

ORIGINAL RESEARCH PAPER

The effect of team performance on the internationalization of Digital Startups: the mediating role of entrepreneurship

M. Tajpour *, SM. Razavi

Department of Industrial Management, Faculty of Management, University of Tehran, Iran

ARTICLE INFO

Article History:

Received 23 August 2022

Revised 18 November 2022

Accepted 14 December 2022

Keywords:

Digital startups
Entrepreneurship
Internationalization
Team performance

ABSTRACT

BACKGROUND AND OBJECTIVES: Team performance is one of the ways to deal with successive changes from the point of view of experts. Therefore, continuous changes in the work environment and daily work activities require sharing ideas and the need for continuous learning and entrepreneurship. Neglecting entrepreneurship has a negative effect on companies and by neglecting entrepreneurship, it is impossible to operate effectively in a dynamic environment. Therefore, in today's competitive world, companies will lose their competitiveness. Thus, the purpose of this study is to investigate the effect of team performance on the internationalization of digital startups through mediating role of entrepreneurship.

METHODS: In terms of the purpose, it is applied and quantitative research. The research population is estimated to be 375 employees of 101 Iranian international digital startups in the field of technology and city services, which accounted for 10% of exports between 2021 and 2022. The sample size is estimated through Cochran's formula of 190 people. To collect data, a standard 5- point Likert scale questionnaire with 22 items was used. Finally, the data were analyzed by using Smart PLS 3 software.

FINDINGS: The results showed that emotional commitment, creating an environment of innovation, and knowledge sharing through mediating role of entrepreneurship have a positive and significant effect on the internationalization of digital startups. The results of the research indicate positive relationships among Emotional Commitment (2.671) and with entrepreneurship mediating (2.927), Innovative environment (2.478) and with entrepreneurship mediating (2.697), and Knowledge sharing (2.707) and with entrepreneurship mediating (3.333) concerning the internationalization of digital startups. Therefore, these hypotheses were confirmed.

CONCLUSION: The team performance of employees plays an important role in the survival and success of companies in the international sector. The knowledge that companies gain from other companies, especially during internationalization, can escalate their competitiveness in the global market. The performance of the team as the primary factor of learning and innovation facilitates trust among the company's employees.

DOI: [10.22034/IJHCUM.2023.01.02](https://doi.org/10.22034/IJHCUM.2023.01.02)



NUMBER OF REFERENCES

67



NUMBER OF FIGURES

3



NUMBER OF TABLES

4

*Corresponding Author:

Email: tajpour@ut.ac.ir

Phone: +989127947802

ORCID: [0000-0001-8951-9711](https://orcid.org/0000-0001-8951-9711)

Note: Discussion period for this manuscript open until April 1, 2023 on IJHCUM website at the "Show Article."

INTRODUCTION

Companies of all sizes have commenced expanding their activities beyond national markets due to globalization and its relevant changes. Therefore, the competition in businesses has been improved, and internationalization has been universally one of the principal components of business strategies as a result of the extended volume of global trade and the related changes in the economic environment of countries (Onkelinx *et al.*, 2016). Furthermore, the internationalization of companies has recently attracted the attention of many researchers as a topic. Accordingly, such companies in many developing countries have started their activities in international markets and have participated more in the markets of developed countries (Liu *et al.*, 2019). Since these companies are principally placed in the category of small and medium companies, they play an essential role in the economic development of the country in the world economy. Therefore, such companies are regarded as the engine of economic development (Cela *et al.*, 2022). According to the statistics provided by the Small Industries Investment Support Fund in 2018, it is seen that small and medium enterprises constitute a 10% share of the total export of Iran. Moreover, according to the report provided by the United Nations Development Fund, Iranian digital startups using advanced technology have an export share of less than 1.5% of non-oil exports; therefore, Iran's rank in this area is lower than countries in the region including Saudi Arabia and Turkey (Vashdi *et al.*, 2007). Internationalization enables digital startups to increase their capabilities needed to compete and succeed in the global arena; so while achieving some degree of internationalization is important for all businesses, it is especially important for digital startups that have fewer resources and experience to compete in international markets (Arghashi *et al.*, 2020). As a result, the conformity of the statistics current position with the determined lofty aims shows that there is high-performance gap and the national economic drivers are inferior. Moreover, digital startups should accomplish their knowledge and research based on international innovation to develop a strategic approach (Purkayastha *et al.*, 2022); accordingly, international organizations such as UNIDO, UNDP which are in the process of trying to integrate the global economy through economic liberalization and reducing laws and regulations

has emphasized the promotion of such activities as the best method for economic development and eliminating inequality in developing countries (Neupane, 2019; Jehan *et al.*, 2020). The significant benefits of internationalization of companies include sustainable competitive advantages, greater performance and higher growth (Bagheri *et al.*, 2019); because the companies working at the international level have normally started their business in national markets and the expanded their activities in global markets after a few years with a cautious approach (Cela *et al.*, 2022). Accordingly, the present study investigates the effect of team performance on the internationalization of digital startups with the mediating role of entrepreneurship, because digital startups are considered as essential components of the development and growth of a society; moreover, entrepreneurship is one of the reasons for success in digital startups because entrepreneurship is created in companies when management and employees have creative and innovative ideas. It can be said that no study has been conducted in this field in Iran so far, and therefore it is an innovative research. Therefore, the present study aims the effect of team performance on the internationalization of digital startups with the mediating role of entrepreneurship.

Theoretical Foundation

Successful companies, especially digital startups, are those which continuously create new knowledge, distribute it broadly throughout the organization and quickly use it in new technologies and products. Such companies conduct research and development and their growth and development greatly depends on the development of new knowledge and technology (Salamzadeh *et al.*, 2021). Also, Knowledge is considered as a combination of documented experience, values and defined information that facilitates a framework to collect and evaluate the new experience and information (Sabokro *et al.*, 2018; Tajpour *et al.*, 2022). Furthermore, digital startups, especially in developing societies, are the axis of economy development and transformation. In these companies, the employees are the principal capital and it can be valuable if the knowledge of employees is shared with members inside and outside the company (Hosseini *et al.*, 2020); because the knowledge acquired by the companies from the other companies, especially during internationalization, can

improve their competitiveness in the global market (Liu *et al.*, 2019). Also, business managers figured out that achieving information and knowledge cannot be ignored for the organization survivals as efficiency and effectiveness. Foreign market knowledge is a type of knowledge that is considered a greatly favored motive for the internationalization of businesses and can distinguish it from competitors. Therefore, companies with more knowledge about foreign markets make more informed decisions (Casillas *et al.*, 2019). As a result, identifying international entrepreneurial opportunities is considered as an essential element in understanding the internationalization behavior of businesses and identification of opportunities is undoubtedly associated with the success in international markets and the internationalization speed (Soetanto, and van Geenhuizen, 2019). Many studies have been conducted to explain team performance as companies are increasingly becoming team-oriented and use the team as the principal unit. Consequently, effective teams are considered as an essential factor for digital startups in dynamic environments (Yang, 2011). In addition, many employees in digital startups perform cognitive and intellectual responsibilities in a team environment, and team-oriented performance has become a challenge for human resource management researchers (Vashdi *et al.*, 2007). Furthermore, Coveri and Zanfei (2022) showed that the determining factors of utilizing the internationalization capability of research and development has directed the increasing attention to companies' efforts to improve the knowledge base of domestic production and take advantage of technological overload (Coveri and Zanfei, 2022). Also, internationalization refers to the process of increasing involvement in international operations (Hosseini *et al.*, 2021). The main hypothesis of the study is as follows:

H0: Team performance with the mediating role of entrepreneurship has a significant effect on the internationalization of digital startups.

