

THE RELATIONSHIP BETWEEN MARKET ORIENTATION AND ORGANIZATIONAL INNOVATION: THE ROLE OF THE SHR PRACTICES

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Abstract

The current study was an effort to test the effects of market orientation and strategic human resources practices (SHR) over organizational level innovation. In an era where companies need to implement key strategic human resources and be market oriented, we aimed at testing the effects of these two important perspectives with data drawn collected from the IT industry (N = 174). Results showed that only participation in decision making from SHR practices and customer orientation from market orientation predicted organizational level innovation positively. Moreover, our findings also emphasized that the relationship between SHR practices and organizational level innovation were more pronounced for companies which had high degrees of market orientation. Our findings speak to significant managerial implications and emphasize the need to include employees in decision making processes. Further suggestions, limitations and conclusions are also discussed.

Keywords: market orientation, technical innovation, managerial innovation, human resources practices.

Introduction

Uncertainty, dynamism and constant change are the key tenets that define today's business settings. Accompanied with the rising pressure to innovate, organizations have started emphasizing their human capital as sources of competitive advantage which is especially prevalent for organizations characterized with market orientation. Keeping pace with the competitors while being innovative is closely associated with the importance given to human capital. Identified as a key differentiator source, human capital can be maximized with human resources applications of a company. In this study, our goal is to integrate innovation and market orientation of companies and reveal the potential relationships between the two constructs. Moreover, we attempt to integrate and test the effects of human resources practices over these dimensions. In an effort to respond to calls for research covering these areas, we have carried out this study in a developing country context and with informants across industries.

1. Background and Hypotheses Building

1.1. Market orientation

In today's business world, it is stated that the prerequisite to ensure competition superiority today is to comprehend what the customers wants and to fully satisfy the customer requests with a customer-oriented point of view whereas the competition superiority referred to being different from the competitors by developing diverse product/service in the beginning (Songur, 2009:24). Within this framework, the market orientation principally covers understanding the variations in customer preferences and creating the superior value for the customer by means of the marketing activities.

The market orientation is defined as an essential marketing culture that creates sustainable competition superiority (Barney, 1986:656). From a wider point of view, it is seen that the market orientation is defined a business management philosophy based on the acceptance of the essential role of the marketing for determining the customer-focused point of view and the market needs throughout the organization (McNamara,

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1972:51). Furthermore, the market orientation has been described as a culture of the organization requiring for the customer satisfaction to be put at the core of the business operations (Liu et al., 2003). For this reason, it creates superior customer value and outstanding performance for the company (Day, 1994; Narver & Slater, 1990). It is observed that the market orientation is approached from different perspectives in the relevant literature and therefore an exact conciliation cannot be ensured in the conceptualization of the subject. However, it is understood that the definitions made by Kohli and Jaworski (1990) besides Narver and Slater (1990) with regard to the market orientation, which can be considered an established series of behaviours and activities, a source, a basis in decision-making or an aspect of the corporate culture (Hurley & Hult, 1998: 42), are generally accepted. It is specified that the researches of Kohli and Jaworski brought a managerial perspective in the market orientation and that the studies of Narver and Slater brought a cultural dimension in this concept (Hamsioglu, 2011:91).

From a cultural point of view, the market orientation is to adopt the competitor orientation and customer orientation and to ensure the interfunctional coordination in the ability of obtaining competition advantage by creating superior customer value. In other words, the market orientation represents the organization's tendency to the high value given to the customers. For this purpose, the information about the customer needs, the competitors' abilities and other environmental impacts should be managed well in the whole organization (Narver & Slater, 1990: 21; Slater & Narver, 1994:63). Within the framework of this understanding, three fundamental behavioural components of the market orientation are mentioned: (1) to be able to respond to and properly determine the customer requests and requirements, (2) to achieve the information about the competitors by following them closely, (3) to ensure the facilitation of the interfunctional coordination in order to create a superior customer value (Day, 1994:37).

