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# The Role of Information Technology Infrastructure In Entrepreneurial Success: Moderating Role of Resource-Based Theory

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**Abstract.** The purpose of current study is to examine the moderating effect of resource-based theory on the relationship between IT infrastructure (Hardware, Software, Network, Data, Procedures, Personnel) and entrepreneurial success. Quantitative approach was employed, and a questionnaire was responded to by a convenient sample of (109) technological and operational managers within Jordanian internet providers in Jordan. SPSS/AMOS were utilized as the main tool to screen and analyze primary data. Results of study accepted the study's hypothesis and it appeared that resource-based theory has the ability to moderate the relationship between IT infrastructure and entrepreneurial success. Study recommended that organizations should assess their internal resources and capabilities to identify areas where IT infrastructure can be leveraged to enhance their entrepreneurial activities. Further recommendations were presented in the study. Examining the moderating effect of resource-based theory on the relationship between IT infrastructure and entrepreneurial success is significant because the moderating effect of resource-based theory suggests that the relationship between IT infrastructure and entrepreneurial success is not straightforward. Rather, the effectiveness of IT infrastructure is dependent on a firm's internal resources and capabilities. Examining this moderating effect provides a more nuanced understanding of the relationship between technology and entrepreneurship.

**Keywords:** Resource-Based Theory, IT Infrastructure, Hardware, Software, Network, Data, Procedures, Personnel

# 1. Introduction

According to Nandi et al (2021) information technology (IT) infrastructure is getting to be progressively critical for entrepreneurial success, because it empowers firms to get to important assets and capabilities that can offer assistance them accomplish maintained competitive advantage. Resource-based theory gives a valuable system for understanding how IT infrastructure can bolster entrepreneurial victory by leveraging a firm's inside assets and capabilities (Hameed et al, 2021). Resource-based hypothesis contends that a firm's inside assets and capabilities are key drivers of its competitive advantage and victory. These assets can incorporate unmistakable resources such as innovation, hardware, and budgetary assets, as well as intangible resources such as information, abilities, and connections with clients and providers. IT framework plays a basic part in empowering firms to use their assets and capabilities. IT framework gives get to specialized equipment, program, organize, data, procedures, and staff that will be troublesome for competitors to reproduce. From another viewpoint, Sehnem et al (2022) stated that resource-based theory recommends that firms must have the administrative and vital capabilities to use their assets and capabilities successfully. This incorporates the capacity to recognize and abuse showcase openings, oversee monetary assets, and construct and keep up solid connections with clients, accomplices, and partners

Isichei et al (2020) explored the relationship between entrepreneurial success, IT infrastructure capability, and performance in little and medium-sized enterprises (SMEs). The research was conducted employing a survey that was managed to a test of 300 SMEs working within the Nigerian fabricating sector. The survey was planned to degree the builds of entrepreneurial success, IT infrastructure capability, and performance. The research found that entrepreneurial success contains a noteworthy positive impact on performance in SMEs, which this relationship is mostly mediated by IT infrastructure capability. The findings recommend that SMEs that are more entrepreneurial in nature are more likely to attain way better performance results, which contributing in auxiliary framework capability can offer assistance SMEs to use their entrepreneurial introduction and accomplish feasible competitive advantage.

Ma et al. (2021) studied the connection between entrepreneurship and IT infrastructure in the context of China's high-speed railway (HSR) network. The study compares the change in entrepreneurial activity in places where HSR was implemented versus regions where it was not introduced using a difference-in-differences (DID) approach. The China Industrial Enterprise Database and the China Labor Statistical Yearbook, respectively, provided the data on new business registrations and employment in the manufacturing and service sectors used in the study. The analysis focuses on how HSR has affected entrepreneurship in the areas where it has been implemented and spans the years 2005 to 2016. According to the report, the introduction of HSR boosts entrepreneurship in the areas where it is implemented. The study suggests that HSR infrastructure can encourage entrepreneurship and support economic growth by increasing new firm registrations and employment in the manufacturing and service sectors. The results show that policymakers should think about investing in transportation infrastructure as a way to promote economic development and that it can play a significant role in fostering innovation and entrepreneurship.

