

The impact of culture and strategic orientation on service innovation capability: Evidence from banking industry

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ABSTRACT

This paper presents a study to measure the effects of culture and strategic orientation on service innovation capabilities on selected banks in province of Alborz, Iran. The survey uses a questionnaire consists of 40 questions where 5 questions are associated with service innovation, 11 questions are related to strategic orientation and 24 questions measures organizational culture. Cronbach alpha for service innovation capabilities, strategic orientation and organizational culture were 0.73, 0.84 and 0.91, respectively. Using structural equation modeling as well as regression technique, the study has determined that organizational culture influences positively on structural orientation ($\beta = 0.6$, t-value = 13.56), organizational culture influences positively on service innovation capability ($\beta = 0.43$, t-value = 8.73) and finally structural orientation influences positively on service innovation capability ($\beta = 0.35$, t-value = 7.22).

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1. Introduction

Nowadays, there is a tight competition among many service organizations such as insurances, banks, etc. Most service organizations attempt to increase their competitive advantages through empowering their employee capabilities (Cueille, 2006; Berry, 2006; Baker & Sinkula, 2007). Innovation, on the other hand, has been increasingly played significant role on organizational abilities (Alam, 2006, 2010; Carmeli, 2005). Organizations through globalization have faced technological development and the increasing speed of information dissemination has substantially influenced on their efficiencies. O'Regan and Ghobadian (2005) studied the role of strategic orientation and environmental perceptions on innovation among some small and medium enterprises (SMEs) and reported that the firms could be classified as either prospectors or defenders. According to Naranjo-Valencia et al. (2011), Innovation plays essential role for gaining a competitive advantage for most service organizations. Innovation, against imitation, motivates firms to offer new products and become pioneers on markets. There are several factors for supporting an organizational innovative orientation including organizational culture.

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Many organizations such as service organizations, nevertheless, are unable to stay atop their industries when facing innovation (Obendhain & Johnson, 2004). Oke (2007) studied different kinds of innovation predominant in some firms in the UK services sector, the degree of innovativeness, the practices related to the pursuit of innovation and their relationship with firm performance. In their survey, product innovations were focused more in telecommunications and financial sectors than in transport and retail sectors while service innovations were focused in retail and transport sectors. Ottenbacher and Harrington (2010) investigated whether managers could have a different method for the development of very innovative services from that of incremental new services. Singh Panesar and Markeset (2008) developed a framework for industrial service innovation management and coordination. Schraeder et al. (2005) offered two methods for enhancing organizational culture awareness and promote cultural change in public sector firms. They reported that “training and leading by example can serve as effective methodologies for promoting culture awareness and bringing about culture change in organizations”. Zhou (2006) compared the impacts of innovation and imitation strategies on new product performance and studied their contingency across various market conditions in China. They reported that an innovation strategy could lead to better new product performance. In addition, the advantages of an innovation strategy over an imitation strategy become stronger.

2. The proposed study

The study uses the questionnaire proposed by Grawe et al. (2009) to measure service innovation, which consists of 5 question. In addition, to measure strategic orientation, the study uses the survey developed by Miles et al. (1978), which consists of 11 questions. Finally, the study uses Quinn and Spreitzer’s (1991) survey, which consists of 24 questions to measure organizational culture. The proposed study of this paper consider the following three hypotheses,

1. Organizational culture (OC) influences positively on service innovation capabilities (SIC).
2. Organizational culture influences positively on structural orientation.
3. Structural orientation (SO) influences positively on service innovation capabilities.

Fig. 1 demonstrates the structure of the proposed study.

