The relationship between quality, image, and performance

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Abstract

In the market orientation (MO) literature, it is widely accepted that there is a relationship between MO and organizational performance. Kohli and Jaworski (1990) define MO as a type of behavior, while Narver and Slater (1990) define the same concept as a business culture. In both cases, the authors assume a direct relationship between MO and performance, while others, such as Baker and Zinkula (1999) and Kirca, Jayachadran, and Bearden (2005), indicate an indirect relationship between MO and performance through innovativeness. This paper is based on the CQL model (Gudlaugsson and Eysteinsson, 2011). In the model, it is assumed that there is a direct relationship between culture (C) and service quality (Q) but an indirect relationship between service quality and loyalty (L) through image of product and organization and overall satisfaction.

In this paper, the focus is on the Icelandic airline industry. The questionnaire used had 28 questions, of which 12 measured service quality, three the image of the organization, three the image of service, one the overall satisfaction, and two loyalty, which is the dependent variable. The results are based on 264 valid answers, and regression analysis used for testing the hypothesized model.

The findings showed a result slightly different from that predicted by the CQL model. Factor analysis showed only three factors with acceptable loadings, quality, image, and performance as the dependent variable. The relations between independent and dependent variables were acceptable (> 0.3), and the covariance between the independent variables was also acceptable (< 0.7). R-squared was 0.61, where quality ($B = 0.52$) had a considerably higher impact on performance than image ($B = 0.34$)

Keywords: Brand image, Service quality, Organizational performance

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1. Introduction and literature review

The current perspective on market orientation (MO) can be traced to studies published between 1990 and 1995 (Narver and Slater, 1990; Kohli and Jaworski, 1990; Deshpandé, Farley and Webster, 1993). The relationship between MO and performance is a cornerstone of the MO literature (Narver and Slater, 1990; Kohli and Jaworski, 1990; Ruckert, 1992; Rose and Shoham, 2005; Xenikou and Simosi, 2006, Martín-Consuegra and Esteban, 2007; Skerlavaj, Skrinjar and Dimovski, 2007). Even though scholars writing during this period were simultaneously focusing on the implementation of MO and the value of service orientation (SO) in various industries (Varey, 1993; DiDomenico and Bonnici, 1996; Reavill, 1998; Canic and McCarthy, 2000), very few studies have considered the relationship between MO and service quality. Certain noteworthy studies, however, are worth mentioning, such as those of Voon (2006), Helgesen and Nesset (2007), Lytle, Hom, and Mokwa (1998), Teng and Barrows (2009), and Homburg, Hoyer, and Fassnacht (2002).

Kohli and Jaworski (1990) argued that though the marketing concept is a cornerstone of the marketing discipline, very little attention had been devoted to its implementation. It is argued that the marketing concept is primarily a business philosophy, an ideal, or a policy statement. The authors also note that a business philosophy can be contrasted with its implementation, which may be reflected in the activities and behaviors of an organization. The growing interest of both academics and practitioners in the marketing concept and its implementation has therefore led authors to attempt to provide a foundation for a systematic development of the concept of MO, which, according to Kohli and Jaworski, is the implementation of the marketing concept. The purpose of these authors' 1990 paper was to delineate the domain of the MO construct, provide an operational definition, develop a propositional inventory, and construct a comprehensive framework for directing future research. Kohli and Jaworski analyzed various texts that had been publishes over the preceding 35 years in the field of marketing literature and in related disciplines and conducted 62 field interviews with managers in diverse functions and organizations. The model they proposed emphasizes the collection of marketing data, the dissemination of this data across functions within organizations, and taking actions based on this intelligence. The authors' definition of MO was as follows:

> *Market orientation is the organization-wide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organization-wide responsiveness to it.*

MO is therefore the implementation of the market concept, and a firm with a high degree of MO is one whose action are consistent with that concept. Market intelligence is the starting point, organizational learning plays a major role, and the dissemination and communication of this learning are crucial.

