



Liaquat Ali Rahoo¹, Muhammad Waqas Nazir Arain², Naira Qazi³,
Muhammad Ali Khan⁴, Fahad Atta⁵

Abstract

Information technology capabilities and entrepreneurial talents have become more important in recent decades. Because day by day business growing with the help of technology. The purpose of this study is to look into how information technology capability and entrepreneur competencies affect the success of businesses. To evaluate the impact of entrepreneurial skills on business success mediating role of information technology capacity. The research was quantitative in method; a survey questionnaire was used as an instrument for data collection. The population of the study was Hyderabad city business owners who had founded their enterprises in the recent past, the Hyderabad Chamber of Commerce. Convenience sampling technique was used for data collection. 500 questionnaires were distributed among the respondents; 320 questionnaires were returned. The study's conclusions demonstrated that entrepreneurial skills are positively correlated with business success, and that information technology, which served as a mediating factor, positively correlated with both entrepreneurial skills and business success. Policy makers and businesspeople will find value in the research's conclusions.

Keywords: Entrepreneurial, Information technology, Chamber of commerce, Capability, Competence

1. Introduction

Job satisfaction refers to an individual's overall feelings and attitudes towards their job. It is a complex and multifaceted construct that involves various factors, including the work environment, job tasks, and relationships with colleagues, supervision, compensation, and opportunities for advancement. Employees with high job satisfaction are generally more content, engaged, and committed to their work. Job satisfaction is often measured using surveys or questionnaires that ask employees to rate their feelings and perceptions about various aspects of their work (Jian-Liang, 2012). Organizations often strive to enhance job satisfaction as part of their overall employee engagement and retention strategies. Regular feedback mechanisms, open communication, and addressing concerns can help create a positive work environment and contribute to higher levels of job satisfaction (Chang & Chuang, 2011). Information Technology (IT) capability refers to an organization's capacity to effectively and efficiently leverage information technology resources to achieve its strategic goals and objectives. It encompasses the integration of technology, people, processes, and data to enhance the overall performance and competitiveness of the organization (Palacios Marques et al., 2015). Effective IT capability is essential for organizations to stay competitive, innovate, and adapt to the rapidly changing business landscape. It involves a strategic and integrated approach to technology management, ensuring that IT resources are aligned with business goals and contribute to organizational success (Aydiner et al., 2020).

Both official and informal entrepreneurial activities make a substantial contribution to the growth and development of the national economy (Al-Mamun et al., 2016; Ali and Rehman, 2025). According to Nabiswa and Mukwa (2017), small businesses play a pivotal role in the development of a stable global economy by improving technological capability, capital mobilization, and innovation dissemination. These businesses are the backbone of indigenous entrepreneurship. Businesses worldwide are at risk due to the market's extreme volatility, an increase in domestic and foreign competitors, and a shortage of both financial and human resources (Raghuvanshia & Garg, 2018). As a result, the OECD and its member countries have prioritized entrepreneurship in an effort to increase the number of new businesses and create jobs for those receiving government assistance (Shatnawi et al., 2021a, 2021b, 2022). According to Rossmiller et al. (2017), the underutilization of technology-assisted systems is the primary cause of failure for traditional SMEs. Therefore, rather than prioritizing increased emphasis on business processes, it is crucial to priorities entrepreneurial intelligence in the technical domain. The Resource-Based View (RBV) has become the focus of IT specialists in an effort to answer queries regarding how and why IT impacts OP. (Perez-Lopez & Alegre, 2012; Audi et al., 2021). In conclusion, IT expertise greatly enhances business outcomes (Benitez et al., 2018; Audi et al., 2022). "IT capabilities" refers to multifarious IT resources that facilitate the efficient coordination of business operations by deploying and mobilizing these IT-based resources, ultimately improving various measures of firm performance (Nevo & Wade, 2010).

The purpose of the study was to examine the role of the entrepreneur competency skills on business success: A mediating role of Information technology at small and medium-sized enterprises (SMEs) which are related with chamber of commerce at Hyderabad district in Sindh province of Pakistan. Influential how IT resources have contributed to development and competitive advantage is critical regardless of a company's size or nature (Abbas, 2018). Because SMEs are so important to Pakistan's economy, this study looks at how entrepreneur competency and IT skills impact these companies in order to fill a knowledge gap. By highlighting the significance of these elements for the growth of SMEs, the study contributes to the body of knowledge on entrepreneur competency skills and IT capability. The study also makes a practical contribution by offering CEOs and policy maker's insights for the business environment.