Emotional commitment

Committed human resources play an important role in the survival and success of the organization (Jayabalan *et al.*, 2016); Because commitment develops a sense of comprehensive identity among the people of the organization and it eventually

leads to social behaviors including sharing ideas and voluntary opinions (Allen *et al.*, 2016); Therefore, organizational commitment is the positive or negative attitudes of employees towards the whole organization not towards the job. Based on organizational commitment, an individual has a strong sense of loyalty towards the organization and identifies his organization through that sense (Tough and Popoola, 2009); In other words, organizational commitment is an attitude about the loyalty of employees towards the organization as a constant process that leads to organizational success through the participation of people in organizational decisions and their care for the organization. Commitment consists of three dimensions: emotional, normative and continuous, and the present study deals with the emotional dimension (Anyango *et al.*, 2015). Emotional commitment is the emotional tendency of employees to the organization, which is identified by satisfaction with the organization and the inclination to stay in it (McKenna, 2005). Emotional commitment is defined as the emotional dependence of the person to the organization, and more precisely, emotional commitment is described as the emotional dependence of employees to determine their identity by means of organization (Arghashi *et al.*, 2020). Furthermore, emotional commitment refers to the extent of the individual's belonging to the organization, the expression of their identity with the organization and the degree of their active participation in organizational processes (Kim *et al.*, 2018); Therefore, emotional commitment is developed by employees' inclination to commit and indicates employees' subjective assessment of their possibilities at a particular time (Gonlo *et al.*, 2010). In this kind of commitment, people consider it their responsibility to proceed working in the organization. Emotional commitment causes employees to stay in the organization due to a sense of loyalty or responsibility and to feel that they are doing the appropriate job (Petty and Hill, 2005). Moreover, the process of internationalization consists of the relationships governing knowledge and awareness about the market, decisions relevant to the level of commitments to a market, and the current activities of academic and entrepreneurial companies (Mtigwe, 2006). Accordingly, organizations must be sensitive to the needs of employees at work and care for their views to achieve employee commitment

(Park and Nawakitphaitoon, 2018); therefore, it can be said that increase in job satisfaction increases the emotional commitment. Furthermore, the entrepreneurial approach and the capacity to absorb knowledge can play an effective role in the success of companies. However, researchers believe that the entrepreneurial approach is an organizational phenomenon that reflects the management ability by which organizations transform the competition based on their interests using innovation and an aggressive approach. Also, according to the internationalization literature, knowledge about foreign markets is a basic concept that explains the behavior and commitment of international companies (Mlinaric, 2016; Mirzapour et al., 2019); therefore, internationalization is performed in digital startups as a strategic orientation to obtain commitment and participation in international markets (Tuppura et al., 2008). According to the contents mentioned above, the first hypothesis of the research is as follows:

H1a: Emotional commitment has a significant effect on the internationalization of digital startups.

H1b: Emotional commitment has a significant effect on the internationalization of digital startups with the mediating role of entrepreneurship.

Innovative environment

Organizations require new and innovative ideas to survive. Organizations can associate with the dynamic environment outside and reach a competitive advantage through the creation of new ideas and processes (Tsai, 2011). As a result, the management should always be open to new ideas from everyone in the company and not just wait for new opinions to be expressed; Therefore, there are many obstacles and challenges to develop innovation in organizations and managers must solve them and support creative and innovative employees to develop a suitable environment for the development of innovation in the organization (Martínez-Román et al., 2020). Furthermore, entrepreneurship is currently known as the principal motive for the development of innovation, and the appropriate solution to be successful in chaotic and unpredictable markets (Cunningham et al., 2019). Therefore, large companies have recently been trying to cooperate with small companies due to the competitive business environment. In fact, due to problems including organizational problems and risk aversion, large

companies frequently encounter a lack of dynamism and lack of flexibility to develop innovation (Jang et al., 2017). Thus, despite the competition in various fields, managers are trying to pay attention to the innovative production by identifying and creating an environment where proper understanding exists so that the creativity and productivity growth becomes possible (Mahdavi Mazde et al., 2022). Environment is often defined as people's perception of the environment. In addition, Innovative environment is defined as the general financial, economic, technological, social and cultural environment of companies (Lawal et al., 2018). Innovative environment includes the shared understanding of team members and the organization in respect of activities, methods and behaviors that promote the new generation of knowledge (Moolenaar et al., 2010). Also, internationalization motivations and competitive advantages that are pursued during internationalization are useful for emerging economic companies (Ahsan and Sinha, 2022). Therefore, based on the conditions and Innovative environment, when team members face particular challenges and problems in the company, they take part in team work seriously and communicate to find appropriate solutions (Tsai, 2011). Because the created innovation is a collection of frequent cooperation, mutual learning and interaction. Thus, various activities of digital startups, regardless of what they produce, are performed based on innovation (Cela et al., 2022). With the purpose of turning knowledge into power and by establishing knowledge-based business, these companies perform their economic activities according to research and development activities and assist in promoting the knowledge-based economy in society (Du et al., 2020); Since knowledge and innovation are considered as the main assets of digital startups based on technology in international markets, public support is essential for success in this field as the available resources are limited (Mahdavi Mazde et al., 2022); Therefore, it is worth mentioning that the more digital startups are equipped with instruments to support the Innovative environment and entrepreneurship and provide an appropriate condition for the commercialization of ideas and the transfer of produced technologies, the more successful they will be in achieving their goals (Du et al., 2020). In this respect, Jang et al. (2017) stated in their study that the international business of

digital startups is greatly important for their growth, Innovative environment and survival. They also believe that the numerous restrictions experienced by small and medium-sized companies in the process of internationalization clarifies the importance of acquiring knowledge and continuous learning (Jang *et al.*, 2017). Martínez-Román *et al.* (2020) have shown in their study that entrepreneurship and innovation in the production leads to the development of the company's business and supports its export operations, however it is associated with a non-linear relationship and a regression in performance with an increase in the level of innovation (Martínez-Román *et al.*, 2020). Therefore, it can be said that the relationship between the company internationalization and the Innovative environment is influenced by many factors, and the strategy of internationalization changes the company's income and also reduces the company's risk and it is beneficial for investment in the development and research and innovation sector (Du *et al.*, 2020). Accordingly, the second hypothesis of the research is as follows:

H2a: Innovative environment has a significant effect on the internationalization of digital startups.

