

Assessing Capabilities for Innovation, The Case of Iranian Kalleh Meat Product Company

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ABSTRACT

In the present world, changes and transformations are pure fact and scientific principle. The growing world population and increasing consumption are some of these changes that increase the demand for food. Development of new food product adapted to tastes and consumer behavior can be obtained by entrepreneurial opportunism and applying systematic approach to creativity and innovation. Innovation capability is one of the innovation infrastructures that include organizational ability to create a new product, service and process. The purpose of this paper is assessing the innovation capability in Iranian Food Industry (case study is in Kalleh Meat Products Company with 100 products) and determines the status of this company in each dimension of innovation capability. According to literature, we provide a model with 11 variables (Organizational Structure, Organizational Capability, Innovation Strategy & Vision, Innovation Culture, Implementation, Top Management Participation, Support of Innovator Employees, Team Working Promotion, Staff Training, Changes at Market Conditions & Supply Chain and Government Provisions) which were categorized in three parts, such as Organizational Factors, Leadership & Innovation Management and External Linkages. By using SPSS22 Calculated correlation between variables and ranked. Indicates results, in order, Organizational Factors, Leadership & Innovation Management and External Linkages have a direct relationship with innovation capability, also the innovation capability has moderate downward in each dimension.

KEYWORDS: Innovation Capability, Organizational Factors, Leadership & Innovation Management, External Linkages.

1. INTRODUCTION

Since early 1980, Because of rapid changes, organizations did more attention to creativity and innovation. Many companies are in an environment that a quarter of their sales of products with a lifecycle of less than 5 years as in his lifetime are always looking for new ideas, new products and services and an important factor in their survival is creativity and innovation, fail and disappear through time of business if they do not have the creativity and innovation because increasing organizational creativity leads to improving the quantity and quality product and service, reducing costs, preventing loss of resources, increasing sales, increasing efficiency and productivity, motivation and job satisfaction [1]. One of the superior characteristics of entrepreneurs is an integrated business strategy for achieving competitive advantage, so that we can research the market and consumers in order to new market orientation detection and using creativity and innovation process leading products to the market creating competitive advantage for initiate organizations. Strategy business determines that a firm's businesses must pay to work in the field, In other words, business's strategy to determine the firm's industry and markets in which they will compete. business strategy to manage products and services company engaged in various businesses, In general it can be said that business plans to expand the organization's strategy ,that is inclusive and as an umbrella organization covering all parts, the strategy also outlines how all parts of your organization will lead to greater efficiency [2]. Organizational competitive levels are shown in Figure1, the levels includes of two important aspects of industry development over time and mobility critical of resources so that at the beginning of the importance of less resource allocation is entrepreneurial competition and with the passage of time and the importance of allocating resources to competitive levels of contractual and operational. In other words, the competition is important in the spectrum of creativity and innovation in organizations is to gain a sustainable competitive advantage, so the role of Top management is crucial for creativity and innovation capability and talent Management Company that can make promote for the staff.

