

Investigating the Development of Entrepreneurship Based on Innovation and Artificial Intelligence

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Abstract

Entrepreneurship is a revolutionary and innovative process in business literature, through which organizations take measures so that all employees can play a role as an entrepreneur and guide organizational processes towards innovation, risk-taking, progress and growth. Artificial intelligence is undoubtedly a powerful tool that can bring significant benefits to businesses in any industry. It is important that instead of fearing or avoiding artificial intelligence, entrepreneurs embrace it with open arms and make the most of it. By understanding the opportunities and benefits that AI can provide, and by taking steps to mitigate ethical considerations, entrepreneurs can stay competitive and succeed in today's ever-changing business landscape. AI can not only improve the performance of AI-based organizations, but also encourage more traditional companies to develop their business models using AI-based solutions. Therefore, the emergence of the era of artificial intelligence has created the greatest entrepreneurial opportunity in the history of civilization.

Keywords: entrepreneurship, entrepreneurship development, innovation, artificial intelligence.

Introduction

Entrepreneurship is a revolutionary and innovative process in business literature, through which organizations take measures so that all employees can play a role as an entrepreneur and guide organizational processes towards innovation, risk-taking, progress and growth. The need for innovation in services and products and on the other hand having entrepreneurial employees has

made many organizations reconsider their organizational structure. These organizations consider entrepreneurship and innovation as organizational culture, so that the relevant organization can continue its life more effectively (Dehghan Dehnavi et al., 2019). In fact, today, the role of the entrepreneur is as an engine of economic development, a champion of industrial development, a driver and encourager of investment, the main option of technology transfer, the option of fixing market defects and bottlenecks, and the main option of creating employment (Fedai Kivani and Nesaj Hosseini, 2018). Until the early 1970s, research in the field of entrepreneurship was focused on the actions or characteristics of people. The researchers subsequently recognized that the organizations themselves also undertake entrepreneurial activities. This caused the formation of the idea of organizational entrepreneurship. Organizational entrepreneurship is a concept that focuses on the organization, not on individuals, and on organizational cultures and processes.

Entrepreneurship is the main factor in creating creativity and innovation in today's organizations, and organizations in most developed countries are transitioning from a bureaucratic state to an organizational entrepreneurial state. Schumpeter considers entrepreneurship as the driving factor of economic growth and mentions it as the foundation of development. In this regard, organizational entrepreneurship is considered a window to take advantage of lasting competitive advantages, innovation and pioneering for organizations. Competition and struggles are needed for some desired outcomes such as customers, market share, organization rank or resources. Also, innovation is a basic need for organizations that seek survival and effectiveness, and many organizations are actively looking for innovative and entrepreneurial methods and approaches in order to improve effectiveness, efficiency, and flexibility. In this regard, organizational entrepreneurship is rapidly becoming a weapon of choice for many organizations. Organizational entrepreneurship is an effort to create entrepreneurial mentality and skills and also to bring these characteristics and mentality into the culture and activities of the organization (Parsaiaian and Arabi, 2018).

In the current conditions, when organizations are facing issues such as rapid changes and developments in technology, complex competition, rapid growth in the number of new competitors, the diversity of customer needs and desires, and the general desire to increase efficiency and productivity, some businesses They can have the power of competition to support the entrepreneurship-organization, which is known as a factor of stimulation and strengthening of competition, innovation and lubricant of change, and a factor of balance in a dynamic economy, by assuming an active and influential role, but various researches They show that despite the fact that organizations have accepted the importance of innovation and entrepreneurship to compete in today's world, they are successful in creating innovation and entrepreneurship due to the lack of proper infrastructure (Zheng et al., 2012).

Concepts and definitions of entrepreneurship

Entrepreneurship or the process of discovering opportunities describes how people independently or within organizations see unknown issues and challenges and create a new framework of tools and goals to use them. Of course, the entrepreneur only sees things and plans to use them that have the necessary value. In order to use the opportunities, entrepreneurs offer goods or services to the society that are customer-friendly and the market or environment wants them. Therefore, it is necessary for entrepreneurs to have complete information about the market and the environment. The process of exchange and interaction with the environment can provide this information (Salehi and Shoghi, 2011).