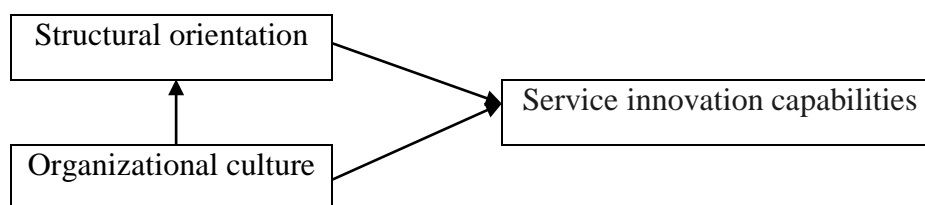


Fig. 1. The structure of the proposed study

The study is accomplished among employees who worked for different banks in province of Alborz, Iran during the year of 2015. The sample size is calculated as follows,

$$n = \frac{N \times z_{\alpha/2}^2 \times p \times q}{\varepsilon^2 \times (N - 1) + z_{\alpha/2}^2 \times p \times q}, \quad (1)$$

where N is the population size, $p = 1 - q$ represents the yes/no categories, $z_{\alpha/2}$ is CDF of normal distribution and finally ε is the error term. Since we have $p = 0.5$, $z_{\alpha/2} = 1.96$ and $N = 3875$, the number of sample size is calculated as $n = 341$. In our survey, 72.9% of the participants were male and 27.1% of them were female. Fig. 1 shows other personal characteristics of the participants.

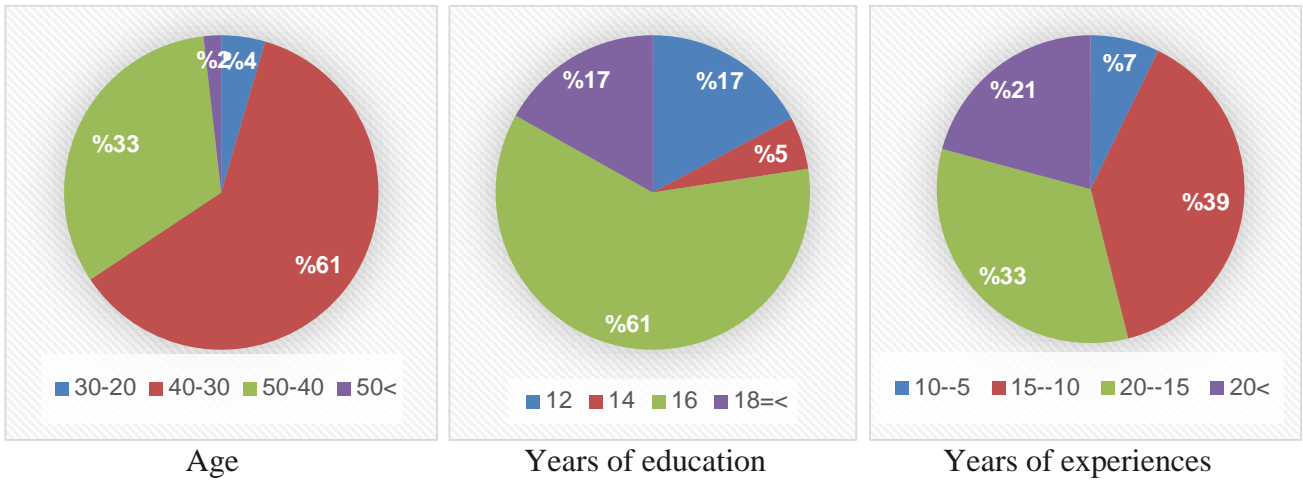
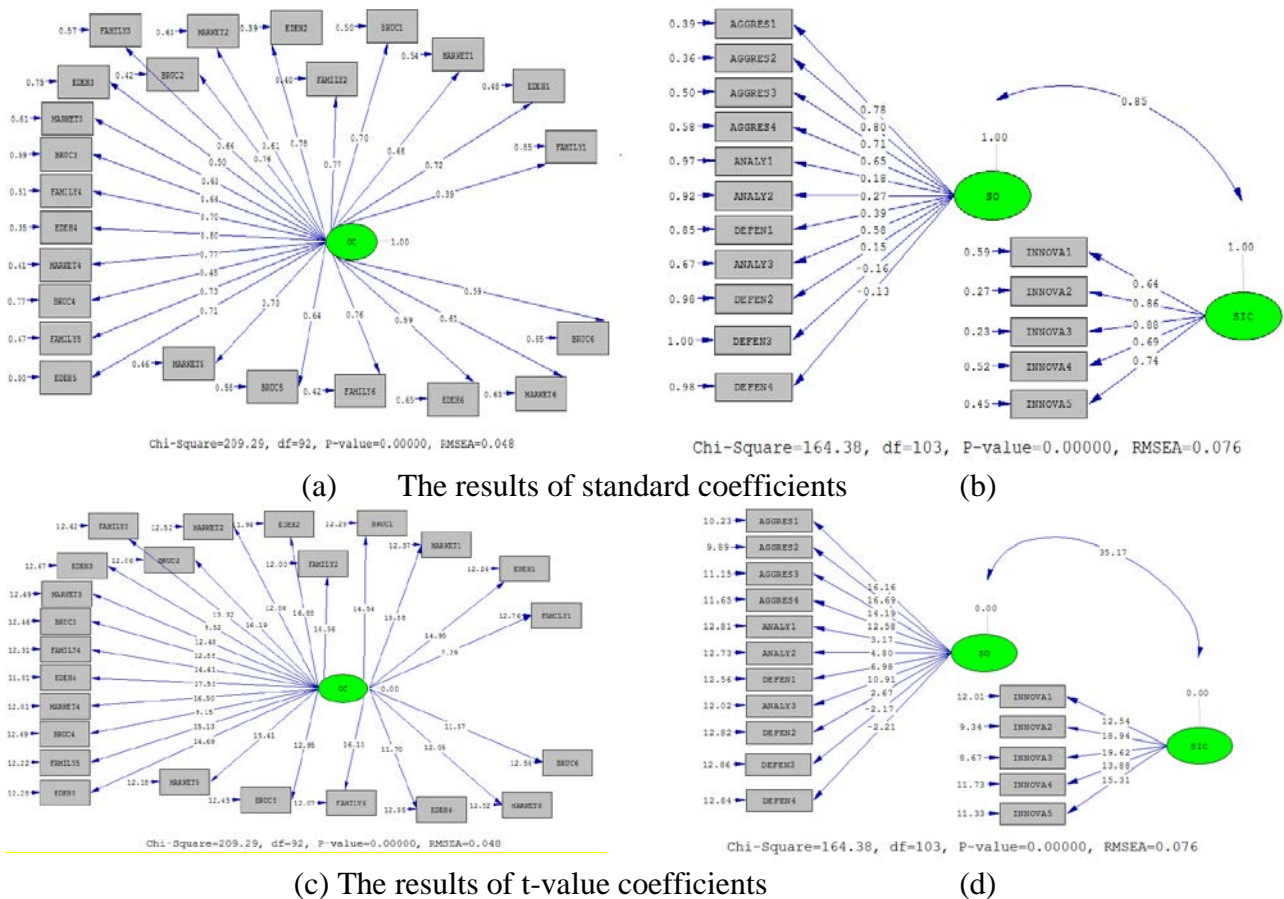