Bennett (2019) explored the relationship between infrastructure investments and entrepreneurial potentials in the United States. The study employed a panel dataset of US states from 1990 to 2015 to analyze the connection between infrastructure investments and entrepreneurial potentials. The study used rates of new business formation, net job creation, and the number of patents filed. The study adopted a range of econometric techniques in order to control other factors that may affect entrepreneurship potentials, such potentials included human capital, economic development policies, and macroeconomic conditions. The study concluded that infrastructure investments positively effect entrepreneurial potentials in the United States. In addition to that, the study found that IT infrastructure potentials can increase new business formation, net job creation, and patent activity, meaning that IT infrastructure potentials stimulate entrepreneurship and promote economic growth.

Barnett and Wang (2019) studied the connection between the utilization of information communication technology (ICT) and entrepreneurship in China. In other meaning, the research sought to explore whether the use of ICT promote entrepreneurship through reducing information barriers and increasing access to markets and resources. The study adopted a questionnaire as a tool on 1,400 households in China to analyze the connection between ICT utilization and entrepreneurship. The study concluded that the utilization of ICT has a positive effect on entrepreneurship in China, meaning that the useing ICT are more likely to be engaged in entrepreneurial activity, suggesting that ICT reduce information barriers and increase access to markets and resources, thereby promoting entrepreneurship.

Jafari-Sadeghi et al (2021) examined the impact of digital transformation on entrepreneurship and technological market performance. The study employed a questionnaire on 130 technology-based firms in Colombia and analyzed the connection between digital transformation, technology entrepreneurship, and technological market performance. The study concluded that digital transformation has a positive effect on technology entrepreneurship and technological market performance, and that this connection is mediated by technology readiness, exploration, and exploitation of technology potentials. The study also found out that firms that are more digitally transformed are more likely to have higher levels of technology readiness, exploration, and potentials, which in turn lead to more levels of technology entrepreneurship and technological market success in performance.

Launching from the above presented argument, it can be concluded that there is – with no doubt – a gap in the literature that examines how IT components can be of influence on entrepreneurial success, and in what specific mechanisms can IT infrastructure and its influence be moderated by resource-based theory. Therefore, further empirical studies are needed to validate the hypothesis and to provide a better understanding of the role of resource-based theory in the relationship between IT infrastructure and entrepreneurial success. While there is existing research on the relationship between IT infrastructure and entrepreneurial success and on the role of resource-based theory in understanding firm performance, there is a need for more research specifically examining the interaction of these two factors.

From the above argument, previous studies and literary gap, the current study seeks to examine the moderating effect of resource-based theory in the relationship between IT infrastructure (Hardware, Software, Network, Data, Procedures, Personnel) and entrepreneurial success. Researcher built the following model in order to highlight the relationship between variables and identify the possible hypotheses:

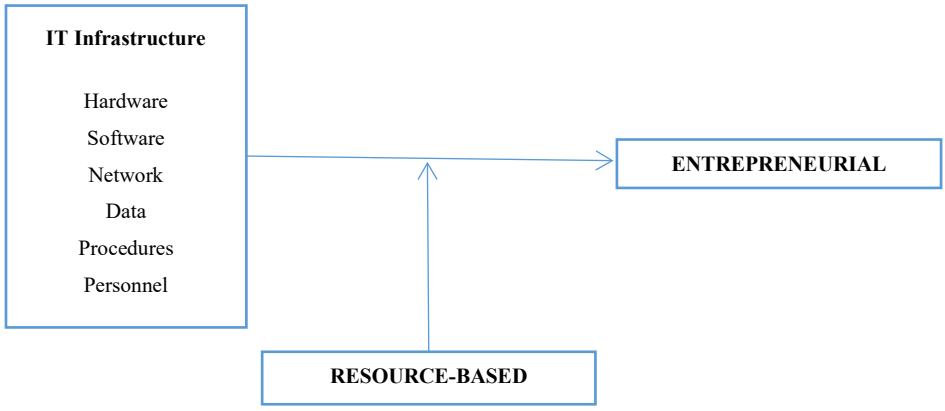


Fig.1: Study Model (Javadpour and Wang, 2022; Prakash et al, 2022)

From study model in figure 1, following set of hypothesis was reached:

**H1:** IT infrastructure has a statistically significant influence on entrepreneurial success

**H2:** Resource-based theory moderates the relationship between IT infrastructure and entrepreneurial success

# 2. Literature Review

## 2.1. IT Infrastructure Components

Information technology infrastructure refers to the hardware, software, and network resources that are used to manage and operate an organization's IT systems and processes (Fakhimi et al, 2021). From perspective of Wagner et al (2021), IT infrastructure is based on physical components that include hardware, software, devices, and networking equipment, in addition to virtual components including cloud computing and applications. IT infrastructure also is based on data management, cybersecurity solutions, and procedures for managing IT resources (Demir and Baylan, 2019). Najarian and Lim (2020) stated that that organizations can get a variety of advantages from a well-designed and managed IT infrastructure, including increased productivity, better data security, and increased agility and flexibility in responding to shifting market conditions. As a result, IT infrastructure is a crucial part of contemporary corporate operations and is required for companies that want to be inventive and competitive in the current fast-paced digital market (Grabis et al, 2021).

According to Antoni et al (2021), Samimi (2020), Grange et al (2020) and Sawitri et al (2019), the main components of a well-designed IT infrastructure include:

- *Hardware*

The physical elements of IT infrastructure, such as servers, computers, storage systems, and networking hardware, are referred to as hardware. Within an organization, these parts are in charge of processing, storing, and sending data and information. Modern hardware options include powerful servers, cutting-edge storage systems, and cutting-edge networking hardware, all of which are intended to handle the intricate and demanding demands of contemporary company operations.

- *Software*

The term "software" refers to the programs and apps that run on the hardware of the IT infrastructure and give users the resources they need to carry out particular operations and functions. Software solutions, which can range from straightforward productivity aids to intricate enterprise software systems, can be tailored to fit the particular requirements of various enterprises. Cloud-based applications, artificial intelligence and machine learning tools, and data analytics platforms are just a few examples of contemporary software solutions that are made to help businesses use their data more effectively and boost their overall performance.

- *Network*

The collection of hardware and software tools that enable data transfer and communication between various IT infrastructure components within an organization is referred to as network infrastructure. This include software programs like email servers, file-sharing platforms, and virtual private networks (VPNs), as well as networking hardware like routers, switches, and firewalls. Collaboration and communication within a business, as well as safe and dependable access to the internet and other external resources, depend on network infrastructure.

- *Data*

The term "data infrastructure" refers to the technology and software tools used by an organization to handle, store, and analyze its data. This comprises databases, data warehouses, and platforms for data analytics, as well as associated software products including tools for data visualization and programs for data mining. The ability of enterprises to make data-driven decisions and enhance their overall business performance depends on their data infrastructure.

- *Procedures*

Procedures refer to the policies, processes, and guidelines that are used to manage and operate an organization's IT infrastructure. This includes procedures for managing hardware and software assets, procedures for implementing and maintaining IT security measures, and procedures for managing IT projects and initiatives. Well-designed and implemented procedures can help organizations to maximize the value of their IT infrastructure resources, while minimizing risks and ensuring compliance with relevant regulations and standards.

- *Personnel*

Personnel are the qualified experts in charge of running, maintaining, and managing the IT infrastructure of a firm. This comprises, among other things, IT managers, system administrators, network engineers, and cybersecurity experts. The effective and efficient use of IT infrastructure resources as well as the security, dependability, and accessibility of IT systems depend on skilled staff. Personnel with particular knowledge in fields like data analytics, artificial intelligence, and cloud computing can also assist businesses in maximizing the potential of their IT infrastructure to gain a competitive edge and spur innovation.

## 2.2. Entrepreneurship

Ghouse et al (2019) and Oppedal Berge and Garcia Pires (2020) stated that the term "entrepreneurship" refers to the act of initiating, growing, and overseeing a business enterprise with the intention of achieving financial success and/or social impact. A person who recognizes a market opportunity or a need and takes the initiative to establish a new business venture to address that need is referred to as an entrepreneur. A variety of tasks are involved in entrepreneurship, such as seeing market opportunities, creating and testing business concepts, obtaining finance and other resources, assembling a team, and running the day-to-day operations of the company (Hatak and Zhou, 2021).