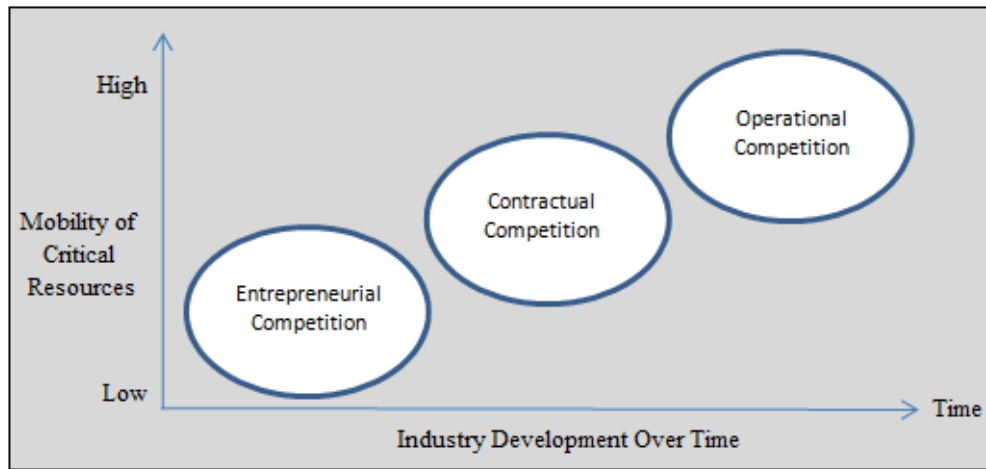


Fig.1. Three Levels of Competition

The characteristics of creative people are: a health perception, a cognitive psychological, cognitive flexibility, initiative, rather than simply the complexity and independence of judgment.

Matrix given by Chen and Wang (2009) [3] suggests that organizations need to have the ability to recognize opportunities for success and entrepreneurial creativity that they are able to deal with the hazards and risks on new investments, this matrix is composed of four parts, so that if the low level of entrepreneurial creativity and knowledge of the investment opportunities that will come into passivity and inactivity, in the next section if the variable can increase their understanding of opportunities in the opportunity to become entrepreneurs and if only to improve their entrepreneurial creativity are innovation-driven investors, the best case is when both variables to strengthen because they can easily recognize new opportunities and provide innovative solutions to become active and successful investors, the matrix is shown in Figure2:

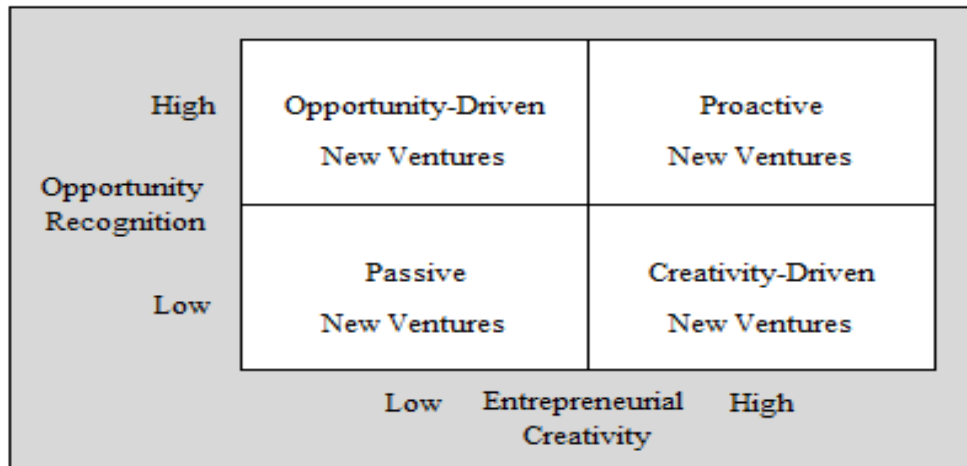


Fig.2. Typology of New Ventures

The views expressed in the strategic impact on the performance of Top Management and staff empowerment, innovation can be said Innovative and profitable activities in a company is very much dependent on the ability of Top managers in identifying environmental opportunities, when managers are able to understand and respond to these opportunities are not exploited, there will be fewer opportunities for innovation. Top management needs to develop a strategy and innovative role in the expression and decide how to use the technology and how to use appropriate performance indicators to improve the innovation system, it should be noted that the innovation or imitation is different because it is time consuming Innovation and the need to think and progress so that in some cases, innovation makes the organization, financing plans, short-term sacrifice and their long-term plans, in other words innovation is the mechanism that needs not to think about the day after tomorrow, today or tomorrow.

