

Exploring the Effects of EFQM Excellence Model on the Process of Intrapreneurship: A Research from Turkey

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Abstract

The innovation process requires intrapreneurial behaviors of employees concerning stages of idea conception, development, implementation and integration. All organizations should apply and follow a suitable excellence model which leads them toward innovative behaviors. One of the methods for creating an innovative culture in the organizations is the EFOM Excellence Model. The purpose of this study is to explore how the applications of EFQM Excellence Model influence on the intrapreneurship behaviors of the employees. A comparative analysis (one-way analysis of variance) was conducted with 275 teachers from three schools one of which achieved Recognized for Excellence 5-Star to find the answer of the research question. The results showed that the innovativeness, proactiveness, risk taking, autonomy and networking dimensions of the intrapreneurship behaviors are higher in the school using EFQM Excellence Model. Thus this paper indicates that the eight basic rules of excellence applications of EFQM Excellence Model make a positive impact on the intrapreneurship behaviors of the employees.

Keywords EFQM Excellence Model, Intrapreneurship, Innovation, Quality Management

JEL Codes: M10, M12, M19

1. Introduction

In today's rapidly changing environment organizations permanently must be innovative to acquire and sustain the competitive advantage. The importance of intrapreneurship applications are growing

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as a method of improving innovation practices in the organizations. Some predictors of the successful intrapreneurial implementations in the organizational context are communication quality and quantity, formal controls, organizational support, the support of top management, employee training, and organizational values (Zahra, 1991; Antoncic and Hisrich, 2001; Demirbağ *et al.*, 2006; Guth and Ginsberg, 1990). For instance, open communication as a means of information sharing and empowerment, the characteristics and visions of strategic leaders or attitudes of individuals can be considered some critical factors for the innovation when attempting to achieve organizational goals. All these factors show the significance of organizational context in terms of the intrapreneurship processes.

Organizations search many techniques to improve their intrapreneurial and innovative capabilities for the competitive advantage. EFQM Excellence Model which is based on the principles of the Total Quality Management is a tool of appropriate management system for the organizations. This model is a self-assessment method of the organization giving the picture of its strengths, weaknesses and improvement requirements. Organizations may present opportunities to intrapreneurs for exhibiting innovative behaviors with using of EFQM Excellence Model.

In this context, the purpose of this study is to explore the effects of EFQM Excellence Model on the intrapreneurship behaviors in the organizations. We have selected different organizations one of which is performing the EFQM Excellence Model to compare their employees' intrapreneurial behaviors. This study is structured as follows. The following titles explain the term of intrapreneurship, main characteristics of the EFQM Excellence Model and the relationship between these variables. The next title puts the methodology, empirical model and findings. Finally, discussion and the main conclusions are presented.

2. Intrapreneurship

The term of intrapreneurship has been defined in several ways: as a process of supplying the resources, production, and initiating the sales for searching new market opportunities and taking the attractive opportunities in an established organization (Kierulff, 1979); as a

practice of developing a new venture within an existing organization, to exploit a new opportunity and create an economic value (Pinchot, 1985); as a risk and venture in an existing and working organization (Luchsinger and Bagby, 1987); as doing new things and pursuing opportunities by leaving the traditional (Vesper, 1990); and as the creation of new organizations by an organization, or as an incentive of renewal and innovation within that organization (Sharma and Chrisman, 1999). It also describes in various terms such as intrapreneuring (Pinchot, 1985), entrepreneurship (Vesper, 1984), internal corporate corporate entrepreneurship (Jones and Butler, 1992), corporate venturing (MacMillan, 1986), and new venture formation (Kanter and Richardson, 1991). In broad terms, intrapreneurship can be explained simply as an entrepreneurship process within an existing organization for creating an economic value.

