deals with the sixteen statements used to assess service quality. They are:

1. The university has a strong student social life
2. In my studies I get the opportunity to do research
3. In my studies I get the opportunity to do practical projects for organizations
4. The department has equipment which meets modern demands
5. Physical facilities fulfill my needs well
6. The employees´ (professors and others) conduct testifies to their professionalism
7. Materials associated with the department's service, such as pamphlets, study materials and website are visually appealing
8. If a professor has promised to do something by a certain time, he does so.
9. The department's service is efficient
10. I trust the department's employees
11. The department's employees are always courteous with me
12. The department's professors have the knowledge to answer my questions on the subject matter
13. I feel that the department's professors are willing to give me personal service
14. The department's employees have the knowledge to answer my questions on rules, registration etc.
15. The department's employees are friendly
16. Study materials are available when I need them

The participants are asked to indicate their agreement with the sixteen statements on service quality. A Likert scale where 1 = strongly disagree and 5 = strongly agree was used. Cronbach's Alpha is 0,845. Participants are also asked to indicate how important these service attributes are on a five point scale where 1= not very important and 5 = very important. Cronhach's Alpha for the sixteen importance statements is 0,769. In fact there are therefore 32 statements which are used in method one – the gap analysis. The question on overall satisfaction along with the sixteen statements on service quality are used in method 2, correlation with overall satisfaction, and method 3, regression analysis.

When data gathering was finished the data was imported into SPSS for further analysis. As stated earlier three common methods of prioritizing service improvement initiatives are used. The first method is based on gap analysis where performance scores for individual service attributes and their corresponding importance scores are shown in a spider's web. The second method is based on correlation calculations where performance scores for individual service attributes and their corresponding correlation coefficients related to overall satisfaction are shown in an importance/performance matrix and the third method is based on regression analysis where performance scores for individual service attributes and their corresponding beta coefficients are shown in an importance/performance matrix.

3.2 Results

In figure 1 the results for the gap analysis are shown. Performance is represented by the dotted blue line and importance by the solid red line. The upper and lower bounds are used as reference lines. Performance above the upper bound (4.12) is a strength at the same time as performance below the lower bound (3.64) is a weakness. It is assumed here that if both the performance and the importance scores for a service attribute is above the upper bound the service attribute is a strength but if the importance score is above the upper bound and the performance score below the lower bound then the service attribute is a weakness and should be given priority status as a service quality improvement initiative (see Þórhallur Guðlaugsson, 2010a). The results can be seen in figure 1.

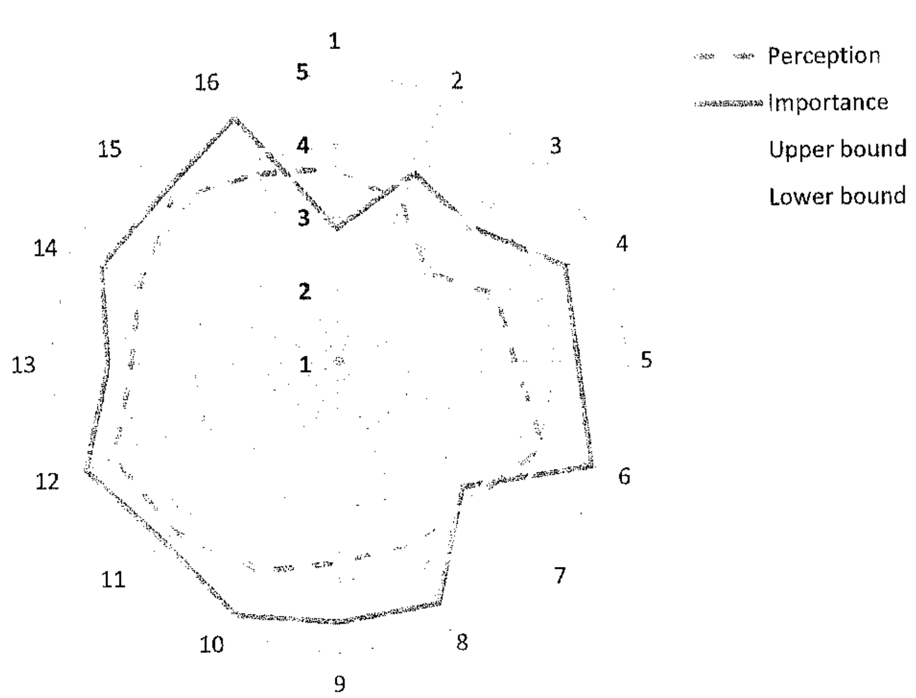

FIGURE 1: PERFORMANCE AND IMPORTANCE SCORES

As can be seen in figure 1 there are only two service attributes that can be classified as weaknesses according to the aforementioned criteria. They are (4) "*the department has equipment which meets modern demands*„ and (5) "*physical facilities fulfill my needs well*"". In addition it can be said that the service attribute (8) "*if a professor has promised to do something by a certain time, he does is*" and the service attribute (9) "*the department's service is efficient*" are borderline cases and close to being classified as weaknesses. Three service attributes can be classified as strengths. They are (11) "*the department's employees are always courteous with me*" and (12) "*the department's professors have the knowledge to answer my questions on the subject matter*" and (15) „*the department's employees are friendly*". In addition it can be said that in two cases there is a possible overkill (the performance score is higher than the importance score). This applies to (1) "*the university has a strong student social life*" and (7) *„materials associated with the department's service, such as pamphlets, study materials and website are visually appealing*".

