

ENTREPRENEURIAL INTENTION AND THE PERFORMANCE OF DIGITAL STARTUPS: THE MEDIATING ROLE OF SOCIAL MEDIA

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ABSTRACT

The purpose of this study is to investigate the effect of entrepreneurial intention on performance development mediated by social media in digital start-ups. The study population includes the managers of 416 digital start-ups. Based on Cochran's formula and with an error level of 5% at 95% confidence level, the minimum number of samples for this study was estimated to be 199. To collect data, a standard 29-item questionnaire was distributed online in 2020. This research has investigated the relationships between variables by using PLS3 software and structural equation modelling. The results indicate that the components of entrepreneurial intention including knowledge sharing, reputation, social relations and identity have a positive effect on the performance of digital start-ups mediated by social media. Furthermore, the results show that successful companies are constantly creating and distributing new knowledge and rapidly applying it to new technologies and products.

Keywords: Entrepreneurial intention, performance, social media, digital start-ups.

INTRODUCTION

Changes in today's business conditions have led to changing in their attitudes (Tajpour, Hosseini, & Alizadeh ,2021). Therefore, entrepreneurship is one of the essential elements in economic development, so paying close attention to it increases job opportunities and competition; it improves productivity and increases the level of economic and social welfare of society (Hosseini, Tajpour, & Lashkarbooluki ,2020). Entrepreneurship is also a type of behavior planned to achieve a goal (Autio & Acs, 2010). Assessing the role and importance of models and patterns, mind maps and cognitive traits can clarify how the entrepreneurial intention is formed and the process of turning this intention into behavior (Salamzadeh, Tajpour, & Hosseini, 2020). For this reason, in psychological studies, intention is often referred to as the best predictor of behavior (Ajzen, 1991). Entrepreneurial intention can also be developed by providing a better understanding of the deep assumptions that underlie that intention (Krueger Jr, 2007). Thus, businesses with an entrepreneurial approach are always ready and able to modify fundamental changes in their external environment and plan their strategies to change environmental needs

(Tajpour, Moradi, & Moradi, 2015). In such cases, entrepreneurial intention can significantly help businesses in recognizing and understanding entrepreneurial behavior.

This has led to a fundamental shift in communication and information that has presented researchers with a completely different perspective on the concept and function of social networking influence (Schroeder, Pennington-Gray, Donohoe, & Kiouisis, 2013). Social media is a set of databases that provide equipment so that users can share their thoughts, interests, and activities with others, and others can share these thoughts and activities with them as well (Nowiński & Haddoud, 2019). Additionally, a social network allows individuals to create public or private profiles for themselves or to communicate with other members of the network (Boyd & Ellison, 2007).

Accordingly, some researchers have examined the development factors of the innovative technology-based businesses in the first three years of launching through social media. They have identified success factors in three main items, that is to say, the uniqueness of the benefits of innovation, the organizational

characteristics of the digital start-ups, and the entrepreneur and innovator (Groenewegen & de Langen, 2012). Hence, there is a meaningful relationship between entrepreneurship, company performance, innovation, growth and social networking (Servantie, Cabrol, Guieu, & Boissin, 2016). Therefore, a successful technology-based business has more development potential than a mature company, i.e. it can have more labour, or more development than the old companies with less capital (Blank, 2012). Then, more years of work experience, analysis of tough competitors' strategies, use of innovation as a business idea and risk-taking are influential factors for the prosperity of technology-based business (Brem, 2011).

In recent years, with the emergence of digital start-ups in Iran, there has been an increase in the number and variety of innovative products. Besides, along with the great development of these businesses in Iran and the lifting of sanctions, various activities have been carried out. Foreign investment companies, launching business support associations, inviting Iranian investors and creating a suitable environment for business elites and investors have been the outcomes of launching digital start-ups in Iran (Salamzadeh, Kawamorita Kesim, & Karami, 2019). Creating entrepreneurial opportunities in Iran paves the way for shaping a bright future for the country in economic, political, and social domains. Moreover, although entrepreneurial intention plays a crucial role in advancing and promoting the activities of companies, especially business development; but unfortunately, as far as the authors are aware, limited research has focused on the issue of entrepreneurial intention. In addition, relevant research shows that entrepreneurial intention in digital start-ups has not been considered so far. Given the above issue and the fact that different studies on entrepreneurial intention and social networks have been conducted separately, the purpose of this paper is to investigate the effect of entrepreneurial intention on performance development mediated by social media in digital start-ups.