Despite the lack of common definition of the intrapreneurship, there are two main research tendencies in the literature. The first one focuses on the individuals who implement innovations in the organizations. This approach discusses intrapreneurship in term of a set of psychological characteristics and personal attributes (Bordeux, 1987; Pinchot, 1985; Ross and Unwalla, 1986) or roles and functions of intrapreneurs (Knight, 1987; Lee and Zemke, 1985). The second one deals with the intrapreneurial process, the factors leading to its emergence and conditions required. This perception views intrapreneurship as an organizational mode, explained by the factors of freedom and autonomy (Covin and Slevin, 1991; Zahra and Pearce, 1994; Reece and Brandt, 1990) or a managerial strategy (Mintzberg, 1989). This trend defines intrapreneurship as a multidimensional concept comprised of dimensions: autonomy, risk taking, innovativeness, competitive aggressiveness and proactiveness (Covin and Slevin, 1991; Dess and Lumpkin, 2005; Lumpkin and Dess, 1996). This classification with actions and behaviors serves a broad frame for using individual and organizational levels. After all Irwin (2000) and Yamada (2004) discuss that networking dimension is more appropriate from the point of the individualistic and collaboration aspects in the intrapreneurship process. Thus networking becomes one of the prominent factors for the intrapreneurship, because social interactions have various functions, such as facilitating communication and coordination, transferring information, and sharing of norms (Irwin, 2000; Yamada, 2004). Accordingly we



focus on the autonomy, risk taking, innovativeness, networking, and proactiveness dimensions of the intrapreneurship behaviors.

acting independently presenting Autonomy is in and implementing an opinion or a vision (Lumpkin and Dess, 1996). Autonomy refers to self directing in pursuing the opportunities and shows the degree of self control on the work plans, selection of work methods and work specifications. Risk taking is a basic element of the intrapreneurship, because the term intrapreneurship can be defined as a risk and venture in an existing and working organization (Luchsinger and Bagby, 1987). Risk, as the possibility of loss, may be viewed as a distinctive characteristic of innovativeness, new business formation, and proactive actions of existing firms (Covin and Slevin, 1989). Innovativeness is activity resulting in new ideas, and attemption which may result in new processes, products, or services (Lyon et al., 2000). Innovativeness indicates the product and service innovation focusing on development and innovation in technology. Intrapreneurship contains new product development, product improvements, and new production methods and procedures (Schollhammer, 1982). Networking is a business network activity that based on human relations and it is fundamental for firms as Granovetter (1973) explains "economic activities are at the same time social activities". Networking provides opportunities to newly combine heterogeneous ideas, promote their realization, and create new activities and potentials through interactions (Yamada, 2004). Proactiveness is anticipation of future needs, changes, or challenges that may lead to new opportunities (Lumpkin and Dess, 1996). The proactiveness dimension is related to pioneering and initiative using in pursuing new opportunities or entering new markets (Covin and Slevin, 1991). Proactiveness is also foreseeing the problems and taking a step directed to struggle these problems with a future oriented behavior (Friedman, 1994).

3. The EFQM Excellence Model

The EFQM Excellence Model measures the organizations in terms of Total Quality Management applications. This model is a selfassessment framework for evaluating the strengths and weaknesses of the organizations. Self-assessment is comparing activities and results of the company with the excellence model (Hillman, 1994). Self-assessment

enables companies to find strengths and improvement areas in order to develop their improvement plans which should be included in organizational strategic plan (Dale *et al.*, 2000). The EFQM Excellence Model includes all the prominent areas of the organization and it explains the needs should be applied in these areas. It has being implemented by many European organizations to improvement of their management systems since 1992 for the European Quality Award.

The EFQM Excellence Model comprises of "Eight Basic Rules of Excellence" principles of the Total Quality Management that guarantee the success in the strategic management process (Figure 1). These are: results orientation (achieving results), customer focus (creating sustainable customer value), leadership and constancy of purpose (visionary and inspirational leadership), management by processes and facts (managing through a set of interdependent and interrelated systems, processes and facts), people development and involvement (maximizing the contribution of employees), continuous learning, innovation and improvement (changing the status quo), partnership development (value-adding partnerships) and corporate social responsibility (meeting expectations of stakeholders).