Staniewski and Awruk (2019) argued that entrepreneurship is sometimes linked to innovation since prosperous businesspeople frequently have new, improved ways of satisfying client wants or resolving issues. As new businesses frequently face tremendous uncertainty and rivalry in the marketplace, entrepreneurship can also require taking risks. Despite these obstacles, entrepreneurship can offer a number of advantages, such as monetary incentives, personal fulfillment, and the chance to have an impact on society (Khan et al, 2021). Zhao et al (2021) on the other hand noted that the capacity to establish and manage a team as well as creativity, strategic thinking, risk-taking, and resilience are all necessary for successful entrepreneurship. The ability to quickly adjust to shifting market conditions and emerging trends is also necessary, as is a thorough awareness of the market and customers' expectations.

According to Shakeel et al (2020) and Gok et al (2021), entrepreneurial success, or success in entrepreneurship, is the attainment of business goals and objectives by an entrepreneur or a variety of factors, including financial performance, market share, customer happiness, and social effect. According to Volkmann et al. (2021), the key to an entrepreneur's ability to endure in the face of obstacles and setbacks is having a compelling vision and mission. Successful businesspeople are often able to spot market possibilities and take advantage of them, whether by developing cutting-edge goods or services or by coming up with better ways to satisfy their current clients' requirements. Building and maintaining strong relationships with customers, partners, and stakeholders is also critical to entrepreneurial success, as it can help entrepreneurs build a loyal customer base and access new markets and resources (Tuan, 2023).

From another perspective, Bauman and Lucy (2021) stated that entrepreneurial success depends on the efficient administration of financial resources, which includes rigorous budgeting, forecasting, and risk management. This can help business owners avoid expensive mistakes and guarantee long-term prosperity. In the face of uncertainty and upheaval, successful entrepreneurs are frequently able to quickly adjust to shifting market conditions and client needs, keeping agile and flexible. Entrepreneurial

success is frequently fueled by a desire to experiment with new concepts and methods, take calculated risks, learn from mistakes, and change course as necessary. A key component of developing strong and motivated teams that can carry out the vision and goal of the entrepreneur is the ability of successful entrepreneurs to attract and retain outstanding personnel (Constantinidis et al, 2019).

### 2.3. Resource-Based Theory

Dubey et al (2019) resource-based theory is described as a framework for comprehending how businesses might develop a lasting competitive edge in the market. According to the theory, a company's internal assets and skills are crucial to its competitive edge and success, and enterprises need to create and use these assets to ensure long-term profitability and growth (Hameed et al., 2021). Resource-based theory states that for a firm's resources to be a source of long-term competitive advantage, they must be valuable, uncommon, inimitable, and non-substitutable (VRIN) (Shibin et al, 2020). Resources that help a business outperform its rivals in cost-cutting or value creation for customers are considered valuable. Rare resources are ones that aren't frequently seen on the market and are challenging for rivals to acquire. Non-substitutable resources are those that lack a direct commercial alternative while exclusive resources are those that are expensive or difficult for competitors to duplicate (Li et al, 2022).

According to resource-based theory, organizations must possess the administrative and strategic skills necessary to efficiently utilize their resources. This involves the capacity to spot market possibilities and seize them, manage financial resources, and establish and uphold solid bonds with clients, partners, and stakeholders (Rodrigues et al., 2021). Resource-based theory contends that for businesses to acquire lasting competitive advantage in the field of information technology (IT), they must have access to specialized hardware, software, networks, data, processes, and staff that are challenging for rivals to imitate. Overall, resource-based theory provides an insightful framework for comprehending how businesses might build long-term competitive advantages. Businesses can distinguish themselves from rivals and achieve long-term success and profitability by recognizing and utilizing their special resources and competencies (Collins, 2021).

## 3. Methods and Materials

### 3.1. Methodological Approach

Quantitative methodology was adopted in current study due to its suitability in being applied on a larger sample size and gain richer and results that are more cohesive that are generalizable.

### 3.2. Tool of Study

A questionnaire was adopted to be self-administered by study sample. The questionnaire was built on liker five point scale (1) Strongly Disagree; (2) Disagree; (3) Neither Agree nor Disagree; (4) Agree; (5) Strongly Agree, also, the questionnaire contained two main sections; the first took into perspective demographics of study sample (age, gender, qualification and experience). While the other section contained statements related to variables as in the following table 1.:

Table 1. Questionnaire Variables

| Variable | # of Statements |
|---|---|
| **IT Infrastructure** | |
| Hardware | 5 |
| Software | 5 |
| Network | 5 |
| Data | 5 |
| Procedures | 5 |
| Personnel | 5 |
| **Entrepreneurial Success** | 5 |
| **Resource-Based Theory** | 7 |

### 3.3. Population and Sampling

Population of study consisted of all operational and technological managers within internet providing organizations in Jordan. A convenient sample of (150) was chosen to represent population of study. After application process; researcher was able to retrieve (125) properly filled questionnaires which indicated a response rate of (87.2%) as statistically accepted.