LITERATURE REVIEW

Entrepreneurship is one of the critical factors in achieving economic development and social change, which solves part of the current crisis

of human society, that is due to the inefficiency of the economy. Therefore, it is necessary to found technology-based business by creating public awareness about the results of entrepreneurial activities and increasing the ability of the workforce to take advantage of current opportunities (Landström, Harirchi, & Åström, 2012). In such cases, entrepreneurial intention can help people to understand and comprehend entrepreneurial behavior. In psychological studies, intention is the motivation of an individual to make an effort based on a conscious plan or decision (Westaby, Probst, & Lee, 2010). Accordingly, entrepreneurial intention is a state of mind that drives a person to start a business (Bird, 1988). Measuring entrepreneurial intention and identifying the factors affecting it as one of the critical factors in the occurrence of entrepreneurial phenomenon, provides a more accurate forecast of its occurrence (Landström et al., 2012).

In most organizations worldwide, managers are always looking to improve and modify the performance of their organizations. In other words, nowadays, if organizations want to maintain their position and act in a way that leads to their survival, development and success, it requires them to reconsider their performance and fulfil their commitments properly (Tajpour, Hosseini, & Moghaddm, 2018). It should be taken into account that one of the conditions for the survival of any organization is to try to improve the performance in terms of components of growth and profitability, on the one hand; it also prevents organizational decline, on the other hand. Therefore, it can be said that one of the most important factors affecting the performance of organizations is entrepreneurial intention (Muñoz-Pascual, Galende, & Curado, 2020).

Modern technology, including social media, plays a crucial role in supporting how companies and customers interact with each other. Social media is a context in which customers participate in production and support mutual relationships (Solem, 2016). Social media is also highly interactive, allowing managers to communicate with their customers and share and exchange information (Sashi, 2012). According to the above, the main hypothesis of the research is as follows:

H0: Entrepreneurial intention has a significant effect on the performance of digital start-ups mediated by social media.

One of the most important parts of entrepreneurship is knowledge sharing. Knowledge must be shared and distributed in the company (Lin, Wu, & Lu, 2012). Knowledge sharing among employees is a vital factor in the emergence of entrepreneurial behaviours (Gaál, Szabó, Obermayer-Kovács, & Csepregi, 2015). Furthermore, knowledge sharing is recognized as a critical element in the entrepreneurial process that leads to improved and enhanced company performance and competitive advantage. One of the main reasons for knowledge sharing in technology-based business is the access to experts with new knowledge at the right time (Chang, Chang, Lian, & Wang, 2018). Meanwhile, knowledge sharing plays a critical role in transforming social knowledge into individual knowledge and public knowledge into secret knowledge (Ma & Chan, 2014). Consequently, organizations can improve their performance by being aware of their strengths and weaknesses (Wang, Yang, Chen, & Tsai, 2016). Improving performance leads to increasing employee motivation towards the company's goals. Through social media, companies implement two goals: development tools to share employees' insider knowledge and motivation to use new technologies (Behringer & Sassenberg, 2015). It can be said that social media is considered as a means of connecting and interacting with people and creating new forms of dynamic and participatory communication. Also, when people spread their knowledge, skills and expertise among members of their organization, performance improves and companies become more innovative. Consequently, effective and efficient knowledge management seems essential for success in this regard (Al-Kurdi, El-Haddadeh, & Eldabi, 2020). Therefore, organizations strive to manage knowledge more effectively and efficiently to improve their performance (Hatefi & Roustia, 2019). In the same vein, it can be said that one of the significant responsibilities of organizational leaders is to increase the performance of companies through knowledge sharing (Shaw, Park, & Kim, 2013). This issue is vital in addition to private companies in the case of governmental and non-governmental

organizations, because the poor performance of a company results in dissatisfaction of the client of that organization, and it leads to the failure to achieve the intended goals for that company. Therefore, the optimal performance of technology-based business increases the productivity of the organization and enhances the level of services of that organization and improves the economy (Gomez-Mejia, Berrone, & Franco-Santos, 2014). So, knowledge sharing meets the future challenge of technology-based business. In other words, not only training and learning of new skills is realized, but also attitudes are changed and, thereafter, it can expand individual self-efficacy, so that individuals' behavioural, emotional, social, and cognitive skills will be coordinated and individual efficiency activate cognitive and emotional and affective currents (Moghadari-Koosha et al., 2020). Therefore, the first hypothesis of the research is as follows:

H1a: Knowledge sharing has a significant effect on the performance of digital start-ups.

