



Researches Benchmarking for Identifying the Relationship between Innovation and Entrepreneurship in E-commerce

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ABSTRACT

The unique features of e-commerce and communications resulted in the development of business and employment to cause the promotion of entrepreneurship in the aspect of training the personality traits of entrepreneurship and entrepreneurial idea making. In addition, there is a mutual interactive relationship between entrepreneurship and e-commerce. In this base, governments must develop and reinforce the platform of entrepreneurship in the area of e-commerce which is the same as communication and information networks. The purpose of this research is to analyze researches' benchmarking for identifying the relationship between innovation and entrepreneurship in e-commerce. In purpose aspect, this study is practical and in data collection aspect is descriptive and survey. Results indicated that the improvement of customer relationship in e-commerce and business causes sustainable competitive advantage and it reduces the costs of organizations. Unemployment can also be reduced with a low capital. Moreover, introducing a practical framework to help organizations achieve their purposes causes entrepreneurship to thrive, and organizations to gain a correct and timely perception of market situation.

Keywords: E-commerce, Entrepreneurship, Innovation, Benchmarking, Information Technology

JEL Classifications: L26, L81, O3

1. INTRODUCTION

In the first half of the 90s, the internet highly developed and gradually exited from university and military areas and found many users from any community. Different e-commerce models have been formed and used in this age. E-commerce gradually developed and e-commerce models introduced as a category of the models of the business world. The reasons for the rapid growth of e-commerce in this age were forming cheap and appropriate platforms for e-commerce and the development of users of these platforms. The growth of competitive pressures among firms was another reason for firms' attention to e-commerce models.

Nowadays, entrepreneurship and entrepreneurs are highly utilized and depended on the provided platforms by information technology. Entrepreneurial activities, in fact, cause the knowledge of needs, the creation of ideas, and production of technologies and information technology is the motor of entrepreneurship development and economic growth. Activities, jobs, cultures, and so on, all of them are changed and affected by information

technology. success lies in entrepreneurship and new investments in different affairs such as information technology.

The main reason for the application of information and communications technology (ICT) in business is that in the aspect of costs, it was required that some activities and business processes implement professionally and separated from other processes. At the same time, in customer orientation aspect, it was required to form the required integration among these processes for systematically providing customer satisfaction. Therefore, the specialization of business processes conflicted with the required integration for customer orientation. In this regard, ICT provided this potentiality for commercial organizations and firms to provide required integration among processes for supporting customer orientation philosophy, while specializing the affairs and sparing the costs.

E-commerce provides different advantages for both seller and consumer. Using e-commerce, sellers can access to small sections of the market that are highly scattered. Buyers can also profit from different sellers with lower costs through

accessing international markets and the preparation of goods. Studies conducted in this field that will be briefly mentioned.

In this regard, the current study is conducted with the purpose of analyzing researches benchmarking for identifying the relationship between innovation and entrepreneurship in e-commerce.

2. ENTREPRENEURSHIP

The primary concepts of entrepreneurship must be attributed to economy science. The climax of the relationship between economy and entrepreneurship in the had been in the twentieth century especially from the 1940s onwards because efforts for conceptualizing entrepreneurship started from economic schools, especially in 1970s. Economists focused on entrepreneurship for preventing continuous inflation in this decade, after observing the defeat of consumer demand management. Economists realized the 2 or 3 percent annual proficiency the years of the 1950s and 1960s reduced to almost zero in 1970s. this issue caused providing goods and services that are in the area of entrepreneurship to be more regarded than demand management (Walzack, 2016).

Entrepreneurship is the process of identifying, evaluating, and optimizing opportunities in order to introduce products and services, methods for organizing markets, new primary material and processes, through organized efforts that have not done before. So entrepreneurship is a nature and an appropriate sample style for better living. Entrepreneurship is a principle that exists as a belief in people. Entrepreneurship is to think differently and it causes a collection of different traits to form and reinforce in people. If opportunism is added in this belief and if these opportunities managed correctly, it brings value creation. As a result, the entrepreneur person is privileged other people and his/her success will be definite (Eskandari et al., 2016).

