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The Role of Strategic Flexibility in Enhancing Entrepreneurship Orientation: A Study of Jordanian Small and Medium-Sized Manufacturing Companies

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Abstract. This study investigates the impact of strategic flexibility on entrepreneurship orientation in small and medium-sized manufacturing companies in Jordan. Employing a descriptive analytical approach, the study surveys 383 industrial companies to examine the relationships between the dimensions of strategic flexibility (human resources flexibility, market flexibility, and manufacturing process flexibility) and entrepreneurship orientation (innovation and commitment to opportunity). The findings reveal a statistically significant impact of strategic flexibility on entrepreneurship orientation, with human resources flexibility and manufacturing process flexibility having the strongest effects. However, the study also highlights the lack of a significant impact of market flexibility on innovation. The results suggest that fostering strategic flexibility, particularly in terms of human resources and manufacturing processes, can enhance entrepreneurship orientation in small and medium-sized manufacturing companies in Jordan. The study contributes to the literature by providing empirical evidence from an emerging economy and offers practical recommendations for managers and policymakers.

Keywords: Strategic flexibility, Entrepreneurship orientation, HR flexibility, market flexibility, manufacturing process flexibility, innovation, commitment to opportunity.

1. Introduction

Business organizations face challenges and obstacles due to complexity and constant changes in business environment, along with the intense competition from other organizations active in the same area, which explains their adoption of a strategic positions based on innovation, risk taking, seizing available opportunities, tendency towards the development and provision of new and innovative products and services to face the intense competition in market, reflecting strategic flexibility that enhances their ability in face of environmental variables in light of conditions of uncertainty, in addition to enabling them to manage their activities with high efficiency and effectiveness (Abu-Nahel et al, 2020).

Strategic flexibility reflects the organizations' ability to adapt and respond quickly to the conditions and variables of the dynamic environment surrounding it, while achieving the maximum utilization of new ideas to produce products and provide customers with distinctive products. The concept of strategic flexibility will be addresses in this topic through identifying its main definitions, its importance for organizations, and its main dimensions.

Entrepreneurship is meaningful dynamic process aims at managing and developing business and projects through innovative methods according to a risk margin that is based on providing non-traditional ideas and suggestions that contributes to the achievement of organizational goals in more efficient and distinctive way (Farouq & Dadwal, 2018).

When it comes to the entreprenership orientation, it is a basic concept in the management literature, which aims at achieving desirable outputs for the organization. It also encourages rushing into certain administrative preferences, and spreading beliefs and behaviors expressed by managers at the top management levels of the organization (Covin et al., 2006).

Small and medium-sized companies are considered human resources limited companies of relatively low capital compared to the other similar large companies. Thus, they are more affected by changes and intense competition in the market, and at the same time, are motivated to seize available opportunities and face threats that may affect their survival.

The scientific importance of the presant study is reflected through understanding the scientific concepts related to the strategic flexibility with its dimensions (Human resources flexibility, market flexibility, manufacturing process flexibility) and entrepreneurship orientation with its dimension (innovation orientation, commitment to opportunity orientation). Also, the scientific importance of the study appears in that it is one of the limited studies in its subject, and thus the researcher is looking forward to benefiting researchers and scholars in conducting future studies through the theoretical literature of this study.

The practical importance of the study is reflected through the importance of the study population represented by the Jordanian small and medium-sized companies in industrial sector for their significant role in the Jordanian economy and their relative high contribution in creating new jobs. Therefore, it is looking that the results and recommendations of the present study help make these companies get to know the level of strategic flexibility application and their entrepreneurship orientation, as well as providing the senior management with information to take the appropriate decisions.

The main objective of this study is to examine the proposed conceptual model designed to measure the relative impact of strategic flexibility with its dimensions (Human resources flexibility, market flexibility, manufacturing process flexibility) on entreprenership orientation with its dimensions (innovation, commitment to opportunity) in Jordanian small and medium sized- companies.

Through the experiences of various companies accessed by the researchers, they became aware that many of them have adopted strategic positions based on innovation, risk taking, and the tendency towards developing and providing new and innovative products and services to face the intense competition in the market, but still they are unable to face the environmental variables and manage their activities effectively under conditions of uncertainty and the intense competition, on the way to achieving the concept of entrepreneurship.

Accordingly, the research problem can be formulated through the following main question: “What is the impact of strategic flexibility on entrepreneurship orientation in Jordanian small and medium-sized companies”?

- The research problem can be presented in the context of the following questions:
- What is the level of application and use of strategic flexibility in small and medium-sized companies in Jordanian industrial sector?
- What is the level of entrepreneurship Orientation in small and medium-sized companies in Jordanian industrial sector?
- Whats is the impact of strategic flexibility on enterperaership orientation in small and medium sized companies in jordonian industrial sector?
- Does the strategic flexibility impact the entrepreneurship Orientation in small and medium-sized companies in Jordanian industrial sector?

The model of this study was developed based on understanding of the literature review related to the theories and practices of strategic flexibility and entreprenership orientation. The researcher suggests this conceptual model to define and establish the relationship between research variables. The dimensions of the dependent variable Enterprenership Orientation are many such as "innovativeness, proactiveness, risk takink, educational level, evaluating, innovation, commitment to opportunity". The researcher has chosen the last 2 variables (Innovation and Commitment to opportunities) becauae these variable are the most mentioned variables in the related literatures and due to their special importance and suitability for the Jordanian economy and the nature of the work of small and medium-sized companies in industrial sector. The other variables are also significant for the research study, but the author focused his study on Innovation and Commitment to Opportunities.