¹ Mehran University of Engineering and Technology, Jamshoro, Pakistan, liaquatirahoo2003@gmail.com

² Ph.D. Scholar, School of Management and Economics, Xidian University of Electronic Science and Technology, China, waqasarain4@gmail.com

³ Hyderabad Institute of Art, Science and Technology, Sindh, Pakistan, nairakazi78@gmail.com

⁴ Department of Industrial Engineering & Management, Mehran University of Engineering and Technology, Jamshoro, Pakistan, muhammad.nagar@faculty.muett.edu.pk

⁵ School of Computer Science and Technology, Xidian University Shaanxi, FahadAtta@stu.xidian.edu.cn

2. Literature Review

Entrepreneurial competence refers to the combination of skills, knowledge, attitudes, and traits that enable individuals to effectively start, manage, and grow a successful business venture. Successful entrepreneurs often possess a diverse set of competencies that contribute to their ability to navigate challenges, identify opportunities, and drive innovation (Błachnio et al., 2017). Entrepreneurial competence is dynamic and evolves as entrepreneurs gain experience, encounter new challenges, and adapt to changing business environments. Successful entrepreneurs often demonstrate a combination of these competencies, enabling them to effectively lead their ventures to success (Mojab et al., 2011).

To launch a business, one needs a variety of resources, including behavioural and financial ones. A company may be founded as a result of a confluence of external factors, like social capital and funding availability, and internal factors, like the desire to launch a business. An excellent way to explain the idea of these intrinsic variables is through competency (Fodor and Pinteá, 2017; Audi et al., 2023). Scholars have discovered that successful entrepreneurs possess a variety of personality traits, including opportunity, conceptual, relational, organizational, strategic, and commitment abilities (Udoh, 2017). According to Kraus, Rigtering, Hughes, and Hosman (2012), SMEs are finding it more and more difficult to maintain or improve their performance in the current global economy because of the fierce competition they face. Human capital is essential to corporate success in terms of the three performance categories of profit, survival, and employment because it is a tangible asset of any sector. Every setting shows that competence leads to better performance, and successful businesses are led by competent people. This implies that the performance of a company is impacted by entrepreneurial traits (Udoh, 2017). According to Mitchelmore and Rowley (2010), an entrepreneur's entrepreneurial competences skills are those facets of their character, upbringing, and work history that qualify them to run a business. Ahmed et al. (2010) emphasize the importance of comprehending the impact that entrepreneurs' conduct, knowledge, skills, and attitudes have on the success of the business.

Information technology (IT) may be advantageous to businesses from both a strategic and operational standpoint. Numerous studies have been conducted on the various contexts in which IT is used. Numerous public and private organisations of various sizes from a range of nations and regions have been the subject of studies. Researchers have found barriers to the successful adoption of new technologies. For these businesses to benefit from technology, it is absolutely necessary. However, companies operating in emerging markets face unique obstacles and constraints (Afolayan, 2015).

Despite the acute resource shortages that startups frequently experience, prosperous businesspeople use their technical know-how as a live resource. A common trait among successful businesspeople is a dedication to innovation, which can have significant implications for technology-related projects (Gholamrezai, Aliabadi, & Ataei, 2021). Technology, according to Hsu (2008), has three distinct facets. Limitations in these domains comprise a surplus of intellectual property and the necessity for entrepreneurs to employ specific skill sets. Because entrepreneurs are by nature risk-takers, these three factors, if properly applied, could have a big effect on the business. Information-based technology, or IT, may ensure a unique product or service in comparison to the conventional or traditional method of developing them, and if the uniqueness is developed, there is a great chance of success. However, there is a risk connected to this chance (Gholamrezai et al., 2021).

Success in business is essential for the creation of new jobs, the economy as a whole, and the owners of the company (Gorgievski, et al., 2018). According to the literature, a company's likelihood of success can be ascertained by looking at two different types of indicators: measures of entrepreneur satisfaction from a functioning firm and financial indicators of organizational performance (Razmus & Laguna, 2018). Business owners use a range of criteria to assess their own success (Wach et al., 2018).

Strong financial results and a company's advantageous position in the market are identified by the research as success indicators for entrepreneurial success of firm performance, in addition to other economic indicators. According to the Resource-Based View (Busenitz & Barney, 1997; Verona, 1999), a company must first have the resources and competencies required to become competitive before it can operate at a high level. These abilities are not natural; rather, they are the product of years of diligent study and improvement of one's methodology and output. Given this, companies ought to be able to combine their resources and expand their skill sets in order to improve their technological capabilities. Businesses possessing cutting-edge technological capabilities are better able to manufacture superior products than their competitors, and these same capabilities have been demonstrated to be correlated with an organization's profitability. Businesses that prioritise technology frequently succeed in the marketplace (Lestari & Ardianti, 2019).