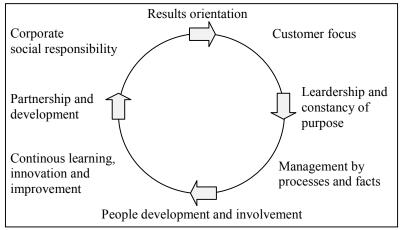


Figure 1: Eight Basic Rules of Excellence

The EFQM Excellence Model has nine criteria for the assessment. Five of them are "Enablers", involving what the organization does, and



four are "Results", including what the organization succeeds. The definitions of EFQM criteria are as follows:

• Leadership: Excellent leaders develop organizational values and systems required for sustainable competitiveness, and facilitate the achievement of the mission and vision.

• Policy and strategy: Excellent organizations implement their mission and vision by employing a stakeholder focused strategy.

• People: Excellent organizations manage, develop and release the full potential of their employees through fairness, equality and empowerment.

• Partnerships and resources: Excellent organizations plan to manage external partnerships, suppliers and internal resources in order to support policy and strategy.

• Processes: Excellent organizations design, manage and improve processes in order to satisfy customers and other stakeholders.

• Customer results: Excellent organizations measure and achieve results relevant to customers.

• People results: Excellent organizations measure and achieve results relevant to their people.

• Society results: Excellent organizations measure and achieve results relevant to society.

• Key performance results: Excellent organizations measure and achieve results relevant to the key element of their policy and strategy.

Innovation and learning help to improve enablers that in turn lead to improved results (Figure 2). The basic assumption of this model is that excellent results related to performance, customers, people and society are achieved through directing the people, policy and strategy, partnerships and resources, and processes in proper leadership manner. The most important advantage that the organizations can get by applying this model is recognizing the organization wholly and revealing its employee's strengths and weaknesses, which provides data for development plans (Tajri, 2005).

ENABLERS RESULTS People People Results Key Leadership Processes Performance Policy & Customer Results Strategy Results Partnerships Society & Resources Results INNOVATION and LEARNING

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Figure 2: The EFQM Excellence Model

There are two important characteristics of EFQM Excellence Model. Firstly EFQM Excellence Model takes into consideration all features and mechanisms of organization, including leadership, partnership, strategy, staff and process. As a result, it can be used as a framework to recognize the areas of improvement and as a self-assessment tool for the quality award. Secondly applying EFQM Excellence Model is not limited to the size of organization and its sector; it can be used by all types of organizations.

4. Relationship between variables

Organizations should take into account the intrapreneurship implementation as a method of improving innovation for the competitive advantage. Pinchot (1985) proposes some "freedom factors", which are correlated with the organizational context, as incentive for the intrapreneurial practices. These freedom factors are: self-selection, no hand-offs, featuring the doer decision or determination, flexible access to time and organizational resources, ending the home-run philosophy, showing tolerance of risk, failure and mistakes, willingness of the organization to commit monetary resources to innovation projects, protecting personal territorial boundaries, cross-functional team formations, and having multiple options. Oden (1997) also suggested six contextual factors as long-term strategic and cultural leadership, of innovation and intrapreneurship, promotion flexibility and adaptability, collaboration and teamwork, ongoing learning and toleration of failure.



Pinchot and Pellman (1999) add further innovation success factors: empowerment of intrapreneurs, supporting the intrapreneurs, sponsoring innovation by mentoring and coaching, strong organizational community, focusing on customers, measuring innovation needs, transparency and truth in support of the free-flow of information, good treatment of people, and social, environmental, ethical responsibility.

Dess and Lumpkin (2005) propose that organizational culture is a strong stimulus for innovation that impacts the intrapreneurship process. Russell and Russell (1992) have measured the effects of norms and values on the end results of innovation and found the relationship between organizational culture and innovation by identifying eight cultural elements, which may affect the intrapreneurship process.