Forsman (2011) [4] described that organizations can by employees, customers, organizational culture, organizational structure, leadership and organizational capabilities to implement innovative strategies in their strategic management process innovation, it is shown in Figure 3:

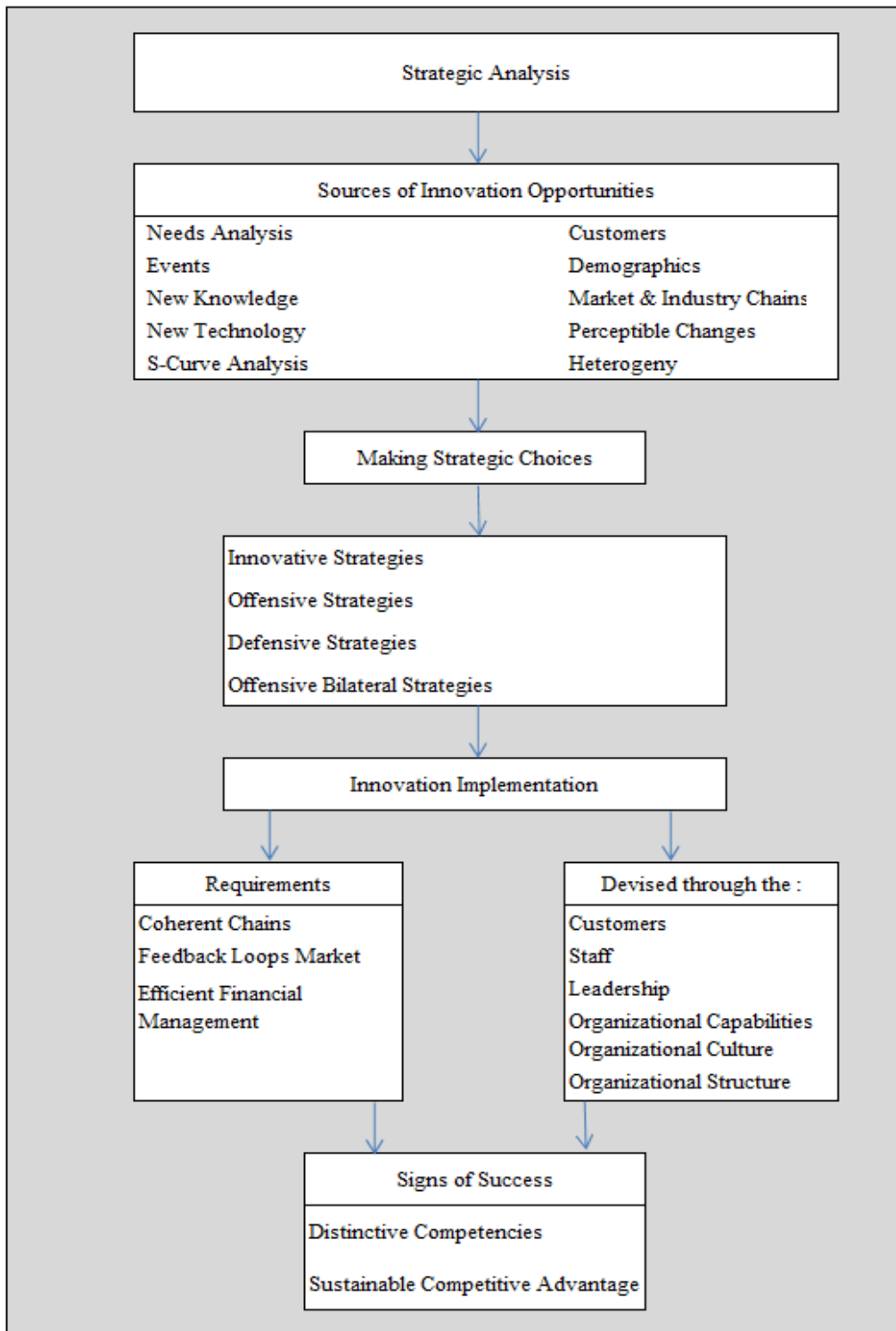


Fig.3. Process of Innovation Strategic Management

Comes different types of innovation by investigating prospects for innovation of both micro aspects (Technology) and macro aspects (Market), the innovation matrix by Von Hippel (2005) [5], as shown in Figure 4 include Radical innovation, Incremental/Minor and Really new. The Radical innovation is resulting from new technologies and new markets so that produce products with new technology and sold in the new target market, this type of innovation will change consumer behavior and preferences, once be used of Incremental/Minor innovation that there is technology in the organization, target market and consumer demand, in the Really New innovation, there is technology and the market is new or there is market and also the technology is new.