### 3.4. Statistical Processing

Statistical package for social sciences (SPSS and AMOS) were used to screen and analyze primary data gathered. Cronbach's Alpha test was done in order to identify the consistency and reliability of study tool, table 2 demonstrated that all variables scored over 0.70, indicating that the scale to be trusted.

Table 2. Cronbach's Alpha

| variable | Alpha value |
|---|---|
| Hardware | 0.803 |
| Software | 0.781 |
| Network | 0.781 |
| Data | 0.896 |
| Procedures | 0.739 |
| Personnel | 0.971 |
| Resource-Based Theory | 0.921 |
| Entrepreneurial Success | 0.936 |

Other statistical tests used included:

- Frequency and percentage
- Mean and standard deviation
- Multiple regression
- Hierarchy regression

## 4. Analysis and Discussion

### 4.1. Demographics

As according to the following table 3 below, demographic results of study sample indicated that (70.6%) of respondents were males who were within age range of (31-36) forming (45.9%). In addition, results indicated that majority of respondents held MA degree and had an experience of (6-9) years forming (77.1%) and (26.6%) respectively.

Table 3. Demographic Results

| | | f | % |
|---|---|---|---|
| **Gender** | | | |
| | Male | 77 | 70.6 |
| | Female | 32 | 29.4 |
| **Age** | | | |
| | 25-30 | 20 | 18.3 |
| | 31-36 | 50 | 45.9 |
| | 37-42 | 35 | 32.1 |
| | +43 | 4 | 3.7 |
| **Education** | | | |
| | BA | 15 | 13.8 |
| | MA | 84 | 77.1 |
| | PhD | 10 | 9.2 |
| **Experience** | | | |
| | 2-5 | 23 | 21.1 |
| | 6-9 | 29 | 26.6 |
| | 10-13 | 26 | 23.9 |
| | 14-17 | 14 | 12.8 |
| | +18 | 17 | 15.6 |

| | | |
|---|---|---|
| Total | 109 | 100.0 |

## 4.2. Questionnaire

Mean and standard deviation were calculated for responses to questionnaire statements. As it appeared in table 4 below, results indicated that all statements along with their variables were positively received as they scored higher than mean of scale 3.00. The highest variable registered a mean of 4.29/5.00 was (Hardware) compared to the lowest mean 3.58/5.00 which was scored by (Personnel).

Table 4. Questionnaire Analysis

| | Mean | Std. Deviation |
|---|---|---|
| Up-to-date hardware infrastructure enable entrepreneurs to run resource-intensive applications and processes | 4.257 | .644 |
| Investing in reliable and scalable hardware help entrepreneurs avoid costly downtime and maintain productivity. | 4.220 | .629 |
| High-performance hardware facilitate faster data processing and analysis | 4.294 | .842 |
| Modern hardware provide entrepreneurs with the mobility and flexibility to work from anywhere | 4.110 | .762 |
| Investing in backup and disaster recovery hardware help entrepreneurs protect their business-critical data and systems in the event of a disaster or cyberattack. | 4.587 | .683 |
| **Hardware** | **4.294** | **.536** |
| Software tools help entrepreneurs streamline and automate routine business processes | 4.183 | .530 |
| Specialized software applications enable entrepreneurs to manage their finances, inventory, customer relationships | 4.009 | .645 |
| Cloud-based software solutions offer entrepreneurs greater flexibility and scalability | 4.083 | .611 |
| Software analytics tools can help entrepreneurs gain insights into their business performance and identify areas for improvement. | 4.248 | .434 |
| Custom software solutions help entrepreneurs differentiate themselves from competitors and meet unique customer needs. | 4.055 | .636 |
| **Software** | **4.116** | **.421** |
| A robust network infrastructure enable entrepreneurs to communicate and collaborate effectively with employees | 3.569 | .937 |
| High-speed networks facilitate faster data transfer and transmission, improving productivity and customer satisfaction. | 3.596 | .851 |
| Scalable network solutions help entrepreneurs accommodate growth and expansion, avoiding costly infrastructure upgrades. | 3.853 | .621 |
| Secure network solutions help entrepreneurs protect their business-critical data and systems from unauthorized access and cyber threats. | 3.697 | .660 |
| Cloud-based network solutions offer entrepreneurs greater flexibility and lower costs | 3.486 | .753 |
| **Network** | **3.640** | **.573** |
| Effective data management tools help entrepreneurs organize and analyze large volumes of data | 4.321 | .575 |