H1b: Knowledge sharing has a significant effect on the performance of digital start-ups through mediating of social media.

Social media creates a unique opportunity for managers to develop relationships with their customers (Laroche, Habibi, Richard, & Sankaranarayanan, 2012). Customer communication and participation are fundamental factors in promoting loyalty, trust and reputation. Social media facilitates exchange and communication with customers (Harrigan, Evers, Miles, & Daly, 2017). Because of its broad domain, social media, also satisfies the desire of customers to interact with a company and leads to improving the performance of companies by creating partnerships, introducing audiences and engaging them (Enginkaya & Yilmaz, 2014). Optimizing the mental image and reputation is one of the most essential and inevitable issues in the development and success of organizations and corporates' development infrastructures (Ha, Janda, & Park, 2009). Reputation is a value estimate that in its meaningful content creates the conditions for positive thinking, feeling and behavior of the stakeholder group (Jackson, 2004). The effect of reputation on helping organizational stability, employee performance and loyalty, ease of attraction, and reducing transaction

costs has been confirmed in numerous studies, all of which are attractive features for companies to encounter financial and political pressures (Harvey & Morris, 2017). Reputation is the external evaluation of a company that is performed by external stakeholders and has dimensions such as the company's perceptual capacity to meet the expectations of its stakeholders and the rational dependence of a stakeholder on the organization (Waddock, 2000). Organizational reputation is a critical factor in increasing customer satisfaction and motivating their behavioural goals. Whenever a company arrives at a specific point about the image it wants to convey and confirms that it can present itself based on that image, then it must follow public perceptions (Gardberg, Zyglidopoulos, Symeou, & Schepers, 2019). Thus, reputation is influenced by what one is known for, beliefs about what is expected of the future, and perceptions of one's overall desirability (Lange, Lee, & Dai, 2011). Because without a good reputation, the survival and development of a company are impossible, managers can play a crucial role in improving employee performance and achieving organizational goals. Based on this, the second hypothesis of the research is as follows:

H2a: Reputation has a significant effect on the performance of digital start-ups.

H2b: Reputation has a significant effect on the performance of digital start-ups through social media mediation.

When a person decides to acquire, present and transfer knowledge, there is, in fact, an interaction to share knowledge (Munar & Jacobsen, 2014). Social interactions have a positive effect on the perception of social media users and, as a result, the users will be more motivated to social interactions and they will be committed to maintaining relationships with other members (Chai & Kim, 2012). Social relationships are a structure that can build loyalty through a solid and lasting psychological connection with experiences. Social relationships affect essential aspects of knowledge, perceptions, and attitudes (Spratt et al., 2009). So, understanding how to organize and facilitate online communities is a crucial domain that many digital start-ups are looking for. However, few of these companies are skilled in developing social media advertising communities (Pongpaew, Speece, &

Tiangsoongnern, 2017). Therefore, organizations need communication to survive in order to improve the effectiveness of organizations (Turaga, 2019). Communication means transmitting and sharing thoughts, ideas and facts in such a way that the recipient receives and understands them. Thus, the goal of communication is to achieve coordinated action between the sender and the receiver of the message (Labelle & Waldeck, 2020). Weak communication processes reduce the effects of well-organized and well-documented information (Abbas et al., 2020). Thus, the first and most crucial step in developing performance is to establish communication in the organization. Employee communication plays a vital role in improving performance, so that the lack of effective communication prevents the improvement of individual and organizational performance (Crawford & Strohkirch, 2006). Because communication determines the development, organizational learning and knowledge sharing that ultimately leads to better performance of companies. The third hypothesis of the research is as follows:

H3a: Social relationships have a significant effect on the performance of digital start-ups.

H3b: Social relationships have a significant effect on the performance of digital start-ups mediated by social media.