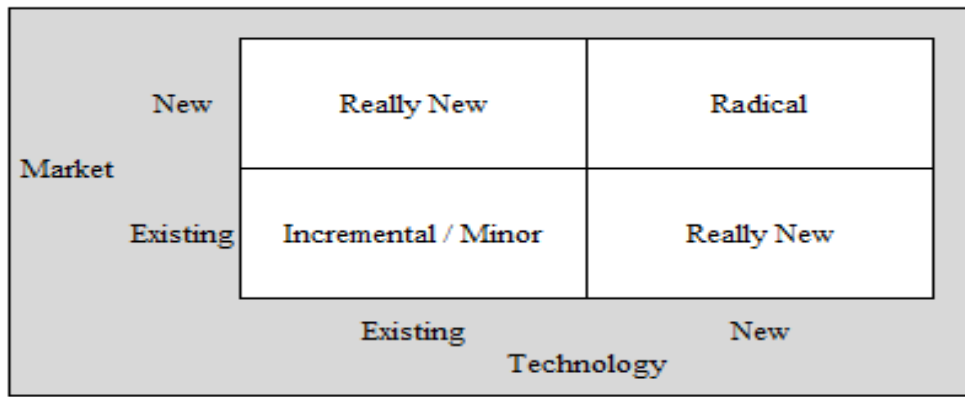


Fig.4. Innovation Matrix

Innovation is examined from two perspectives, first aspect is innovation capacity that is related to the potential infrastructure and other aspect is innovation capability that is related to the actually infrastructure. Organizations can measure their innovation capabilities to provide the necessary conditions for doing innovation in their product or services and processes and take strategic decisions for technology acquisition with allocating resources to clear objectives and analyzing their organization potential and comparing it with competitors status so that low innovation capabilities leads to the acquisition of technology from external sources and high innovation capabilities leads to the use of internal skills. According to Porter (2002) [6], innovation capability levels are:

- The first level is related to innovation capability of employees and team groups that depends on the staffs creativity and knowledge.
- The second level is related to organization capability in product innovation process that consists of generating ideas to conceptual development, market research and making samples.
- The third level is related to projects innovation capability that is more extensive than previous levels. The project is a complex system of people, resources and functions which consists of multiple and various processes.
- The fourth level is related to corporate, at this level addition to innovation capabilities in previous levels, attention to innovation management capabilities like innovation projects portfolio and knowledge sharing on different projects.

Due to the extremely low level of creativity and innovation in organizations while most people have the talent and potential of creativity and innovation, organizations can use the following guidelines to help employees increase innovation capabilities:

- Increase the risk tolerance of the new Works
- Reduction of external controls and procedures outside the rules of intellectual
- Reduction division
- Ambiguities tolerance
- Contradictions tolerance
- Focus on results and Tools
- The opposition and increase communication in all aspects
- Increased communication in all aspects

Based on reports by the UN (2005) [7], until 2030 the world's population will be 8.2 billion so will increase the demand for food in the world, also technology changes and market orientations will lead to reduced life cycle of product so that successful entrepreneurial food companies to develop their innovation and make Competitive advantage and continuously improve their products. Most company prefer to redevelopment of existing products with incremental innovation instead to create new products with radical innovation, because of most new products never enter to market, vice versa, products that are successful in entry into market will face with failure of 25% to 45% and among seven new products ideas almost four ideas will develop, two ideas will start and only one idea will success. Therefore can be said that top management need to know what factors have affect on their organization innovation capability that this paper will answer to this need [8].