| | | |
|---|---|---|
| Data security solutions help entrepreneurs protect their sensitive business-critical data from cyber threats and hacking attempts. | 4.092 | .714 |
| Data backup and recovery solutions help entrepreneurs protect against data loss and ensure business continuity in the event of a disaster or cyberattack. | 4.128 | .595 |
| Cloud-based data solutions offer entrepreneurs greater flexibility and scalability | 4.440 | .584 |
| Data visualization tools help entrepreneurs present complex data in a clear and easy-to-understand format | 4.229 | .464 |
| **Data** | **4.242** | **.497** |
| Standardized procedures help entrepreneurs ensure consistency and quality across their operations | 4.073 | .556 |
| Well-defined procedures help entrepreneurs identify inefficiencies and opportunities for improvement | 4.101 | .332 |
| Procedures that prioritize data security help entrepreneurs protect their business-critical data from unauthorized access and cyber threats. | 4.128 | .511 |
| Procedures that focus on customer service help entrepreneurs build strong relationships with customers | 3.917 | .759 |
| Procedures that prioritize employee training and development help entrepreneurs build a skilled and motivated workforce. | 4.422 | .496 |
| **Procedures** | **4.128** | **.383** |
| Skilled IT personnel help entrepreneurs design, implement, and maintain effective IT infrastructure solutions | 3.752 | 1.341 |
| Personnel with customer service skills help entrepreneurs build strong relationships with customers | 3.101 | 1.194 |
| Personnel with project management skills help entrepreneurs manage complex IT projects and initiatives | 3.817 | 1.396 |
| Personnel with data analytics skills help entrepreneurs extract insights from their data | 3.606 | 1.374 |
| Personnel with cybersecurity skills help entrepreneurs protect their business-critical data from cyber threats and hacking attempts. | 3.624 | 1.339 |
| **Personnel** | **3.580** | **1.260** |
| Resource-based theory suggests that IT infrastructure is a key driver of its competitive advantage and success in the marketplace. | 3.817 | 1.486 |
| Resource-based theory also suggests that an organization must have access to specialized hardware, software, network, data, procedures, and personnel that are difficult for competitors to replicate. | 3.642 | 1.364 |
| Resource-based theory suggests that organizations must have the managerial and strategic capabilities to leverage their IT infrastructure resources effectively. | 3.899 | .871 |
| In the context of IT infrastructure, resource-based theory suggests that firms must also have the technical capabilities to design, implement, and maintain effective IT solutions. | 4.394 | .681 |
| Resource-based theory suggests that organizations must have the flexibility and agility to adapt their IT infrastructure resources to changing business needs and market conditions. | 3.826 | 1.339 |

| | | |
|---|---|---|
| Resource-based theory suggests that organizations must have the ability to protect their IT infrastructure resources from external threats | 3.193 | 1.236 |
| Resource-based theory suggests that organizations must have the ability to continuously innovate and improve their IT infrastructure resources over time | 3.881 | 1.386 |
| **Resource-Based Theory** | **3.844** | **.979** |
| Entrepreneurial success is often driven by a strong vision and mission that inspires and motivates the entrepreneur to persevere through challenges and setbacks | 3.752 | 1.341 |
| Successful entrepreneurs are typically able to identify and capitalize on market opportunities | 3.771 | 1.303 |
| Building and maintaining strong relationships with customers, partners, and stakeholders is critical to entrepreneurial success | 4.009 | 1.371 |
| Successful entrepreneurs are often able to recruit and retain top talent, building strong and motivated teams that are able to execute on the entrepreneur's vision and mission. | 3.862 | 1.280 |
| Effective management of financial resources, including careful budgeting, forecasting, and risk management, is critical to entrepreneurial success | 4.028 | .799 |
| **Entrepreneurial Success** | **3.884** | **1.103** |