Subsequently, Jaworski and Kohli (1993) published a paper in which they addressed three questions: (1) Why are some organization more market-oriented than others? (2) What effect does an MO have on employees and business performance? (3) Does the linkage between an MO and business performance depend on the environmental context? Their findings, which were based on two national samples, suggest that an MO is related to top management's emphasis on such an orientation, the risk aversion of top managers, interdepartmental conflict and connectedness, centralization, and reward system orientation. Kohli, Jaworski, and Kumar (1993) subsequently developed the MARKOR scale, a well-known measure of MO. This scale consists 20-item scale with a factor structure that consists of one general MO factor, one factor for intelligence generation, one factor for dissemination and responsiveness, one marketing informant factor, and one non-marketing informant factor. The authors suggested that there was a direct link between MO and performance.

Narver and Slater (1990) also published a paper in 1990, several months after their colleagues Kohli and Jaworski, focusing on the relationship between MO and performance. The focus was on developing a valid measure of MO and its effect on a business' profitability, the so-called MKTOR scale. The authors used a sample of 140 business units consisting of both commodity-products businesses and non-commodity businesses. The goal was to shed light on the components that comprise an MO and propose a useable definition of the concept. Narver and Slater viewed MO as an organization culture, as did Desphandé and Webster (1987). However, they took the definition further and argued that market-oriented firms focus not only on customers but equally on competitors. They put an emphasis on inter-functional coordination that is intended to create unity between all functions in an organization and become part of the organizational culture. Narver and Slater definition of MO was as follows:

> *Market orientation consists of three behavioral components – customer orientation, competitor orientation, and inter-functional coordination – and two decision criteria – long-term focus and profitability.*

In the authors' definition, customer orientation, competitor orientation, and inter-functional coordination are all equally important behavioral dimensions of MO, but all of these dimensions have been found to have strong relationships with organizational performance (see Grey, Matea, Boshoff and Matheson, 1998; Day and Wensley, 1988; Levitt, 1960; Shapiro, 1988). The authors add two decision criteria, long-term focus and profitability, to their model, as these dimensions have been found to have a relationship with organizational performance (Felton, 1959; Boyd, Walker and Larreche, 1995; Barabba and Zaltman, 1991). They found that there was a substantial positive effect of an MO on the profitability of both types of businesses.

The views of Kohli and Jaworski on the one hand and Narver and Slater on the other hand with regard to MO are quite similar. Both view MO as a concept that leads to a greater competitive advantage; in addition, both agree that business intelligence concerning both customers and competitors is crucial, that all managers and staff members must participate in creating and maintaining MO, and that MO is a construct consisting of three equally important components, namely customer orientation, competitor orientation, and inter-functional coordination. However, there are important distinctions between these two views: Kohli and Jaworski place more emphasis on customers than Narver and Slater do. As discussed previously, Kohli and Jaworski view MO as involving the implementation of the market concept . Narver and Slater emphasize the human role and describe MO as a corporate culture that leads to certain customer-/competitor-oriented behavior throughout an organization, which in turn creates a specific atmosphere that leads to superior performance. Both Kohli and Jaworski and Narver and Slater indicate for a direct relationship between MO, while others, such as Baker and Zinkula (1999), Denison, Haaland, and Coelzeer (2004), and Krica, Jayachadran, and Bearden (2005), indicate an indirect relationship between MO and performance, mainly through innovativeness.

Voon (2006) emphasizes the importance of service-driven MO (SERVMO) and its relationship with service quality. The aim of Voon's research was to define this type of MO and to explore its connection to service quality. The author administered a questionnaire to 588 university students in Malaysia to further investigate the relationship between SERVMO and service quality. Voon notes that a key reason for difficulties in improving service quality and developing a service culture in higher education is a lack of MO in higher education another potential reason is a misunderstanding of the marketing concept. Voon also identifies the importance of service quality for universities, for example in achieving competitive advantage and meeting government demands for cost-effectiveness and efficiency, as well as in meeting the public's growing expectations with regard to higher education and the role of higher education in building a stronger community. Voon divides SERVMO into six separate components: the customer orientation, the competitor orientation, the interfunctional orientation, the performance orientation, the long-term orientation, and the employee orientation. Voon's SERVMO model is depicted in Figure 1.
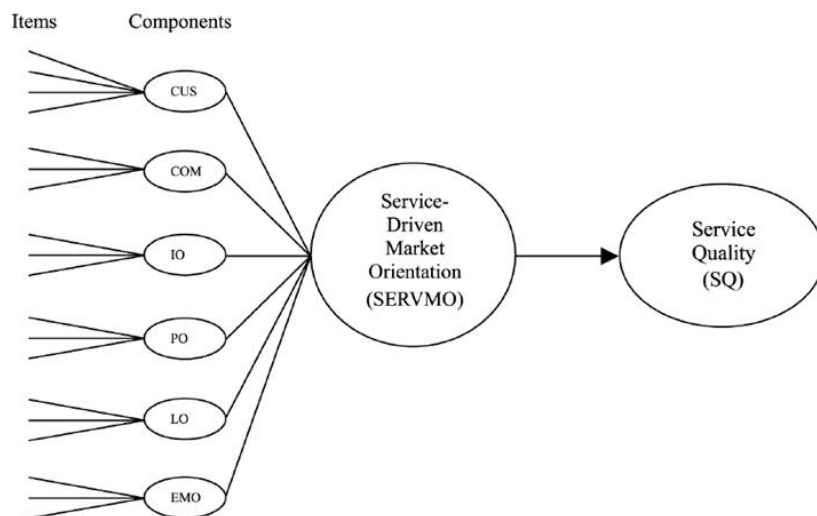