Since the beginning of the concept of entrepreneurship in scientific circles, different definitions of it have been presented based on different points of view, the most important of which are:

Joseph Schumpeter's definition with an economic approach (2003): he considers entrepreneurship as the engine of economic development and calls it creative destruction and states that an entrepreneur is a person who creates new combinations in production and Entrepreneurship means offering a new product, a new method in the production process, creating a new market, finding new sources and creating any new organization in business (Ahmadpour Dariani and Moghimi, 2015).

David McClelland's definition with a psychological approach (1991): He proposed the need for success as a potential factor in entrepreneurship. The need for success is a special type of motivation that includes a strong inner feeling towards success. According to him, entrepreneurs have three indicators: 1- high activity, 2- orientation towards success, 3- commitment to others (Pardakhtchi and Shafizadeh, 2021).

Drucker's definition with a managerial approach (1985): Entrepreneurship is the use of opportunities to create changes, and the entrepreneur is always looking for change, responding to it, and exploiting it as an opportunity. He believes that the management of entrepreneurial activities does not happen randomly in organizations, but conditions must be provided: 1- Organizations need a culture that is ready to accept innovation. 2- The field of measuring the performance system related to Innovation and entrepreneurship should be provided. 3- The management of entrepreneurial activities needs to be structured (Pardakhtchi and Shafizadeh, 2021).

In general, they have defined the process of creating something new and valuable, by allocating the necessary time and effort, taking into account financial, psychological and social risks, and achieving personal, financial and independence satisfaction. This definition emphasizes four basic aspects of entrepreneurship without considering the work context:

First, entrepreneurship requires a creative process. Creating anything new and of course valuable. This creation should have value for the entrepreneur and the audience for whom this creation was made.

Second, entrepreneurship requires dedication of time and sufficient effort. Only those involved in the entrepreneurial process have a true understanding of the significant amount of time and effort that goes into creating something new and bringing it to life.

The third aspect is to consider unavoidable risks. These risks have different forms depending on the efforts of entrepreneurs, but they are usually focused on financial, psychological and social issues.

The last part of the definition refers to entrepreneurs' rewards. The most important of these rewards is independence, which causes personal satisfaction. Financial rewards are also important for profit-seeking entrepreneurs (Hisrich and Peters, 2002).

Factors affecting the development of entrepreneurship

Stimulation and cultivation of motivations: one of the goals in entrepreneurship training and promotion is to stimulate motivations in people who have entrepreneurial characteristics. Stimulation of motivations such as the desire to gain wealth, success, independence, etc. Some people are brought up in environments where the ground is provided for the stimulation of motivations and the development of characteristics; But most people are not in such environments. Hence, it is necessary for them to create motivation and cultivate entrepreneurial traits through innovative and creative educational and research programs. These features include things like teaching creative thinking, increasing risk-taking, increasing tolerance, giving self-confidence, opportunism, giving educational information about personal psychological characteristics such as the center of control (Melki et al., 2018).

Training of skills: Training of entrepreneurial skills is one of the important dimensions in expanding and developing entrepreneurship. These trainings are divided into three dimensions: before starting a business, during and after starting a business. Before establishing a company or starting a business, an entrepreneur should learn how to start a business and its steps, how to do group work, and communication skills and the like. At the time of start-up, he should gain the necessary knowledge and expertise about financial issues, market knowledge, management principles, insurance, economy, labor law and legal affairs. The ability to manage development and growth, find new methods, compete and maintain the position in the market and find new markets are among the skills needed by entrepreneurs after starting a business.

The culture of understanding change and discovering opportunities: for promotion and progress, one should always understand new changes and developments and take advantage of suitable opportunities. Creative and entrepreneurial managers pay attention to the future and encourage themselves and employees to hunt for "golden" opportunities. They have a lot of patience and tolerance until the opportunities and innovative plans come to fruition and they follow them with interest. Therefore, entrepreneurs and entrepreneurial companies keep pace with the changes and try to discover the opportunities created during these changes and take advantage of them.

