



Investigation of the effective role of human capital on marketing capability of mobile product

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Abstract: *In the current business world; knowledge, skill and internal sources play significant role in further successes of an organization which are like capital that its effect on the organization's performance and productivity can be observed. In addition to, the capabilities of an organization which has market-oriented approach and is in the field of finding markets and new customers for its products, relies on the experience and expertise of the organization and especially its human capitals. The purpose of the present research is investigation of the effective role of human capital from profession and experience aspect on mobile product marketing. This research is experimental in terms of objective, descriptive in terms of nature and survey based in terms of performing manner. Managers and staff of mobile selling agencies around Yazd constitute the statistical population of the research that the number of the calculated statistical population is 80 individuals making use of Cochran formula and Morgan table. For collecting data, a standard questionnaire with high reliability and validity is used and the method of sampling in this research is according to simple random sampling. Analysis of data and hypotheses testing are according to confirmatory factor analysis, structural equation modeling technique and using SPSS20 and PLS Smart2 applications. The results of the study demonstrate that the experience and expertise dimensions of human capital have positive and significant effect on marketing capability of the product.*

Keywords: *product's marketing capability- human capital- experience- expertise- mobile*

INTRODUCTION

Effective and powerful human capital in the companies possess particular importance to success in the current unstable market field. In so doing, for better synchronization with the competitive market, companies should consider compatibility with it. Familiarizing with customers' needs and providing suggestions based on them can provide a condition for more attraction of them. Practical studies regarding market selection have demonstrated that those who are on the verge of entering the market, are somehow heterogeneous and primary conditions and necessities have determinant role in their further successes (Baptista et al., 2013). Considering the perspective based on source regarding the company, those sources which are precious and rare can provide competitive advantages for a company (Barney, 1991; Peteraf, 1993; Wernerfelt, 1984). Human capital has been always considered a valuable source which has been particular and unique and can help the company in maintaining competitive advantage. The major formation of human capital of a company constitutes knowledge and skills which due to teaching, education and experience cumulates with staff which can be the key and important factor for the company's capabilities. In so doing, numerous experimental studies have examined the relationship between human capital level and performance of the company (Choudhary et al., 2014).

A successful company which is market oriented should make use of its capabilities effectively for attaining market intelligence, combine them and make use of favorable strategy reaction rapidly. Capability in an

organization can involve a kind of capability about a particular topic which can be used for a change and creation of a new knowledge and continuity in performance promotion. This capability is a set of connected competencies and decencies (in a usual and common manner) that refers to the issue that what the ability involves in terms of knowledge, skills and perspectives. It is expected that the marketing ability unionize, create and reconfigure the internal and external sources which involves tangible and intangible strategic approaches (Leen et al., 2013). Traditional viewpoint about business operation is from inner to outer part deducing that a company's activities start form inner sources and seeks to know what the market can do for itself (Day, 2011). When the power of the market is transferred to the customers and complexity, speediness, and unpredictability of its changes speeds, a company's inner to outer viewpoint prevents rapid compatibility with the changes of the market sphere. A company's inner to outer viewpoint causes that a company's activities start from the market and that what it can do for the market (Day, 2011; Haeckel, 1999). In this regard, based on the inner to outer perspective, a combination of three capabilities is determined; market evaluation, commitment to customer and connection with partners. Meanwhile, commitment to customer has high degree of importance and results in providing the most and the best services to the customers by the company that in this case it will conclude to better relationship between customer and company and its products (Mu et al, 2015). According to the presented explanations, this research seeks the answer to the question that do experience and expertise of human capital affect mobile product marketing capability.

1. Theoretical foundations and hypothesis making

Human capital refers to skills, abilities and individuals' knowledge (Becker, 1964). In general, it has been induced that human capital is an important source for creating competitive advantage for companies and states (Dakhli & De Clercq, 2004; Gimeno et al., 1997). Since human capital is beneficial for expanding new knowledge, its role on innovation has always been considered at the company level and has always supported company's abilities for attracting knowledge (Cohen & Levinthal, 1990). The knowledge can be provided within the company due to the performed research and development or it can be the result of skills and abilities of the staff (Zahra & George, 2002) that is referred to as human capital. Despite the role of research and development, the role of human capital also has always been considered particularly for innovation. Previous studies have demonstrated the positive effect of research and development for innovation in developed countries (Amara et al., 2008; Raymond & St-Pierre, 2010) and developing countries (Goedhuys, 2007; Shefer & Frenkel, 2005); but the role of human capital has been investigated less in a clear way and limited experimental studies have focused on the relationship between human capital and innovative achievements (Schneider et al., 2010). The relationship between human capital and more innovation at the national level has been studied (Dakhli & De Clercq, 2004) or it is been used as control variable at the level of company (Goedhuys & Veugelers, 2012). However, Echnneider et al. (2010) induce that a perspective at the level of company demands better understanding of the relationship between human capital and innovation. In fact, experimental results show that the staff who have been trained well, provide more innovative achievement for the company. Similarly, even in the developing countries, Mahemba & Bruijn (2013) also show that teaching has a determinant role in innovative performance of the staff in the company while Robson et al (2009) did not find the positive relationship between training and innovation in their study.