2.1. Entrepreneurship Approaches

- Macro level: This approach is based on environmentalism and it focused on the conducted studies in the field of the organizational life cycle. This approach emphasizes in determinants factors of organizational growth in the long term and analyzes what entrepreneurs should do to create wealth.
- Micro level: This approach analyzes entrepreneurship in Psychological and sociological aspect at the micro level.
- Median level: This approach focused on a growth-oriented organization in which the collection, storage, and distribution of resources are emphasized.

2.2. Entrepreneurship Anti-motivational Factors

The most important anti-motivational factors of entrepreneurship include fear of losing personal assets, fear of failure on Financing for setting up a business, concerns about failing to provide the legal requirements, concern about the lack of social security, administrative corruption, fear of not having adequate skills and experience and so on (Al-Qirim, 2017).

2.3. Legal Barriers for Entrepreneurship Development

The most important barriers to entrepreneurship development include banking regulation, tax law, commercial law, labor

law, the existence of state monopoly derived from laws and regulations, customs laws and regulations, municipal laws and so on (Khalili, 2016).

2.4. Entrepreneurship Types: Entrepreneurship is Divided into Two Basic Types

Personal and organizational entrepreneurship. If the person's yield is innovating and manufacturing a new product or service due to the market, it is personal entrepreneurship. If the yield that is from a team in an organization, this is organizational entrepreneurship (Sepahri, 2014).

2.5. Effective Characteristics of IT in Entrepreneurship

IT could show a considerable flexibility in entrepreneurship field with having different features and potentialities. These features caused the increase of the efficiency of these technologies in entrepreneurship and creating jobs. Some of these features are as follow:

- Increasing speed: Fast calculation and processing of information reduce the time of the work and consequently increase the efficiency. IT also provides fast search and access to information.
- Increasing accuracy: In human-based jobs, the accuracy of work is changeable, while IT provides and guarantees high accuracy. In different types of calculation and processing activities, the accuracy of the computer is much better than human.
- Reducing the physical size of the storage of information: With the development of IT and its usage, there is no longer need to carry and maintain a large volume of specialized reference books. The information of many books can be easily saved in any compressed disk and/or the required resources can be received through computer networks.
- Fix some administrative corruptions: The use of IT increases the transparency in affairs and eliminate most of the mediators. These two key advantages cause some of the administrative corruptions especially at low levels to solve (Sardari, 2015).

2.6. Electronic Entrepreneurship

Electronic entrepreneurship connects the whole entrepreneurship elements including risk propensity, activism, innovation in manufacturing, set up and management of e-business. Electronic entrepreneurship is not limited only in e-business, but this concept is also the electronic infrastructures for large businesses in large organizations. So e-entrepreneurship is a factor for e-commerce development because it caused the more extension of economic relations (Sohrabi and Khanlari, 2016).

2.7. Entrepreneurial Vision

Entrepreneurs are the people who understand the opportunities and see the gaps. The understanding of opportunities by these people may result from marketing or relationship with people or watching tv, media, internet network etc. and this is called entrepreneurial vision. Market gaps are seen well through the entrepreneurial vision and it creates a motivation to take an action and set up a business. In other words, people who tend

to set up a business should reinforce this vision in themselves. Development and propagation of this vision in families, schools etc. will help the reinforcement of this vision and it generally caused innovation and setting up business (Shahabadi and Rahmani, 2016).

3. INNOVATION

Innovation is to use intellectual abilities to create a new thought or concept. Innovation is the process of gaining a creative thought and turn it into a product or service and/or a useful operating procedure. Innovation as an objectified creativity: In this type of definition, innovation has the concept of the operation and implementation of new ideas. From this view, innovation can be considered as objective creativity and also as the implemented and realized form of subjective creativity (Emadzadeh et al., 2016).