Culture of participation: in the way of entrepreneurship, people should be able to do activities with participation and in the form of group work so that the company is established. In addition, in small entrepreneurial companies there is a simpler organizational structure and the hierarchy is very limited and useful. While in the coherent and extensive structures of traditional organizations, a broad hierarchy has ruled. In these organizations, the culture of "guaranteeing job security" as opposed to "obedience" is formed. With the reduction of hierarchies and the disappearance of borders, relationships are formed more based on cooperation and mutual understanding, and obedience plays a lesser role in this organizational structure. In small entrepreneurial companies, employees gradually learn how to cooperate and participate in equal positions with each other and push this cooperation towards a win-win situation.

Creativity culture: for success in work and profession, new plans and ideas are needed. Creative managers and entrepreneurs use this feature in a good and correct way. Competing with other managers, earning more income, developing the work space and space, effective employment of the workforce, producing high quality products and increasing organizational efficiency, all need new methods that coordinate the work environment with the conditions and needs of the time. Entrepreneurs are creative people who produce new ideas and follow their implementation in the form of a company. In addition, in innovative companies, employees can search for the unknown and experience new methods. In the mentioned companies, people are encouraged to be creative and innovative. Valuing creativity not only leads to the growth and development of companies in the long run, but also provides a suitable background for the growth and flourishing of human talents and capacities, and this flourishing is a suitable platform for the growth of moral and spiritual virtues in humans.

A culture of independence and acceptance of responsibility: creative and entrepreneurial employees and managers are self-decision makers and are less influenced by other people's suggestions. They are self-reliant and have a completely independent spirit. In other words, strong will enables them to resist adversity. Making decisions with risk and accepting new plans requires independence in thought and action. They encourage this spirit in their employees and human factors. Entrepreneurs have a spirit of independence and are ready to take responsibility for their work and job (and even others). They believe that they should make a living based on their abilities, skills and thoughts. In such a company, employees are self-directed, risk-taking and responsible, and they all consider themselves responsible and accountable for their interests, participation and customer satisfaction. People make decisions in their work area and do not put the responsibility of their decisions on the shoulders of their managers.

Risk-taking culture: Creative and entrepreneurial employees and managers are risk-takers. They are not afraid of failure and by accepting the risk, they search for new business and competition space. Entrepreneurs should be risk-averse, that is, they should be able to take risks with respect to their situation, conditions, facilities, and in a word, their future, and fight for "probable success". Entrepreneurs are not always able to provide all the capital and facilities needed for their new business. For this reason, the government or other independent sponsors should be willing to

accept the risk needed by the entrepreneur, provide him with "risk capital" and accompany him in the various stages of entrepreneurship. In an entrepreneurial society, all people have the same opportunities in front of them. In this society, capital or land is not the source of wealth production, and intelligent, creative, thoughtful, hard-working and determined people have more chances to succeed, and the owners of large capitals cannot monopolize wealth.

Change and transformation of organizational values: One of the characteristics of creative and entrepreneurial people is that they help to change and transform inappropriate and unfavorable values and norms in work and production. Creating work opportunities and effort requires the modification of cumbersome regulations, attitudes and limitations that entrepreneurial employees and managers are well able to do. Therefore, an entrepreneur can be considered as a person who has the ability to organize work management well and uses opportunities and situations optimally and helps the growth of people and new changes by applying innovative and innovative plans. Considering the factors and components affecting the development of entrepreneurial culture in the views and theoretical schools of Max Weber, Parsons and McClelland, it can be said that the development of entrepreneurial culture is influenced by these components. The factors and components that generally affect the development of entrepreneurial culture are shown in Figure 1 (Melki et al., 2018).