From a managerial point of view, the market orientation is to gather information about the variation in the present and future needs and preferences of the customers, to ensure the distribution of this information obtained among the departments in the organization and to elicit the reaction to be given to the market (Kohli & Jaworski, 1990; Kohli et al., 1993). From this perspective, for the enterprise to be focused on the market, Kohli and Jaworski mention the need for (1) determining what the present and future needs and/or expectations of the customers are in the ability of creating a superior customer value (formation of the information), (2) sharing the information gathered by various departments of the organization with the other departments of the organization (distribution of the information) and (3) giving rapid reaction to the market in line with the requirements of the market (Kohli & Jaworski, 1990, s. 4-6). In this way, it can be possible to transfer the permanent and systematic information from the customers and competitors, to share the information obtained to the departments inside the organization and to give rapid response to the changing requirements of the market (Martin & Grbac, 2003, s. 25).

In the light of this information, it is understood that the market orientation is formed by three components and three dimensions are equiponderant (Narver & Slater, 1990: 22). It is suggested that merely the customer orientation will remain insufficient for the market orientation and focusing on this dimension only might be actually the indication of the deficiency in the integrity of the business strategies. It is stated that the competitor orientation, being another dimension of the market orientation, allows not only having predictions related to the strategies of the competitors, but also making the evaluation of the weaknesses and strengths of the organization against its competitors (Han et al., 1998). It is specified that ensuring the interfunctional coordination, however, is pertinent

to sharing the information among the departments in the conversion of the information obtained with regard to the market into valuable information and refers to the specific aspects of an organization's structure that facilitate the communication among the diverse functions of the organization (Thompson 1967:29). The process of developing a new product will be managed by a single preoccupation (a customer, a rival, or a technological preoccupation), decreasing the potential performance of the innovation, without the interfunctional coordination. For this reason, the interfunctional coordination is the system that ensures the collaboration of strategic orientations (Gatignon & Xuereb, 1997: 6) for the organizational innovation.

1.2. Organizational level innovation

In the world that has become a single market depending on the globalization process, there are consumers who have both products and services similar to each other and the opportunity to compare the similar products easily and to achieve them. For this reason, it is of importance for the organizations to be able to meet the consumer requirements more efficiently, evaluate the strategic market opportunities with their strengths and be ahead in the competition. The innovation, however, is known to be one of the critical factors for the organization to gain competitive advantage. It is known that while realizing the innovation, the organization aims at carrying on their existence with success in the long term, being able to be in the leading position in the market in which they are present and increasing their profitability which is the most essential indication of success. From this point of view, the innovation can be generally defined as the conversion of the information into economic and social benefit (Arikan et al., 2003:362). Accordingly, the innovation is generally a process, not an outcome. The studies carried out for innovating and developing, and obtaining new products and services can be seen as the innovation-focused activities in general terms (Cicek and Onat, 2012: 48). In the relevant literature, it is observed that the innovation is divided into three categories in general:

Technical and Managerial innovation: Some authors consider that the innovations are classified by the technological versus managerial innovations according to their relation, or lack of there, with the core business of the organization (Camison-Zornoza et al., 2004: 335). The technical innovation is defined as the innovations that are realized in the product, service and production processes forming the core of the technical capability of an organization. The technical innovations are defined by Damanpour et al. (1989) as "the innovations which arise in the operating component and have an influence on an organization's technical system" (p.588). The managerial innovation, however, is a process that considerably changes the way of performing the management work or that progresses the organizational objectives by making significant changes in the conventional organization forms (Hamel & Bren, 2007:15–18), and is described as the innovation type from which the large and complex organizations with departments differentiated from each other benefit in order to solve the control and coordination problems (Damanpour,1989: 598).

Product and process innovation: is described as developing and commercializing a new product so as to create value and satisfy the requirements of the external user or the market (Damanpour, 1991; Damanpour & Gopalakrishnan, 2001). This includes significant improvements in technical features, components and materials, integrated software, userfriendliness and other functional properties (Soylu & Göl, 2010:116). On the other hand, process innovation is considered as the formation of a new process or the improvement of the existing one (Damanpour, 1991; Leonard & Waldman, 2007).