H2b: Innovative environment has a significant effect on the internationalization of digital startups with the mediating role of entrepreneurship.

Knowledge Sharing

Organizations are required to react appropriately to the continuous changes in the process of competition in the business environment otherwise they will be destroyed (Hosseini *et al.*, 2020). Therefore, knowledge sharing is one of the factors influencing the competitive advantage of businesses in the international environment, and it is also an essential instrument for organizations to manage information and knowledge to a higher standard. Furthermore, entrepreneurial culture facilitates the entrepreneurial activities of international businesses through knowledge (Zahra, 2005). This leads to the identification of international opportunities (Dimitratos *et al.*, 2012). According to international entrepreneurship, internationalization means searching, knowing, evaluating and utilizing opportunities beyond national borders in order to produce goods and provide services, a process in which the company's engagement in international markets increases (Schillo, 2018) ; Therefore,

internationalization is the product of the combination of uncertain market conditions that generate measures, entrepreneurial insights, knowledge sharing and it is performed by decisions made on strategic entry mode in foreign markets (Martínez-Román *et al.*, 2020). As a result, collaborative agents in designing innovation and entrepreneurship take part in sharing knowledge, resources, and risks among participants (Chen *et al.*, 2020). Thus, knowledge sharing is known as one of the important components of business so that the competitive advantages of companies remain and are maintained in their business (Razak *et al.*, 2016). In fact, it is worth mentioning that if organizations intend to achieve their goals including survival, growth and development through the international environment, they should provide the conditions for the development of entrepreneurial behaviors by managing knowledge (Chitsaz *et al.*, 2019). Subsequently, the business world is transforming the capital dominance into knowledge sharing (Korimbocus *et al.*, 2020). Therefore, sharing knowledge as a complex but valuable and basic activity is the foundation of many management strategies in the organization (Singh *et al.*, 2019). Thus, in today's knowledge-based societies, knowledge assets serve a vital function in the growth, survival and better performance in the economy of organizations (Yasir and Abdul Majid, 2017); Because when people share their knowledge, skills and expertise among members of an organization, performance improves and organizations become more innovative (Tajpour *et al.*, 2022); Therefore, it can be stated that sharing knowledge effectively and efficiently is essential for the success of companies, especially digital startups that work in international environments (Al-Kurdi *et al.*, 2020; Tajpour *et al.*, 2022). In other words, knowledge sharing consists of sharing ideas, needs, successes and problems in the organization. As a result, the competitive advantages of any organization can be improved by sharing employees' knowledge. Accordingly, since knowledge sharing has an important and special position in the process of knowledge management, it is necessary for the success process of an organization to investigate the position of knowledge sharing in the international environment. Therefore, according to the contents mentioned above, the third hypothesis of the research is as follows:

H3a: Knowledge sharing has a significant effect

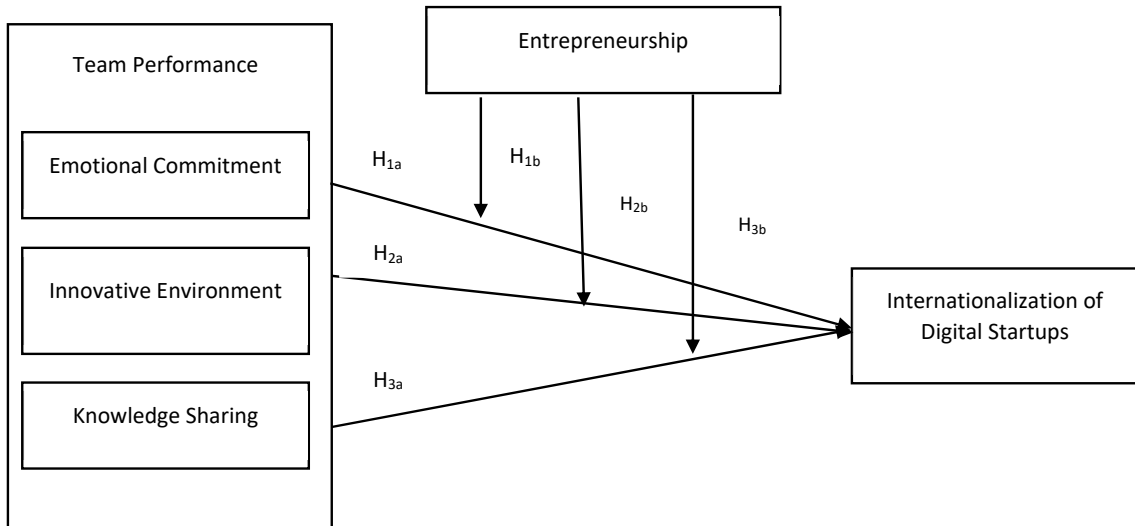


Fig.1: Conceptual model

on the internationalization of digital startups.

H3b: Knowledge sharing with the mediating role of entrepreneurship has a significant effect on the internationalization of digital startups.

The present study and the conceptual model are designed based on scientific sources and previous studies with a new arrangement; hence, according to the studies so far, no study has been conducted in Iran on team performance, internationalization of digital startups with mediating role of entrepreneurship as discussed in the present study. Therefore, the conceptual model of the research has been selected (Fig. 1) according to the research literature. The current study have been carried out in Tehran in 2022.

MATERIALS AND METHODS

Sample Methodology

The present study is applied in terms of the purpose and it is a quantitative research in terms of method. The population of the study is estimated to be 375 employees from 101 international digital startups in the field of technology and urban services that constitute 10% of exports during the past two years (2021-2022). For data collection, a standard questionnaire instrument has been used to measure the variables of the conceptual model. It includes 22 closed-ended questions and 12 team performance

questions including (emotional commitment (Allen and Mayer, 1990), Innovative environment (Sigel and Kimer, 1978) and knowledge sharing (Wang and Wang, 2012), 4 questions on entrepreneurship (Murphy et al., 1996) and 4 questions on the internationalization of digital startups (Cahen, 2019) with a 5-point Likert scale (1- absolutely disagree, 2- disagree, 3- no opinion, 4- agree and 5- absolutely agree). The present study has investigated the relationships between variables using PLS3 software and structural equation modeling. This software has been used because the distribution is not required to be normal compared to other available software (Kline, 2015).

Measurement, reliability and validity

In the present study, the constructs are considered as follows: team performance is an independent variable, internationalization of digital startups is a dependent variable, and entrepreneurship is a mediating variable. In order to ensure the accuracy and precision of the results, the technical characteristics of the questionnaire were evaluated in two sections, validity and reliability, using different criteria. The validity of the questionnaire has been evaluated and confirmed through content and construct validity. To measure the content validity of

the instrument, the ideas of relevant professors and experts on the topic were used, and to measure the construct validity, the structural equation modeling of convergent and divergent validity was used. In order to determine the convergent validity, the average Variance Extracted (AVE) index was used and for the divergent measurement, the square root of average variance extracted index was used (Mobaraki *et al*, 2021). The average standard deviation extracted for the variables is higher than 0.5 and indicates its high validity. Moreover, the reliability of the questionnaire instrument was measured using Cronbach's alpha coefficient and composite reliability. Furthermore, as Cronbach's alpha of all variables is higher than 0.70 and the overall alpha of the questionnaire was calculated as 0.83, it can be concluded that the study instrumentation used has an accepted level of reliability (Table 1).