Identity for a person is a quality that distinguishes him/ her from other people and is determined by a person's appearance, behavior, and values. An individual's identity is a trait that describes his/her nature and distinguishes him/ her from others and expresses the continuity of these traits over time (Whetten, 2006). Identity represents the transformation of common beliefs vis-a-vis stakeholders (Sarason, 1997). Identity is a set of common characteristics of individuals, pursuing collective goals through specific activities and using a limited number of operational principles (Kress & Elias, 2000). Companies, which are considered as creators of an identity, shape their identity through symbolic and linguistic behaviours used in specific organizational contexts (Hosseini et al., 2020). Therefore, identity is formed based on its customs (Liu et al., 2020). Identity plays a pivotal role in regulating behavioural norms. Therefore, the biggest and most vulnerable asset of any organization is its identity.

Identity gives the organization a personality that determines the image and perception that stakeholders have of the organization (Chang & Hung, 2021). Organizational identity is considered as a strategic source of building credibility and support against various stakeholders and gaining a competitive advantage in any new business environment. Newcomers to the organization experience their social identity over time and in distinct stages (Bernardi & Exworthy, 2020). In sum, members' identity formation makes them closer to the organization, and this causes the distance between the members of the organization, at each level of the organization, to be shorter. The fourth research hypothesis is as follows:

H4a: Identity has a significant effect on the performance of digital start-ups.

H4b: Identity has a significant effect on the performance of digital start-ups through mediating of social media.

METHODOLOGY

Research setting

To sum up, based on articles regarding the relationship between entrepreneurial intention and performance in digital start-ups, this study examines whether entrepreneurial intention affects performance in digital start-ups while considering the mediating role of social media in digital start-ups in Iran. According to the literature review in this domain, the conceptual model can be drawn

as follows:

Sample

The statistical population of the study includes digital start-ups which are defined and categorized according to the evaluation regulations of Iranian companies and knowledge-based institutions. A private company or institution has been created to develop and apply inventions and innovations and to commercialize the results of research and development (including the design and production of goods and services) in the field of high technology. Accordingly, the population of this study includes the managers of 416 digital start-ups. Based on Cochran's formula and with an error level of 5% and a 95% confidence level, the minimum number of samples for this study was estimated to be 199. Given that structural modelling has been used in this study, the sample size should be 5 to 10 times greater than the questionnaire items; therefore, the obtained value is sufficient (Ishtiaq, 2019). To collect data, a 29-item researcher-made questionnaire based on research literature was distributed online in 2020. This research has investigated the relationships between variables by using PLS3 software and structural equation modelling. The justification for using this software is the lack of need for normal distribution and its ability to run for a sample size of less than 200 compared to other available software (Kline, 2015).

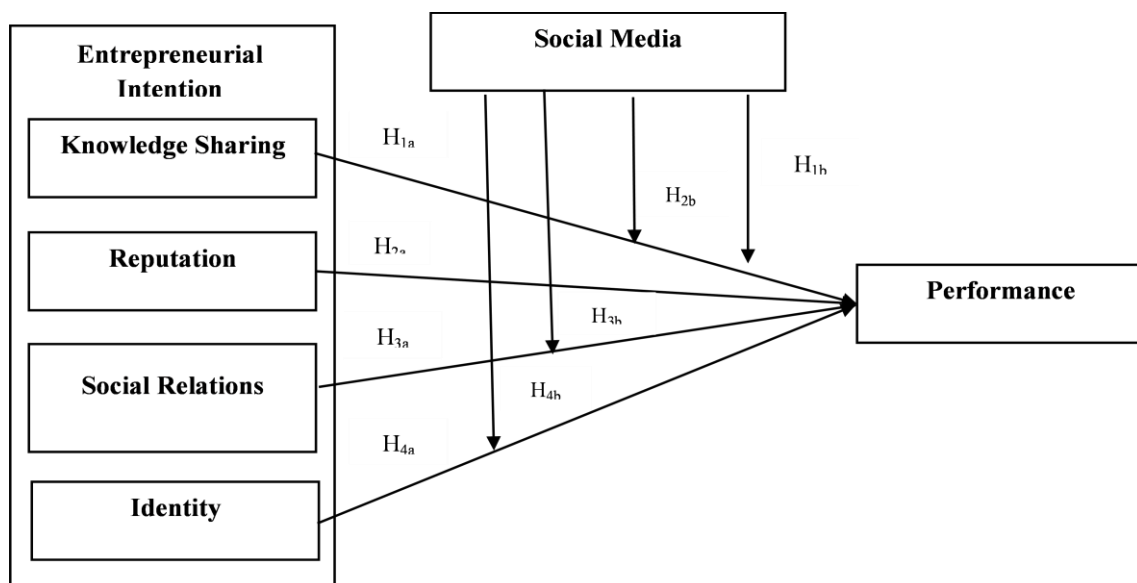


Figure1. Conceptual framework

(Source: Authors' elaboration)