Radical and gradual innovation: The radical innovations are the innovations that include

radical changes related to the activities and that are realized by completely breaking out of the previous routine. The gradual innovations, however, include the partial changes that are applied without leaving from the existing operational activities much (Pecen & Kaya, 2013: 100). Technical and Managerial innovation are taken into account as the aspects of the organizational level innovation in this study.

1.3. Strategic human resources (SHR) practices

Globalization, changing customer demands and increasing competition have made “the human” and “the way of managing the human” more important as compared with the past (Wright et al, 2001; Saa-Perez and Garcia- Falcon, 2002) and the traditional resources of the competition superiority lost their previous significance due to the reason that they can be easily imitated (Becker & Gerhart, 1996: 779; Harel & Tzafrir, 1999: 185). Although the traditional resources create a value, it was understood that human resources practices may be an essential source of the sustainable competition superiority upon understanding the need for creating the value that cannot be easily imitated by the competitors (Barney, 1991; Becker and Gerhart, 1996; Harel &Tzafrir, 1999; Saa-Perez and Garcia-Falcon, 2002).

The role of the human resources practices is to be able to effectively and efficiently benefit from the knowledge and capabilities of the human resource that the organization has and to support the same. In this regard, Huselid, Jackson and Schuler (1997:171) defined the strategic human resources management as the design and implementation of a set of internally consistent policies and practices that help to achieve the company targets and supply the human capital. As a matter of fact, the innovation practices and processes that are carried on in the high uncertainty environment actually create the need for creative employees who can take risks, who are resistant to uncertainty and who can orient themselves to this type of environments as well. The qualified employees can be attracted to the organization through the human resources practices such as selection, evaluation, training-development and wage system. The high quality resource pool can be created by means of the attractive human resources practices such as applicable and reliable selection system, payment packages higher than the usual and various development opportunities (Saa-Perez & Garcia- Falcon, 2002:125). It is probable for the employees to create variety of ideas and to devote to more innovative behaviors when creative skills and innovative features are used by the companies as the recruitment and selection criteria (Atuahene-Gima, 1996). It is expressed that only recruitment and selection are not sufficient in the organizations’ being innovative and that if the motivations of the employees who are competent and high skills cannot be provided for their development, their capacities are restricted. Within this scope, it is stated that the human resources practices encourage the employees for them to work harder and more rationally and positively affect them for the targeted innovativeness via the training and development practices in order to increase the new information, capabilities and innovative capacity (Beugelsdijk, 2008; Chen & Huang, 2009; Tan & Nasurdin, 2011). It was revealed that the employees are supported via the incentive compensation systems by evaluating the individual and in-group “performance appraisals” of the employees (Huselid,1995:637) and that it can be possible to achieve the goals (Saa-Perez & Garcia-Falcon, 2002: 125).

In the light of this information, it can be concluded that the human resources practices provide sustainable competition superiority to the company by providing significant contributions to the organization in achieving its goals by means of its functions such as finding the human resource, recruiting the proper employees, adapting the new employees to the job, establishing incentive and competency-based payment systems,

creating an effective performance assessment system, developing the knowledge, skills and capabilities (Tan & Nasurdin.2011:157).

Training, compensation, performance appraisal, staffing, participation are taken into account as the aspects of the SHRM practices in this study.

2. Relationships Between The Variables

2.1. Market Orientation and Organizational Level Innovation

It is considered that the economic growth and the main components of the competitive advantage are stimulated by marketing and innovation. The research is not related to only the variables that influence marketing and innovation any longer and has currently become the characteristics of the relationship between two functions. Whether the market orientation encourages or restrains the innovation is the key question of this new focus (Lukas & Ferrell, 2000: 239). Narver and Slater (1990) verified that there is a powerful correlation between the market orientation and the differentiation strategy. In other researches, a direct relationship was found between the market orientation and the organization innovation (Hult et al.; 2004) and it was determined that the market orientation increases the organizational innovation and encourage putting much more new products on the market (Deshpandé et al.,1993; Kohli & Jaworski,1990). Also in the other researches that are made with this perspective, the relationship between the market orientation and the organizations' innovation capacities was verified (Atuahene-Gima, 1996; Han et al., 1998; Hult et al., 2004).