As can be seen in Table, the values for square root of the average variance extracted are higher than the acceptable minimum of 0.5; therefore, the variables have divergent validity. Furthermore, since the square root values for the average variance extracted are higher than the correlation of the variable with other variables, divergent validity is acceptable if the numbers mentioned in the main diameter are greater than their underlying values (Fornell and Larcker, 1981). So, it can be concluded that the variables have validity and their divergent validity is also confirmed.

According to the contents mentioned above and the results achieved from the SmartPLS3 software output in Tables 1 and 2, the measurement models have accepted validity (convergent and divergent) and

reliability (reliability, composite reliability coefficient and Cronbach's alpha).

RESULTS AND DISCUSSION

The fit of the model was examined at three measurement levels, structural and general. Some indexes are applied to examine the fit of the structural model of the study using the partial least-squares method, which is the first and most principal index of significant coefficients or t-statistic values. The fit of the structural model using t coefficients is such that these coefficients must be greater than 1.96 to confirm their significance at the 95% confidence level (Thomas, 2003). The results obtained from the investigation of this index revealed that the obtained values whose critical value is higher than the critical value (1.96) at the 95% confidence level have been confirmed (Fig. 2).

Coefficient of Determination (R²)

The second index for examining the fit of the structural model in a study is the R² coefficients related to the endogenous hidden variables of the model. R² is an index that displays the effect of exogenous variables on an endogenous variable and three values of 0.19, 0.33 and 0.67 are taken into consideration for weak, medium and strong values of R² (Salamzadeh *et al*, 2021). In the present study, the index considered for the entrepreneurship is (0.721) and internationalization of digital startups is (0.215), so the structural model has a desired fit at a strong level based on this index. Furthermore, the results have been shown according to Fig. 3.

Table1. Variables, the Number of Questions and Reliability

No	Variables	Questions	Cronbach's alpha	Shared Reliability	Confidence Level	AVE
1	Emotional Commitment	1-5	0.847	0.884	0.943	0.632
2	Innovative environment	6-10	0.838	0.801	0.823	0.514
3	Knowledge Sharing	11-15	0.863	0.718	0.713	0.552
4	Entrepreneurship	16-19	0.777	0.712	0.726	0.875
5	Internationalization of digital startups	20-24	0.812	0.822	0.869	0.571

Table 2: Divergent validity

Variables	1	2	3	4	5
Innovative environment	0.383				
Emotional Commitment	0.89	0.795			
Entrepreneurship	0.241	0.481	0.534		
Internationalization	0.304	0.144	0.653	0.756	
Knowledge Sharing	0.367	0.408	0.165	0.500	0.689