3.1. Innovation Types

There are four main types of innovation:

Product innovation: It results in new products and services or the promotion of products and services. Process innovation: It results in improved processes in organizations. This innovation emphasizes in efficiency and performance. Marketing innovation: This innovation is related to marketing functions, advertisement, distribution, and other functions of the product, except product development. Management innovation: It improves organizations' management method. Joseph Schumpeter has also represented four types of innovations in his studies including (1) Introducing a new product or changing the quality of existing product (2) Forming a new market (3) New resources, providing primary material, and other inputs (4) Changing industrial organizing (Geraeli and Valavi, 2014).

3.2. Organizational Innovation

Successful organizations are the organizations that can confront and adapt the changes and constantly implement new ideas and thoughts in the organization. Organizational innovation includes belief or behavior that is new to the public industry, market or environment of the organization. Organizational innovation components include administrative, productive, and process innovation (Vali, 2015).

3.2.1. Productive innovation

This innovation is the provider of a tool for producing and refers to the development and presentation of new and improved productions and services. In fact, it can be said that the meaning of productive innovation is in what extent the organization is leading in presenting new services, allocating financial resources to research and development and so forth.

3.2.2. Process innovation

This innovation provides a tool for maintaining and improving quality and sparing costs and it includes adopting new or improved methods for producing, distributing, or delivering the service. In fact, the meaning of process innovation is that to what extent the organization utilizes new technologies and experiments new methods.

2.2.3. Administrative innovation

This innovation refers to organizational procedures, policies, and forms. In fact, the meaning of administrative innovation is that to what extent new management systems are used in administration (Chen et al., 2015).

3.3. Culture of Innovation and its Dimensions

In innovation culture field, innovation refers to a complex process which its purpose is to form, transfer, change, and react to new ideas. Successful organizations have this ability to institute innovation in organizational culture and the process of organization management because culture comes into play through different ways such as socialization and sociability process, policies, plans, and procedures in an organization. In this culture, the executive base includes the ability of the organization to form the ideas that can create additional value. This category also includes the ability of quick adjustment of the systems and processes with the changes in competition environment (Christel and Michael, 2013).

3.4. Barriers for Extending Creativity and Innovation

- Over-emphasizing in bureaucracy
- Emphasizing the fact that every decision must be decided by the usual and conventional people inside the organization.
- Continuous emphasizing in the implementation of any affairs in a certain and standard framework.
- Affecting the people who try to be creative.
- Weakness of communication systems within the organization and thus preventing new ideas to flow.
- Hard monitoring systems that make the environment unfavorable for creativity (Drnovsek et al., 2013).

4. E-COMMERCE

E-commerce includes the buying and selling and trade of goods, services, and information through computer networks including the internet. This type of trade is based on processing and electronic transfer of the data including text, audio, and video. E-commerce also includes different activities including fast delivery of digital content, electronic transfer of funds, electronic trade of stocks, electronic bills of loading, commercial and engineering plans, and after sales service.

The main feature of this type of trade is facilitating commercial processes, eliminating additional and unnecessary processes in implementing commercial affairs, reducing costs through the increase and improvement of cooperation, reducing administrative costs especially correspondence costs, and also improving the access to market and increasing variety for customers. Meanwhile, new communicative technologies such as the internet, extranet, electronic post, and mobiles have a significant impact on the development of e-commerce (Howorth et al., 2016).

4.1. E-commerce Framework

E-commerce frameworks have 3 levels they are required for having a successful e-commerce.

Infrastructure: The first section of required e-commerce framework includes hardware, software, databases and communication that are used on worldwide web services

on the internet and other methods for sending and receiving messages methods on the internet and other networks.

Services: The second section of the frameworks include a wide range of services that allow to find and present information and include searching for trading partners and also negotiate and agree on commercial trades.

Products and structures of e-commerce: This section of e-commerce frameworks includes anticipating and directly providing commercial products and services dependent on information for customers and commercial partners, cooperating and participating in the information inside and outside the organization, and organizing the environment of e-market and supply and support chain (Kuan and Chau, 2014).