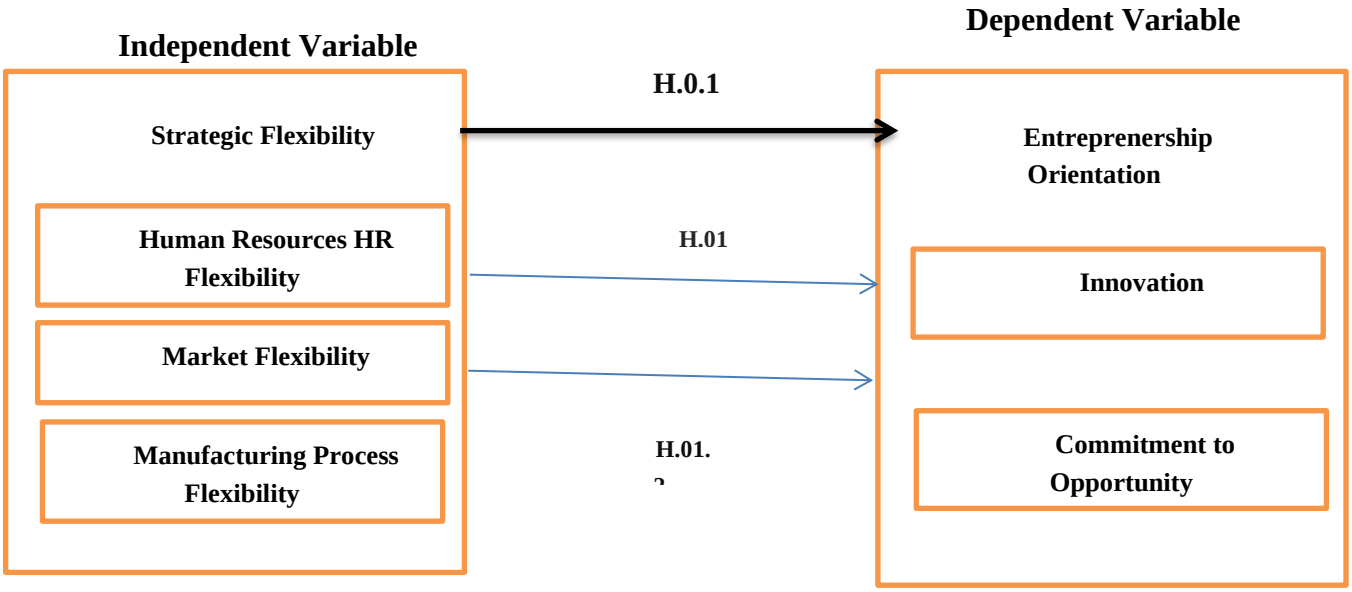

Fig.1: Study Model

2. Literature Review

Strategic Flexibility:

The concept of strategic flexibility is linked to various aspects of strategic importance to the organization, as it has been defined as the degree to which the organization is ready to change its strategy in response to opportunities, threats, and changes in the external environment (Liyanage & Weerasinghe, 2018).

Strategic flexibility also refers to how organizations adapt to conditions of environmental uncertainty, in addition to their response to changing internal and external environmental factors in order to implement their tasks and activities (Al haraisa, 2018).

Gholipour-Kanan & Ghorban-Bakhsh (2018) believe that strategic flexibility is increasing the organization's capability to respond to the competitive and changing market environment through supporting knowledge and enhancing its main capabilities.

From the above, the researcher believes that strategic flexibility is the organization's capability to respond quickly to all changes and challenges facing its internal and external environment, through adopting new methods and procedures consistent with these changes. Thus it represents the organization's capability to deal with competitive changing environments.

As for the small and medium-size companies, the researcher believes that strategic flexibility reflects the recognition and ability of these companies to utilize all available limited human and material resources compared to the other similar large companies, in order to shift from one strategy to another according to the requirements of the surrounding competitive environment, and face uncertainty condition and risks associated with in the best possible way.

Dimension of Strategic Flexibility

Strategic flexibility has many dimensions according to researchers. The current study has chosen the following ones to achieve its goals:

First: HR Flexibility

HR flexibility is one of the main sources of strategic flexibilities for different organizations, due to that the success of these organizations and the achievement of excellence in performance depends on the employees' knowledge, experience and behaviors and their ability to adapt to changes, which requires performing various tasks and activities (Beltran-Martín et al., 2021).

The researcher believes that HR flexibility is of great importance for small and medium-sized companies as they adapt the abilities and features of their HR, such as knowledge, skills, and behavior to face the changes occurring in the work environment and external markets. Thus, these companies must invest in their HR in the best possible manner, especially since these companies are characterized with limited number of workers compared to large companies; thus, they should be paid attention along with highlighting their innovative abilities.

Second: Market Flexibility

Al haraisa (2018) has identified market flexibility as the organizations' capability to modify or adapt their marketing efforts in a changing environment during an extended period of time, in order to face and changing environmental conditions and respond quickly to them.

As for AL haraisa (2018), market flexibility is the organization's ability to respond, adapt and face the accelerated market changes, in order to survive, grow, resist competition; hence, have excellent performance.

Accordingly, the researcher believes that market flexibility is the way organizations deal with market changes through responding quickly to these changes, and concentrating on marketing efforts in order to grow and survive (Atieh & Hashem,2024).