Internationalization of Digital Startups

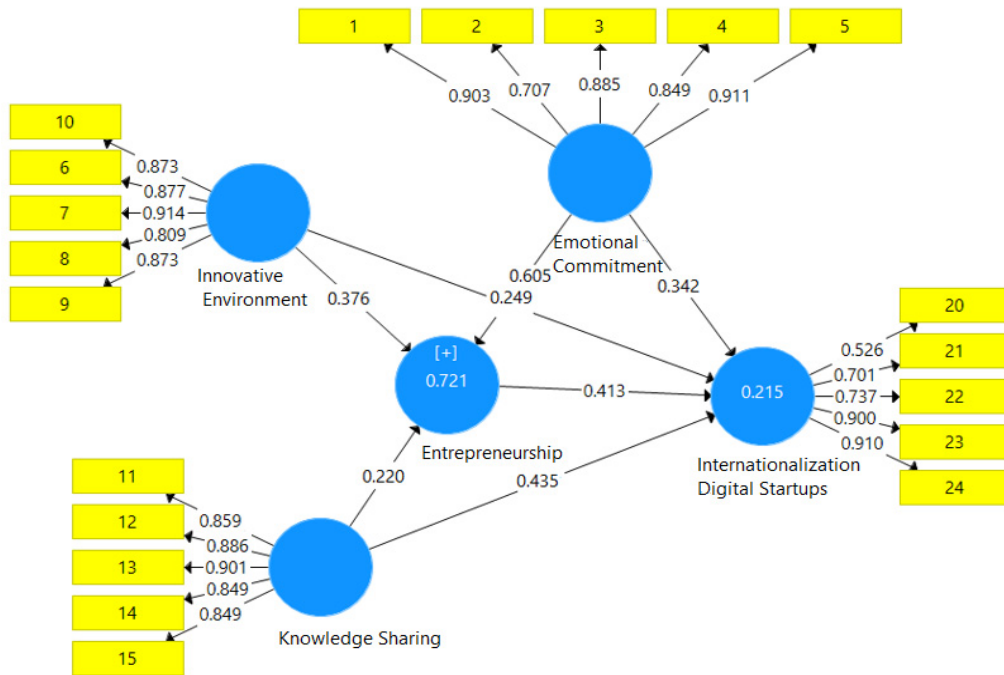


Fig.2: T-statistic values

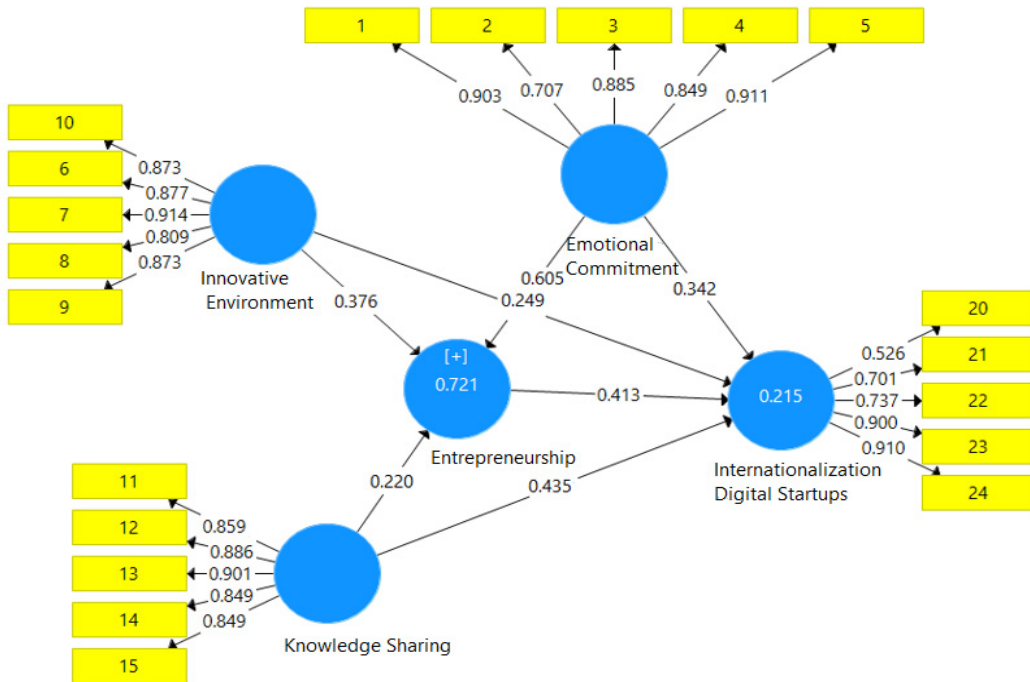


Fig. 3: Model in the case of standard factor loading coefficients

The Q2 index

The Q2 index is calculated for all dependent constructs and represents the product of the combined values of the study constructs by the values of their respective coefficients of determination. The value should be 0.2, 0.15 and 0.35 for all endogenous structures as low, medium and strong predictive power (Kline, 2015). This index in the present study is for entrepreneurship (0.513) and internationalization of digital startups is (0.177). This result shows the high and desired fit of the structural model of the study.

General fit of the model

The general model includes both measurement and structural model parts, and when its fit is confirmed, the fit check in a model is complete. Thus, the general fit of the model is possible with the help of GOF goodness of fit index. According to three values of 0.01, 0.25 and 0.36, weak, medium and strong values for GOF have been introduced. The value of 0.607 for this index shows the strong fit of the general study model.

$$GOF = \text{vaverage (Commonality)} \times \text{average (R}^2\text{)}$$

Another index is the Standardized Root Mean Square Residual (SRMR). According to Byrne (1998) view, the value of 0.05, according to Hu and Bentler's view (1999), the value of 0.08, and according to Ringel

et al. (2016) view, the value of SRMR is less than 0.10, showing an acceptable fit of the general model. According to Table 3, this index is also at its acceptable threshold, so it can be claimed that the present study model has a desired fit. Normed Fit Index (NFI) has also been used to measure fit. The acceptance range of this index is between 0 and 1 and the NFI should be larger than 0.9 (Kline, 2015). Therefore, as shown in Table 3, this value is 0.920, and this index is also confirmed. In addition, the VAF statistic indicates that the intensity of entrepreneurship mediation is equal to 0.326, which means that the mediation effect is partial.

Testing Hypotheses

Finally, t-statistic has been applied to examine the presumed relationships between the variables. To test the main hypothesis, six sub-hypotheses have been used, and according to Table 4, the T-coefficient of the six existing relationships has been confirmed. To determine the impact of the predictor variables on the dependent variables, the standardized factor loading coefficients relevant to the paths of each of the hypotheses have been investigated. These coefficients represent how many percent of the changes of the dependent variables are described by the independent variables.

Organizations have paid a great deal of attention to entrepreneurship considering today's disordered and

Table3: Fit Indexes

Model Fit	NFI	SRMR
Accepted Values	≥0.9	≤0.10
Calculated Values	0.920	0.07

Table 4. T-statistics and research impact factor

No	Path	T-statistics	Impact Factor	Test
1	Emotional Commitment-Internationalization of Digital startups	2.671	0.342	Hypothesis Confirmed
2	Emotional Commitment- Entrepreneurship -Internationalization of Digital startups	2.927	0.605	Hypothesis Confirmed
3	Innovative environment- Internationalization of Digital startups	2.478	0.249	Hypothesis Confirmed
4	Innovative environment- Entrepreneurship -Internationalization of Digital startups	2.697	0.376	Hypothesis Confirmed
5	Knowledge sharing- Internationalization of Digital startups	2.707	0.435	Hypothesis Confirmed
6	Knowledge sharing- Entrepreneurship -Internationalization of Digital startups	3.333	0.220	Hypothesis Confirmed

extremely competitive conditions. Therefore, the aim of the present study is to investigate the effect of team performance on the internationalization of digital startups with mediating role of entrepreneurship. The results of structural equation analysis using SmartPLS3 software demonstrated that the six hypotheses were confirmed. According to the first hypothesis i.e. the effect of emotional commitment on the internationalization of digital startups and its sub-hypothesis i.e. emotional commitment has a significant effect on the internationalization of digital startups with the mediating role of entrepreneurship, it can be said that organizations should identify the employees' goals and values and progress to connect these goals and values with the principal goals in order to improve the level of employees' emotional commitment, and they should explain the goals and values of the organization properly by establishing efficient and effective communication with the employees so that the employees can feel personally responsible for the success of the organization. Moreover, according to [Oyewobi et al. \(2019\)](#), the company should hire people who consider it an essential issue to stay in the company and they are emotionally attached to the company. Similarly, the results indicated that human resource is the most important and sensitive source to determine the success and failure of the organization. Therefore, managing people is one of the strategies that, if used in an appropriate and timely manner, can maintain and develop and proportionally improve the level of satisfaction of committed, hard-working and responsible employees based on objective performance measurement methods, and it can lead to the actualization of capabilities, capacities and the potential abilities of people, and the establishment of high motivation for employees entrepreneurship and it can also create a higher level of quality and organizational performance through the direct participation of capable entrepreneurial teams; Therefore, according to [Kim et al. \(2018\)](#), there is evidence of change in companies that feel committed to establishing entrepreneurial teams. In fact, they are moving towards a transformation or a revolution. Such risky activities are the new strategy for many companies. These teams are described as people who are their own managers and leaders and have great performance; it is also worth mentioning that in large organizations working

in the field of hierarchical technology and urban services, new ideas are shared among the groups while the environmental conditions are continuously changing, developing and transforming; The idea provider (entrepreneur), despite his interest and enthusiasm for the subject, gradually moves away from it and reduces his commitment and attraction to the subject. Furthermore, whenever the idea is transferred and exchanged, some information is missed and eventually the final result is very different from the original topic. Thus, in digital startups, the provider of a new idea can directly communicate with the principal decision-maker without observing the hierarchy and quickly gets informed about the work results. Consequently, they have a more successful performance in international environments. According to the second hypothesis i.e. Innovative environment has a significant effect on the internationalization of digital startups and its sub-hypothesis i.e. Innovative environment has a significant effect on the internationalization of digital startups with the mediating role of entrepreneurship, it can be said that it is necessary to focus on organizational culture and proceed towards arranging the values and norms of people, because innovative organizations have a common culture to move towards the internationalization of digital startups. They encourage experiencing, appreciate new experiences, and reward success and failure considering different situations, they also learn from mistakes and respond to environmental issues in the shortest time and in the best way according to the changes made. It is also worth mentioning that empowerment programs enable the company to perform in a creative and innovative way and provide its business plans in such a way that it always maintains excellently its position ([Schillo, 2018](#)). Therefore, managers are recommended to consider strategies such as innovative learning to solve problems, to prepare for change, to promote self-reliance and creativity development in digital startups regarding urban services and technology in order to improve the Innovative environment. They are suggested to facilitate the formation of an Innovative environment by creating a peaceful and informal work environment for staff, providing appropriate bonus and rewards to innovators, preparing people for change and supporting work bias. They should enhance the amount of