2. Research literature and Conceptual Model

According to Börjesson & Elmquist (2012) [9], innovation capabilities can be described as a company's ability to be competitive through systematic innovation. This innovation builds not only on reconfiguration of resources and processes, but also on the values that influence how decisions are taken within the organization. Developing innovation capabilities is not a one-time effort it requires a continuously improving absorptive capability [10]. This view is shared by Balan et al (2009) [11] who argue that modern companies need to be able to innovate on a systematic and continuing basis. In the context of innovation, they moreover claim that firms do not only compete in terms of new offerings, but also their capability to develop new products. This distinction is important and it is the latter that constitutes the innovation capability. Previous investigations were reviewed and the variables affecting the innovation capabilities presented in Table 1.

Table 1. Summary of literature on innovative capability

No.	Authors	Items
1	Assink (2006) [10], Colarelli O'Connor (2008) [12], Guan and Ma(2003) [13], Hurt et al (1977) [14], Martensen et al (2007) [15]	Organizational Structure
2	Akman and Yilmaz (2008) [2], Calantone et al (2002) [16], Forsman (2011) [4], Subramanian and Youndt (2005) [17], Wonglimpiyarat (2010) [18], Yam et al (2011) [19]	Organizational Capability
3	Assink (2006) [10], Bjorkdahl and Borjesson (2011) [20], O'Brien (2003) [21], Saleh and Wang (1993) [22]	Innovation Strategy & Vision
4	Akman and Yilmaz (2008) [2], Assink (2006) [10], Bertland (2009) [23], Biloslavo (2005) [24], Song and Dyer (1995) [25]	Innovation Culture
5	Nassimbeni (2001) [26], Romijn and Albaladejo (2002) [27], Sher and Yong (2005) [28], Wonglimpiyarat (2010) [18], Yang (2012) [29]	Implementation
6	Akman and Yilmaz (2008) [2], Bakker (2006) [30], Bessant (2010) [31], Boedrich (2004) [32], Stamm (2005) [33]	Top Management Participation
7	Akman and Yilmaz (2008) [2], Nassimbeni (2001) [26], Subramanian and Youndt (2005) [17], Yang (2012) [29]	Support of Innovator Employees
8	Damanpour (1991) [34], Freel (2005) [35], Hurley and Hult (1998) [36], Pearce (1993) [37]	Team Working Promotion
9	Argyris (1977) [38], Assink (2006) [10], Biloslavo (2005) [24], Bjorkdahl and Borjesson (2012) [20], Guan and Ma (2003) [13]	Staff Training
10	Akman and Yilmaz (2008) [2], Hurley and Hult (1998) [36], Jaworski and Kohli (1993) [39], Nassimbeni (2001) [26], Wonglimpiyarat (2010) [18]	Changes at Market Conditions & Supply Chain
11	Akman and Yilmaz (2008) [2], Chesbrough (2003) [40], Verganti (2008) [41], von Hippel (2005) [5]	Government Provisions

A more detailed definition is given by Helfat and Peteraf (2003) [42], who argue that this type of capabilities refers to “the ability of an organization to perform a coordinated set of tasks, utilizing organizational resources, for the purpose of achieving a particular end result”. According to Christensen (1997) [43], organizational capabilities encapsulate three dimensions:

- Resources, consisting of people, equipment, technology, product designs, brands, information, cash and relations with external partners.
- Processes, which refers to the methods aiming at transforming input into value-added output, thus including interaction patterns, coordination, communication and decision-making.
- Values, which can be thought of as the criteria used for decision-making.

Variables identified from the results of Table 1 were categorized in three parts and designed a conceptual model of research that shown it in Figure 5.