The competitor orientation refers to having all technological opportunities for estimating the requirements of the customers in the target market against the present and possible competitors in parallel to gathering the information about the expectations and needs of the customers. The ability of the organizations to create a superior customer value can be realized by providing the customers with services more superior than the present and possible competitors (Narver & Slater, 1990:21-22). For this reason, accurately determining the current strategies and capabilities of the organization's competitors within the market in which it is present is of strategic importance in gaining the target customer mass and creating the superior customer value. In the relevant literature, it was determined that the competitor-oriented strategies are effective in developing products and services differentiated from the competitors (Han et al., 1998; Im & Workman, 2004; Grinstein, 2008; Oflazoglu & Kocak, 2012).

It was determined that the customer orientation in which it is aimed to understand the customer's demands and requests in the most accurate manner and accordingly render the best product/ service increases the innovation capacity of the organization (Gatignon & Xuereb, 1997; Han et al., 1998). The results of the studies of Deshpande et al. (1993) found the positive relationship between the customer orientation and the organizational innovation (Han et al, 1996:7). In addition to these studies, significant and positive relationships were found between the customer orientation and the organization innovation (Appiah-Adu & Singh, 1998; Kahn, 2001; Grinstein, 2008). The other studies (e.g., Bennett & Cooper 1979, 1981; Christensen and Bower 1996; Leonard-Barton and Doyle 1996; Tauber 1974) found that the customer orientation is one of the bases of the radical innovation (Lukas & Ferrell, 2000: 244).

IFC was described as the use of company resources in coordination for creating superior value for the target customers (Narver & Slater, 1990). It is suggested by the earlier studies that the new product decisions are directly affected by the interfunctional coordination (Atuahene-Gima, 1996). It was verified by the other researches that the

interfunctional coordination is a source of “true” innovation (Griffin & Hauser, 1994; Wheelwright & Kim, 1992). In line with the prior research, we set our first hypothesis as below.

H1: There is positive association between market orientation (Competitor orientation, Customer orientation, Inter-functional coordination) and innovation at organizational levels.

2.2. SHR Practices and Organizational Level Innovation

There occur rapid changes in the world that has become a single market upon the globalization. Within these conditions, it is seen that the prerequisite for the enterprises both to be in the front positions in the competition and to carry on their existence with success for many years is the ability of keeping pace with the change and, further to that, the ability of orienting the change. From this point of view, it is observed that the human resource that the enterprises have increase their performances concerning the innovativeness through the practices for developing their competencies (Gupta & Singhal, 1993; Chen & Huang, 2009; Tang & Nasurdin, 2011; Wei et al., 2011; Pecen & Kaya, 2013; Chang et al., 2013).