an Innovative environment by giving importance to entrepreneurial skills and providing relevant training among employees. They are also suggested to promote the development of digital startups regarding urban services and technology by applying the capabilities and innovative ideas presented by employees. Furthermore, managers should note that having information and communication technologies is the factor in achieving superiority and power in the company and it can influence various aspects of the company and it leads to important changes in the process of entrepreneurship, especially in internationalization. The results of this hypothesis are consistent with the statements made by [Tajpour et al. \(2020\)](#). According to the third hypothesis i.e. knowledge sharing has a significant effect on the internationalization of digital startups and its sub-hypothesis i.e. knowledge sharing with the mediating role of entrepreneurship has a significant effect on the internationalization of digital startups, it can be said that the lack of logical communication between managers and employees of digital startups in the development of executive rules and regulations reduces the motivation of people. Thus, informing employees through the publishing of extensive information leads to the production of constructive ideas to solve problems in digital startups in respect of urban services and technology. Furthermore, team spirit, self-efficacy, and self-confidence are improved through the behavioral honesty of the manager in presenting information. Teams for research, development, and support must be established senior managers to respond to environmental challenges in the internationalization of companies; therefore, using human resources efficiently provides knowledge and material resources and it makes it possible to perform at a greater level and to present their services and products in the customer's attitude by providing a proper condition and guiding the workforce; accordingly, entrepreneurs are able to efficiently face ambiguous, insufficient, inconclusive, disorganized and vague conditions and information to a moderate extent without feeling threatened or anxious by threats or failures, and they can use the ambiguities for their own interest and change the company in the international environment by resolving ambiguities using personal skills and efforts. The results of this hypothesis are consistent with the statements made by [Kim et al. \(2018\)](#).

CONCLUSION

Entrepreneurship is a significant phenomenon in digital startups, especially in Iran which is facing many challenges including sanctions and economic problems; therefore, managers should pay special attention to entrepreneurship because employees will express their creative and innovative ideas through suggestions if they ensure that their managers behave honestly. Thus, employees develop new and unique ideas to help digital startups in respect of urban services and technology to survive in the international competitive environment, support their colleagues and provide basic and quick suggestions for improvement to their leaders so that they can deal with the fundamental problems that arise in the industry. Furthermore, managers can set common goals, satisfy the social and group needs of members, create a two-way communication, develop the employees' skills and expertise, and establish group dynamics by collaborating and negotiating with team members. Creativity, innovation and entrepreneurship of employees are developed by participation and better responsiveness of employees to responsibilities and experiences. In fact, digital startups are developed in their specialized field by eliminating communication obstacles in the company. Company managers should also pay attention to the needs and demands expressed by their employees. Managers can create the opportunity to hear new opinions and ideas expressed by employees and clarify team and organizational goals by holding entrepreneurship courses so that they can perform well in the internationalization of their companies. Therefore, conditions for increasing the internationalization of digital startups in respect of urban services and technology will be provided through entrepreneurship.

Research Limitations

Even if a research is perfect, the researcher encounters some challenges and limitations. In present research, there are limitations in research data collection using questionnaire such as, the paper questionnaire naturally has limitation, it was impossible to investigate how careful the repliers were, there was a time limitation and the data collection was delayed because of online distribution of questions.

AUTHOR CONTRIBUTIONS

M. Tajpour and S.M. Razavi performed the conceptualization and literature review, compiled the data, manuscript preparation and editing references. M. Tajpour performed the Methodology, analyzed and prepared the manuscript text and manuscript preparation.

ACKNOWLEDGEMENT

This article is taken from the postdoctoral project of University of Tehran with the supported of the National Elite Foundation. The authors are also very grateful to employees the digital startups in the field of urban services and technology.

CONFLICT OF INTEREST

The authors declare that there is not any conflict of interests regarding the publication of this manuscript. In addition, the ethical issues, including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, and redundancy has been completely observed by the authors.

OPEN ACCESS

©2023 The author(s). This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The images or other third-party material in this article are included in the article's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this license, visit: <http://creativecommons.org/licenses/by/4.0/>

PUBLISHER'S NOTE

IJHCUM Publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

ABBREVIATIONS (NOMENCLATURE)

AVE	Average Variance Extracted
CR	Composite Reliability

R ²	R Square
Q2	Predictive Relevance
GOF	The Goodness of Fit
NFI	Normed Fit Index
SRMR	Standardised Root Mean Square Residual

REFERENCES

Ahsan, F.M.; Sinha, A.K., (2022). Internationalization motives, location advantages and performance: the case of Indian firms from knowledge-intensive industries. *Cross. Culture. Strat. Manage.* Ahead of print.

Al-Kurdi, O.F.; El-Haddadeh, R.; Eldabi, T., (2020). The role of organisational climate in managing knowledge sharing among academics in higher education. *Int. J. Inform. Manage.*, 50: 217-227 (11 pages).

Allen, T.J.; Gloor, P.; Colladon, A.F.; Woerner, S.L.; Raz, O., (2016). The power of reciprocal knowledge sharing relationships for startup success. *J. Small BUS. Ent. Dev.*, 23(3): 636-651 (16 pages).

Allen, N.J.; Meyer, J.P., (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *J. Occup. Psychol.*, 63(1): 1-18 (18 pages).

Arghashi, V.; Okumuş, A., (2022). Country-of-origin image; SMEs and emerging economies- evidence from a case study of manufacturing SMEs from Turkey. *J. Isl. Mark.*, 13(4): 956-974 (19 pages).

Bagheri, M.; Mitchelmore, S.; Bamiatzi, V.; Nikolopoulos, K., (2019). Internationalization orientation in SMEs: The mediating role of technological innovation. *J. Int. Manage.*, 25(1): 121-139 (19 pages).

Byrne, J.J., (1998). Teacher as hunger artist: Burnout: Its causes, effects, and remedies. *Contem. Educ.*, 69(2): 86 (1 pages).

Casillas, J.C.; Moreno-Menéndez, A.M.; Barbero, J.L.; Clinton, E., (2019). Retrenchment strategies and family involvement: The role of survival risk. *Fam. Bus. Rev.*, 32(1): 58-75 (17 pages).

Cahen, F.R., (2019). Internationalization of Brazilian high-tech startups. In *Startups and innovation ecosystems in emerging markets*. Palgrave Macmillan, Cham. 37-53 (17 page).

Cela, A.; Hysa, E.; Voica, M.C.; Panait, M.; Manta, O., (2021). Internationalization of Large Companies from Central and Eastern Europe or the Birth of New Stars. *Sustainability.*, 14(1): 261 (1 page).