Small and medium sized companies should focus on this side for its significant role for their presence in the market. It is known that these companies are characterized with small capital in comparison with large companies. Thus, they must concentrate on studying the market, its requirements, and changes occurring in it, for that any loss of these companies' market share may not be bearable and compensated from their capital, which in turn may significantly affect their profits, thus impacting their survival.

Third: Manufacturing Process Flexibility

Manufacturing process flexibility is the organizations' capability to produce goods, provide services to all markets with preferential or competitive prices over a long period of time. To achieve this, it is necessary to ensure the efficiency of processes, jobs, materials, equipment's, in addition to knowing to way the existing production system responds and interactive with changes (Al haraisa, 2018).

Strategic flexibility is known also as the ability of the company to confront competition through the possibility to do the required changes in production processes or changing products to achieve the highest possible level of customer satisfaction with lower product cost and higher quality. In addition to the ability to produce a large group of products under the changing conditions in the market and the changing customers' requirements (Al-Azzawi and Al-Sabawi, 2019)

Accordingly, the researcher believes that manufacturing processes has a significant role for small and medium-sized organizations, for that manufacturing processes flexibility relies heavily on the continuous improvement of products technical features, in response to the different customers' needs, thus allowing these companies to respond or prepare to adapt to changing circumstances, that may be represented by the rapid change in customers' needs or fluctuation in the raw materials availability. Since small and medium-sized companies are with small capital in comparison with large companies, thus, they should follow a clear strategy for continuous improvement of manufacturing processes and provision of products according to the market variables and the changing customers' needs, for that any loss of the company's share in the market may not be bearable and compensated from its capital, which may greatly impact their survival.

Entreprenership Orientation:

The use of entrepreneurship concept has been widely used by organizations as it is a significant element with various variables (Najim et al.,2013). The organizations' entrepreneurship has become a vital feature for organizations in order to continue detect and invest opportunities for development especially that organizations need to be more innovative to accelerate growth and survival in a highly competitive and changing global environment (Homsi et al.,2020; Freihat et al.,2023) .

Entrepreneurship is considered a challenge to the ability of individuals to lead change under uncertainty conditions, as it is a dynamic process requiring the entrepreneur to have skills and capabilities that help him lead organizations and projects, as well as direct them to serve their interest and achieve the intended benefits, through the use of creative ideas, calculated risk, and venture capital, In the exploitation of opportunities and avoidance of threats in a work environment that is characterized by risks, challenges and stiff competition (Abood et al.,2014).

Entreprenership orientation is the process of undertaking entreprenership activities through the entrepreneurship perspective, through concentrating on finding opportunities in the external environment and exploiting them through theses entrepreneurship activities (Kor, 2016).

Hitt et al (2013) also referred to the entreprenership orientation as an attempt to build a new business, or expand an existing organization.

Based on the foregoing, the researcher believes that the entreprenership orientation is to undertake entreprenership activities involving basically the recognition of the available and sufficient practical opportunities, and the establishment and expansion of profit-oriented economic organizations, through combining between innovation, creativity, risk tolerance, hardworking and proactiveness.

Dimensions of Entreprenership Orientation

Entreprenership orientation is a dynamic process that requires the entrepreneur to have the skills and capabilities that help him lead organizations, and implement projects at the highest level of performance taking advantage of innovative ideas, calculated risks, and exploiting opportunities. To

achieve this, there must be a set of dimensions representing as a whole the concept of entreprenership orientation. They can be summarized as follows:

Innovation

Innovation reflects the organization's move towards innovation, experimentation, technological leadership, and research for and development of new and innovative products and services (Oni et al., 2019; Hashem,2016).

Accordingly, innovation is defined as the process through which new ways and methods are developed in order to implement tasks inside the organization, as well as provide better products and services. Innovation can take place at the level of the individual, work team, or the organization as a whole (Anderson et al., 2014). Innovation is also the tendency and capability to experiment, think creatively, and the capability to adapt to problem-solving (Schachter et al, 2015).

The application of innovation is represented through a particular group of activities and programs developed to put the innovative idea into practice. It also includes the organization's capability to implement high-value innovative ideas, and the ability to proactively adapt systems and operations to changes in the competitive environment (Alafeef, 2015).

Therefore, the researcher believes that the adaption of innovation in all aspects of small and medium-sized companies work in particular is of great importance for their success and excellence and facing their competitors. This requires the management of these organizations and entrepreneurs to pay attention and concentrate on finding and strengthening innovation for its great benefits for them, especially under conditions of intense competition and the resulting challenges facing entrepreneurs owners of these companies which abilities to bear these rapid changes might be limited due to their limited employees and capital compared to large companies.

Commitment to Opportunity

Commitment to the opportunity is one of the basic principles of entreprenership orientation in business organizations, which reflects the way of creating or discovering opportunities in the external environment and developing them; providing the necessary capabilities and resources to take advantage of them, in order to ensure customers' needs and achieve their unsatisfied desires; and exploiting them to face competition in markets (Al-Jinini, Dahiyat, Bontis, 2019).

In this context, (Cetinkaya et al., 2019) link between individual initiatives of employees and the ability to exploit the available opportunities, for that the individual initiatives to provide innovative and unusual ideas enhance the organizations' ability to seize the available opportunities in a proactive way far from the other competitors, which would enhance the organization competitive advantage surpassing the other competitive organizations in the market.