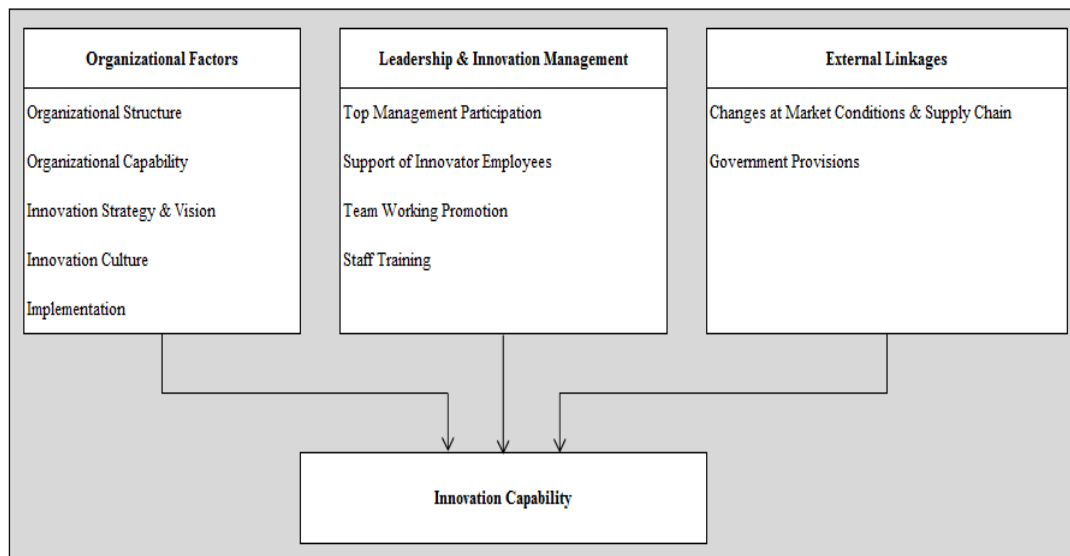


Fig.5. Conceptual Mode

According to several authors, including e.g. Schilling (2010) [44], the organizational structure of the company affects its ability to innovate. One aspect that influences this ability is the degree of centralization, which concerns what level the decision-making authority is kept on. In an organization where decision-making authority is distributed to a low level, a decentralized structure prevails. In relation to innovation and new growth, the extent to which R&D activities should be centralized is for instance important to consider. Here, decentralization could lead to projects that closely respond to the need of the specific division, but at the same time result in duplication of work and lack of economies of scale. Lawson and Samson (2001) [45] claim that clear articulation of a common vision along with the expression of the strategic direction are requirements for successful innovation. This is important since it contributes to the institutionalizing of innovation, making it a continuously ongoing activity. Without this type of strategy, there is a risk that the interest of and attention given to innovation will be too low. On the contrary, if the employees are aware of the strategy, they have clarity of purpose to find new ways of doing things to achieve a certain goal. In this manner, the innovation strategy is of major importance when it comes to direct the organization's attention. Ahmed (1998) [46] lists elements that top management of innovative companies typically possess. This list includes putting a lot of effort into accurate market analysis, working closely together with end users, and assuring that innovation projects are supported at all levels in the organization. Leaders furthermore need have trust in employees' abilities and competences, be good at communicating, and have a tolerance to change, ambiguity and slack resources. Linkage with the external environment is something that is emphasized by many researchers on the subject of innovation capabilities. Users are often the ones that most accurately can identify the best potential value proposition. Hence, including users in the innovation process can assist the company in focusing its efforts on aspects that are valued on the market. Lead users are frequently involved in innovation projects since they face new needs earlier than the regular actors in the marketplace [47].

3. RESEARCH METHOD

In this study, the 40-item questionnaire was used, that was designed based on the 5-point Likert as it was considered least significant respond with 1 and most significant respond with 5. This questionnaire was distributed among managers and experts in statistical population and was used to calculate the reliability of Cronbach. The Cronbach alpha value is 0.933 that this value indicating a high internal consistency. For identifying factors affecting innovation capabilities was used 11 variables that were categorized in three parts, such as Organizational Factors, Leadership & Innovation Management and External Linkages. Organizational factors influencing innovation capabilities include: Organizational structure (mean 2.94), Organizational Capability (mean 3.32), Innovation Strategy & Vision (mean 3.30), Innovation Culture (mean 3) and Implementation (mean 2.88). Average of organizational factors is 3.09 that show the innovation capability in this group is medium. Factors are shown in Table 2.