Chen, K; Zhang, Y; Zhu, G; Mu, R., (2020). Do research institutes benefit from their network positions in research collaboration networks with industries or/and universitos? *Technovation*, 94:102002-29(3): 94-95 (2 page).

Chitsaz, E; Tajpour, M; Hosseini, E; Khorram, H; Zorrieh, S., (2019). The effect of human and social capital on entrepreneurial activities: A case study of Iran and implications. *Entr. Sustain.*, 6(3): 1393-1203 (11 pages).

Coveri, A; Zanfei, A., (2022). Who wins the race for knowledge-based competitiveness? Comparing European and North American FDI patterns. *J. Tech. Trans.*, 1-39 (39 pages).

Covin, J.G; Miller, D., (2014). International entrepreneurial orientation: Conceptual considerations, research themes, measurement issues, and future research directions. *Entrep. Theory. Pract.*, 38(1): 11-44 (34 pages).

Cunningham, J.A; Menter, M; Wirsching, K., (2019). Entrepreneurial

- ecosystem governance: A principal investigator-centered governance framework. *Small. Bus. Econ*, 52(2): 545-562 (18 pages).
- Dimitratos, P; Voudouris, I; Plakoyiannaki, E; Nakos, G., (2012). International entrepreneurial culture—Toward a comprehensive opportunity-based operationalization of international entrepreneurship. *Int. Bus. Rev*, 21(4): 708-721 (14 pages).
- Du, H; Mitkova, L; Wang, N., (2020). The paths of internationalization of Chinese innovative firms. *Sustainability*, 12(6): 1-27 (27 pages).
- Fornell, C; Larcker, D.F., (1981). Structural equation models with unobservable variables and measurement error: *Algebr. Stat.*, 382-388 (7 pages).
- Hosseini, E; Ardekani, S.S.; Sabokro, M., (2020). Conceptual model of the voice of the members of the scientific board of public universities of Iran with the approach of interpretive structural modeling. *J. Res. Manage. Teach. Mar. Sci.*, 7(4): 16-41 (26 pages). (In Persian)
- Hosseini, E; Ardekani, S.S; Sabokro, M., Mahdi; S.; Almodarresi, A., (2021). Developing a model for knowledge employee voice: The case study of information technology enterprises. *Org. Cult. Manage.*, 19(4): 655-682 (27 pages). (In Persian)
- Hosseini, E; Tajpour, M; Lashkarbooluki, M., (2020). The impact of entrepreneurial skills on manager's job performance. *Int. J. Hum. Capital Urban Manage.*, 5(4): 361-372 (12 pages).
- Ipsmiller, E; Dikova, D; Brouthers, K.D., (2022). Digital Internationalization of Traditional Firms: Virtual Presence and Entrepreneurial Orientation. *J. Int. Manage.*, 28(4): 100940 (18 pages).
- Jang, H; Lee, K; Yoon, B., (2017). Development of an open innovation model for R&D collaboration between large firms and small-medium enterprises (SMES) in manufacturing industries. *Int. J. Innov. Manag.*, 21(01): 1750002 (16 pages).
- Jayabalan, J; Appannan, J.S; Low, M.P; Ming, K.S., (2016). Perception of employee on the relationship between internal corporate social responsibility (CSR) and organizational affective commitment. *J. Prog. Res. Soc. Sci.*, 3(2): 168-175 (8 pages).
- Jehan, Y; Hussain, D; Batool, M; Imran, M; Rasaizadi, A; Askari, M; Jonga, R. H., (2020). Effect of green human resource management practices on environmental sustainability. *Int. J. Hum. Capital Urban Manage.*, 5(2): 153-164 (12 pages).
- Keser, S.; Duzgun, S.; Aksoy, A., (2012). Application of spatial and non-spatial data analysis in determination of the factors that impact municipal solid waste generation rates in Turkey. *Waste Manage*, 32(3): 359-371 (13 pages).
- Kim, M; Choi, L; Borchgrevink, C.P; Knutson, B; Cha, J., (2018). Effects of Gen Y hotel employee's voice and team-member exchange on satisfaction and affective commitment between the US and China. *Int. J. Contemp. Hosp. Manage.*, 30(5): 2230-2248 (19 pages).
- Kline, R.B., (2015). Principles and practice of structural equation modeling: Guilford publications.
- Korimbocus, M.A.; Towokul, T.; Nagowah, S.D., (2020). A Survey of knowledge capture and knowledge sharing techniques in Agile Software Companies. Springer, Singapore. *Adv. Comp. Intell. Engn.*, 567-578 (12 pages).
- Lawal, F.A; Iyiola, O.O; Adegbuyi, O.A; Ogunnaike, O.O; Taiwo, A.A., (2018). Modelling the relationship between entrepreneurial climate and venture performance: The moderating role of entrepreneurial competencies. *Acad. Entr. Manage. J.*, 24(1): 1-16 (16 pages).
- Liu, X; He, P; Chen, W; Gao, J., (2019). Improving multi-task deep neural networks via knowledge distillation for natural language understanding. 1904.09482 (8 pages).
- Mahdavi Mazde, B; Zakery, A; Mirzamohammadi, S., (2022). A Model Presentation for the Role of Knowledge Types in the Internationalization of Knowledge Based Firms with its Policy Implications. *Commer. Surv.*, 19(111): 85-106 (22 pages).
- Martínez-Román, J.A.; Gamero, J.; Tamayo, J.A.; Delgado-González, L., (2020). Empirical analysis of organizational archetypes based on generation and adoption of knowledge and technologies. *Technovation*, 96: p.102145.
- McKenna, S., (2005). Organisational commitment in the small entrepreneurial business in Singapore. *Cross Cult. Manage. Int. J.*, 12(2): 16-37 (22 pages).
- Mirzapour, M; Toutian, S.S; Mehrara, A; Khorrampour, S., (2019). The strategic role of human resource management in crisis management considering the mediating role of organizational culture. *Int. J. Hum. Capital Urban Manage*, 4(1): 43-50 (7 pages).
- Mlinaric, C.M., (2016). Foreign market knowledge and SME's international performance: Moderating effects of strategic intent and time-to internationalization. *Entr. Bus. Econ Rev.*, 4(4): 51-66 (16 pages).
- Mobarki, M; Ziyae, B; Rezvani, M; Tajpour, M., (2021). Conceptual model of internationalization of the entrepreneurial university with an interpretive structural modeling approach. *J. Res. Manage. Teach. Mar. Sci.*, 8(4): 186-209 (24 pages). (In Persian)
- Murphy, G.B.; Trailer, J.W.; Hill, R.C., (1996). Measuring performance in entrepreneurship research. *J. Bus. Res*, 36(1): 15-23 (9 pages).
- Moolenaar, N.M; Daly, A-J; Slegers, P.J., (2010). Occupying the principal position: Examining relationships between transformational leadership, social network position, and schools' innovative climate. *Educ. Admin. Q.*, 46(5): 623-670 (48 pages).
- Mtigwe, B., (2006). Theoretical milestones in international business: The journey to international entrepreneurship theory. *J. Int. Entr.*, 4(1): 5-25 (20 pages).
- Neupane, P.A., (2019). Networks and internationalization in higher education: A case study (Order No. 13808418). Available from ProQuest Dissertations and Theses Global. 1-31 (32 pages).
- Onkelinx, J; Manolova, T.S; Edelman, L.F., (2016). The human factor: Investments in employee human capital, productivity, and SME internationalization. *J. Int. Manage.*, 22(4): 351-364 (14 pages).
- Ouakouak, M.L; Ouedraogo, N., (2019). Fostering knowledge sharing and knowledge utilization. *Bus. Process. Mange. J.*, 757-779 (23 pages).
- Oyewobi, L.O.; Oke, A.E.; Adeneye, T.D.; Jimoh, R.A., (2019). Influence of organizational commitment on work-life balance and organizational performance of female construction professionals. *Eng. Constr. Archit. Manage.*, 26(10): 2243-2263 (21 pages).
- Park, J.Y; Nawakitphaitoon, K., (2018). The cross-cultural study of LMX and individual employee voice: The moderating role