Therefore, the researcher believes in the importance of small and medium-sized companies' commitment to the available opportunities in their external environments, and their move towards seizing these opportunities and the distinctive experiences that enable them to find the suitable alternatives to improve and develop their business, especially their products; get maximum benefit from these opportunities; and avoid threats that may impact their success in achieving strategic goals.

Relationship between Strategic Flexibility and Entrepreneurship Orientation

Many studies have emphasized the relationship between strategic flexibility and entrepreneurship orientation in business organizations in particular, based on that the adaptation of organizations to conditions of environmental uncertainty, and the response to changing internal and external environmental factors to implement their various functions and activities, significantly affect the adoption of entrepreneurship based on exploring opportunities available in the external environment and exploiting them in a way that achieves high competitive advantage for the organization.

The study of Yu (2012) indicated a statistically significant relationship between entreprenership orientation and strategic flexibility on the performance of Chinese small and medium-sized companies,

where the impact of entreprenership orientation on the performance of companies was strong due to the presence of strategic flexibility.

The results of the study of Bakhsh and Kanani (2018) indicated that the strategic flexibility has a positive role and impact on innovation as one dimension of entreprenership orientation, and that HR flexibility as one dimension of strategic flexibility had greater impact on products innovation.

From the above, the researcher believes that entreprenership orientation that is based on the introduction of innovative and renewable ideas leading the organization to achieve its future strategic goals, and ensure its survival and continuity, is closely linked to strategic flexibility, for that having a group of experienced and highly knowledgeable employees who have entreprenership and innovative capabilities, results in strengthening the organizations' strategic abilities based on innovation and creativity.

According to the above mentioned literature review, we suggested these hypotheses :

-Main Hypothesis H.0.1: there is no statistically significant impact at the level ($\alpha \leq 0.05$) for strategic flexibility with its dimensions (Human resources flexibility, market flexibility, manufacturing process flexibility) on entrepreneurial orientation with its dimension (innovation, commitment to opportunity) in Jordanian small and medium sized- companies.

-First Sub- Hypothesis H.01.1: there is no statistically significant impact at the level ($\alpha \leq 0.05$) for strategic flexibility with its dimensions (Human resources flexibility, market flexibility, manufacturing process flexibility) on innovation as the first sub-dimension of Entreprenership orientation in small and medium sized- companies in Jordanian industriel sector.

-Second Sub-Hypothesis H.01.2: there is no statistically significant impact at the level ($\alpha \leq 0.05$) for strategic flexibility with its dimensions (Human resources flexibility, market flexibility, manufacturing process flexibility) on commitment of opportunities as the secound sub-dimension of Entreprenership orientation in small and medium sized- companies in Jordanian industriel sector.

3. Study Methodology

The study followed the descriptive analytical approach. It is a commonly used approach in applied and field studies, for its role in describing and clarifying the relationship between variables, and arriving at relational links between them based on their analysis.

Study Population and Sample

To increase the degree of benefit from the study and generalize it to different sectors, the researchers chose the study population related to Jordanian small and medium-sized companies, where these companies are divided into commercial, industrial and service companies according to a Jordanian economic report (2021) issued by the Association of Banks in Jordan. The study targeted small and medium industrial companies, which numbered (2365), according to the Jordanian Ministry of Industry (2021), Trade and Supply. In order to include the largest number of companies, the simple random sample size was increased to (383) companies.

The study targeted the individuals working in Jordanian small and medium-sized company's industrial sector, who fall under the following professional status: general manager/ executive director, head of division, and head of department. (383) questionnaires were distributed electronically, at the rate of one questionnaire, in each company. Where the copany has check whish of the following above mentional professional status is available to fill the questionnaiers, where (354) questionnaires were returned. After the questionnaires were checked and reviewed, (37) of them were excluded for incomplete answers. Thus, (317) questionnaires were valid for analysis, with (82.8%) return rate, which is statistically accepted.

Testing Validity of the Study Tool

Testing validity of the study tool aims to verify the ability of the questionnaire to achieve the goals, for which it was designed, as well as testing if it can be used to collect the data related to the study topic, through conducting different tests, mainly:

Content Validity Test

Content validity test aims at verifying the accuracy and clarity of the questionnaire language, and the coherence and objectivity of its items. The experienced and specialized arbitrators are the ones most capable of judging the validity of the study tool content. Thus, the questionnaire was presented to (4) specialized faculty members in Jordanian public and private universities.

Comments and proposals of the arbitrators were taken into consideration, as well as amendments referred to by them concerning adding, omitting or paraphrasing its items to have its final form. Se.

Testing Reliability of the Study Tool

Testing reliability of the study tool aims to investigate consistency and reliability of its items, and ensure accuracy, clarity and objectiveness of the tool. To this end, internal consistency coefficient (Cronbach Alpha Coefficient) was used. This coefficient indicates that is the result is statistically accepted if the value of Cronbach Alpha is between (0.70) or more. The more the value of the coefficient reaches (100%), the more this indicates higher reliability of the tool (Sekaran & Bougie, 2016).