Assessment, reliability, validity

In order to assess the relationships between the variables of the conceptual model, data were collected by using a researcher-made 29-item questionnaire with a 5-point Likert scale (1- strongly disagree, 2- disagree, 3- have no opinion, 4- agree and 5- strongly agree). In this study, entrepreneurial intention is considered as an independent variable, and the performance of digital start-ups is considered as a dependent variable and social network is considered as a mediating variable. In order to ensure the accuracy of the research results, the technical characteristics of the questionnaire were evaluated in two parts: validity and reliability by applying different criteria. The validity of the questionnaire has been evaluated and confirmed through content and structure validity. To evaluate the content validity of the instrument, the opinions of professors and experts aware of the subject have been taken into account. To measure the validity of the structure, the model of structural equations of convergent and divergent validity has been applied. In order to determine the convergent validity, the Average Variance Extracted (AVE) was used and to measure divergence, the root mean index of the extracted variance was used (Sabokro, Tajpour, & Hosseini 2018). The mean standard deviation extracted for the variables in this change is higher than 0.5 and indicates its high validity. The reliability of the questionnaire was also measured by using

Cronbach's alpha coefficient and composite reliability. According to Table 1 and based on the appropriateness of these coefficients, it can be concluded that the research tool has acceptable validity and reliability. Studies also show the value of Cronbach's alpha coefficient and the composite reliability of all structures is higher than the minimum acceptable, i.e. 0.7. Therefore, the structures of this study have the desired reliability. Based on the results of Table 1, all indicators have good validity and reliability.

As Table 2 shows, the root mean values of the extracted variance are higher than the acceptable minimum of 0.5; therefore, research variables have divergent validity. Additionally, regarding that the values of the root mean of the extracted variance are higher than the correlation of the variable with other variables, divergent validity is acceptable if the numbers in the original diameter are higher than their lower values (Fornell & Larcker, 1981). Thereafter, it can be said that the variables are valid and their divergent validity is also confirmed.

Based on the above table and the results obtained from the output of Smart PLS 3 software in Tables 1 and 2, the validity models (convergent and divergent) and reliability (reliability, composite reliability coefficient and Cronbach's alpha) are at a satisfactory level.

Table 1. Composite reliability, Cronbach's alpha and AVE

No.	components	variables	items	Cronbach's alpha	rho	C.R	AVE	R ²	Q ²
1	Entrepreneurial intention	knowledge sharing	aq1-aq5	0.900	0.908	0.926	0.716	---	---
		reputation	bq1-bq5	0.902	0.920	0.928	0.721	---	--
		Social relations	cq1-cq5	0.951	0.952	0.963	0.837	---	---
		identity	eq1-eq4	0.846	0.847	0.897	0.687	--	--
2	Social media	---	fq1-fq5	0.943	0.944	0.956	0.814	0.968	0.914
3	performance	----	dq1-dq5	0.922	0.923	0.943	0.768	0.872	0.805

(Source: Authors' elaboration)

Table 2. Divergent validity

variables	1	2	3	4	5	6
social media	0.902					
identity	0.791	0.889				
knowledge sharing	0.899	0.846	0.938			
performance	0.828	0.876	0.876	0.881		
reputation	0.849	0.783	0.821	0.816	0.942	
Social relations	0.819	0.766	0.779	0.870	0.855	0.915

(Source: Authors' elaboration)

FINDINGS

The fit of the model at three levels of measurement, structural and general was investigated. To evaluate the fit of the structural model of the research which has been done by means of partial least squares method, several criteria are used, the first and most basic of which is the coefficients of significance coefficients or the values of t-statistics (Tajpour, Hosseini, & Salamzadeh, 2020). The fit of the structural model using t-coefficients is such that these coefficients must be higher than 1.96 in order to confirm their significance at the 95% confidence level (Thomas, 2003). The results of this criterion show that the obtained values whose critical value is more than the critical value (1.96) at the 95% confidence level have been confirmed (Figure 2).