In spite of all that, most of the studies which make use of human capital, mostly focus on official education and years of education as a criterion for human capital (Marvel & Lumpkin, 2007). Staff's education refers to the level of education that company's staff possess that this issue in the company may accompany some advantages for it; given that learning and education increases ability in the field of understanding, creation and processing of data in a more rapid pace in comparison to the staff without education (Nelson & Phelps, 1966). Liu & Buck (2007) have examined the educational level in order to explain its effect on innovative achievements for which they attained similar findings. If a company seeks to introduce a new product or service, staff should acquire new skills by means of producing the new products; therefore, training staffs increases innovative successes in the company (Freel, 2005), especially in case with industries that have low or moderate amount of technology, it seems that training is vital for innovation (Santamaría et al., 2009). In spite of that, results concerning the role of official training is not definite. For instance; Caloghirou et al. (2004) in their studies did not find significant effects of training while Santamaría et al (2009) in a research which they performed in Shakur- Spain, found a revelatory and significant role of training. Goedhuys (2007) did not find any positive relationship between training and innovation of the product. In spite of all the

mentioned elements, it is expected that official training of the staff compensate their low level of education (Uden et al, 2014). According to the presented explanations, the hypothesis of the research is as the following: Hypothesis (1): Human capital's experience and expertise have positive and significant effect on marketing capability.

1-2. literature review

Hamidizadeh and Kheyrikhah (2012) examine the effect of marketing knowledge management capabilities on an organization's performance in Iran petrochemical industry. The statistical population of the research involves local and foreign commercial staff of the commercial petrochemical company. The results show that there is positive and significant relationship between the abilities of marketing knowledge management on overall performance of the organization (market performance, customer performance and financial performance); while, the local marketing abilities have the most effect on the customer performance. Nourollahi et al. (2013), in a research titled investigation of the effect of marketing capabilities on market operation due to high value innovation variable for customer in food industry of Toos-Mashhad industry suburb, examine the effect of marketing capabilities' effect on market operation due to high value innovation. The statistical population are the active companies in Toos-Mashhad industry suburb and the number of sample is 95 food industry companies which act in producing and offering of food products. The results of the research show that the direct effect of marketing capabilities on market operation is more than the indirect effect of marketing capabilities on market operation due to creating superior value for the customer. Nopasand Asil et al. (2016) in a research titled the effect of marketing capabilities, innovation and training on organization's operation in Tabriz petro chemistry has taken an attempt to present an integrated model in order to evaluate the effect of all the three capabilities in an integrated and complementary way on organization's operation. For so doing and for evaluating the effect of marketing capability, innovation and training on the operation of Tabriz petro chemistry company, 265 Individuals of official staff with master and higher degree were selected as the sample. The results of the research show that there is a significant relationship between marketing capability and organization's operation, there is also significant relationship between innovation capability and organization's operation and between learning capability and organization's operation. A significant relationship is observed between marketing capability, innovation and learning as complementary capabilities and organization's operation.

Blesa and Ripolle (2008) in a research titled the effect of marketing capabilities on international economical operation investigates the issue that marketing capabilities have positive effect on international operation of company which can be direct and indirect. This research has been done in Spanish and Belgian and analysis of data and hypotheses testing has been done through structural equation modeling. The results show that marketing capability have positive effect on economics' international operation, international commitment and the manner of entering to international market and also entrance methods of direct investment has positive and significant effect on economical international operation. Karanja et al. (2014) in a research titled the effect of marketing capabilities and distribution strategy on mediational organizations' operation, have determined the effect of marketing capabilities and distribution strategy on mediational organizations' operation in Nairobi-Kenya. The results show that marketing capabilities and selection of distribution strategy have integrated and significant effects on mediational organizations' operation. Mu (2015) in a research titled marketing capability, organizational compatibility and product's improvement operation, investigates the relationship between product's marketing capability and new product's improvement operation considering productivity and discovery mechanisms. Data collection tool of the research was a questionnaire and 324 companies in America took part in the study. The findings of the study demonstrate that marketing capability has positive and significant effect on product's improvement operation and customer based structure, decentralization and interwork integration play mediator role in this relationship.