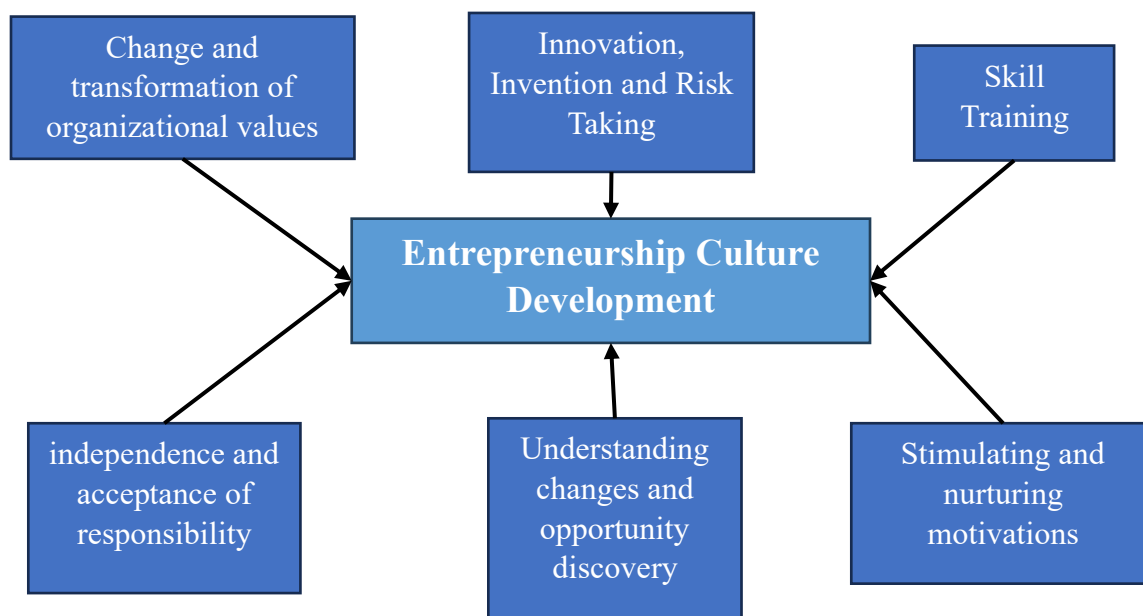


Figure 1. general scheme of factors and components affecting the development of entrepreneurial culture (Melki et al., 2018)

Development of entrepreneurship based on innovation and artificial intelligence

The world of entrepreneurship is changing rapidly. One of the most significant changes we are witnessing is the rise of solopreneurs: people who build successful businesses on their own and use the power of artificial intelligence to achieve what once required a team of experts. Before examining the impact of artificial intelligence on entrepreneurship, it is necessary to understand the difference between a founder and a sole entrepreneur. A founder is someone who starts a business to build a team around it. In contrast, the sole entrepreneur starts and runs a business alone and manages all aspects of the investment without additional team members or partners (or at least much less team members than traditional entrepreneurs) (Zakavati, 2021).

Artificial intelligence is enabling solo entrepreneurs to achieve what was once unthinkable—creating successful, scalable companies with minimal staff. In the near future, we will undoubtedly see the establishment of large companies that are built and run with only a few employees. The rise of the individual entrepreneur is also changing the way companies operate and communicate. With fewer employees and less emphasis on meetings and more focus on communication and simple decision-making, corporate culture moves away from the traditional office system. Companies led by solopreneurs will need fewer employees and are likely to know each other well. This contributes to a protected organizational culture, less politics and bureaucracy, and clearer and faster decision-making. AI-powered tools enable solopreneurs to work efficiently and maintain strong relationships with contractors, freelancers, and temporary team members. Artificial intelligence will be a factor in building more such companies. Unknown things that will become reality thanks to artificial intelligence (Ando et al., 2018).

Artificial intelligence is undoubtedly a powerful tool that can bring significant benefits to businesses in any industry. It is important that instead of fearing or avoiding artificial intelligence, entrepreneurs embrace it with open arms and make the most of it. By understanding the opportunities and benefits that AI can provide, and by taking steps to mitigate ethical considerations, entrepreneurs can stay competitive and succeed in today's ever-changing business landscape.

AI can not only improve the performance of AI-based organizations, but also encourage more traditional companies to develop their business models using AI-based solutions. Therefore, the emergence of the era of artificial intelligence has created the greatest entrepreneurial opportunity in the history of civilization.