Russell (1999) has identified organic and mechanistic organizational structures as an influencing factor of innovation. Thus it was found that the decentralized structure enables greater autonomy, resource control and participation by facilitating the initiation and stimulation of intrapreneuring through increased empowerment.

Moreover Ahola and Tuominen (2008) propose seven excellence criteria for promoting intrapreneurship behaviors in the organizations. These are leadership, strategy and planning, knowledge and information, people, customer and market focus, process management, improvement and innovation, and success and sustainability.

Ultimately, all of these structural, contextual and cultural factors play significant roles for the intrapreneurial behaviors in the organizations. With this regard, EFQM Excellence Model as a frame of reference of management system may influence many applications of the organizations. This quality model focuses on what an organization does, or could do, to provide an excellent service or product to its customers, service users or stakeholders. Related with the organization's quality policy applications, this excellence reference model may influence intrapreneurship behaviors in the organizations. In parallel with this proposal we formulate this inquiry question: does EFQM Excellence Model differentiates intrapreneurship behaviors of employees in terms of autonomy, risk taking, innovativeness, networking, and proactiveness.

We have not encountered any study discussing relationship between these variables in the literature.

5. Method

5.1. Participants

The participants in the present study comprised 298 teachers from three schools in Turkey. One school is in Bursa, and the other ones are in Ankara and Istanbul. All of the schools are Vocational and Technical High Schools. Sample-1 represents the school in Bursa that implies the EFQM very successfully. Sample-2 is the school in Ankara and Sample-3 is the school in Istanbul both of which are not applying any quality model. When we examined the demographic structure of the schools, no significant difference was addressed.

Questionnaires were distributed by the researchers to every participant in different sessions in all of the schools. When the returned questionnaires were examined, 23 were invalid. As a result, a total of 275 valid responses were used in the research. The sample included 179 (65%) female and 96 (35%) male volunteers; 196 (71%) participants were married, 74 (27%) were single, and 5 (2%) were divorced. The participants' ages ranged from 22 to 63 years of age, with the average age being 41.02 (SD=7.75) years. Participants had been working in their schools for a minimum of 1 year and a maximum of 35 years, with the average period being 10.53 (SD=7.60) years.

5.2. Measures

EFQM Evaluation: The evaluation of EFQM Excellence Model was not conducted by the researchers, but instead the evaluations of the National Quality Award Jury were taken to consideration. The school located in Bursa, achieved Recognized for Excellence 5-Star in 2009 and received the National Quality Success Award in 2009. The other schools in Ankara and Istanbul have ISO 9001:2000 Quality Management Certificate but do not apply EFQM Excellence Model.

Intrapreneurial Behavior Scale: Intrapreneurial behaviors of the students were measured by a 22-item scale taken from Şeşen (2010)'s study. The scale designed to measure the intrapreneurial behaviors on five dimensions named as innovativeness, proactiveness, risk taking, autonomy, and networking. Each item was answered via a five-point

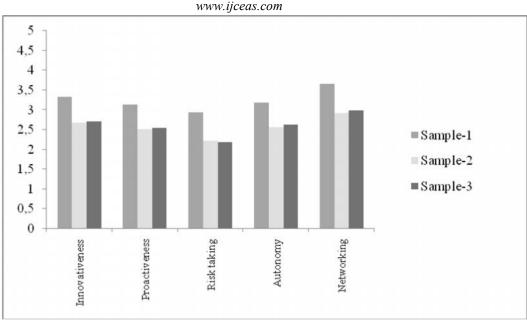


Likert scale: '1=almost never' through to '5=almost always' and highest scores indicate more tendency in the given dimension. Sample items were "I try to do new things during my job", "I think I am open for novel ideas", and "I do not hesitate to add new point of contacts to expand my social network". Cronbach's alpha coefficient for the scale was 0.86.