Table 2. Organizational factors influencing the innovation capability

No.	Independent variable	Dependent variable	Pearson correlation	Gamma	Rank
1	Implementation	Innovation Capability	0.793	0.601	First
2	Organizational Structure		0.776	0.587	Second
3	Innovation Strategy & Vision		0.718	0.535	Third
4	Innovation Culture		0.705	0.572	Fourth
5	Organizational Capability		0.688	0.496	Fifth

Leadership & Innovation Management influencing innovation capabilities include: Top Management Participation (mean 3), Support of Innovator Employees (mean 2.58), Team Working Promotion (mean 2.7) and Staff Training (mean 2.9). Average of Leadership & Innovation Management is 2.79 that show the innovation capability in this group is moderate downward. Factors are shown in Table 3.

Table 3. Leadership & Innovation Management influencing the innovation capability

No.	Independent variable	Dependent variable	Pearson correlation	Gamma	Rank
1	Top Management Participation	Innovation Capability	0.864	0.552	First
2	Staff Training		0.743	0.592	Second
3	Support of Innovator Employees		0.681	0.538	Third
4	Team Working Promotion		0.549	0.391	Fourth

External Linkages influencing innovation capabilities include: Changes at Market Conditions & Supply Chain (mean 3) and Government Provisions (mean 2.64). Average of External Linkages is 2.82 that show the innovation capability in this group is moderate downward. Factors are shown in Table 4.

Table 4. External Linkages influencing the innovation capability

No.	Independent variable	Dependent variable	Pearson correlation	Gamma	Rank
1	Government Provisions	Innovation Capability	0.849	0.85	First
2	Changes at Market Conditions & Supply Chain		0.762	0.697	Second

Correlation analysis showed, in order, Organizational Factors, Leadership & Innovation Management and External Linkages have a direct relationship with innovation capability that shown in Table 5.

Table 5. External Linkages influencing the innovation capability

No.	Independent variable	Dependent variable	Pearson correlation	Gamma	Rank
1	Organizational Factors	Innovation Capability	0.916	0.639	First
2	Leadership & Innovation Management		0.884	0.564	Second
3	External Linkages		0.878	0.816	Third

In Table 6, were ranked all the variables affecting innovation capability:

Table 6. Ranking all variables influencing the innovation capability

No.	Independent variable	Rank
1	Top Management Participation	First
2	Government Provisions	Second
3	Implementation	Third
4	Organizational Structure	Fourth
5	Changes at Market Conditions & Supply Chain	Fifth
6	Staff Training	Sixth
7	Innovation Strategy & Vision	Seventh
8	Innovation Culture	Eighth
9	Organizational Capability	Ninth
10	Support of Innovator Employees	Tenth
11	Team Working Promotion	Eleventh

4. Conclusion

Entrepreneurial management is a topic about applying new thinking and opportunities recognition. There are a group of people in any organization which use of human resources, finance and technology better than others so should identify creative people in organizations and encouraged them to become entrepreneurs in the organization and continuously to implement their entrepreneurial activities. Organizations can establishment of electronic human resource management prepare the proper context for creative staff as with the formation of the innovation atmosphere increases innovation capability. The results showed that in order Top Management Participation, Government Provisions, Implementation, Organizational Structure, Changes at Market Conditions & Supply Chain, Staff Training, Innovation Strategy & Vision, Innovation Culture, Organizational Capability, Support of Innovator Employees and Team Working Promotion have greatest direct relationship with innovation capabilities therefore it is recommended to organizations in addition to establishment of electronic human resource management, a lot of attention to creative people, focus on measurable objectives and making opportunities for learning through experience and Create multiple job promotion paths for creative staff.

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