Artificial intelligence is supposed to create machines that are programmed to think and learn like us. They are able to analyze large amounts of data, recognize patterns, and make decisions based on that data. Based on these capabilities, artificial intelligence can be expected to help entrepreneurs in the following ways (Bagheri et al., 2019):

Increased efficiency: AI can automate repetitive tasks such as data entry, giving employees more free time to focus on more complex tasks that require human expertise.

Better decision-making: AI can help entrepreneurs turn existing data into accurate predictions. Man and machine have strengths and weaknesses. Humans perform better when data is scarce, while machines often appear more efficient when there is a lot of data to examine. Therefore, thanks to artificial intelligence, the entrepreneur is able to make the best decision.

Cost savings: By automating tasks and increasing efficiency, AI can reduce labor costs, resulting in significant cost savings.

Improved customer experience: chat bots and personalization based on artificial intelligence provide a perfect and unique experience for customers and increase their satisfaction and loyalty.

Competitive advantage: By using artificial intelligence, entrepreneurs can gain a competitive advantage in the market because AI-based businesses can often work faster and more efficiently than their competitors.

And finally, the entrepreneur who works as an ally alongside intelligent machines can use the complement of human work and machine learning to get the best possible result.

Access to new markets and customers

One of the most important benefits of artificial intelligence for entrepreneurs is the ability to access new markets and customers. Using AI-based tools and technologies, entrepreneurs can better identify and target specific market segments, personalize their products and services, and reach new audiences through targeted marketing campaigns. AI-based automation can also help entrepreneurs scale up their operations and reach more markets and customers. Through language translation, personalized marketing and even through the use of chatbots and virtual assistants for customer service. In this way, entrepreneurs can not only reach new customers, but also provide better customer service that can help build brand loyalty (Tan and Lee, 2022).

For example, a small online clothing retailer might use AI-based tools to analyze customer data and create targeted marketing campaigns for specific customers, such as plus-size or petite clothing. This allows the retailer to reach new customers who may not have been reached through traditional advertising methods. In addition, the retailer can use AI-based automation to expand its operations into new markets, such as international sales, using machine translation to communicate with customers in different languages or using virtual assistants to handle customer service requests. (Dundapati et al., 2022).

Another example would be a company that uses an AI-based chatbot to make personalized recommendations to customers based on their browsing and purchasing history. This not only improves the customer experience, but also increases the chances of repeat business and customer loyalty. As these examples show, AI is helping entrepreneurs reach new markets and customers; In ways that were never possible before (Palatadeka et al., 2023).

Conclusion

Entrepreneurship is the main factor in creating creativity and innovation in today's organizations, and organizations in most developed countries are transitioning from a bureaucratic state to an organizational entrepreneurial state. Schumpeter considers entrepreneurship as the driving factor of economic growth and mentions it as the foundation of development. In this regard, organizational entrepreneurship is considered a window to take advantage of lasting competitive advantages, innovation and pioneering for organizations. Competition and struggles are needed for some desired outcomes such as customers, market share, organization rank or resources. Also, innovation is a basic need for organizations that seek survival and effectiveness, and many organizations are actively looking for innovative and entrepreneurial methods and approaches in order to improve effectiveness, efficiency, and flexibility. In this regard, organizational entrepreneurship is rapidly becoming a weapon of choice for many organizations. Organizational entrepreneurship is an effort to create entrepreneurial mentality and skills and also to introduce these characteristics and mentality into the culture and activities of the organization. Artificial intelligence is undoubtedly a powerful tool that can bring significant benefits to businesses in any industry. It is important that instead of fearing or avoiding artificial intelligence, entrepreneurs embrace it with open arms and make the most of it. By understanding the opportunities and benefits that AI can provide, and by taking steps to mitigate ethical considerations, entrepreneurs can stay competitive and succeed in today's ever-changing business landscape. AI can not only improve the performance of AI-based organizations, but also encourage more traditional companies to develop their business models using AI-based solutions. Therefore, the emergence of the era of artificial intelligence has created the greatest entrepreneurial opportunity in the history of civilization.

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