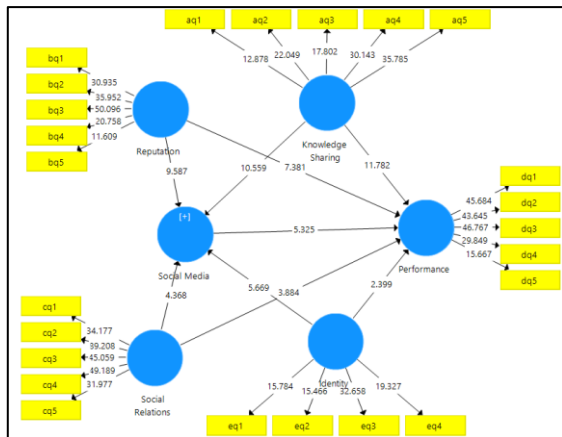


Figure 2: t-test

(Source: Authors' elaboration)

Coefficient of determination (R^2)

The second criterion for examining the fit of a structural model in research is the R^2 coefficients related to the latent endogenous variables of the model. This criterion is used to examine the intensity of relationships between structures, which only applies to dependent structures and not independent ones. R^2 is a criterion that indicates the effect of exogenous variables on an endogenous variable and three values of 0.19, 0.33 and 0.67 are considered for weak, medium, and strong values of R^2 (Hosseini et al., 2020). In this study, the criterion is for developing the performance of digital start-ups (0.872) and social media (0.968); therefore, a structural model from the perspective of this criterion has a good fit at an intense level. The results have been represented according to Figure 3.

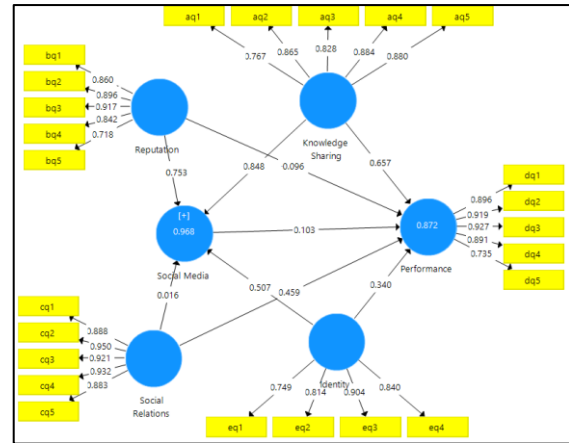


Figure 3: Model of Standardized Factor Loading Coefficients

(Source: Authors' elaboration)

Criterion Q^2

The Q^2 criterion is calculated for all dependent structures and represents the product of the combined values of the research structures in the values of the coefficient of determination related to them. Introduced by Stone-Geisser (1975), this criterion determines the predictive power of the model in dependent variables. According to them, models that have an acceptable structural part fit should be able to predict the characteristics of the endogenous structures of the model. This means that if in a model, the relationships between structures are appropriately defined, the structures will have a good effect on each other's characteristics and thus the hypotheses are correctly confirmed. 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 criterion in the present study is to develop the performance of digital start-ups (0.768) and social media (0.814). This result represents the high appropriateness and fine structure of the research model.

Overall Fit of the Model

The general model includes both parts of the measurement model and the structure, and by confirming its fit, the fit of the model is checked. Hence, the overall fit of the model is possible with the help of the good of fitness (GOF) criterion. According to the value obtained 0.918 for GOF, the overall fit of the research model is very appropriate and approved. According to the three values of 0.01, 0.25 and 0.36, which are weak, medium and strong values for GOF, the value of 0.918

for this criterion indicates a strong fit of the overall research model.

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

Another indicator is the standardized root mean residual index (SRMR). According to Byrne (1998) the value of 0.05, according to Hu and Bentler (1999) the value of 0.08 and according to Ringle (2016) the value of SRMR less than 0.10 indicate an acceptable fit of the overall model. According to Table 3, this index is also at an acceptable threshold, so it can be claimed that the current research model has a perfect fit. Normed fitness index (NFI) has also been used to measure fit. The acceptance range of this index should be between 0 and 1 and the NFI should be higher than 0.9 (Kline, 2015). As a result, as shown in Table 3, this value is equal to 0.933, which is also confirmed as a result of this index.