4.2. E-commerce Stages

E-commerce growth and development stages can be divided into 5 sections. As we get closer to the final stages, we actually got close to the real e-commerce. Organizations and companies that are looking for an electronic market for their products and services are endeavoring to reach the final stages of this cycle.

In the first stage of the fivefold stages, the applicant company or organization of e-commerce tries to form a simple website including its production and services in order to deliver this information to customers by the internet. In fact, The first stage is meant to create a showcase on the Worldwide Web for visitors to receive their considered information through these pages.

The second stage includes developing the first stage. In this stage, company website turns into a strong database and uses for maintaining the information. In this stage, the information of the whole products and services and their full description is uploaded in information bank and users will be able to send a purchase order through this website. But yet, the required infrastructures for online payment are not provided and payments are done as the traditional ways (Howorth et al., 2016).

Providing the possibility to interact is one the main points of the third stage. In this stage, users are able to interact with the admin. This interaction is through Email, chat, and voice. Also, users receive their answer in a very short period from the admin and this is possible for the seller and buyer to question and answer online and to exchange information about the product or the services asked.

In the fourth stage, this is possible for users to purchase online. After sending the purchase order and receipt of goods forms, customers pay the considered and agreed fund through the sales terminals of banks and financial institutions of contracted party. This transaction is provided for customers very safely and by the internet.

In the fifth stage, which is the last stage of the five stages is the stage of integration. In this stage, intermediate systems between the seller and buyer will completely integrate into the existing systems in the organization or company. It means that if a product sold, the inventory of the sold product will be subtracted from the physical inventory at the purchased amount and at the same time the order

of new purchase will be sent to the warehouse for replacing the products sold and it will be immediately presented in the next purchases for the warehouse. This stage from the collection of e-commerce stages is the most complete stage in e-commerce in which the result of the whole trade operation is reflected in all the systems of the organization (Sohrabi and Khanlari, 2016).

4.3. E-commerce Types

In the aspect of transactions, e-commerce can be divided into different types and some of them are as follow:

Business to business relationship: It is a pattern of e-commerce that the transaction parties are businesses.

Business to consumer relationship: It is a pattern of e-commerce that is very common and is the direct commercial relationship between companies and consumers.

Consumer to business relationship: In this case, natural people sell their products or services to companies using the internet.

Consumer to consumer relationship: In this case, the selling and buying relationship is among consumers.

Business to state agency relationship: It includes all the commercial interactions between companies and state agencies. The payment of taxes and duties are such transactions.

Government to customer relationship: It is a pattern between the government and people which include economic agencies, state institutes, and the whole customers. This pattern is one of the components of electronic government.

Government to government relationship: This pattern includes commercial relationship among the governments in the cases like imports and exports. But it should be said that the types above are not completely separated and sometimes they come in the form of e-business when they do not emphasize in sell and buy (Vali, 2015).

4.4. E-commerce Advantages

E-commerce advantages are briefly as follow: Globalization of trade, eliminating barriers in time and place to do transactions and advertisement, Helping to defeat monopolies, lower prices, increased sales, increased consumer and social welfare, easy access to required information, Significant reduction of the transaction, information, advertising, and transportation costs, speed up the transactions, reinforced competitive positions of the countries in the world, utilizing the fleeting opportunities in the field of exports, elimination of bureaucracy costs, elimination of intermediaries, the increase new job opportunities, the possibility to present products and services, reduced social costs derived from the produced environmental pollutions in vehicles traffic for doing face to face transactions etc. (Emadzadeh et al., 2016).

4.5. Legal Dimensions of E-commerce

The prediction and approval of laws and provisions that support e-commerce is one of the basic issues in the field of its development. Thus, unlike traditional trade which is based on paper documents, handy sign, and physical presence of transaction parties, e-commerce is done in a virtual space and without physical presence and previous identification of people. Therefore, there are other mechanisms for obtaining people's identification and documents authenticity in virtual space and

there are also other facilities there instead of offices and official documents. So according to the mechanisms in this type of trade, laws, and regulations need to be approved in accordance with different stages of e-commerce process. The approval of laws and provisions relevant to this type of trade in Iran has begun in the framework of e-commerce law in article 81 and with the subjects such as definitions, message data orders, supporting commercial secrets, computer fraud, computer forgery, compensation etc. But it expected from the defects and deficiencies of these rules to be solved by the development and growth of e-commerce and its implementation in the real world (Christel and Michael, 2013).