2. Methodology

Method

The basis of the research is descriptive and survey based and since it deals with investigating the effective role of human capital on marketing capability of mobile product, it is experimental in terms of objective and due to data collection in a period of definite time is sectional and also with consideration of

content and the type of issue of research and proposed questions concerning variables under investigation, it is done through correlation method.

Population and sample

The statistical population of the research involves managers, staff of the mobile sale agency throughout Yazd. Sampling method of the research is simple random sampling given that the managers and staff of the agencies in Yazd have been considered that for its determining Cochran formula with error level of 5 percent and also Morgan table have been used.

Data collection

Necessary data related to each indexes, variables and educational background has been done through library studies (available articles on the internet) and taking notes tool has been used for research literature. In data collection methods, questionnaire has been used in the duration of January, 2016 till early August, 2006 in a field study manner. In this questionnaire, at first demographic questions have been proposed and after that the related questions to each variable have been proposed which involves 7 questions about experience expertise among human capital and also 31 questions related to product’s marketing capability indexes in evaluation areas of market, commitment to customer, connection with fellows and partners, outside organization, inside organization, and provision capability have been surveyed.

The validity of the research has been approved through using the supervisors and advisor’s viewpoints. Therefore, the validity of the questionnaire can be assured and claimed that the corresponding questionnaire provides the necessary information. For evaluating reliability, internal consistency method has been used. The most important indicator of internal consistency is Cronbach Alpha method that shows how much the test items measure a single attribute that for evaluating the research questionnaire’s reliability, considering the limitedness of the samples, 20 questionnaires were completed by managers and staff of mobile selling agencies throughout Yazd and for measuring the reliability of questionnaire, Cronbach alpha method has been used. If alpha coefficient is more than 0.7, questionnaire possess acceptable reliability (Momeni, 2007). The measured values of Cronbach Alpha for each variable have been provided in Tables 1 and 2.

Table1. Cronbach Alpha for human capital

Variable’s name	attribute	Cronbach alpha
Human capital	Experience and expertise	.845
Total alpha coefficient		.790

Table2. Cronbach alpha for product’s marketing capability

Variable’s name	Attribute	Cronbach alpha
Product’s marketing capability	Market evaluation	.854
	Commitment to Customer	.792
	Connection to Fellows	.838
	Outside organization capability	.734
	Inside organization capability	.708

	Provision capability	.863
Total Cronbach alpha		.801

Data analysis

The analysis of demographic data has been done through descriptive statistics methods, frequency tables and Pie charts and data has been analyzed using Spss20 application and hypotheses testing has been done with the aim of evaluating simultaneous relationships and examining and admitting the relationships between variables directly and indirectly considering limited statistical population through structural equations technique making use of SmartPLS2 application.

3. Findings of the research

4-1. The main structural model test

After examining the processing of measurement methods, it is processing of structural method of the research’s turn. The structural part of the model deals only with hidden variables and examines the relationships between them. The criteria of examining the processing of the model has been described in the following.

4-1-1. Significant test tracks

The most primary criterion for evaluating the relationship between variables is significant numbers. Provided that the values of these numbers exceed 1.96, is indicator of the accuracy of the relationship between components and accordingly approves the research’s hypotheses with confidence level of 95%. In this research, in this analysis, the statistic value of t exceeds 1.96 for all the tracks; therefore, it is significant at the 95% confidence level. So, at the 95% confidence level, it can be indicated that human capital has positive and significant relationship with marketing capability.

4-1-2. Path coefficient

The determinant coefficient for marketing capability has been estimated the value of 0.181 and shows that human capital could explain 18.1% of marketing capability changes. Coefficient determination to customer (0.619) demonstrates that marketing capability variables could explain 61.9% of the changes related to commitment to customer that shows the most effect on marketing capability is done through commitment to customer. Chin (1998) introduces 3 values of 0.19, 0.33 and 0.67 as criterion value for low, moderate and high values for R2. Therefore, the variables of commitment to customer, connecting to fellows with values of R2, 619, and 0.448 containing high fitness and market evaluation and provision capability containing moderate fitness and experience and expertise, inside and outside organization containing low fitness.

4-2. Model’s fit index

Q2 values

This criterion which was introduced by Stone and Pizzer (1975), determines predictability power of the model. They believe that models containing acceptable structural part fitness should possess predictability capability of indexes related to the model’s endogenous structures. Hensler et al. (2009) have determined the predictability strengths related to the endogenous structures of 3 values 0.02, 0.15 and 0.35.

Table 3. Predictability quality of (Q2)

structure	Q2
Experience and expertise	0.03
Market evaluation	0.20

Commitment to customer	0.25
Connecting to fellows	0.23
Outside organization capability	0.12
Inside organization capability	0.09
Provision capability	0.17
Marketing capability	0.03

As it is clear from the above table, commitment to customer variable has higher level of prediction power and market evaluation, connecting to fellows and provision capability have moderate prediction power and experience and expertise variables, inside and outside organization capability have low prediction power.