Table 3. Fitness indexes (Source: Authors' elaboration)

	SRMR	NFI
Acceptable values	≤0.10	≥0.9
Calculate values	0.087	0.933

VAF test was used to investigate the mediating role of motivation in the development of technology-based businesses. The value of 0.124 obtained in this test indicates the role of partial mediation for the motivation construct.

$$VAF = (a \times b) / (a \times b) + c$$

a: The amount of the mediator and independent variable pathway coefficient: 0.531

b: The amount of the mediator and dependant variable pathway coefficient: 0.103

c: The amount of the dependant and independent variable pathway coefficient: 0.388

Hypotheses Testing

Finally, t-test has been used to investigate the hypothetical relationships between variables. Eight sub-hypotheses have been used to test the primary hypothesis, which according to Table 4, the t-coefficient for the eight existing relationships has been confirmed. To determine the effect of predictor variables on dependent variables, standardized factor load coefficients related to the paths of each hypothesis are examined. These coefficients indicate that changes in dependent variables are justified by independent variables up to a few percent.

DISCUSSION

According to the main purpose of this study, which was about the entrepreneurial intention investigation regarding the performance improvement of digital start-ups by mediating of social media, the main purpose has been investigated based on eight hypotheses. The results of Smart PLS 3 software showed that

Table 4. T-test and Research Influence Coefficients

Path	t-test	Influence coefficient	result
Knowledge sharing has a positive effect on the performance of digital startups.	11.782	0.657	Accepted
Knowledge sharing has a positive effect on the performance of digital startups through mediating of social media.	10.559	0.848	Accepted
Reputation has a positive effect on the performance of digital startups.	7.381	0.096	Accepted
Reputation has a positive effect on the performance of digital startups through mediating of social media.	9.587	0.753	Accepted
Social relations have a positive effect on the performance of digital startups.	3.884	0.459	Accepted
Social relationships have a positive effect on the performance of digital startups through mediating of social media.	4.368	0.016	Accepted
Identity has a positive effect on the performance of digital startups.	2.399	0.340	Accepted
Identity has a positive effect on the performance of digital startups through mediating of social media.	5.669	0.507	Accepted

(Source: Authors' elaboration)

entrepreneurial intention has a positive and significant effect on improving the performance of digital start-ups through social media. Therefore, it can be said that successful companies are those that are constantly creating new knowledge, disseminating it widely throughout the organization and rapidly applying it to new technologies and products. This is because digital start-ups are considered as the driving force for the knowledge-based economy. In these companies, more research and development have been done and their growth more based on the development of new technology and knowledge. In addition, their competitive advantage is mainly innovative in technologies and, finally, these companies are conquering new markets as soon as possible.

Therefore, according to the first hypothesis, i.e. knowledge sharing on the performance of digital start-ups and its sub-hypothesis, knowledge sharing have a positive effect on the performance of social media-mediated companies. Moreover, it can be said that knowledge-sharing companies are the axis of development and transformation in the economy of societies, especially developing societies. The employees of these companies are the main capital and can be valuable when the knowledge of individuals is shared with the members inside and outside the company. Such knowledge sharing leads to the interaction of experiences and perspectives, and, consequently, it triggers learning at the company and member level. Information sharing is usually more efficient through social media because it delivers information quickly and uniformly to individuals. Due to the formation of new relationships, it leads to a resource for empowering the company and, ultimately, gaining a competitive advantage by creating knowledge and creating synergies in a dynamic environment. It also leads to improved performance, the formation of innovative processes, the creation of opportunities and the survival of the company. Social media fosters the socialization of managers, which facilitates interaction and collaboration between learners and leads to various activities. Therefore, the stronger the managers' desire for knowledge-sharing behavior, the more they share their values and beliefs. The results of this hypothesis are consistent with the results of research by Chang et al. (2016), Hatefi and

Rousta (2019) and Moghadari-Koosha (2020). Thereafter, it is suggested that laws protect the capital of digital start-ups, including inventions. In order to share knowledge among companies, the required flexibility should be done to avoid administrative bureaucracy. Furthermore, it is recommended that managers participate in webinars and workshops formed through social media to share their experiences with other colleagues and find new ideas.