Table 1: Test results of the study tool reliability

Variable	Dimension no.	Dimension	Alpha Value
Independent variable	1	HR Flexibility	0.923
	2	Market Flexibility	0.924
	3	Manufacturing Process Flexibility	0.956
	Strategic Flexibility		0.975
Dependent variable	4	Innovation	0.928
	5	Commitment to opportunity	0.931
	Entrepreneurship orientation		0.958
Study tool			0.98

Results of the table1 clarifies that the study tool enjoys high reliability coefficients, along with its ability to achieve goals of the study. Thus, it can be relied upon for statistical analysis, as the value of Cronbach Alpha Coefficient ranged between (0.924 – 0.975), while the coefficient value of the study tool as a whole reached (0.981), greater than (0.70).

Statistical Methods Used to Treat Data and Test Hypotheses

The statistical package for social sciences (SPSS V.20) was used to analyze the study data and test its hypotheses, using the following statistical methods:

Descriptive Statistic Methods: they are used to describe the demographic data of the study sample individuals; analyze their responses to the items; and describe the dimensions and variables of the study model. These methods are:

Frequency and Percentage: to describe the demographic data related to study sample individuals of respondents.

Mean and Standard Deviation: to analyze the study sample individuals' responses, and describe the variables of the study model and its sub-dimensions.

Inferential Statistics Methods: the method used to investigate the reliability of the study tool and the suitability of the study model, in addition to test hypotheses. They are:

- Reliability of the study tool was verified using the internal consistency test (Cronbach Alpha).
- Multiple Linear Regression Analysis to test the study hypotheses

Description of Sample:

This part of the study presents, in details, the data related to Jordanian small and medium-sized companies, so as to acquire knowledge about them. These variables included the company's age and the number of its employees. To achieve this, descriptive statistic methods were used, represented in the frequencies and percentages. It is found that the largest percentage of the company's age is the one that ranged between 5-10 years, where the number reached (176) companies, representing (55.6%) of the total number of the study sample. The researcher believes that the increased percentage of the company's age (5-10 years) indicated the increased small and medium-sized projects, thus increasing the economy of Jordan through support provided by Jordanian loan institutions.

Also, it is found that largest percentage of the company's number of employees is for the category (50 – less than 100 employees), as they reached (178) employees, representing (56.2%) of the total number of the study sample. The researcher believes that this increased percentage indicates that Jordanian companies encourage the employment of youth and reduce unemployment.

Whereas, the largest percentage of the study sample individuals is for (males), as they reached (227) employees, representing (71.6%) of the total number of the study sample. The researcher believes that this high percentage indicates that males seek to get jobs and seize work opportunities more than females.

Meanwhile, the largest percentage of the study sample individuals is for the age category (25 - less than 35 years), as it reached (189) employees, representing (59.6%) of the total number of the study sample. The researcher believes that this high percentage indicates that these companies care about employ males to work with them.Also, the largest percentage of the study sample individuals is for those having years of experience (Less than 5 years), as their number reached (178) employees, representing (56.2%) of the total number of the study sample. The researcher believes that this high percentage is because small and medium-sized as they don't require high experiences in order to be able to pay wages that are in line with the company's budget.

Description of Study Variables

- **Strategic Flexibility Variable**

The following table describes the strategic flexibility variable and identifies its importance for Jordanian small and medium-sized companies, by finding the means, standard deviations, rank, and identifying the level of relative importance for the variable as a whole. The results were as follows:

Table2: Description of Strategic Flexibility variable

No.	Dimensions	Mean	Rank
1	HR Flexibility	4.415	1
2	Market Flexibility	3.902	3
3	Manufacturing Process Flexibility	3.987	2
Strategic Flexibility		**4.035**	**---**

Table 2 indicates high relative importance of the strategic flexibility variable in Jordanian small and medium-sized companies, where the general mean was (4.035). HR flexibility ranked first with mean of (4.145) and a standard deviation of (0.837) with high relative importance, while the market flexibility variable ranked third and last with mean (3.902) and standard deviation of (0.897) with high relative importance.

- **Entrepreneurship Orientation Variable**

The following table presents an analysis of the entrepreneurship orientation, and an identification its importance for Jordanian small and medium-sized companies, by finding the means, standard deviations, rank, and relative importance of the variable as

Table3: Describing entrepreneurship orientation variable

No.	Dimensions	Mean	Rank
1	Innovation	3.833	2
2	Commitment to opportunity	4.067	1

Entrepreneurship orientation	**3.946**	**---**

Table 3 indicates high relative importance of the entrepreneurship variable in Jordanian small and medium-sized companies, where the general mean reached (3.946). Commitment to opportunity variable ranked first with mean of (4.076) and a standard deviation of (0.809) with high relative importance, while the innovation variable ranked second and last with mean (3.833) and standard deviation of (0.988) with high relative importance.

Testing the study hypotheses

This part of the study presents the results of the study hypotheses testing, arrived at through applying the suitable inferential statistic methods. Main hypotheses were subjected to the Multiple Linear Regression, while the sub-hypotheses were subjected to the Simple Linear Regression. Results of the hypotheses testing are as follows:

Results of the Main Hypothesis Test

The first main hypothesis aims to identify strategic flexibility and its impact on entrepreneurship orientation in small and medium sized- companies in Jordanian industriel sector. It stats that: "**there is no statistically significant impact at the level (α≤0.05) for strategic flexibility with its dimensions (Human resources flexibility, market flexibility, manufacturing process flexibility) on entrepreneurial orientation with its dimension (innovation, commitment to opportunity) in Jordanian small and medium sized- companies."**

In order to test this hypothesis, Multiple Linear Regression was used. The results were as follows:

Table 4: Model summary and Regression variance analysis for the main hypothesis H.0.1