Based upon the characteristics of the human capital that the organizations have such as being valuable, rare and inimitable (Schuler & Jackson, 1987), it is seen that the organizations carry out practices primarily for their internal resources and for benefiting from these resources as competitive advantage resource (Ayyildiz & Kececioglu, 2009:1180) as well as they deem the same as a significant competition advantage resource (Huselid, 1995; Guthrie 2001; DeNisi & Griffin, 2001). It was observed that, by means of the strategic human resources practices, the competent employees can be attracted to the organization and can be improved, it is enabled that the employees are much more satisfied with their jobs by ensuring their participation in the decisions and, in this way, the employees who believe that their ideas are important have much more creative thoughts and show innovativeness behavior (Damanpour, 1991; Laursen & Foss, 2003). On the other hand, the organizational innovation is estimated by ‘the sophisticated approaches’ to recruitment and selection, induction, appraisal and training (Shipton et al., 2006). The HRM and innovation relationship has been empirically researched by Jiménez-Jiménez and Sanz-Valle (2005, 2007, 2008) as well. It was indicated by Jiménez-Jiménez and Sanz- Valle (2005,2008) that there is a positive relationship between the innovation and the HR practices aimed at innovation, including external recruitment, high employment security, wide application of training, utilization of internal career paths, utilization of performance appraisal systems, incentive-based compensation and high employee participation. More recently, it was confirmed by Beugelsdijk (2008:838) that the HR practices positively affect the innovation. For instance, as the employees gain the opportunity to discuss about their work performance, the commitment and satisfaction of the employees are improved by the performance appraisal. In return for this, the employees will perform greater innovative activities. Likewise, the career management helps the employees to achieve their career goals and objectives. The knowledge, skill, and ability of the employees to perform effectively in their job are improved by training and thus higher organizational innovation is ensured. The reward system provides the employees with financial reward, promotion and other recognition so that the employees are motivated in taking risks, developing successful new products and creating newer ideas (Tan & Nasurdin, 2011:158)

In the light of this information, it can be concluded that the strategic HR practices -in terms of staffing, training, participation, performance appraisal, and compensation – are effective in rising of the organizations’ innovation capacities to better levels. In this regard, we set our second and third hypotheses as below:

H2: Strategic human resources practices positively shape organizational level innovations.

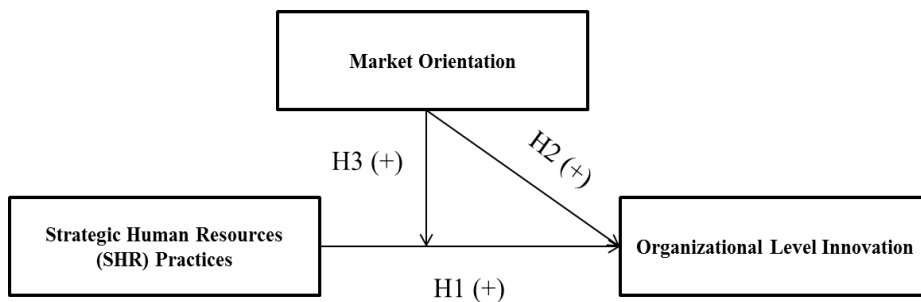
2.3. SHR Practices and Market Orientation

When the relevant literature is reviewed, the existence of the relationship between the HR practices and the market orientation is verified (Movando et al., 2005; Qun Wei & Lau, 2005, 2008). The results of the research carried out by Harris and Ogbonna (2001) indicate that the improvement of the market orientation partially depends on the proper strategic management of the human resource that facilitates the improvement of a proper organizational culture. Accordingly, it is discussed that the SHRM can be considered as an antecedent to the market orientation (Wei & Lau, 2005, 2008). In the light of this information, the market orientation is taken as the antecedent to the strategic human resource management (SHRM) and the SHRM reconciles the link between the market orientation. It is also determined that the SHRM impacts the company performance more powerfully in terms of the companies having higher degree of autonomy in recruitment and more weakly in terms of the private companies. The results of another research suggest that the HRPs should be included into the models of Market orientation and the innovation into the organization performance in order to enhance the clarifications of the same by the marketers. It is suggested by this study that the HRPs are one of the critical mediators of the market orientation and organizational performance (Movando et al., 2005; Wei and Lau, 2008). In line with the prior research, we set our first hypothesis as below.

H3: Market orientation moderates the relationship between strategic human resources practices and innovations at organizational level. The relationship between strategic human resources practices and innovations at organizational level is stronger for market oriented firms.

This study was an effort to test the effects of human resources practices and market orientation over organizational innovation (Technical and Managerial innovation) of firms. The proposed model that will be tested with this study is shown in Figure 1.