4.6. Barriers for Developing E-commerce

- Inadequacy of the required legal fields for using e-commerce such as lack of acceptance of documents and electronic signs in Iran's current laws and regulations.
- The shortage of credit cards and the possibility of funds electronic transfer.
- The lack of the main network of e-commerce and its relevant software and hardware in Iran.
- The relatively high primary cost for using e-commerce in private and state companies especially for small institutes and the lack of the required motivations for doing this method in them.
- The shortage of knowledge and culture of using e-commerce and internet network.
- Providing the required security for implementing electronic transactions and the privacy of the related information.
- The lack of conformity of domestic debit cards with international debit cards in order to buy from foreign websites (lack of acceptance of domestic debit cards to foreign sellers) (Walzack, 2016).

5. BENCHMARKING AND ITS METHODS

Benchmarking or sampling is used for identifying the successful experiences and achievements of business and in order to improve and develop the performance of the organization. Benchmarking methods include comparing with the bests of consortium, benchmarking using information bank method, benchmarking using survey, benchmarking using self-assessment, and benchmarking using one to one method.

5.1. Benchmarking Benefits

- Preventing useless reworking (reinvention)
- Overcome inertia and resistances and the feeling of necessity with the visibility of gaps
- Leading the organization out of the solid frameworks, with the observation of improvement ways in other organizations, industries, and technologies
- Forcing the organizations to test and review the existing processes that usually result in the improvement
- Increasing the knowledge of costs and its performance with other rivals
- Facilitating the development of successful strategies with assigning logical and tested methods.
- Helping to understand and develop the critical attitude to your business processes

- Promoting organizational learning process and facilitating the change and improvement
- Finding improvement fields and new ways to do affairs out of the organization
- Presenting a reference for evaluating the performance of organization
- Forming a better knowledge to business environment
- Forming the sense of necessity of improvement and the need to improve integrately and consistently (Sardari, 2015).

5.2. Benchmarking Barriers

- Fear of reworking
- Fear of losing competitive advantages due to sharing of information
- Pride for the ease of the process of benchmarking and feeling no need to a systematic approach for benchmarking
- Benchmarking the things that can be analyzed easily but are unimportant
- Forgetting the planning phase in benchmarking process which result in its conversion to recreation visit and general familiarity (Eskandari et al., 2016).

5.3. Benchmarking Types

- Internal benchmarking: It is usually used in large companies where different units evaluated and compared to each other. If a unit had a better performance than other units, the operation and experiences of that unit can be internally transferred in order to reform and improve other units.
- Competitive benchmarking: It is the development of the analysis of the competitor so that the best competitors are focused. According to the issues related to sharing of significant information among competitors and legal and moral restrictions relevant to this type of benchmarking, it is observed that competitive benchmarking is often trivial, superficial, and focused on key statistics.
- Functional benchmarking: Benchmarking partners can be customers, providers, and/or other companies within the same industry or technologic field. Keeping in touch with these companies is often easy and the issues and these companies confront are usually similar.
- Public benchmarking: An exercise of creativity, finding companies that have similar processes with their own company processes in unrelevant industries usually required creativity. This matter applies in transferring information from one industry to another. The ability to determine new and commercial technologies that will lead us in passing the barriers is the most important subject in public benchmarking (Baker and Thomas, 2014).

5.4. The Circumstance of Benchmarking

Benchmarking is the comparison of organization performance with the executive methods of the best samples of the industry for improving organization performance. Benchmarking is finding the best method that probably ends up the better performance in some business activities. This method can enable the efforts for improving quality to achieve the top place by presenting information about other organizations, performance levels, and its used methods. Benchmarking is also supervising the activities

from the outside, specialized tasks, and internal operations for continuous reform and improvement.