Fig. 2. Personal characteristics of the participants

As we can observe from the results of Fig. 2, most participants were middle aged people with good educational backgrounds and job experiences. The implementation of Kolmogorov-Smirnov for structural orientation, organizational culture and service information capabilities yields $Z=1.3$ Sig. = 0.09, $Z = 1.2$ Sig. = 0.10 and $Z = 1.1$ Sig. 0.11, respectively, which means all components of the survey were normally distributed when the level of significance is five percent. Fig. 3 shows details of the implementation of structural equation modeling.



Normed Fit Index (NFI) = 0.90 Non-Normed Fit Index (NNFI) = 0.89
 Comparative Fit Index (CFI) = 0.91 Incremental Fit Index (IFI) = 0.95
 Relative Fit Index (RFI) = 0.82 Goodness of Fit Index (GFI) = 0.94
 Adjusted Goodness of Fit Index (AGFI) = 0.93

Fig. 3. The results of structural equation modeling

As we can observe from the results of Fig. 3, all general statistical tests such as NFI, NNFI, CFI, IFI, RFI, GFI and AGFI are within the acceptable limits. This confirms the results of the implementation of structural equation modeling. In addition, all t-student values are meaningful when the level of significance is five percent. Therefore we may examine the hypotheses of the survey based on the results of SEM implementation. As we can observe from Fig. 3(a) and Fig. 3(b) there are positive and meaningful relationship between three components of the survey.