Figure 1. Proposed Model



3. Method

In the present research, we adopted survey approach. We utilized the original scales from the literature and they were back-to-back translated to match the Turkish context. The

survey was sent to 217 participants and in the end, a total of 174 surveys were used (80% response rate). Necessary modifications were made to existing scales to ensure that they were salient to the context of this investigation. As suggested by Yin (2003), translation of surveys is a very critical step for clarity and understanding. Unless otherwise stated, all the items were asked and measured in 5 point Likert-scale. Participants of the current research were full-time employees. 52 % of them were male. They had an average of 3.4 (S.D. = 1.2) years of experience. 60% of them had undergraduate degrees and the remaining attend a post-graduate degree.

3.1. Measures

Strategic human resources practices

To evaluate the extent to which strategic human resources practices were followed in the focal company, we utilized the scale of that was composed of sixteen statements. Training was assessed with four statements (e.g., the presence of formal training programs); performance appraisal was evaluated using three statements (e.g., presence of individualized performance appraisal system); compensation was assessed with three statements (e.g., additional compensation benefits), staffing was evaluated with three statements (e.g., our HR division is selective in the recruitment process) and participation was evaluated with three statements (e.g., employees are encouraged to voice and participate in the decision making process). Since our constructs are collective in terms of functions and outcomes, we follow the recommendation of Morgeson and Hofmann (1999) in operationalizing them. They argued that collective constructs which represent overall organizational functions, strategies or processes are embedded in a set of knowledge, skills, and abilities held by particular individuals. In this context, we assumed that employees in our focal organizations were knowledgeable about the strategic human resources practices of their companies.

The internal reliability value (Cronbachs' Alpha) for the overall scale was .93. Cronbachs' Alpha values for the dimensions of strategic human resources practices were as follow. Training .93, compensation .90, performance appraisal .78, staffing .73 and participation had internal reliability value of .70. All the dimensions of strategic human resources practices revealed acceptable reliabilities (Hair et al., 2010).

Market orientation

We assessed the market orientation of our focal firm with fourteen statements (Narver and Slater, 1990). Six items measured customer orientation, four items measured competitor orientation and four items measured inter-functional collaboration. The internal reliability values (the Cronbachs' Alpha values) were .78 (customer orientation), .82 for competitor orientation and .83 (inter-functional orientation).

Organizational level innovation

We measured organizational level innovation with seven statements. The items emphasize the product, process and supplier innovation. The internal reliability (the Cronbachs' Alpha value) for the scale was .90.

4.2. Findings

Validity checks

We tested the validity of our measurement theory with respect to convergent, discriminant and nomological validity (Hair, Black, Banin & Anderson, 2010). Internal reliability (the Cronbachs' Alpha) values were above the cut-off criteria (Hair et al.,

2010). We used average variance extracted (AVE) to measure our convergent validity. AVE of 0.50 or higher suggests adequate convergence (Hair et al., 2010). Our findings offer sufficient evidence for convergent validity. We assessed discriminant validity with our measurement model and via conducting series of confirmatory factor analyses (Aiken and West, 1991). Results suggest that items loaded into their theoretically relevant constructs. We assessed the nomological validity by examining whether the correlations among the constructs in the measurement theory make sense (Hair et al., 2010). Strong and predictive correlation patterns exist among independent and dependent variables, which is in line with the previous research. This provides supportive evidence for nomological validity.

Since we utilized self-report, our findings suffer from mono-method bias (Podsakoff, MacKenzie Lee, and Podsakoff, 2003). In line with the procedure followed by Podsakoff and Organ (1986), we tried to ensure that our participants responded to surveys based on factual experience and company data, in addition to their personal perceptions, which cannot be avoided in self-report driven investigations. We implemented the Harmon-One-Factor test, for all study constructs (Podsakoff & Organ, 1986), to examine the existence and explanatory structure of constructs. Our findings supported a view that there were three conceptually critical and theory driven constructs namely strategic human resources practices; market orientation and organizational level innovation.