Figure 1: The SERVMO model. Reference: Voon, 2006

Voon's findings indicated a strong correlation between SERVMO and service quality. The SERVQUAL instrument was used to assess service quality, but only the section on perceptions, and therefore the instrument was more similar to SERVPERF than SERVQUAL. A high score on SERVMO is thus positively related to a high score on SERVQUAL, and it may therefore be desirable for universities to focus on developing the areas represented by the SERVMO orientations. These results support previous findings indicating that non-profit organizations adopt an MO in an effort to improve performance.

Helgesen and Nesset (2007) explored the relationship between service quality, facilities, student satisfaction, image of the university, and image of the study program, with student loyalty to their study program. Student loyalty was used as the dependent variable and considered as being crucial to a university's success. Helgesen and Nesset emphasize that although this particular study considered the students as customers, they are not the only group of customers, as employers, families, and members of community could also be defined as customers. The study used three questions to measure loyalty: what was the likelihood that a student would recommend studies at his or her university, what was the likelihood that a student would select the same program of study were s/he starting now, and what was the likelihood that a student would select his or her university for further studies in the future? Loyalty was thus defined as an important variable when it comes to success, and it is therefore important to identify the factors that contribute to earning students' loyalty. Helgesen and Nesset's model can be seen in Figure 2.
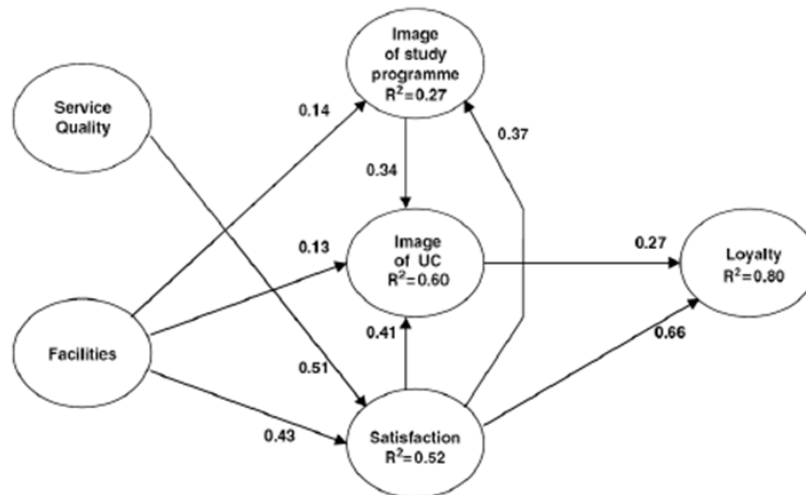

Figure 2: SFISL theoretical structural model. Reference: Helgesen and Nesset, 2007

The survey was administered at a Norwegian university, and responses were obtained from 454 students or 35% of the total number of students. The survey featured 25 questions on a 7-point Likert scale where 1 represented the lowest value ("very dissatisfied") and 7 represented the highest value ("very satisfied"). Seven of the questions were used to assess facilities, five were used to assess the service quality of studies, four were used to assess overall student satisfaction, two were used to assess the image of the university college, three were used to assess the image of the study program, and, as mentioned previously, three were used to assess loyalty. Analysis of the data was based on structural equation modeling and showed that the coefficient of determination (R^2) for loyalty was 0.8, which was considered very high and indicative of the strength of the model. Student satisfaction was found to have the strongest level of association with loyalty; thus, Helgesen and Nesset deduced that loyalty was driven by satisfaction at this particular university college. The authors note, however, that, at other universities, loyalty may be explained with reference to image rather than student satisfaction. The coefficient of determination (R^2) for student satisfaction was 0.52, and the variables that were associated with it were service quality and facilities.