3. Hypothesis Development and Conceptual Framework

It's common knowledge that competencies are the culmination of one's approach, knowledge, and skills. Through practice and study, skills and abilities can be enhanced and modified (Volery et al., 2015). An entrepreneur's skill set, which is essential to the seamless running of a business, has been fully and intricately envisioned. A holistic view of competence, according to research by Mulder et al. (2007), emphasizes the ability to successfully meet complex demands in a particular setting. Numerous studies have determined, analytically and behavior-oriented, the precise attributes that entrepreneurs must possess in order to succeed (Chwolka & Raith, 2012; Karlsson & Honig, 2009; Markman & Baron, 2003). According to various authors who have written about the subject of identifying which competencies are essential for entrepreneurs (Estay, Durrieu, & Akhter, 2013; Makhbul, 2011; Latham, 2009), taking risks seems to be an intrinsic and crucial component of an entrepreneur's success. However, as noted by Baron & Markman (2000) and Shane & Venkataraman (2000), taking risks can also lead to failure and setbacks. For this reason, it's critical that entrepreneurs have the skills necessary to manage these risks and their consequences.

The first skill we identified is the capacity to persevere through obstacles. According to Alizadeh and Khosravi (2015), perseverance is a crucial component of an entrepreneur's success because it enables them to keep working towards their objectives

even when they are tired or weary. Perseverance is a key component that can accurately predict an entrepreneur's level of efficiency and success. The ability to persevere in the face of adversity is one of the most crucial traits for entrepreneurs to possess (Kyndt & Baert, 2015). Furthermore, prosperous businesspeople understand the importance of long-term planning for reducing uncertainty. They must prepare ahead of time and have a broad perspective of the organization's short- and long-term goals.

Recognizing the viewpoint of the market can help entrepreneurs evaluate risks. Entrepreneurs who are successful are always aware of their competitors' identities and strategies (Chwolka & Raith, 2012; De Clercq, Sapienza, Yavuzc, & Zhoua, 2012). In order to maintain a competitive advantage, business owners must stay abreast of current trends, as the market is constantly evolving. In order to stay successful, entrepreneurs need to be flexible enough to adjust to changing conditions and information, like those resulting from technological and economic advancements. An "orientation towards learning," which is characterized as a desire to learn new skills and improve current ones, is possessed by successful business owners. They actively look for opportunities for training and development and are curious to learn about new techniques and approaches that are appropriate for their line of work (Sawaeen & Ali, 2020). Risk-taking creates opportunities for success, and prosperous company owners recognize these opportunities are ready to take advantage of them (Kerr, Kerr & Xu, 2017). They might assess the advantages and disadvantages of various financial decisions and determine the factors that affect the result (Luc, 2018). Decisiveness is necessary for a successful entrepreneur, in addition to the capacity to identify and evaluate opportunities, risks, and rewards. They are able to make decisions that will further the growth of the company based on the data and recommendations given by experts, consultants, coworkers, etc. When opinions are divided and the outcome is unclear, they choose what to do. Another key skill that is closely related to this one and necessary for the entrepreneur position is the ability to act independently.

Being able to make your own decisions and act on them is what it means to be independent. Then, one could have confidence in their own ability to make decisions and take personal responsibility. This also requires self-awareness and confidence in one's own judgement (Kyndt & Baert, 2015).

Successful company owners are knowledgeable, confident individuals who can evaluate their own advantages and disadvantages and determine which areas they should work on improving on their own and which ones they should outsource to others (Bird, 2019).

Successful entrepreneurs are more likely to be adept at networking and persuasion. Since startup business owners cannot afford to lose customers, it is imperative that they create and maintain strong networks both inside and outside the organisation. Entrepreneurs can benefit greatly from having the ability to persuade others of their views, offerings, or business plan for a number of reasons. They can make good use of this ability when interacting with employees and clients and negotiating with rival businesses. Lastly, since running a business is a social and human endeavor, it is critical that entrepreneurs behave responsibly in order to achieve a balance between present and future social, economic, and environmental issues. "Socio environmental consciousness" refers to the ability to manage a business with consideration for the environment and the community (Draksler & irec, 2018).

4. Research Hypothesis

H1: There is a positive impact of Entrepreneurial Competency on business success.

H2: There is a positive impact of Information Technology on business success.

H3: there is a positive impact of mediating variable between entrepreneurial competency and business success.

5. Research Methodology

The study was quantitative in nature. The Hyderabad Chamber of Commerce was the population of the study used to find business owners who had recently founded their enterprises and recruit them as study participants. The sample size the study was five hundred participants in total were contacted by phone and email, and one of the research team members personally administered the questionnaires to them. Convenience sampling technique was used for data collection the respondents of the selected population. The total 350 questionnaires were returned by respondents in physically and email Google form. A final study sample of 320 questionnaires was included in this investigation after the incomplete questionnaires were eliminated. The data collection instruments was a questionnaire which have four parts of questions, first part demographic information, second part entrepreneur competency related questions, third part questions related with business success and last four part questions related with information technology proficiency. All the items of questionnaire with likert scale ratio from 1 to 5 1 equal to strongly disagree and 5 is equal to strongly agree. The questionnaire was adopted from the available previous literature. This approach proves to be optimal for testing hypotheses involving a substantial number of variables, and it can also explore the connections among various variables (Morgan, 2014). Surveys are particularly strong in terms of objectivity because it is simple to duplicate and analyses the questions to produce data. Additionally, if the identical survey questions are asked, the results ought to be consistent every time (Morgan, 2014). Data analysis were done through SPSS (Cronbach alpha) was performed of complete questionnaire and individual variable. This study employed the most widely used Cronbach's alpha in the literature required normal range is 0.70 or greater than it support by previous literature.