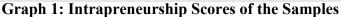
To ensure the construct validity of the scale, confirmatory factor analysis (CFA) was conducted. A model in which all variables were each loaded onto separate latent factors (five different sub-dimensions) was tested in CFA and as expected, this model yielded very good fit [χ^2 =12.78, p<.01; df=4, GFI (goodness of fit)=.93, CFI (comparative fit index)=.91, RMSEA (root mean square error of approximation)=.05, IFI (incremental fit index)=.92]. Thus, all of the variables were adopted as distinct constructs and this model explained 69,4% of the total variance. Moreover the Cronbach's alpha coefficients for the sub factors were calculated as 0.78 for innovativeness, 0.82 for proactiveness, 0.81 for risk taking, 0.77 for autonomy, and 0.85 for networking.

6. Results and Discussion

The mean scores of the dimensions of intrapreneurship scale were given in Graph 1 separately for each sample. As seen on the graph, mean scores of Sample-2 (innovativeness=2.68, proactiveness=2.51, risk taking=2.22, autonomy=2.56, and networking=2.92) and Sample-3 (in order 2.71, 2.55, 2.18, 2.62, and 2.98) were lower than Sample-1 (in order 3.33, 3.14, 2.94, 3.18, and 3.65) in all dimensions. This result indicates that there is a significant difference between the school performing EFQM Excellence Model and the schools that do not in the mean scores of the intrapreneurial behaviors.



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We conducted one way analysis of variance (ANOVA) to determine whether there is statistical significance in the intrapreneurship behaviors scores among Sample-1, Sample-2 and Sample-3 (see Table 2). The findings demonstrated that Sample-1 and the other samples differ significantly for all intrapreneurship behaviors as innovativeness (F=3.69, p<0.05), proactiveness (F=3.65, p<0.05), risk taking (F=3.81, p<0.05), autonomy (F=3.61, p<0.05), and networking (F=3.91, p<0.05). Moreover while the means of Sample-1 were relatively increased, we could not find any mean difference between Sample-2 and Sample-3. This evidence demonstrated that the main cause of displaying more intrapreneurship behaviors is result from not something else but depends on the EFQM Excellence Model applications in the schools.



Sub dimension	Mean	Sd	Mean dif.	F
Innovativer	iess			3.69
Sample1	3,33	0,45		
Sample2			0,65*	
Sample3			0,62*	
Sample2	2,68	0,34		
Sample1			0,65*	
Sample3			0,03	
Sample3	2,71	0,35		
Sample1			0,62*	
Sample2			0,03	
Proactiveness				3.65
Sample1	3,14	0,39		
Sample2			0,63*	
Sample3			0,59*	
Sample2	2,51	0,35		
Sample1			0,63*	
Sample3			0,04	
Sample3	2,55	0,37		
Sample1			0,59*	
Sample2			0,04	
Risk taking				3.81
Sample1	2,94	0,44		
Sample2			0,72*	
Sample3			0,76*	
Sample2	2,22	0,37		
Sample1			0,72*	
Sample3			0,04	
Sample3	2,18	0,34	-	
Sample1	-	·	0,76*	
Sample2			0,04	

Table 2: The Results of the ANOVA between Samples

Autono	my			3.61
Sample1	3,18	0,43		
Sample2			0,62*	
Sample3			0,56*	
Sample2	2,56	0,38		
Sample1			0,62*	
Sample3			0,06	
Sample3	2,62	0,39		
Sample1			0,56*	
Sample2			0,06	
Networ	king			3.91
Sample1	3,65	0,41		
Sample2			0,73*	
Sample3			0,67*	
Sample2	2,92	0,40		
Sample1			0,73*	
Sample3			0,06	
Sample3	2,98	0,41		
Sample1			0,67*	
Sample2			0,06	
*p<0,05				

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The results obtained (see Table 2) show that the scores of innovativeness, proactiveness, risk taking, autonomy and networking dimensions of the intrapreneurship behaviors are higher in the school using EFQM Excellence Model. We can say that eight basic rules of excellence applications of EFQM Excellence Model make a positive impact on the intrapreneurship behaviors of the employees.