Regarding the second hypothesis, i.e. reputation on the performance of digital start-ups and its sub-hypothesis on reputation on the performance of digital start-ups which were both confirmed through social media, it can be said that regarding environmental dynamics as well as economic and cultural effects, reputation has a special place in improving and developing the performance of companies. In such a competitive environment, companies that cannot compete with others are quickly eliminated from the environment. In such circumstances, reputation optimization is one of the most indispensable and unavoidable issues in the development of companies. This is because most of the value of companies does not only include tangible assets, but also the value of the company is in its intangible assets. Thus, shaping the company's reputation in human resources will attract and retain talented employees and the company's optimal performance. The existence of social media to create new connections leads to the elimination of negative decisions and actions in many cases for greater awareness of various issues. Reputation increases the value of companies' end products or services when entering new markets. Accordingly, the relationship between the reputation and performance of the company is bilateral. If managers instil the value of reputation in employees, they can instil this positive image in others as well, and ultimately the performance of companies will be improved. The results of this hypothesis are consistent with the results of research by Harrigan et al. (2017), Harvey et al. (2017) and Gardberg et al. (2019). Therefore, it is suggested that managers and officials increase their credibility in the community by creating the ground for the company's progress and improving performance. Also, to maintain informal participation and cooperation

manager should strengthen the positive perception of the company so as to increase the initiative and thus the ability to solve problems and, therefore, they can achieve more effective decisions.

Regarding the third hypothesis, i.e. social relations on the performance of digital start-ups and its sub-hypothesis, social relations on the performance of digital start-ups which were both confirmed through social media, it can be said that in the new information age, social media has been transformed from a source of entertainment to an influential and significant communication tool considering the exchange of knowledge and experiences that has accelerated the exchange of information and increased levels of efficiency and trust among company managers. Through diverse social relationships, company managers can organize the activities of their employees and coordinate management systems and determine their success and failure in the labour market. Actually, the greater the diversity of people in terms of culture, education, skills and age in social relationships, the better the results of starting an entrepreneurial business can be achieved since experiences of different people in different fields and domains are not the same. Also, workplace social relationships provide access to various resources, including work knowledge, career counselling, strategic information, and social support, which ultimately leads to increased corporate performance and productivity. Allowing employees to talk through social media creates a motivating atmosphere for ideas and opinions. The results of this hypothesis are consistent with the results of research by Pongpaew et al. (2017), Turaga (2019), Abbas et al. (2020) and LaBelle and Waldeck (2020). Regarding the fourth hypothesis, i.e. identity on the performance of digital start-ups and its sub-hypothesis of identity on the performance of digital start-ups which were both confirmed through social media, it can be said that the close relationship between identity and organizational performance has made people feel united and have cohesion and continuity towards the company and consider themselves as part of the issues and problems of the organization. It can be said that the more identity a person has on social media, the more she/he seeks to create entrepreneurial businesses. Definite identity

and intensification of a familiar and inner feeling towards one's goals motivates entrepreneurial activities. Social identity is a part of one's self-concept that results from perceived membership in a related social group that leads to one's participation in creative businesses. People with high social identities sacrifice their interests for group and organizational interests, so they will exchange ideas and ideas to achieve the company's goals, provide solutions for progress. The findings of these hypotheses are consistent with the results of research by Liu et al. (2020), and Chang and Hung (2021). In this regard, company managers are suggested to improve their identity to improve the performance of the organization by increasing the improvement of salaries and benefits of employees.

Finally, according to the confirmation of all hypotheses, it can be concluded that the main purpose of the research is confirmed. Accordingly, other suggestions are made by researchers such as the use of virtual social media because the efficient use and development of new technology tools lead to a sustainable reduction of advertising costs and promotion of products and services and helps to meet the needs customers are properly considered. The needs of visitors should be addressed, including creating a personal approach, establishing intelligent, creative, and interactive communication that includes empathy and emotion. Since entrepreneurs' social networks are recognized as one of the key parts of entrepreneurial opportunities, managers should pay more attention to the expansion, development and formation of relationships with network members, which will facilitate, guide and advise them.

SUGGESTIONS AND LIMITATIONS

Since this research has been done in Iranian digital start-ups, the results should be generalized to other companies with caution. Thus, it is suggested that the subject of this study be done for other companies and the results be compared with the present study.

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