Second, PLS-SEM analysis was used to test the hypotheses. The purpose of the test was to determine if the information technology capability, the mediating variable, had an effect on the independent and dependent variables. The importance of the outcome would dictate whether the theories lined up or not. The result can only be considered significant if the p-value is less than 0.05.

6. Data Analysis and Results

The questionnaire was divided into three sections. The first asked questions about the participants' demographic information. Table 1 displays the demographic characteristics.

6.1. Demographic Details

Table 1: Demographic Information

Gender		
Male	230	62.03%
Female	90	37.96%
	320	100.00%
Experience		
Less than 10 years	18	5.70%
11 to Less than 20 years	143	44.66%
More than 20 years	159	49.62%
	3.20	100.00%
Business/Company type		
Builders Construction Development	20	6.20%
Beauty Polaris	40	12.40%
Financial auditing services	32	9.90%
Wholesale Agency	28	8.60%
Restaurant and Hoteling	24	7.40%
Agriculture and Horticulture	16	4.90%
Textile industry	44	13.60%
Flour Mills	44	13.60%
Oil Mills	18	5.70%
Showrooms	24	7.40%
Others	32	9.90%
	3.20	100.00%

6.2. Entrepreneurial Competency

Table 2 presents the findings. Twelve entrepreneurial competencies that affect business success are displayed in the table. The table's result indicates that independence competency was ranked highest, indicating that for entrepreneurs to advance, they must possess the independence to make audacious decisions on their own. Future planning came in second, indicating that the entrepreneur needs to have long-term vision and the ability to create both short- and long-term plans as the business grows. Decisiveness is the third entrepreneurial skill; business owners must exercise decisiveness and assume responsibility for all of their decisions.

Table 2: Entrepreneurial Competency

Variables	Percentage	Rank
Perseverance	10%	5 th
Self-Knowledge	8%	7 th
Orientation towards Learning	6%	8 th
Awareness towards potential return on investment	9%	6 th
Decisiveness	12%	3 rd
Information Seeking	13%	2 nd
Goal Setting	15%	1 st
Demand for Efficiency and Quality	11%	4 th
Risk-taking	10%	5 th
Commitment to Work Contract	3%	9 th
Persistence	2%	10 th
Opportunity Seeking	1%	11 th

6.3. Information Technology Capability

Information Technology (IT) capability refers to an organization's capacity to effectively leverage information technology resources to achieve its strategic goals and objectives. It involves the integration of technology, processes, people, and data to support and enhance various aspects of the organization's operations.

The factor analysis result is displayed in Table 3. If the reliability coefficient is greater than 0.7, it is deemed significant. The survey's reliability satisfies the general requirements, as indicated by Table 2's results. The outcomes provide more details indicating that every item satisfies the required standards. Additionally, Table 3's result indicates that each of the five informational variables.

6.4. Measurement Model

The measurement model in structural equation modeling is crucial for determining whether the outer model, which consists of Factor Loadings, Composite Reliability (CR), and Average Variance Extracted (AVE), is being measured appropriately. Additionally, the Heterotrait-Monotrait (HTMT) Ratio (Henseler, Ringle, and Sarstedt, 2015) and the Fornell and Larcker (1981b) Criterion are used in the measurement (outer) models to assess discriminant validity. Table 3 presents statistical inferences for evaluating the current study's measurement (outer) models. Factor loading should be at least 0.70 or above for these assessments, according to Hair et al. (2017), Hair et al. (2016), Hair et al. (2011), and Hair et al. (2014), while CR and AVE should be at least 0.70 and 0.50, respectively.

Table 3: Factor Loading

Variable	Item	Factor Loading	Cronbach α
Product Upgrading	PU1	0.82	0.827
	PU2	0.79	
	PU3	0.76	
	PU4	0.87	
	PU5	0.81	
Process Upgrading	PRU1	0.86	0.738
	PRU2	0.74	
	PRU3	0.71	
	PRU4	0.86	
	PRU5	0.84	
Technological Acquiring	TAC1	0.88	0.719
	TAC2	0.87	
Technological operating capability	TAC3	0.81	
	TAC4	0.76	
	TAC5	0.83	
Technological shifting capability	TOC1	0.81	0.814
	TOC2	0.89	
	TOC3	0.85	
	TOC4	0.84	
	TOC5	0.77	
Technological shifting capability	TSC1	0.76	0.734
	TSC2	0.86	
	TSC3	0.87	
	TSC4	0.82	
	TSC5	0.81	

The Heterotrait-Monotrait (HTMT) Ratio and the Fornell and Larcker (1981a) Criterion are used, respectively, to assess discriminant validity in Tables 4 and 5.