Dependent Variable	Model Summary			ANOVA Analysis of Variance		
	Correlation Coefficient R	Coefficient of Determination R^2	Adjusted Coefficient of Determination Adj.R^2	Degree of Freedom DF	F Calculated value	Sig F*
Entrepreneurship Orientation	0.821	0.674	0.671	3	215.377	0.000

*Statistically significant impact at the level (α≤0.05)

Table 4 indicates a strong and positive relationship between strategic flexibility and entrepreneurship orientation, as the correlation coefficient (R = 0.821), while the coefficient of determination (R^2=0.674). This indicates that strategic flexibility variable explained (67.4%) of the difference occurring in entrepreneurship orientation, and (32.6%) was due to other factors. The value of the adjusted coefficient of determination Adj.R^2 reached (0.671), where the difference between it and the coefficient of determination was (0.003), which is a very small value. This indicates the ability of the accepted model variables to predict the values of the entrepreneurship orientation variable.

The table indicates the significance of the model, as the value of F calculated reached (215.377) with a significance level (SigF=0.000), which is less than 0.05, indicating a statistically significant impact for strategic flexibility variable on entrepreneurship orientation at the level (α≤0.05) and at 3 degrees of freedom.

Accordingly, the main null hypothesis is rejected and the alternative hypothesis, which states that: "there is a statistically significant impact at the level (α≤0.05) for strategic flexibility with its dimensions (Human resources flexibility, market flexibility, manufacturing process flexibility) on entrepreneurial orientation with its dimension (innovation, commitment to opportunity) in Jordanian small and medium sized- companies." is accepted.

Table 5: Regression coefficients of the main hypothesis H.0.1

Regression Coefficients

Independent Dimension	B Coefficients	Beta Value	T Calculated Value	Level of Significance *Sig T
HR Flexibility	0.309	0.315	5.345	0.000
Market Flexibility	0.163	0.178	2.817	0.005
Manufacturing Process Flexibility	0.321	0.386	6.398	0.000

*The impact is statistically significant at ($\alpha \leq 0.05$)

Table 5 shows the values of regression coefficients of strategic flexibility. B value of (HR flexibility) dimension was (0.309). This indicates that the increase in the Flexibility by one unit, increases the entrepreneurial orientation by (0.309) unit. T calculated value for this variable was (5.345) with significance level **(**SigT=0.000**),** and it is less than 0.05, indicating the presence of a positive significant impact for HR flexibility on entrepreneurial orientation.

Table 5 shows that B value for (Market flexibility) dimension was (0.163). It indicates that the increase in the market flexibility by one unit, increases the entrepreneurial orientation by (0.163) unit. T calculated value for this variable was (2.817) with significance level **(**SigT=0.005**),** and it is less than 0.05, indicating the presence of a positive significant impact for market flexibility on entrepreneurial orientation.

Table 5 shows that B value for (Manufacturing process flexibility) dimension was (0.321). It indicates that the increase in the manufacturing process flexibility by one unit, increases the entrepreneurial orientation by (0.321) unit. T calculated value for this variable was (6.398) with significance level **(**SigT=0.000**),** and it is less than 0.05, indicating the presence of a positive significant impact for manufacturing process flexibility on entrepreneurial orientation.

Results of the Sub-Hypotheses of the Main Hypothesis Test

To verify the impact of strategic flexibility on entrepreneurial orientation, the main hypothesis was divided into two sub-hypotheses. These hypotheses were tested through Multiple Linear Regression. The results were as follows:

Results of the First Sub-Hypothesis Test

The first sub- hypothesis aims to identify strategic flexibility and its impact on innovation in small and medium sized- companies in Jordanian industriel sector. It stats that: "**there is no statistically significant impact at the level ($\alpha \leq 0.05$) for strategic flexibility with its dimensions (Human resources flexibility, market flexibility, manufacturing process flexibility) on innovation as the first sub-dimension of Entreprenership orientation in small and medium sized- companies in Jordanian industriel sector."** The results were as follows:

Table 6: Model summary and Regression variance analysis for the first sub- hypothesis H.01.1

Dependent Variable	Model Summary			ANOVA Analysis of Variance		
	Correlation Coefficient R	Coefficient of Determination R^2	Adjusted Coefficient of Determination Adj.R^2	Degree of Freedom DF	F Calculated value	Sig F*
Innovation	0.760	0.577	0.573	3	142.491	0.000

*Statistically significant impact at the level ($\alpha \leq 0.05$)

Table 6 indicates a strong and positive relationship between strategic flexibility and innovation, as the correlation coefficient (R = 0.760), while the coefficient of determination (R^2=0.577). This indicates that strategic flexibility variable explained (57.5%) of the difference occurring in innovation, and (42.3%) was due to other factors. The value of the adjusted coefficient of determination Adj.R^2 reached (0.573), where the difference between it and the coefficient of determination was (0.004), which is a very small value. This indicates the ability of the accepted model variables to predict the values of the innovation variable.

The table indicates the significance of the model, as the value of F calculated reached (142.461) with a significance level (SigF=0.000), which is less than 0.05, indicating a statistically significant impact for strategic flexibility variable on innovation at the level ($\alpha \leq 0.05$) and at 3 degrees of freedom.

Accordingly, the first sub null hypothesis is rejected and the alternative hypothesis, which states that: "there is a statistically significant impact at the level ($\alpha \leq 0.05$) for strategic flexibility with its dimensions (Human resources flexibility, market flexibility, manufacturing process flexibility) on innovation as the first sub-dimension of Entreprenership orientation in small and medium sized-companies in Jordanian industriel sector." is accepted.