Benchmarking should not be mistaken with industrial espionage or mere imitation. In fact, similar, unsimilar, and even competitors can be used in benchmarking and in contrast, they can be participated in improving the similar business methods. Also at the national level, benchmarking centers must form and work in order to explore and expand the best methods. Thereupon, companies are trained and encouraged in the comparative analysis and learning of processes and business methods in order to plan and operate in the direction of achieving the highest industrial standards (Lee, 2015).

5.5. Benchmarking Advantages

Using benchmarking in organizations has advantages that are as follow: It forms a deep knowledge of processes and methods in the organization; it reduces reluctance to change; it helps the targeting and planning of improvement (management development); it causes the knowledge top operations at global and national level; it improves the understanding of the current situation; and it encourages to innovate (Christel and Michael, 2013).

5.6. Benchmarking Methods

Benchmarking has different methods based on what is compared to it and these methods are as follow:

- Internal method: In this method, we are looking for identifying the best function within our organization. In some organizations, similar functions implement in organization's units and finding the best function withing the organization is the lowest cost and the simplest way of benchmarking. The advantage of this method is that it is low cost and simple and also its results are accepted more easily. The disadvantage of this method is that it is limited in the methods within the organization and the selection of the appropriate function is affected by cultural norms and organization's bias.
- Competitive method: In this type of benchmarking, the methods of competitor organizations are sampled with similar processes such as the comparison between Apple and International Business Machines Corporation IBM. The advantage of this method is the comparison between organization's operation and its competitors but on the other hand obtaining information about the competitor makes it difficult (Morshedloo et al., 2013)
- Functional method: In this method, the benchmarking partner of the organization is a non-competitor company, a company which is leading in the similar industry but its process or a part of its process is similar to the organization. In this method, the comparison is done with the organizations that have some of the specific technological and functional features. For instance, a newspaper publisher can study the processes of a television channel. The advantage of this method is the reliability of the obtained information. Also in this method, finding an eager partner is easier. The disadvantage of this method is that it is more time-consuming and more costly and in a hand, the identified methods cannot be easily localized.
- Public method: In this method, the performance, and processes of organizations that are irrelevant are compared. For instance, an insurance company may model the application process for

loans before its insurance demand process. These processes are not apparently similar to each other but both of them need the timely and continuous verdict issuance. The advantage of this method is its effectiveness because it selects the best method among the good methods and also the obtained information has an acceptable validity. This method has a high cost and some of the activities of the organization cannot be compared to other industries (Vali, 2015).

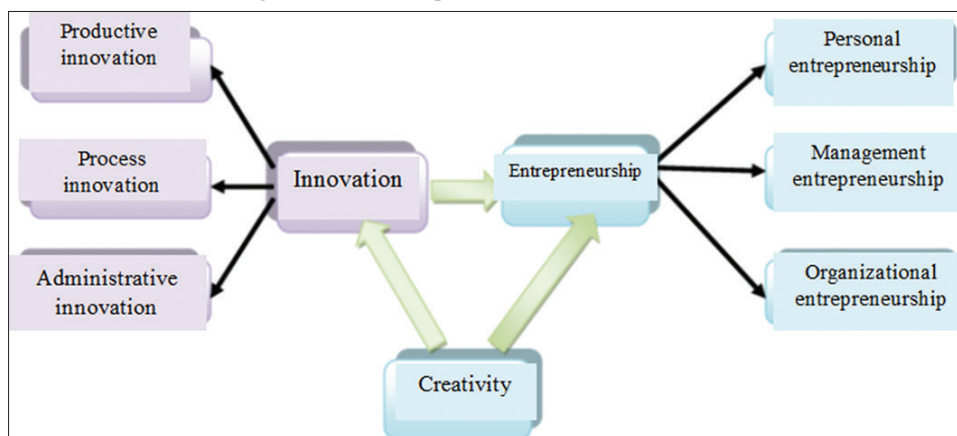
5.7. Benchmarking Models

Based on what it is compared to, benchmarking include the following models:

- Process model: The organization focused on the observation and analysis of business processes of one or more companies with the purpose of identifying and observing the best methods.
- Financial model: Financial analysis and the comparison of the obtained results for assessing the efficiency and the general competitiveness or organization.
- Product: This model is used for designing the new product or improving the existing product. In this model, the engineering may be done reversely in order to identify the strengths and weaknesses of the competitive product.
- Functional model: An organization may focus its benchmarking on a function for improving that specific function. It seems it is unlikely that complicated functions such as human, financial, accounting, and ICT resources are comparable in terms of cost and efficiency and it is required that these resources are divided into smaller processes to be comparable.
- Strategic model: It analyzes the type of others' competition and it usually used for improving strategic programs and promoting the position of organization (Geraeli and Alavi, 2014) (Figure 1).

5.8. Domestic Background

1. In 2013, Morshedloo et al. studied the approaches of promoting the product innovation in a manufacturing business (case study: Melli agro chemical company). in this research, it is endeavored to analyze the approaches of innovating product in a new perspective in a business agency. The method of this research was descriptive-survey. The researcher studied the whole statistical population, 53 people including the managers and staff of Melli agro chemical company. But 48 questionnaires among the whole questionnaires were returned to the author. The data collection tool was a questionnaire which designed by the author and the author obtained its validity with the guidance of advisors and supervisors. Quality management activities, organizational learning ability, utilizing the tools of IT and process innovation have a positive and significant correlation with product innovation in Melli agro chemical company.
2. In 2013, Kianpour studied entrepreneurship in Iran compared to development vision countries. Its method was descriptive-practical. The author concluded that entrepreneurship development has become one of the basic and important approaches of the most developed and developing countries. But the truth is that one of the basic actions in developing entrepreneurship is to assess it. Entrepreneurship assessment

Figure 1: The conceptual model of the research

must be implemented based on international indices and standards in order not only to present a clear vision of entrepreneurship at the national level, but it also makes it possible to benchmark and compare with successful countries in the field of entrepreneurship.

- In 2016, Khalili Shahanaghi conducted a research with the purpose of identifying and prioritizing the barriers of utilizing e-commerce in Tehran's social institutions. In research has studied in order to identify and prioritize the barriers of utilizing e-commerce in Tehran's social institutions. The range of the research includes executive managers and active employees in the field of information technology of social institutions including charity or active non-profit institutions in the social area. the research method that used in this study is quantitative, descriptive-survey. According to the results, about the barriers of using e-commerce in social institutions, cognitive barriers have the highest rank and behavioral barriers have the lowest rank. These findings are aligned with the previous studies.

5.9. Foreign Background

- In 2017, Al-Qirim conducted a research with the purpose of identifying the effective factors on successfully using e-commerce in small and medium companies in the US. For this purpose, first, the effective indices were extracted and scientific experts in this field in Los Angeles and the managers of small and medium companies in Los Angeles' industrial towns were asked in the form of a questionnaire. Based on formula calculations, according to the unlimitedness of statistical population, the statistical sample of this study include 150 people from which 102 of them are asked the questionnaire. The results indicated that the evolution of the markets on the line and infrastructure of the company technology has the most effectiveness and correlation.
- In 2014, Baker and Thomas conducted a research with the purpose of analyzing the role of in women entrepreneurship and innovation development in small commercial institutions. In the analysis of ten institutions, they concluded that the institutions under the study used electronic calls and the IT under the network well for collecting information and also attracting customers and developed this type of technology well in the direction of their profession.

- In 2015, Lee concluded in his study about using the internet for developing business in Scotland that 28 percent of their study cases were effectively used the internet for introducing and developing their services. Moreover, some of these businesses were successfully used the internet for marketing and online selling.