## 4.3. Hypotheses Testing

Study hypotheses were tested through multiple regression. As it was seen in table 5 below. Preliminary findings indicated a very significant relationship between the variables (r = 0.883). It was also shown that the independent variables explain 77.9% of the total variation in the dependent variable. That means, IT infrastructure has a statistically significant influence on entrepreneurial success

Table 5. Testing H1

**Coefficients**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | | | | |
|---|---|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | t | Sig. | R | R Square |
| 1 | (Constant) | -1.442 | .672 | | -2.146 | .034 | .883[a] | .779 |
| | a | -.105 | .115 | -.051 | -.912 | .364 | | |
| | b | .140 | .140 | .053 | .997 | .321 | | |
| | c | -.235 | .103 | -.122 | -2.276 | .025 | | |
| | d | .292 | .121 | .132 | 2.407 | .018 | | |
| | e | .616 | .193 | .214 | 3.190 | .002 | | |
| | f | .636 | .045 | .727 | 14.220 | .000 | | |
| **H1: IT infrastructure has a statistically significant influence on entrepreneurial success** | | | | | | | | |

Hierarchy Regression was used to test above hypothesis .it was found – Table 6- that there was a statistically significant relationship between IT infrastructure and entrepreneurial success, with a value of ($R2 = 0.478$, $p \leq 0.05$). In the second phase, the role of Resource-based theory variable was introduced, and it was discovered that it contributed $\Delta R2 = 33.5$ % of the overall interpretation factor, which is a substantial number. In the third phase, the interaction between Resource-based theory and IT variable was introduced, and it was discovered that it contributed $\Delta R2 = 5.4\%$ of the overall interpretation factor, which is a substantial number. That is, Resource-based theory moderates the relationship between IT infrastructure and entrepreneurial success.

Table 6. H2 Testing

**Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .695[a] | .483 | .478 | .79714 | .483 | 99.890 | 1 | 107 | .000 |
| 2 | .904[b] | .818 | .815 | .47513 | .335 | 195.172 | 1 | 106 | .000 |
| 3 | .934[c] | .872 | .869 | .39970 | .054 | 44.787 | 1 | 105 | .000 |

**ANOVA**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 63.473 | 1 | 63.473 | 99.890 | .000[b] |
| | Residual | 67.991 | 107 | .635 | | |
| | Total | 131.463 | 108 | | | |
| 2 | Regression | 107.534 | 2 | 53.767 | 238.167 | .000[c] |
| | Residual | 23.930 | 106 | .226 | | |
| | Total | 131.463 | 108 | | | |
| 3 | Regression | 114.689 | 3 | 38.230 | 239.296 | .000[d] |
| | Residual | 16.775 | 105 | .160 | | |
| | Total | 131.463 | 108 | | | |

**H2: Resource-based theory moderates the relationship between IT infrastructure and entrepreneurial success**

## 4.4. Discussion

Current study sought to examine the moderating influence of resource-based theory on the relationship between IT infrastructure (Hardware, Software, Network, Data, Procedures, Personnel) and entrepreneurial success. Quantitative methodology was applied through a questionnaire which was answered by (109) technical and operational managers within internet providing organizations in Jordan. Results through SPSS indicated the accepted of study hypotheses. As results indicated that resource-based theory has the ability to positively support IT infrastructure to enhance entrepreneurial success.

Results of study accepted the hypothesis arguing that IT infrastructure has a statistical influence on entrepreneurial success. The study confirmed that IT infrastructure has a critical role in promoting entrepreneurial activity and success. The finding suggests that organizations that invest in IT infrastructure are more likely to achieve entrepreneurial success than those that do not. In addition to that, results indicated that IT infrastructure gives businesses a variety of tools that improve their entrepreneurial endeavors. IT infrastructure, for instance, enables businesses to access and analyze market data, streamline internal operations, enhance communication and cooperation, and reach new markets. Such results agreed with Isichei et al (2020) and Ma et al (2021) who argued that IT infrastructure has an impact on entrepreneurs' success and has ramifications for policymakers as well. Policymakers can see the value of making investments in IT infrastructure to foster innovation and economic expansion, such as facilitating access to broadband internet or fostering the creation of technology parks. Entrepreneurs can also utilize this finding to inform their investment choices, such as purchasing technology to improve internal workflows or broaden their market reach.