Reviewing studies of contextual factors affecting the intrapreneurship behaviors, Pinchot (1985) proposed some "freedom factors" particularly including autonomy, showing tolerance of risk, failure and mistakes, cross-functional team formations. Oden (1997) suggested factors as long-term leadership, flexibility and adaptability, teamwork, ongoing learning and toleration of failure. Pinchot and Pellman (1999) focused on the empowerment, strong organizational community, focusing on customers, and social, environmental and ethical



responsibility factors. Russell and Russell (1992), Dess and Lumpkin (2005) proposed organizational culture, and Russell (1999) identified organic organizational structures as an influencing factor of intrapreneurship behaviors. Ultimately Ahola and Tuominen (2008) proposed leadership, strategy and planning, knowledge and information, people, customer and market focus, process management, improvement and innovation, and success and sustainability for promoting intrapreneurship behaviors. Because the EFQM Excellence Model assumes that any organization regardless of its sector, size, structure and etc. should have a proper management system to be successful, all these intrapreneurial features of context also represents some characteristics of the excellent organizations which are projected in the EFQM Excellence Model.

Firstly the excellent organizations value their people and create a culture of empowerment for the balanced achievement of organizational and personal goals. This may lead to increase employee productivity and motivation, cost effectiveness of operations and services, and promotes effective teamwork. Secondly the excellent organizations generate increased value and levels of performance through continual and systematic innovation. Intrapreneurial behavior is most likely to occur in the organizations that encourage it. Thirdly the excellent organizations meet their mission and progress towards their vision through planning and achieving a balanced set of results for economic, social and ecological sustainability. Intrapreneurship behaviors also are more likely to be proactive behaviors requiring strategy and planning with the help of top management support. Lastly excellent organizations have organic structures and they are managed flexible through customer-focused based on their needs and expectations. This flexibility and decentralization are the keys to intrapreneurship behaviors for decision making autonomy.

Ultimately the outcomes of this study supported that the innovativeness, proactiveness, risk taking, autonomy and networking dimensions of the intrapreneurship behaviors may increase in the organization using EFQM Excellence Model. Our findings showed similar results with all these contextual factors regarding the effects of the EFQM Excellence Model applications on the intrapreneurship behaviors in the organizations in this context.

7. Conclusion

The innovation is a crucial factor for organizations to survive and develop in the present changing competitive environment. The innovation process requires intrapreneurial behaviors of employees concerning stages of idea conception, development, implementation and integration. All organizations should apply and follow a suitable excellence model which leads them toward innovative behaviors. It is the management responsibility to establish such an innovative culture in the organizations with norms and values. The innovative culture is the result of long term careful thinking, reflection, planning, measurements and follow-up from top level to projects and process level. One of the methods for creating an innovative culture in the organizations is the EFQM Excellence Model. This model is designed for all kinds of organizations and helps organizations to identify their weaknesses, strengths and areas of improvement.

The results of this study showed the evidence of the significant relationship between EFQM Excellence Model and intrapreneurial behaviors in the organizations. We found that the EFQM Excellence Model applications have positive impact on the intrapreneurship behaviors of the employees. These findings indicate that organizations that have adopted the EFQM Excellence Model are more inclined to implement these intrapreneurial practices. Our results are also interesting for managers who are applying the EFQM Excellence Model to improve the innovative behaviors of the employees.

This study has some limitations in terms of external validity because the data was collected only from a single type of sector. It may be used differentiated sectors to increase the generalizability of the findings. Moreover it would be meaningful future studies would conduct empirical research on the other contextual factors effecting intrapreneurship behaviors.



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