The research in this paper is based on the CQL model developed by Gudlaugsson (see Gudlaugsson and Eysteinsson, 2011). The model was developed to measure the relationship between service quality, image of services, image of organization, customer satisfaction, and loyalty. The model assumes that there is a direct relationship between service quality on the one hand and image of services, image of organization, and customer

satisfaction on the other hand and that the relationship between service quality and loyalty is indirect through those three components. The CQL model is presented in Figure 3.
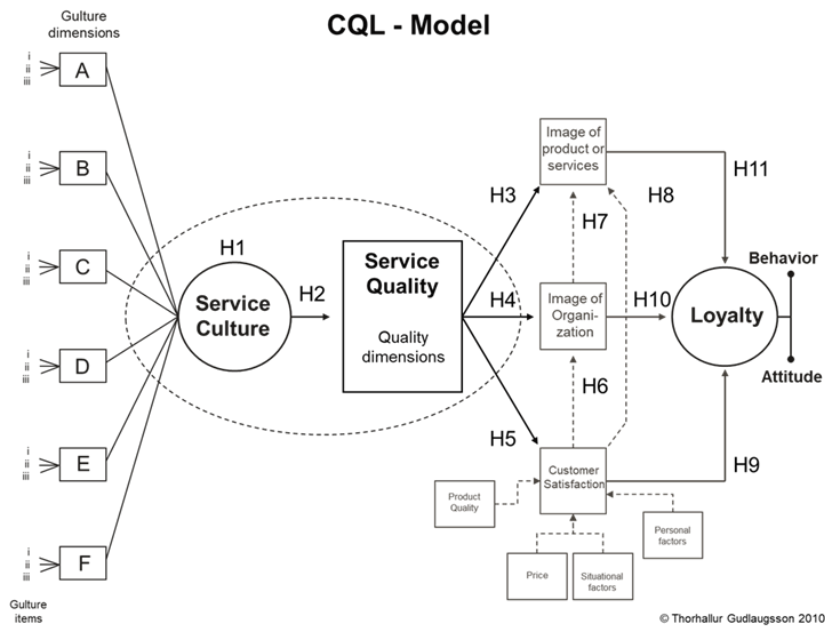

Figure 3: The CQL model. Reference: Gudlaugsson and Eysteinsson, 2011

The model is based on viewing MO as a culture, as is assumed in Narver and Slater's (1990) definition, but also behavior, as assumed by Kohli and Jaworski (1990) and also in Voon's (2006) definition of SERVMO. It is assumed that a certain culture is likely to enhance service quality, but no claims are made as to what type of influence an increase in service quality might have on the operation of the organization. Helgesen and Nesset (2007), however, do so, as they used structural equation modeling to show that service quality directly affects image and overall satisfaction, which in turn affects loyalty. They do not, however, indicate which aspects affect service quality. Therefore, the research model combines these two models and provides a definition of service culture. The working definition of service culture is as follows:

> *Employee attitudes, expectations and behaviors, as well as the organizational values,*
> *which directly or indirectly affect the customers' satisfaction with the service.*

The model was developed with a focus on the relationship between service focus and performance in higher education. Findings showed a strong relationship between service quality and customer satisfaction ($r = 0.64$), customer satisfaction and loyalty ($r = 0.51$), and service quality and image of organization ($r = 0.44$). The findings also showed a strong relationship between service quality and loyalty ($r = 0.5$), which indicates that the relationship between service quality and performance (measured as loyalty) may be direct instead of indirect, as is assumed in the CQL model (Gudlaugsson and Eysteinsson, 2011). The focus of present study is on testing the model for the profit market, more specifically among airlines that fly between Iceland and other countries.

2. Methodology and data analysis

This chapter provides an overview of how the research was planned, how the data were processed and what sample of people participated in the study.