Results of study accepted the moderating hypothesis which argued that “resource-based theory moderates the relationship between IT infrastructure and entrepreneurial success”. The success of this theory demonstrated how intricately entwined technology and entrepreneurship are. The result implies that a firm’s internal resources and competencies as suggested by resource-based theory moderate the relationship between IT infrastructure and entrepreneurial success. This finding suggests that an organization's internal resources and capabilities determine how well IT infrastructure supports entrepreneurship. A company with great management and strategic talents, for instance, may be better

able to use IT infrastructure to support its entrepreneurial activities than a company with inferior capabilities. Such results agreed with Bennett (2019) and Barnett and Wang (2019) who noted that policymakers understand how crucial it is to aid in a company's internal resource and capability growth, such as by granting managers and entrepreneurs access to training and development opportunities. This result can also be used by business owners to inform their investment choices, such as investing in the expansion of their own internal resources and competencies in addition to their investments in IT infrastructure. This also agreed with Jafari-Sadeghi et al (2021).

# 5. Conclusion

## 5.1. General Conclusion

Entrepreneurial success come in a variety of shapes and sizes, from modest beginnings to big international enterprises. Entrepreneurial success, however, it is frequently characterized by a strong sense of purpose and a dedication to having a positive impact on society, regardless of the shape or scale of the business. It is crucial to remember that there may be a complex and situation-specific relationship between IT infrastructure and entrepreneurship success. The link may also be influenced by additional variables like market conditions, managerial and strategic skills, and financial access. In order to understand the mechanisms by which IT infrastructure promotes entrepreneurial success and to pinpoint the contextual variables that influence the relationship, more research is required. Therefore, it is necessary to conduct more research to comprehend the mechanisms by which IT infrastructure influences entrepreneurial success and to pinpoint the contextual variables that influence the relationship. However, the discovery that IT infrastructure has a statistically significant impact on entrepreneurship success offers substantial new insights into the role of technology in fostering entrepreneurship and success.

## 5.2. Recommendations

Launching from results, discussion and conclusion of study mentioned earlier, it is recommended that organizations can leverage IT infrastructure to enhance their entrepreneurial activities and achieve sustained competitive advantage. By assessing internal resources and capabilities, developing a strategic IT infrastructure plan, fostering a culture of innovation, collaborating with external partners, and regularly evaluating the effectiveness of IT infrastructure, firms can leverage their resources and capabilities effectively and achieve entrepreneurial success.

## 5.3. Limitations of Study

Current study was limited to the following:

- Technical and operational managers within internet providing organizations in Jordan
- The study was applied on organizations which were willing to take part in the study
- Only valid and properly filled questionnaires were statistically analyzed

## 5.4. Practical and Theoretical Implications

One practical implication of examining the moderating role of resource-based theory on the relationship between IT infrastructure and entrepreneurial success is that it can help entrepreneurs and managers better understand how to leverage their IT infrastructure resources to achieve sustainable competitive advantage. By identifying the specific IT resources and capabilities that are valuable, rare, inimitable, and non-substitutable, firms can focus their investments and efforts on building and maintaining those resources, while also developing the managerial and strategic capabilities needed to leverage them effectively. One theoretical implication of examining the moderating role of resource-based theory on the relationship between IT infrastructure and entrepreneurial success is that it can help to refine and extend the theoretical framework of resource-based theory itself. By testing the VRIN criteria in the context of IT infrastructure resources, researchers can gain a better understanding of how these criteria apply to different types of resources, and how they interact with other factors, such as managerial and

strategic capabilities, to influence entrepreneurial success. This can help to refine the theoretical predictions of resource-based theory, and inform future research in this area.

### 5.5. Future Studies

Based on the result that resource-based theory has the ability to positively support IT infrastructure to enhance entrepreneurial success, the following future studies were suggested:

- Examine the relationship between resource-based theory, IT infrastructure, and entrepreneurial success across different sectors such as manufacturing, services, and agriculture.
- Use longitudinal data to examine the long-term effects of resource-based theory and IT infrastructure on entrepreneurial success.
- Compare the relationship between resource-based theory, IT infrastructure, and entrepreneurial success across different countries and regions.

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