We have also implemented a regression technique between different components of the survey. Eq. (1) shows the results of regression estimation.

$$\begin{array}{l} \text{SIC} = 0.94 + 0.64 \text{ OC} \\ \text{t-value} \quad 5.795 \quad 15.129 \quad \text{F-value} = 228.881 \text{ (Sig.} = 0.000) \\ \text{Sig.} \quad \quad 0.000 \quad 0.000 \quad \text{Durbin-Watson} = 1.97 \end{array} \quad (1)$$

As we can observe from the results of regression analysis stated in Eq. (1), F-value is equal to 228.881 (Sig. = 0.000), which means there is a linear relationship between the independent variable and dependent variable. Durbin-Watson is equal to 1.97, which indicates that there was no autocorrelation among residuals. Moreover, both t-values are statistically significant, which means the coefficients are meaningful. Therefore, organizational culture (OC) influences positively on service innovation capabilities (SIC).

Next, we have used a regression technique between organizational culture (OC) and structural orientation (SO). Eq. (2) shows the results of regression estimation.

$$\begin{array}{l} \text{SO} = 1.70 + 0.59 \text{ OC} \\ \text{t-value} \quad 15.239 \quad 13.560 \quad \text{F-value} = 183.865 \text{ (Sig.} = 0.000) \\ \text{Sig.} \quad \quad 0.000 \quad 0.000 \quad \text{Durbin-Watson} = 2.280 \end{array} \quad (2)$$

As we can observe from the results of regression analysis stated in Eq. (2), F-value is equal to 183.865 (Sig. = 0.000), which means there is a linear relationship between the independent variable and dependent variable. Durbin-Watson is equal to 2.280, which indicates that there was no autocorrelation among residuals. Moreover, both t-values are statistically significant, which means the coefficients are meaningful. Therefore, organizational culture (OC) influences positively on structural orientation (SO).

Finally, we have implemented a regression technique between structural orientation (SO) and service innovation capabilities (SIC). Eq. (3) shows the results of regression estimation.

$$\begin{array}{l} \text{SO} = 0.40 + 0.61 \text{ SIC} \\ \text{t-value} \quad 1.867 \quad 13.992 \quad \text{F-value} = 195.770 \text{ (Sig.} = 0.000) \\ \text{Sig.} \quad \quad 0.063 \quad 0.000 \quad \text{Durbin-Watson} = 1.83 \end{array} \quad (3)$$

As we can observe from the results of regression analysis stated in Eq. (3), F-value is equal to 195.770 (Sig. = 0.000), which means there is a linear relationship between the independent variable and dependent variable. Durbin-Watson is equal to 1.83, which indicates that there was no autocorrelation among residuals. Moreover, both t-values are statistically significant, which means the coefficients are meaningful. Therefore, service innovation capabilities (SIC) influences positively on structural orientation (SO).

3. Discussion and conclusion

In this paper, we have presented an empirical investigation to measure the effects of culture and strategic orientation on service innovation capabilities on selected banks in province of Alborz, Iran. The study has designed a questionnaire in Likert scale consisted of 40 questions and distributed it among randomly selected people who were employed with some banks. The results have determined

that organizational culture has influenced positively on structural orientation, organizational culture impacted positively on service innovation capability and finally structural orientation had some positive effects on service innovation capability. The results of this survey are consistent with other findings in the literature (Grawe et al., 2009; Miles et al., 1978; Quinn and Spreitzer, 1991; Chapman et al., 2003). According to the results of our survey, banks must try to decentralize the structures of their firms to increase the market orientation culture. To strengthen market orientation culture in the banks, they also need to reduce regulations and minimize barriers to communicate easier. Because of the importance of innovation and initiative in the use of the opportunities and to overcome the challenges of competitors, managers must take more risk to increase their capabilities to meet the existing changes and diverse needs of their customers.

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