2.1 Research design

The findings are based on a survey conducted in May, 2017, among travelers who fly between Iceland and other countries. There were 264 valid responses, and data were weighted by gender and age so as to better represent the airlines' customers. The instrument used was based on a questionnaire that featured 32 questions in total. The first question was open-ended and focused on determining which airlines first came to the respondents' minds. The

next three questions inquired as to how many trips the respondents had taken in the last 12 months, with which airline their last trip was flown, and how long it had been since that trip. These questions was followed by 14 questions concerning service quality based on SERVQUAL, one question measuring overall satisfaction, and six questions measuring the image of the airline the respondent had used. There was two questions intended to measure loyalty and, finally, four concerning background information, such as gender, age, education and income.

2.2 Sample

The population of interest consists of the airlines' customers. However, a convenience sample was used, which in most cases resulted in a higher proportion of female respondents. In addition, since the survey was web-based, it was also likely to feature a higher proportion of younger respondents. The structure of the sample is presented in Table 1.

Table 1: The respondents' backgrounds

Gender	
Male	18.3%
Female	81.7%
Age	
21 years or younger	17.0%
22 to 27 years old	43.9%
28 to 32 years old	12.9%
33 to 42 years old	14.8%
43 to 42 years old	8.7%
53 years old or older	2.7%
Education	
A-levels or lower	68.0%
University degree	32.0%

As can be seen in Table 1, the sample is skewed compared to the population, where the proportion of females is 49.2% instead of 81.7% and those younger than 27 years old are only 20% (as opposed to 60% in the sample). Therefore, all data were weighted by age and gender to better reflect the population.

3 Results

This section describes the results. First, the average scores for quality, image, customer satisfaction, and loyalty are presented. Thereafter, the findings of the factor analysis (principal components) are discussed, and, finally, the regression model is represented.

In Table 2, the average scores for quality, image, customer satisfaction, and loyalty are presented. All variables are measured on a five-point scale where 1 is the lowest score and 5 is the highest score. In Table 2, it can be seen that, relatively speaking, the scores are highest where the variable images have the lowest score and loyalty the highest score.

Table 2: The average scores for quality, image, customer satisfaction, and loyalty

	Average score (scale 1-5)
Quality	3.95
Image	3.88
Customer Satisfaction	4.08
Loyalty	4.16

Based on the CQL model, the score for loyalty measures performance and is therefore the dependent variable. Quality, image, and customer satisfaction are therefore the independent variables. The hypothesized model is presented in Figure 4.
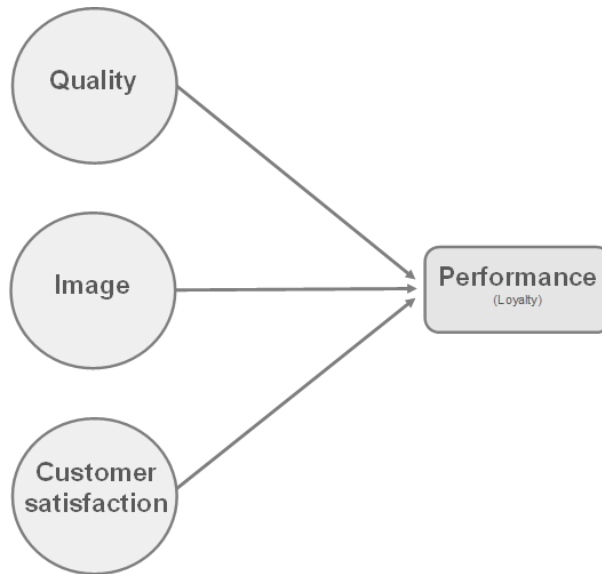
Figure 4: The hypothesized model