Measurement of the model with exploratory factor analyses

Prior to hypothesis testing, we conducted principal components factor analysis using the Varimax rotation. Measurement of sampling adequacy (.88), was performed using Barlett's Test of Sphericity ($\chi^2 = 131.47$, $p < .000$), which offered evidence favoring use of exploratory factor analyses. The commonality values for all the constructs were above .50 which shows that measures fit well with with the other measures in the relevant construct (Nunnally & Bernstein, 1994). All factors loaded in their respective factors with cut-off values above than .50 (Nunnally & Bernstein, 1994). The overall variance explained by the rotated factors is 77 %.

Measurement of the model with confirmatory factor analyses

We conducted confirmatory factor analysis using maximum likelihood estimation procedure in Amos. The measurement model included five dimensions of strategic human resources practices; three dimensions of market orientation and organizational level innovation as one construct. The items of all the constructs were restricted to load on their priori extracted factors and all the constructs were allowed to correlate with each other in the measurement model.

In terms of fitness indices, we used chi-squares differences test for comparing competing models, SRMR (standardized root mean square residual value), which is an absolute fit index (Hu & Bentler, 1995; 1999) which is required to be smaller than .06, RMSEA (root mean square error of approximation) which should be as small as possible (<.06) along with the related 90 percent confidence interval indicators. Regarding the comparative indices, the TLI (Tucker Lewis index) and the CPI (Comparative fit index) were used. Last, but not least, for comparison, we made use of χ^2/df , which should be below 2, 3 or 5; AIC (Akaike's information criterion) and BIC (Bayesian information criterion), which should be small (Hair et al., 2010). Fit indices provided support for the validity of fit with our model.

Table 1. Findings for Confirmatory Factor Analyses Comparing Two Alternative Groups

Evaluation Parameters	X ²	d.f.	P Value	X ² / d.f.	RMSEA	RMSEA	SRMR	CFI	TLI	AIC	Adjusted BIC
Recommended Values	Lower	Higher	Non-significant	<3	<.06	90% CI	<.06	>.95	>.95	Smaller	Smaller
Values in the Original Sample	131.47	304	0.00	3	0.00	[.11 - .13]	0.02	0.97	0.96	11863	11543

Note. N= 174. RMSEA = Root Mean Square of Estimation. SRMR = Standardized Root Mean Square Residual. CFI = Comparative Fit Index. TLI = Tucker Lewis Index. χ^2 significant at * p<.05. ** p<.01. *** p<.001.

Hypotheses testing

Table 3 presents mean, standard deviation and correlation patterns among our study constructs. The mean responses of all study variables ranged between 3.05 (s.d=1.05) (for compensation) and 4.05 (s.d=.57) (training). Pearson bi-variate correlation patterns across measures of constructs differed in terms of strength and significance. The range of correlation values was between r =.08 (between competitor orientation and training, n.s.) and r =.81** (between inter-functional collaboration and competitor orientation, p<.001). As suggested by Hair and colleagues, (2010), correlation values above .80 should be treated with caution, since closer correlations might inform us on convergence to the same construct measurement. Most correlation values were in the middle range. They were clustered between .38 and .75 values except for the relationship between inter-functional collaboration and competitor orientation. Direction and significance of bi-variate correlation values were as expected and in line with the extant literature.

Table 2. Means, Standard Deviations and Correlation Values

	M	SD	1	2	3	4	5	6	7	8	9
1 Training	4,05	0,57	.93								
2 Compensation	3,05	1,01	(.19)*	.90							
3 Performance Appraisal	3,19	1,04	(.23)*	.63***	.78						
4 Staffing	3,45	0,91	(.22)*	.65***	.68**	.73					
5 Participation	3,59	0,92	(.12)*	.49**	.51**	.67**	.70				
6 Customer Orientation	3,53	0,86	.17*	.32**	.28**	.10	.44**	.78			
7 Competitor Orientation	3,53	0,97	.08	.35**	.33**	.31**	.33**	.67***	.82		
8 Inter-Functional Collaboration	3,38	1,07	.08	.41**	.34**	.33**	.41**	.65**	.81***	.83	
9 Organizational Level Innovation	3,42	0,89	.03	.38**	.27**	.33**	.55***	.56**	.32**	.42**	.90

Note. N = 174.