Table 4: Measurement Model

Construct	Factor Loadings	CR	AVE
EC	0.875	0.855	0.886
ITC	0.884	0.887	0.858
BS	0.882	0.849	0.846

Regarding this, all of the AVE square-roots have higher coefficients than the corresponding latent constructs, indicating that the data set has met the requirements for discriminant validity, as stated by Fornell and Larcker (1981a). Furthermore, for sufficient discriminant validity, the HTMT ratio for latent constructs should be less than 0.90, according to Henseler, Hubona, and Ray (2016) and Henseler et al. (2015). As a result,

Table 5: Discriminant Validity using Fornell and Larcker Criterion

Construct	Mean	SD	EC	ITC	BS
EC	2.74	1.37			
ITC	1.192	0.332	0.203		
BS	3.489	2.054	0.15*	0.02	0.75

Table 6's HTMT ratio threshold has also been met using its latent constructs.

Table 6: Heterotrait-Monotrait Ratio (HTMT)

Construct	Mean	SD	EC	ITC	BS
EC	1.566	0.233			
ITC	2.552	0.333	0.011		
BS	2.421	1.043	0.13*	0.01	0.77

Table 7 presents findings indicating that entrepreneurial competence, through the mediating role of information technology capability, has a positive and significant impact on business success. Moreover, the findings show that the relationship between entrepreneurial skill and business success is mediated by information technology capability.

Table 7: Hypothesis Testing using Path Analysis

Hypothesis	Path	Path Coefficient	T-value	P
H1	EC-->BS	0.318*	4.15	0.00
H2	IT-->BS	0.349*	5.19	0.00
H3	ITC-->BS	0.189*	4.88	0.00

7. Discussions

The company's achievements were examined in this study from the perspectives of its IT expertise and entrepreneurial abilities. The study looked at the impact of five tech competencies and twelve entrepreneur skills on the expansion of businesses in developing countries.

The aim of this study was to investigate the moderating effect of IT on the relationship between firm performance and entrepreneurial competence. The study's findings partially corroborated the theory that IT expertise and entrepreneurial spirit are linked to business success. Additional testing or research is necessary because other internal factors, including company management, marketing prowess, and other elements, have an impact on the firm's growth.

The findings of this study support those of a study by Ahmed et al. (2010), which suggests that entrepreneurial skills improve business outcomes. They emphasize how important it is to understand how an entrepreneur's knowledge, abilities, conduct, and attitudes affect the success of their companies. Freedom is the most important of the 12 abilities needed to start your own business (Kyndt and Baert, 2015). Define autonomous. Then, one could have confidence in their own ability to make decisions and take personal responsibility. Self-awareness and confidence in one's own judgment are also prerequisites for this. Making decisions quickly is considered to be the third most important skill for entrepreneurs. According to this study, the second most important skill for entrepreneurs is future planning. Successful business owners are advised by numerous studies—all of which have produced consistent findings—to invest time and energy in future projections in order to minimize potential drawbacks. They must prepare ahead of time and have a broad perspective of the organization's short- and long-term goals. This means that in order to accomplish their goals, they must develop a strategy that is both workable and realistic (Chwolka & Raith, 2012; Brinckmann, Grichnik, & Kapsa, 2010; Karlsson & Honig, 2009).

Additionally, this study discovered that IT proficiency improves business performance and that combining IT proficiency with an entrepreneurial spirit is a powerful way to propel business growth. Our findings are corroborated by Akleis et al. (2012), who demonstrate that the use of technology in business is perceived as a changing trend in this era of hyper business and commercialization. Despite the acute resource shortages that startups frequently experience, prosperous businesspeople use their technical know-how as a live resource. A common trait among successful businesspeople is a dedication to innovation, which can have significant implications for technology-related projects.

From a business perspective, the theoretical and empirical results reported in this work are somewhat relevant. There are several angles from which to examine the subject of firm performance, including the company's advantages. In order to stand out from the competition in this quickly growing market, entrepreneurs must create unique goods and services. A business can only enter the

market at a discount and make long-term profits from it once it has satisfied the demands of the upper end of the market. The best way to increase a company's competitiveness is to build it on innovation and learning, not on the back of a low-cost strategy.

8. Conclusions

The impact of information technology capability and entrepreneurial competencies on business success was examined in this study. The relationship between entrepreneurial competencies and business success in this study added to the RBV. While integrating information technology, it also added to the body of literature by examining the influence of entrepreneurial competencies on business success. The outcomes of the path analysis confirmed that entrepreneurial abilities and information technology served as the foundation for the businesses and had a direct and indirect impact on corporate success. The study's practical implications shed light on how SMEs can perform better in order to encourage entrepreneurship and information technology proficiency.