Table 7: Regression coefficients of the first sub - hypothesis H.01.1

Regression Coefficients				
Independent Dimension	**B Coefficients**	**Beta Value**	**T Calculated Value**	**Level of Significance *Sig T**
HR Flexibility	0.242	0.205	3.060	0.002
Market Flexibility	0.132	0.120	1.666	0.097
Manufacturing Process Flexibility	0.483	0.481	7.014	0.000

*The impact is statistically significant at ($\alpha \leq 0.05$)

Table 7 shows the values of regression coefficients of strategic flexibility. B value of (HR flexibility) dimension was (0.242). This indicates that the increase in the Flexibility by one unit, increases the innovation by (0.242) unit. T calculated value for this variable was (3.060) with significance level **(**SigT=0.002**),** and it is less than 0.05, indicating the presence of a positive significant impact for HR flexibility on innovation.

Table 7 shows that B value for (Market flexibility) dimension was (0.132). It indicates that the increase in the market flexibility by one unit, increases the innovation by (0.132) unit. T calculated value for this variable was (1.666) with significance level **(**SigT=0.097**),** and it is greater than 0.05, which indicates that there is no effect for market flexibility on the innovation

Table 7 shows that B value for (Manufacturing process flexibility) dimension was (0.483). It indicates that the increase in the manufacturing process flexibility by one unit, increases the innovation by (0.483) unit. T calculated value for this variable was (7.014) with significance level **(**SigT=0.000**),** and it is less than 0.05, indicating the presence of a positive significant impact for manufacturing process flexibility on innovatiom.

Results of the Second Sub-Hypothesis Test

The second sub- hypothesis aims to identify strategic flexibility and its impact on commitment to opportunity in small and medium sized- companies in Jordanian industriel sector. It stats that: "**there is no statistically significant impact at the level ($\alpha \leq 0.05$) for strategic flexibility with its dimensions (Human resources flexibility, market flexibility, manufacturing process flexibility) on commitment to opportunity as the second sub-dimension of Entreprenership orientation in small and medium sized- companies in Jordanian industriel sector."** The results were as follows:

Table 8: Model summary and Regression variance analysis for the second sub- hypothesis H.01.2

Dependent Variable	Model Summary			ANOVA Analysis of Variance		
	Correlation Coefficient R	Coefficient of Determination R^2	Adjusted Coefficient of Determination Adj.R^2	Degree of Freedom DF	F Calculated value	Sig F*
commitment to opportunity	0.779	0.607	0.603	3	161.091	0.000

*Statistically significant impact at the level (α≤0.05)

Table 8 indicates a strong and positive relationship between strategic flexibility and commitment to opportunity, as the correlation coefficient (R = 0.779), while the coefficient of determination (R^2=0.607). This indicates that strategic flexibility variable explained (60.7%) of the difference occurring in commitment to opportunity, and (39.3%) was due to other factors. The value of the adjusted coefficient of determination Adj.R^2 reached (0.603), where the difference between it and the coefficient of determination was (0.004), which is a very small value. This indicates the ability of the accepted model variables to predict the values of the commitment to opportunity variable.

The table indicates the significance of the model, as the value of F calculated reached (161.091) with a significance level (SigF=0.000), which is less than 0.05, indicating a statistically significant impact for strategic flexibility variable on commitment to opportunity at the level (α≤0.05) and at 3 degrees of freedom.

Accordingly, the second sub null hypothesis is rejected and the alternative hypothesis, which states that: "there is a statistically significant impact at the level (α≤0.05) for strategic flexibility with its dimensions (Human resources flexibility, market flexibility, manufacturing process flexibility) on commitment to opportunity as the second sub-dimension of Entreprenership orientation in small and medium sized- companies in Jordanian industriel sector." is accepted.

Table 9: Regression coefficients of the second sub - hypothesis H.01.2

Regression Coefficients				
Independent Dimension	B Coefficients	Beta Value	T Calculated Value	Level of Significance *Sig T
HR Flexibility	0.380	0.393	6.072	0.000
Market Flexibility	0.182	0.201	2.902	0.004
Manufacturing Process Flexibility	0.197	0.239	3.620	0.000

*The impact is statistically significant at (α≤0.05)

Table 9 shows the values of regression coefficients of strategic flexibility. B value of (HR flexibility) dimension was (0.380). This indicates that the increase in the Flexibility by one unit, increases the commitment to opportunity by (0.380) unit. T calculated value for this variable was (6.072) with significance level **(**SigT=0.000**),** and it is less than 0.05, indicating the presence of a positive significant impact for HR flexibility on commitment to opportunity.

Table 9 shows that B value for (Market flexibility) dimension was (0.182). It indicates that the increase in the market flexibility by one unit, increases the commitment to opportunity by (0.182) unit. T calculated value for this variable was (2.902) with significance level **(**SigT=0.004**),** and it is less than 0.05, indicating the presence of a positive significant impact for market flexibility on commitment to opportunity.

Table 9 shows that B value for (Manufacturing process flexibility) dimension was (0.197). It indicates that the increase in the manufacturing process flexibility by one unit, increases the

commitment to opportunity by (0.197) unit. T calculated value for this variable was (3.620) with significance level **(**SigT=0.000**),** and it is less than 0.05, indicating the presence of a positive significant impact for manufacturing process flexibility on commitment to opportunity.