Note. Reliabilities (coefficient alpha) are in diagonals.

* p < .05, ** p < .01, *** p < .001

To test our hypotheses, we followed hierarchical multiple regression analyses. Our first hypothesis predicted that strategic human resources practices predicted organizational level innovation. The results provided partial support for our hypothesis. Only

participation in decision making ($\beta = .54^{***}$, $p < .001$) predicted organizational level innovation. The overall explanatory power in organizational innovation was 29% ($R^2 = .29^{***}$, $p < .001$). Our findings showed that performance appraisal, compensation, training and staffing policies did not have significant association with organizational level innovation.

Our second hypothesis predicted that being market oriented positively shapes organizational level innovation. Findings offered partial support for our second hypothesis, showing that only customer orientation positively predicts organizational level innovation ($\beta = .56^{***}$, $p < .001$). The overall explanatory power of customer oriented was 31% ($R^2 = .23^{***}$, $p < .001$). Inter-functional collaboration and competitor orientation did not have significant predictive power of organizational level innovation.

We also tested for the moderation effect of participation and customer orientation by following the ordinary least squares method of by Aiken and West (1991). First, we mean centered the independent variable (participation), and the moderator variable (customer orientation). We then multiplied the two mean centered variables to create an interaction term. We then conducted a hierarchical regression analysis predicting organizational innovation from participation and customer orientation (Step 1), and the partial product term (Step 2). The analyses revealed that the interaction term predicted higher variance in organizational level innovation ($R^2 = .42^{***}$, $p < .001$ in Step 2; $\Delta R^2 = .01^{***}$, $p < .001$ with moderation effect). We also tested for the alternative model where participation acted as a moderator and customer orientation as independent variable. While this model also increased the explanatory power for the variance in organizational innovation, the interaction term became insignificant in the second step. Therefore, our third hypothesis received partial support.

Discussions and Conclusions

Stiff competition, changing dynamics and shifting career expectations have placed human resources in a very strategic position within companies. Employers no more treat their human capital as passive-receivers of their decisions. On the contrary, with the rise of relational job designs and boundaryless careers, employees seek to create and craft their own career paths. Similarly, keeping close ties with the external environment – that includes competitor, customer orientation and collaborations – is detrimental for successful performance. In order to examine the extent to which SHR practices exist across organizations and market orientation, we carried out a survey-driven study with participants selected from two IT organizations. Our findings emphasized that employees once involved in decision making contribute positively to organizational level innovation. Research findings are consistent with other studies. Jiménez-Jiménez and Sanz-Valle (2005, 2008) indicated that there is a positive relationship between the HR practices and innovation, including high employee participation. More recently, Beugelsdijk (2008) confirmed that the HR practices positively affect organizational level innovation. The relationship between SHRM and innovation as well as the mediators and moderators for this relationship have been examined and confirmed the role of HR practices on organizational innovation by other studies (Wei et al., 2011, Chang et al., 2013).

Moreover, we showed that adopting a customer oriented approach (market orientation) positively predicts organizational level innovation. In other researches, a direct relationship was found between the market orientation and the organization innovation (Deshpandé et al., 1993; Kohli & Jaworski, 1990; Hult et al., 2004; Huhtala et al., 2010). In addition to these studies, significant and positive relationships were found between the customer orientation and the organization innovation (Appiah-Adu and Singh, 1998; Kahn

2001; Gatignon and Xuereb, 1997; Grinstein,2008).

Building on these two predictions, we tested for the interaction of market orientation and revealed that the relationship between SHR practices in a company and organizational level innovation is stronger for firms with higher market orientation. The other studies demonstrate that SHRM and market orientation may interact with each other to influence organizational innovation (Wei et al., 2008, 2011, Chang et al., 2013).

However, we should note that our participants were selected from IT industries which are an important limitation. Moreover, data represent self-reports, which prevents the generalizability of the results. Considering these limitations in mind, we hope that our study extends our understanding on SHR practices and market orientation over organizational level innovation.

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