Method number two revolves around using correlation coefficients related to overall satisfaction. It is assumed that there is a relationship between service attributes and overall satisfaction and that overall satisfaction is dependent on the level of performance of the service attributes. It is common for consulting companies, such as Capacent in Iceland, to use this method when prioritizing service quality improvement initiatives. The results for this method can be seen in figure 2.

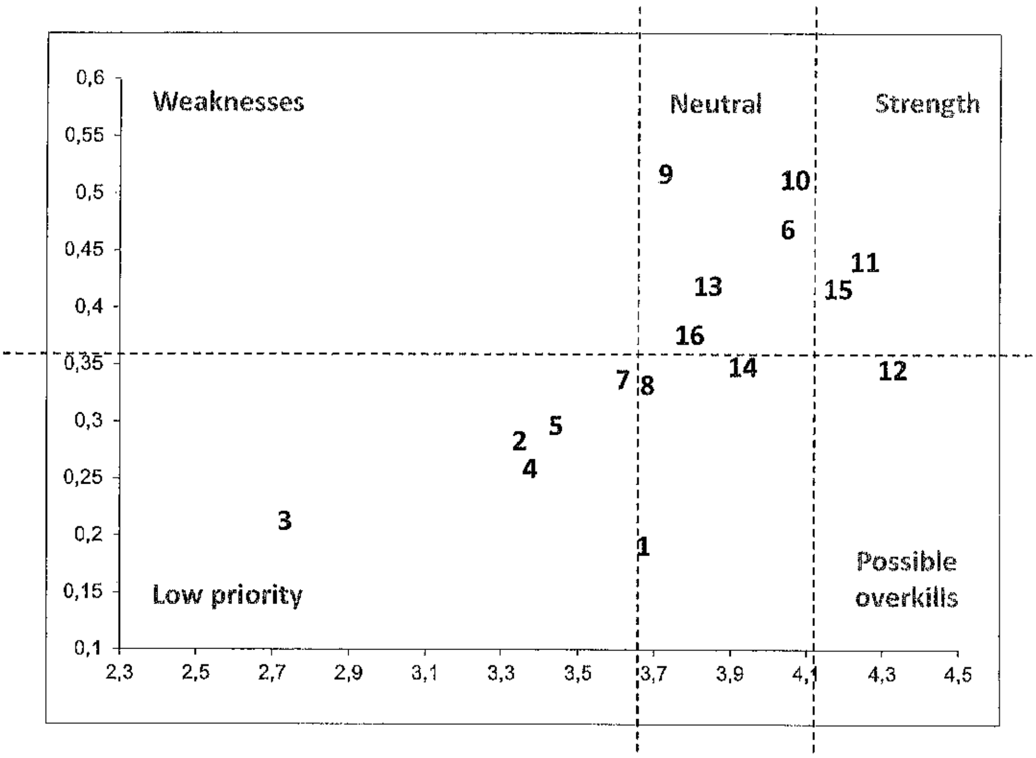

FIGURE 2: PERFORMANCE AND CORRELATION COEFFICIENTS

In figure 2 three grid lines are shown. One is horizontal and two are vertical. The vertical lines represent the upper and lower bounds of performance as before. Performance below the lower bound is considered negative at the same time performance above the upper bound is positive. The horizontal dotted line represents the medium value of the correlation coefficients which is calculated by using the formula ((H-L)/2)+L where H is the highest correlation coefficient related to overall satisfaction and L is the lowest correlation coefficient related to overall satisfaction. In this case H equals r = 0.522 and L equals r = 0.19. The medium value therefore becomes 0.356.

It varies where grid lines are placed. Here a conservative approach is used to avoid exaggerating weaknesses and strengths. The importance/performance matrix is split into five regions based on the position of the grid lines. The service attributes that end up in the NA region are strengths, the NW region weaknesses, the SW region of low priority and the SA region possible overkills. Between the regions of strengths and weaknesses there is a neutral region. It is a judgment call each time whether service attributes which end up there belong there, i.e. are of low priority or belong to one of the other regions.