- of conflict avoidance. *Hum. Res. Manage. J.*, 28(1): 14-30 (17 pages).
- Park, J; Chae, H; Choi, J.N., (2017). The need for status as a hidden motive of knowledge-sharing behavior: An application of costly signalling theory. *Hum. Perform.*, 30(1): 21-37 (17 pages).
- Petty, G.C; Hill, R.B., (2005). Work ethic characteristics: Perceived work ethics of supervisors and workers. *J. Ind. Tech. Educ.*, 42(2): 5-20 (15 pages).
- Purkayastha, A.; Kumar, V.; Lovallo, D., (2022). How do business group affiliated firm in emerging markets outperform standalone firms? A knowledge-based view. *J. Knowl. Manage.*
- Razak, N-A; Pangil, F; Zin, M.L. M; Yunus, N-A-M; Asnawi, N. H., (2016). Theories of knowledge sharing behavior in business strategy. *Procedia Econ. Finance*, 37(1): 545-553 (9 pages).
- Ringel, M.; Schlomann, B.; Krail, M.; Rohde, C., (2016). Towards a green economy in Germany? The role of energy efficiency policies. *Appl. Energy*, 179: 1293-1303 (11 pages).
- Sabokro, M.; Tajpour, M.; Hosseini, E., (2018). Investigating the knowledge management effect on managers' skills improvement. *Int. J. Hum.Capital Urban.Manage.*, 3(2): 125-132 (11 pages).
- Salamzadeh, A; Tajpour, M; Hosseini, E; Salembrahmi, M., (2021). Human capital and the performance of Iranian digital startups: the moderating role of knowledge sharing behaviour, *Int. J. Public Sect. Perform. Manage.* 2(1): 1-16. (14 pages).
- Schillo, R.S., (2018). based spin-offs as agents in the entrepreneurial ecosystem. *J. Technol. Trans.*, 43(1): 222-239 (18 pages).
- Siegel, S.M.; Kaemmerer, W.F., (1978). Measuring the perceived support for innovation in organizations, *J. Appl. Psychol.*, 63(5): 553-563 (11 pages).
- Singh, S.K; Gupta, S.; Busso, D.; Kamboj, S., (2019). Top management knowledge value, knowledge sharing practices, open innovation and organizational performance. *J. Bus. Res.*, 788-798 (11 pages).
- Soetanto, D; van Geenhuizen, M., (2019). Life after incubation: The impact of entrepreneurial universities on the long-term performance of their spin-offs. *Technol. Forecast. Soc. Change*, 141: 263-276 (14 pages).
- Tajpour, M., Hosseini, E., & Brahmj, M., (2022). Effect of international entrepreneurship indicators on innovative performance: the mediating role of motivation. *Int. J. Tech. Transfer. Commerc.*, 19(1): 142-162 (21 pages).
- Tajpour, M; Mohammadi, M; Soleymanian, S. M; Yaghoobpour, M., (2022). spin-off and internationalization: the mediating role of entrepreneurial university. *Acad. Strat. Manage. J.*, 21(5): 1-14(14 pages).
- Tajpour, M; Ziyae, B; Mobaraki, M; Rezvani, M., (2022). Exploring the relationship between internationalization and entrepreneurial university: the mediating effect of education (University of Tehran, Sharif University of Technology, and Tarbiat Modares University). *Iran. J. Manage. Stud.* Ahead of print. (In Persian)
- Thomas, K.W; Velthouse, B.A., (1990). Cognitive elements of empowerment: An interpretive model of intrinsic task motivation. *Acad. Manage. Rev.*, 15(4): 666-681(16 pages).
- Tough, A; Popoola, S.O., (2009). Organizational commitment of records management personnel in Nigerian private universities. *Rec. Manage. J.*, 19 (3): 204-217(14 pages).
- Tsai, C.H., (2011). Innovative behaviors between employment modes in knowledge intensive organizations. *Int. J. Human. Soc. Sci.*, 1(6): 153-62 (10 pages).
- Tuppura, A; Saarenketo, S; Puumalainen, K; Jantunen, A; Kyläheiko, K., (2008). Linking knowledge, entry timing and internationalization strategy. *Int. Bus. Rev.*, 17: 473-487 (15 pages).
- Vashdi, D., R; Bamberger, P., A; Erez, M; Weiss-Meilik, A., (2007). Briefing-debriefing: Using a reflexive organizational learning model from the military to enhance the performance of surgical teams. *Hum. Res. Manag.*, 46(1): 115-142(28 pages).
- Wang, Z; Wang, N., (2012). Knowledge sharing, innovation and firm performance. *Expert systems with applications*, 39(10), 8899-8908. (10 pages).
- Yang, L. R; Huang, C.F; Wu, K.S., (2011). The association among project manager's leadership style, teamwork and project success. *Int. J. Project. Manage.* 29(3): 258-267 (10 pages).
- Yasir, M; Majid, A., (2017). Impact of knowledge management enablers on knowledge sharing. *World J. Entr. Manag. Sustain. Dev.*, 13(1): 16-33 (18 pages).
- Zahra, S.A., (2005). Toward a theory of international new ventures: Reflections on a decade of research. *J. Int. Bus. Study.*, 36: 29-41 (13 pages).

COPYRIGHTS

©2023 The author(s). This is an open access article distributed under the terms of the Creative Commons Attribution (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, as long as the original authors and source are cited. No permission is required from the authors or the publishers.



HOW TO CITE THIS ARTICLE

Tajpour, M.; Razavi, S.M., (2023). *The effect of team performance on the internationalization of Digital Startups: The mediating role of entrepreneurship.* *Int. J. Hum. Capital Urban Manage.*, 8(1): 17-30.

DOI: 10.22034/IJHCUM.2023.01.02

url: https://www.ijhcum.net/article_699768.html