6. CONCLUSION

The strategies and support by senior management affect the utilization of e-commerce in small and medium agencies. IT and e-commerce can create many changes in different dimensions in entrepreneurship. So it may not be an exaggeration if it is considered as the most important tool of modern entrepreneurship. Entrepreneurs have special personality traits. These traits are the main factors to determine the person who should become an entrepreneur. Risk-propensity, innovation and creativity, idealization, accountability and internal control center are part of the traits of these individuals. Every entrepreneur may have a number of these traits and entrepreneur with their unique personality. In this regard, IT and e-commerce will cause the improvement and success of these traits.

REFERENCES

- Al-Qirim, N.A.Y. (2017), An empirical investigation of an e-commerce adoption-capability model in small businesses in New Zealand. *Electronic Markets*, 15(4), 418-437.
- Baker, T. (2014), The essential elements of innovation. *Journal of Being Competitive*, 18(3), 408-452.
- Chen, Y., Liu, Y., Zhang, J. (2015), When do third-party product reviews affect firm value and what can firms do? *Journal of Marketing*, 76(2), 116-134.
- Christel, K., Michael, H. (2013), Entrepreneurship and immigrant wages in US labor markets: Algorithm multi-level approach. *Journal Homepage*. Available from: <http://www.elsevier.com/locate/ssresearch>.
- Drnovsek, M., Cardon, M.S., Murnieks, C.Y. (2013), Collective passion in entrepreneurial teams. In: Carsrud, A., Brannback, M., editors. *The Entrepreneurial Mind*. New York: Springer Publishing.
- Emadzadeh, M., Koochakzadeh, M., Asghari, A. (2016), *E-Commerce and E-Money in the New Global Economy*. Isfahan, Iran: Faculty of Economics and Administrative Sciences, University of Isfahan.

- Eskandari, M., Khaljani, J., Aaribi, S.M. (2016), Coordination pattern of product and process innovation strategies based on competitor values framework. *Journal of Management Improvement*, 35(11), 9-17.
- Geraeli, S.R., Valavi, P. (2014), The Role of ICT in Promoting Entrepreneurship. Sanandaj, Iran: Islamic Azad University of Nain.
- Howorth, C., Tempest, S., Coupland, C. (2016), Rethinking entrepreneurship methodology and definitions of the entrepreneur. *Journal of Small Business and Enterprise Development*, 12(1), 24-40.
- Khalili, S.N. (2016), The identification and prioritization of barriers and using e-commerce in Tehran's social institutions. *The Social, Economic, Scientific, and Cultural Journal of Labor and Society*, 149, 57-68.
- Kianpour, S. (2013), Analyzing the growth of entrepreneurship in Iran in comparison with development vision countries. *The Specialized Journal of Parks and Incubators*, 9(34), 60-81.
- Kuan, K., Chau, P. (2014), A perception-based model of EDI adoption in small businesses using technology-organization-environment framework. *Information and Management*, 38, 507-521.
- Lee, J. (2015), Discriminant analysis of technology adoption behavior: Algorithm case of internet technology in small business. *Journal of Computer Information Systems*, 44(4), 57-66.
- Morshedloo, E., Alipour, M., Abedi, Z. (2013), Discuss strategies to promote product innovation in a manufacturing firm (case study: Melli agro chemical company). *Journal of Economics and Business*, 11, 63-76.
- Sardari, A. (2015), *IT and Its Role in Entrepreneurship Development*. Tehran: Semat Publication.
- Sepehri, M. (2014), Benchmarking in business re-engineering. *Journal of Sharif*, 17(8), 51-57.
- Shahabadi, A., Rahmani, O. (2016), Examining the role of R and D productivity on Iran's manufacturing sector. *Journal of Technology Growth*, 25, 18-28.
- Sohrabi, B., Khanlari, A. (2016), Factors affecting the use of e-commerce in Iran's small and medium enterprises. *Entrepreneurship Development Journal*, 7, 11-34.
- Vali, M. (2015), Evaluation of methods and patterns of benchmarking in the book industry. *Analytic Research Journal of Ketabe Mehr*, 5, 1-8.
- Walzack, S. (2016), Organizational knowledge management structure. *The Learning Organization*, 12(4), 330-339.