4-3. The main model’s total fitness evaluation criterion

For evaluating total fitness of the model, GOF criterion has been used. Wetzels et al. (2009:187) have considered the three values of 0.01, 0.25 and 0.36 as low, moderate and weak values for GOF. Though using mean R2 and average of shared index, GOF value for the total model estimated 0.45 which is indicator of high fitness of the total model.

Table4. Communalities criterion

structure	communalities
Experience and expertise	0.53
Market evaluation	0.57
Commitment to customer	0.4
Connecting to fellows	0.5
Outside organization capability	0.78
Inside organization capability	0.59
Provision capability	0.69
Marketing capability	0.20

4-4. Q2 values

Table 4 determines prediction power. As it is clear in Table 5, except marketing capability structures, the rest of the structures possess moderate fitness.

Table 5. Predictability quality of (Q2)

structure	Q2
Market evaluation	0.21
Commitment to customer	0.25
Connecting to fellows	0.22
Outside organization capability	0.12
inside organization capability	0.09
Provision capability	0.16
Marketing capability	0.06

4-5. Total fitness evaluation criterion of the research’s hypothesis model

For evaluation of total fitness of alternative model, GOF criterion has been used. Through using average R2 and average shared index, GOF value is estimated 0.42 for total model which shows that total fitness of the model is high.

4-6. research hypothesis testing

After examining and approving the main model, research model hypothesis has been investigated and provided that absolute value of statistics t is below 1.96, null hypothesis is accepted and if absolute value of t exceeds 1.96, null hypothesis is rejected. The results of the research hypothesis are provided in the following Table. In this analysis, the statistic value of t for experience and expertise track on marketing capability is significant.

Table 6. The result of alternative hypotheses

Hypotheses	β coefficient	T-value	result
Experience and expertise track on marketing capability has positive and significant effect.	0.358	3.733	accepted

Discussion and conclusion

The obtained results are indicator of the fact that according to respondents’ point of view, managers and staff’s experience and expertise have positive and significant effect on marketing capability of the product and this conclusion is compatible with the obtained results of Zelat and Inach (2015). Nowadays, agencies providing various products in addition to financial sources and strategies that they demand for their business processes; they also need staff’s abilities, expertise and innovative motivation as human sources in order to achieve the determined objectives. Above all, capabilities related to customers and in a more comprehensive form, whether inside or outside the organization and having commitment to customer and also evaluation power and examining the market’s condition can help agencies for achieving the more successes in creating appropriate position for selling and marketing their own products. According to the viewpoint based on sources, there is a direct relationship between competitive advantage of companies and unmatched sources including human and financial capitals. Human capital is determined as a key factor which affects the initiation of operation. A company as a social system emphasizes economic and social dimensions with preference over human factor. Staff are foundation of the organization and in case with their absence, survival of the organization will be impossible. Survival of the organization’s activities relies on the assistance of individuals that each of them contribute to success and productivity of the organization with their own way and with updating available knowledge which is a process which possess excessive potential and demands competent staff.

Since human capital can be known as the staff’s producer potential, expanding and maintaining human capital based on staff has a determinant role in improving productivity and effectiveness at all the levels. Most of the studies have shown that an organization’s human capital increases with staff’s human capital growth and maturity. Marketing documentations have approved the role of marketing capability in operational achievement of company such as company’s general operation and operation in the field of improving new product. Marketing researchers and professionals are interested in understanding the mechanism that though it, marketing capability can increase the company’s compatibility and along that create high productivity and competitiveness. However, there is not any comprehensive structure in the documentations that covers the key component of marketing capability from outer to inner perspective. Considering the strategic importance, marketing capability in research agency operation that its dimensions and distinctive associations have taken into account in compatible with the organization seems favorable and this is conditioned that the importance of marketing capability of the product in organizational verification and innovation operation of the product be investigated.

Applied recommendation based on research hypothesis

Due to the importance of occupational fixation of staff and the high rate of the effect of this variable on occupational performance from respondents’ viewpoints; therefore, it is recommended to the investigation official:

- prioritizing the staff who possess higher level of experience and expertise.
- providing the field for the more connection of the experienced and professional staff with other staff.
- taking an attempt to improve the level of staff's experience and expertise in more involvement at work and high risk taking.
- using staff's experience in order to fulfill customers' current demands and creating necessary preparation for fulfilling their demands in future.
- taking an attempt to increase the potency level of available human sources.
- using staff's potency for business management and using the information obtained from market.

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