The service attribute that can be classified as a weakness according to the above mentioned criteria is (9) "*the department's service is efficient*". It is classified as a weakness even though the service attribute ends up in the neutral region but close to the lower bound (3.64). Since the correlation coefficient for this attribute is very high, or 0.522, the performance is not considered to be good enough (m=3.73) for such an important service attribute. Some service attributes are classified as strengths (good performance/important attribute). Those are (6) "*the employees´ (professors and others) conduct testifies to their professionalism*", (10) "*I trust the department's employees*", (11) "*the department's employees are always courteous with me*", (12) "*the department's professors have the knowledge to answer my questions on the subject matter*", and (15) "*the department's employees are friendly.* Service attributes that have a low priority are (5) "*physical facilities fulfill my needs well*", (7) "*materials associated with the department's service, such as pamphlets, study materials and website are visually appealing*" and (16) „*study materials are available when I need the*". One service attribute (1) "*the university has a strong student social life*" is a possible overkill.

Method three is based on regression analysis where overall satisfaction is the dependent variable and it is assumed that its level can be predicted based on the performance of the service attributes. In this case 11 service attributes out of 16 accounted for 43% of the variability in overall satisfaction. The results for this method can be seen in figure 3.

FIGURE 3: PERFORMANCE AND BETA COEFFICIENTS

The results are presented in a similar way as when method two is used. They can be seen in figure 2. The vertical grid lines are the same as before. A horizontal grid line is also put in place just like in method two. The medium value is calculated based on the relative importance of the variables in the regression equation where beta coefficients are used. The medium value's only purpose is to be of guidance as to the importance but not to classify the service attributes as in method two. It is understood that the beta coefficients are significant and that therefore all the service attributes have a role in explaining and predicting overall satisfaction. A weakness is greater the higher the beta coefficient (relative) and the lower the level of performance. Correspondingly, a strength is greater the higher the beta coefficient (relative) and the higher the level of performance.

The service attributes that can be classified as weaknesses according to the above mentioned criteria are (5) "*physical facilities fulfill my needs wel*" and (9) "*the department's service is efficient*". Two service attributes are strengths (10) "*I trust the department's employees*" and (15) "*the department's employees are friendly*". Finally there are three service attributes which have low priority (2) "*in my studies I get the opportunity to do research*", (3) "*in my studies I get the opportunity to do practical projects for organizations"* and (7) "*materials associated with the department's service, such as pamphlets, study materials and website are visually appealing*".

4. DISCUSSION

The basic purpose of service quality measurements is to obtain information with the aim of improving performance. Therefore it is important to know where the organization is doing a good job (strengths) and where it is not (weaknesses). As a rule organizations, in both the private and the public sectors, have limited resources. Therefore it is very important to prioritize service quality improvement initiatives. It is logical to launch improvement initiatives where they are expected to yield the best results. Three common methods of prioritizing service quality improvement initiatives have been discussed in this paper. The comparison of the results of the three methods can be seen in table 1. There is a certain congruency between the methods'results even though they are to some extent different. Where these three methods are used together it is assumed that if a service attribute is classified the same way in two of them then that is a reason to give it attention.

TABLE 1: A COMPARISON OF THE FINDINGS OF THE DIFFERENT METHODS OF PRIORITIZING SERVICE QUALITY IMPROVEMENT INITIATIVES

	Weaknesess	Low priority	Strength	Possible overkill
Gaps analysis	4, 5	8, 9, 16	10, 11, 12, 15	1, 7
Correlation analysis	9	5, 7, 16	6, 10, 11 12, 15	1
Regression analysis	5, 9	2, 3, 7	10, 15	

When looking at the service attributes that are classified as strengths it can be seen that there is a good match between the different methods. The service attributes (10) "*I trust the department's employees*" and (15) "*the department's employees are friendly*" are common to all the methods. Therefore it can be inferred that these service attributes are important and that the organization is doing a good job where they are concerned. The service attributes (11) "*the department's employees are always courteous with me*" and (12) "*the department's professors have the knowledge to answer my questions on the subject matter*" were common to two of the methods and therefore it can also be inferred that these service attributes are important and that the organization is doing a good job where they are concerned. The organization's strengths among the service attributes that were measured therefore lies in service attributes 10, 11, 12 and 15. The good work should be kept up.

Two service attributes that are classified as weaknesses (5) "*physical facilities fulfill my needs well*" and (9) "*the department's service is efficient*" are common to two of the three methods. These are therefore the two service attributes that should be prime candidates for service quality improvement efforts. It is very important to gain a better understanding of what it is about the physical facilities that the students are not happy with and what it means when the students do not agree that the department's service is not efficient. Next in line are service attributes that are common to at least two of the methods and are of low priority. They are (7) "*materials associated with the department's service, such as pamphlets, study materials and website are visually appealing*" and (16) "*study materials are available when I need them*".

When utilizing the authors´ research findings it is important to realize that the participants are all students at the University of Iceland. It also needs to be kept in mind that the results differ depending on the department the students are enrolled in and whether they are undergraduates or graduates (see for example Gudlaugsson, 2008; Þórhallur Guðlaugsson, 2010a).

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