Policymakers can utilize the study's conclusions as a guide when addressing the financial problems faced by low-income households. Thus, through appropriate policies and training initiatives, the government and socioeconomic development organisations should improve information technology proficiency and entrepreneur skills. The knowledge needed to conduct business operations should be the main goal of these programs and training. Since small-to-medium business owners work extremely hard to break free from the cycle of poverty, government agencies and other relevant organisations ought to recognize these businesses and their owners and offer training programs to help them survive.

References

- Abd Wahid, N., Abd Aziz, N. N., & Halim, R. A. (2017). Networking and innovation performance of micro-enterprises in Malaysia: The moderating effects of geographical location. *Pertanika Journal of Social Science and Humanities*, 25, 277-287.
- Afolayan, A., Plant, E., White, G. R., Jones, P., & Beynon-Davies, P. (2015). Information technology usage in SMEs in a developing economy. *Strategic Change*, 24(5), 483-498.
- Ahmad, N. H., Ramayah, T., Wilson, C., & Kummerow, L. (2010). Is entrepreneurial competency and business success relationship contingent upon business environment? *International Journal of Entrepreneurial Behavior & Research*.
- Al Mamun, A., Nawi, N. B. C., & Zainol, N. R. B. (2016). Entrepreneurial competencies and performance of informal microenterprises in Malaysia. *Mediterranean Journal of Social Sciences*, 7(3), 273-273.
- Ali, A., & Rehman, H. U. (2015). Macroeconomic instability and its impact on the gross domestic product: an empirical analysis of Pakistan. *Pakistan Economic and Social Review*, 285-316.
- Aparicio, S., Urbano, D., & Audretsch, D. (2016). Institutional factors, opportunity entrepreneurship and economic growth: Panel data evidence. *Technological forecasting and social change*, 102, 45-61.
- Arian, M. W. N., Khan, M. A., Kumar, D., Zaidi, A. R., & Rahoo, L. A. (2023). Role of Knowledge Management Practice in Higher Education Institutions for Sustainable Development among Faculty Members. *Russian Law Journal*, 11(5), 624-633.
- Audi, M., Ali, A., & Al-Masri, R. (2022). Determinants of Advancement in Information Communication Technologies and its Prospect under the role of Aggregate and Disaggregate Globalization. *Scientific Annals of Economics and Business*.
- Audi, M., Ali, A., & Roussel, Y. (2021). The Advancement in Information and Communication Technologies (ICT) and Economic Development: A Panel Analysis. *International Journal of Innovation, Creativity and Change*, 15(4), 1013-1039.
- Audi, M., Ehsan, R., & Ali, A. (2023). Does Globalization Promote Financial Integration in South Asian Economies? Unveiling the Role of Monetary and Fiscal Performance in Internationalization. *Empirical Economics Letters*, 22(10), 237-248.
- Ayandibu, A. O., & Houghton, J. (2017). The role of Small and Medium Scale Enterprise in local economic development (LED). *Journal of Business and Retail Management Research*, 11(2).
- Aydiner, A. S. (2020). A Model for Digital Business Governance for Strategic Growth and Innovation with Dynamic Capabilities. In *Strategic Outlook for Innovative Work Behaviours* (pp. 149-163). Springer, Cham.
- Baron, R. A., & Markman, G. D. (2000). Beyond social capital: How social skills can enhance entrepreneurs' success. *Academy of Management Perspectives*, 14(1), 106-116.
- Benitez, J., Castillo, A., Llorens, J., & Braojos, J. (2018). IT-enabled knowledge ambidexterity and innovation performance in small US firms: The moderator role of social media capability. *Information & Management*, 55(1), 131-143.
- Bharadwaj, A. S. (2000). A resource-based perspective on information technology capability and firm performance: an empirical investigation. *MIS quarterly*, 169-196.
- Błachnio, A., Przepiorka, A., Senol-Durak, E., Durak, M., & Sherstyuk, L. (2017). The role of personality traits in Facebook and Internet addictions: A study on Polish, Turkish, and Ukrainian samples. *Computers in Human Behavior*, 68, 269-275.
- Brinckmann, J., Grichnik, D., & Kapsa, D. (2010). Should entrepreneurs plan or just storm the castle? A meta-analysis on contextual factors impacting the business planning–performance relationship in small firms. *Journal of business Venturing*, 25(1), 24-40.
- Busenitz, L. W., & Barney, J. B. (1997). Differences between entrepreneurs and managers in large organizations: Biases and heuristics in strategic decision-making. *Journal of business venturing*, 12(1), 9-30.