The questions in the survey were subjected to a principal component analysis (PCA) conducting using SPSS. Prior to the PCA, the data's suitability for factor analysis was assessed. Inspection of the correlation matrix revealed the presence of many coefficient values of 0.3 or higher. The Kaiser-Meyer-Olin value exceeded the recommended value of 0.6 (Kaiser, 1970, 1974), and Bartlett's (1954) test of sphericity reached statistical significance, supporting the factorability of the correlation matrix. The PCA revealed the presence of three components with eigenvalues exceeding 1, namely quality, image, and performance (customer satisfaction and loyalty). The three-component model is presented in Figure 5.
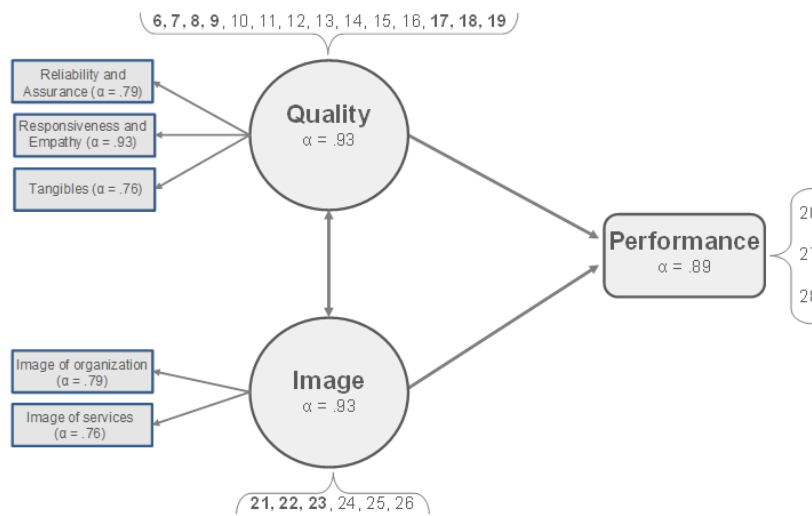

Figure 5: The three-component model

As can be seen in Figure 5, the model has only three components instead of the four in the hypothesized model, as the variables customer satisfaction and loyalty are merged into one component.

A multiple regression was used to test the model. The correlation between the independent variables and the dependent variables was lower than 0.3, and the correlation between the independent variables was lower than 0.7. The tolerance exceed 0.1, the VIF was lower than 10, the Mahal statistic was sufficient, and Cook's statistic was lower than 1. The findings are presented in Figure 6.
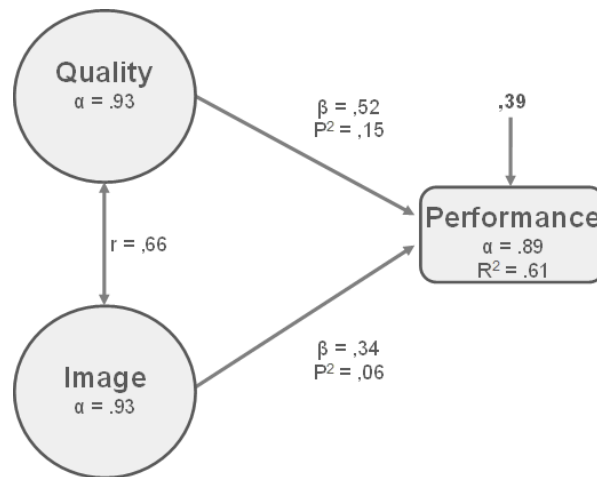
Figure 6: The regression model

As can be seen in Figure 6, the model explained (R^2) 61% of the variability in performance, of which quality uniquely explains 15% ($P^2 = 0.15$) of the variance in performance and image accounts for 6% ($P^2 = 0.06$). Based on these findings, it is concluded that, for performance based on loyalty and customer satisfaction, quality is more important than image.

4 Conclusions and discussion

In this research, the focus is on the relationship between quality, image, customer satisfaction, and organizational performance. Findings are based on the CQL model, where MO is defined as both culture and behavior. The model also considers quality and image as important components of organization performance. The population of interest consists of airline customers. both from Iceland and abroad. The hypothesized model considers four components, namely quality, image, customer satisfaction, and loyalty. Loyalty is considered the dependent variable and therefore measures an organization's performance, but the other three are considered to be independent variables.

Factor analysis (PCA) suggested the presence of three components; quality ($\alpha = 0.93$), image ($\alpha = 0.93$), and performance ($\alpha = 0.89$), instead of the four components assumed in the hypothesized model. The regression model explains 61% of the variability in performance, where quality seems to be of higher importance than image, but quality uniquely explains 15% of the variance in performance, whereas image only explains 6% of the variance. This is, of course, only one survey in one industry, and therefore it would be important to conduct more research in this field before it can be stated that, in general, quality has higher importance than image when it comes to organizations' performance. Further investigation in other industries is therefore necessary.

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