- Channar, P. B., Ahmed, G., Thebo, J. A., Khan, M. A., & Rahoo, L. A. (2023). Factors of Knowledge Sharing Among Faculty Members In Higher Educational Institutions: An Empirical Study Of The Public Sector. *Journal of Positive School Psychology*, 1498-1506.
- Chwolka, A., & Raith, M. G. (2012). The value of business planning before start-up—A decision-theoretical perspective *Journal of business venturing*, 27(3), 385-399.
- De Clercq, D., Sapienza, H. J., Yavuz, R. I., & Zhou, L. (2012). Learning and knowledge in early internationalization research: Past accomplishments and future directions. *Journal of Business Venturing*, 27(1), 143-165.
- Dijkhuizen, J., Gorgievski, M., van Veldhoven, M., & Schalk, R. (2018). Well-being, personal success and business performance among entrepreneurs: A two-wave study. *Journal of Happiness Studies*, 19(8), 2187-2204.
- Dillman, D. A. (2000). Procedures for conducting government-sponsored establishment surveys: Comparisons of the total design method (TDM), a traditional cost-compensation model, and tailored design. In *Proceedings of American statistical association, second international conference on establishment surveys* (pp. 343-352).
- Draksler, T. Z., & Širec, K. (2018). Conceptual research model for studying students' entrepreneurial competencies. *Naše gospodarstvo/Our economy*, 64(4), 23-33.
- Estay, C., Durrieu, F., & Akhter, M. (2013). Entrepreneurship: From motivation to start-up. *Journal of international Entrepreneurship*, 11(3), 243-267.
- Fodor, O. C., & Pinteá, S. (2017). The “emotional side” of entrepreneurship: a meta-analysis of the relation between positive and negative affect and entrepreneurial performance. *Frontiers in Psychology*, 8, 310.
- Hsu, D. H. (2008). Technology-based entrepreneurship. *Handbook of technology and innovation management*, 3, 367-388.
- Jardim-Goncalves, R., Popplewell, K., & Grilo, A. (2012). Sustainable interoperability: The future of Internet based industrial enterprises. *Computers in Industry*, 63(8), 731-738.
- Jee-Hae, L., Stratopoulos, T. C. & Wirjanto, T. S. (2012). ‘Role of IT Executive in The Firm’s Ability to Achieve Competitive Advantage through IT Capability. *International Journal of Accounting Information Systems*, 13(2012), 21–40
- Jian-Liang, C. (2012). The Synergistic Effects of IT-Enabled Resources on Organizational Capabilities and Firm Performance. *Information and Management*, 49(3-4), 142-150.
- Johannesson, J., & Jorgensen, P. J. (2017). The moderating effect of employee education and professional skills on the relationship between entrepreneurial orientation and performance. *Journal of Entrepreneurship Education*, 20(2), 1-18.
- Karlsson, T., & Honig, B. (2009). Judging a business by its cover: An institutional perspective on new ventures and the business plan. *Journal of Business Venturing*, 24(1), 27-45.
- Kerr, S. P., Kerr, W. R., & Xu, T. (2017). Personality traits of entrepreneurs: A review of recent literature.
- Kleis, L., Chwelos, P., Ramirez, R. V., & Cockburn, I. (2012). Information technology and intangible output: The impact of IT investment on innovation productivity. *Information Systems Research*, 23(1), 42-59.
- Kraus, S., Rigtering, J. C., Hughes, M., & Hosman, V. (2012). Entrepreneurial orientation and the business performance of SMEs: a quantitative study from the Netherlands. *Review of Managerial Science*, 6(2), 161-182.
- Kyndt, E., & Baert, H. (2015). Entrepreneurial competencies: Assessment and predictive value for entrepreneurship. *Journal of Vocational Behavior*, 90, 13-25
- Latham, J., Jones, R., & Betta, M. (2009). 18 ‘critical social entrepreneurship—an alternative discourse analysis. *Critical Management Studies at Work: Negotiating Tensions Between Theory and Practice*, 285.
- Lestari, E. R., & Ardianti, F. L. (2019). Technological capability and business success: The mediating role of innovation. In *IOP Conference Series: Earth and Environmental Science* (Vol. 250, No. 1, p. 012039). IOP Publishing.
- Ling, L. S. (2017). Impacts of information technology capabilities on small and medium enterprises (SMEs) and Large Enterprises. *Journal of Innovation Management in Small and Medium Enterprise*, 2017, 133143.
- Love, J. H., & Roper, S. (2015). SME innovation, exporting and growth: A review of existing evidence. *International small business journal*, 33(1), 28-48.
- Luc, P. T. (2018). The relationship between perceived access to finance and social entrepreneurship intentions among university students in Vietnam. *The Journal of Asian Finance, Economics, and Business*, 5(1), 63-72.
- Malepe, N. (2014). *How's business? Manufacturing small, medium and micro enterprises (SMMEs') contributions to the formal sector employment in Gauteng and the Western Cape between 2007 AND 2013* (Doctoral dissertation, Stellenbosch: Stellenbosch University).
- Mitchelmore, S., & Rowley, J. (2010). Entrepreneurial competencies: a literature review and development agenda. *International journal of entrepreneurial Behavior & Research*, 16(2), 92-111.
- Moh'd AL-Tamimi, K. A., Jaradat, M. S., & Al-Rjoub, A. M. (2019). The Role of Central Bank of Jordan in Economic Development. *International Journal of Economics and Financial Research*, 5(10), 221-226.
- Morgan, L. P., Graham, J. R., Hayes-Skelton, S. A., Orsillo, S. M., & Roemer, L. (2014). Relationships between amount of post-intervention mindfulness practice and follow-up outcome variables in an acceptance-based behavior therapy for Generalized Anxiety Disorder: The importance of informal practice. *Journal of contextual behavioral science*, 3(3), 173-178.
- Mulder, M., Weigel, T., & Collins, K. (2007). The concept of competence in the development of vocational education and training in selected EU member states: a critical analysis. *Journal of Vocational Education & Training*, 59(1), 67-88.

- Nabiswa, F., & Mukwa, J. S. (2017). Impact of credit financing on human resource development among micro and small enterprises: A case study of Kimilili Sub County, Kenya. *Asian J. Manag. Sci. Econ*, 4, 43-53.
- Nevo, S., & Wade, M. R. (2010). The formation and value of IT-enabled resources: antecedents and consequences of synergistic relationships. *MIS quarterly*, 34(1), 163-183.
- Ngai, E. W., & Chan, E. (2005). Evaluation of Knowledge Management Tools Using AHP. *Expert Systems with Applications*, 29(4), 889-899
- Nunnally, J. U. M. (1994). C., BERSTEIN, Ira H. *Psychometric theory*. New York: McGraw Hill.
- Palacios-Marqués, D., Soto-Acosta, P., & Merigó, J. M. (2015). Analyzing the effects of technological, organizational and competition factors on Web knowledge exchange in SMEs. *Telematics and Informatics*, 32(1), 23-32.
- Pérez-López, S., & Alegre, J. (2012). Information technology competency, knowledge processes and firm performance. *Industrial Management & Data Systems*, 112(4), 644-662.
- Raghuvanshi, J., & Garg, C. P. (2018). Time to get into the action. *Asia Pacific Journal of Innovation and Entrepreneurship*.
- Rahoo, L. A., & Memon, M. (2022). Impact of Information Technology on Knowledge Sharing among Faculty Members of Public Sectors Higher Education Institutions of Sindh, Pakistan. *Pakistan Journal of Social Research*, 4(03), 797-803.
- Razmus, W., & Laguna, M. (2018). Dimensions of entrepreneurial success: a multilevel study on stakeholders of microenterprises. *Frontiers in psychology*, 9, 791.
- Rossmiller, Z., Lawrence, C., Clouse, S. F., & Looney, C. (2017). Teaching an old dog new tricks: Disaster recovery in a small business context. *Information Systems Education Journal*, 15(2), 13.
- Sawaeen, F., & Ali, K. (2020). The impact of entrepreneurial leadership and learning orientation on organizational performance of SMEs: The mediating role of innovation capacity. *Management Science Letters*, 10(2), 369-380.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of management review*, 25(1), 217-226.
- Shatnawi, S. A., Eldaia, M., Marei, A., & Aaraj, S. A. (2021a). The Relationship between Audit Committee Characteristics on Accounting-based Performance (ROA and ROE) as a Measure of Performance Evidence from Jordan. *International Journal of Business and Digital Economy*, 2(2), 15-27.
- Shatnawi, S. A., Marei, A., Hanefah, M. M., Eldaia, M., & Alaaraj, S. (2022). The Effect of Audit Committee on Financial Performance of Listed Companies in Jordan: The Moderating Effect of Enterprise Risk Management. *Journal of Management Information & Decision Sciences*, 25.
- Tsang, S., Royse, C. F., & Terkawi, A. S. (2017). Guidelines for developing, translating, and validating a questionnaire in perioperative and pain medicine. *Saudi journal of anaesthesia*, 11(Suppl 1), S80.
- Verona, G. (1999). A resource-based view of product development. *Academy of management review*, 24(1), 132-142.
- Wach, D., Stephan, U., Marjan, J. G., & Wegge, J. (2018). Entrepreneurs' achieved success: developing a multi-faceted measure. *International Entrepreneurship and Management Journal*, 1-29.
- Yaghoubi, N. M., Banihashemi, S. A., Ahoorani, N. and Yazdani, B. O. (2011). Information Technology Infrastructures and KM: Towards Organizational Excellence,' *Computer and Information Science*, 4(5), 20-27.