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4. Results and Recommendations

Results

Based on the outputs of the statistical analysis and the results of the hypotheses testing, the study arrived at the following results:

1. Results of the descriptive analysis were reflected in the high level of interest paid by Jordanian small and medium-sized companies to the strategic flexibility, where the mean reached 4.035. The relative importance for all items was high, as the (HR Flexibility) ranked first, while (Manufacturing process flexibility) ranked third and last.
2. Results of the descriptive analysis were reflected in the high level of interest paid by Jordanian small and medium-sized companies to entrepreneurship orientation, where the mean reached 3.946. The relative importance for all dimensions was high, as the (commitment to opportunity) ranked first, while (innovation) ranked third and last.
3. There is a statistically significant impact at the level ($\alpha \leq 0.05$) for strategic flexibility with its dimensions (Human resources flexibility, market flexibility, manufacturing process flexibility) on innovation as an entreprenership orientation dimension in Jordanian small and medium sized- companies.

This can be explained by the entrepreneurial orientation that is based on creativity and innovative and renewable ideas that lead the organization to achieve its future strategic goals, and ensure its survival and continuity, which is closely related to strategic flexibility, so the presence of a group of highly knowledgeable employees with entrepreneurial capabilities and creative ideas leads to enhancing capabilities of institutions and increasing their adaptation to changes and challenges in the external environment. This result agreed with the results of Bakhsh and Kanani (2018) study, which indicated that the strategic flexibility has a positive role and impact on innovation as one dimension of entreprenership orientation. It also agreed with the Kharisma, Irawanto, Rofiq (2020) study, which confirmed that the elements of entreprenership orientation represented in innovation, risk-taking, and proactivness, have a significant impact on strategic flexibility, and that the significant role of strategic flexibility in enhancing the impact of entreprenership orientation, has contributed to enhancing the performance of small and medium-sized companies.

4. There is no statistically significant impact at the level ($\alpha \leq 0.05$) for strategic flexibility with its dimensions (Human resources flexibility, market flexibility, manufacturing process flexibility) on commitment to opportunity as an entreprenership orientation dimension in Jordanian small and medium sized- companies.

This can be explained by companies that strategically position themselves, committing to opportunities and leveraging them to develop and offer new products and services. By doing so, they will gain the necessary capacity to navigate environmental changes in uncertain conditions and ultimately embody the concept of entrepreneurship. The findings of this study align with those of Yu (2012), suggesting a significant correlation between entrepreneurship orientation and strategic flexibility in Chinese small and medium-sized companies. It was observed that the presence of strategic flexibility strengthened the impact of entrepreneurship orientation on company performance.

Recommendations

Based on the results above, the study recommends:

1. increasing Jordanian small and medium-sized companies' attention that their employees demonstrate the highest level of effectives at work

2. Increasing Jordanian small and medium-sized companies' attention to provide various products and services from time to time, in order to attract new customers and gain superiority over the competitive companies.
3. Increasing Jordanian small and medium-sized companies' attention to be committed to achieve quality in their manufacturing process.
4. Increasing Jordanian small and medium-sized companies' attention to encourage their staff to innovate new working methods through providing material and moral incentives.
5. Increasing Jordanian small and medium-sized companies' attention to seize the emerging opportunities before competitors.
6. Increasing Jordanian small and medium-sized companies' attention to adapt and respond to the surrounding environment conditions.
7. Increasing Jordanian small and medium-sized companies' attention to take advantage of new production ideas to produce products and provide customers with new products.
8. Increasing Jordanian small and medium-sized companies' attention to develop the skills of their employees, exploit technology, and develop their strategies.

5. Conclusion

This study contributes to the understanding of the relationship between strategic flexibility and entrepreneurship orientation in small and medium-sized manufacturing companies in Jordan. The findings highlight the significant impact of strategic flexibility, particularly in terms of human resources flexibility and manufacturing process flexibility, on fostering entrepreneurship orientation. However, the study also reveals the lack of a significant effect of market flexibility on innovation, suggesting that companies may need to focus more on understanding and responding to market demands to drive innovation. The study offers several practical implications for managers and policymakers. First, small and medium-sized manufacturing companies in Jordan should invest in developing their human resources and manufacturing processes to enhance their strategic flexibility and support entrepreneurship orientation. This may involve providing training and development opportunities for employees, encouraging creativity and risk-taking, and adopting flexible manufacturing technologies and practices. Second, policymakers should consider providing support and incentives for small and medium-sized companies to foster strategic flexibility and entrepreneurship orientation, such as through funding for training programs, tax incentives for innovation, and facilitating access to markets and resources. However, the study also has some limitations that should be acknowledged. The cross-sectional design limits the ability to establish causal relationships, and the focus on the manufacturing sector in Jordan may limit the generalizability of the findings to other sectors and contexts. Future research could employ longitudinal designs, examine other sectors and countries, and investigate additional factors that may influence the relationship between strategic flexibility and entrepreneurship orientation, such as organizational culture, leadership, and external environmental factors.

References-

Abood, N., Aboyasin, N. A., & Ajloni, M. I. (2014). Impact of the Entrepreneurial Attributes on Business Performance in a Sample of Jordanian Institutions. *International Journal of Professional Management*, *9*(1), 1-18.

Abu-Nahel Z. O; Alagha, W. H.; Al Shobaki, M. J.; Abu-Naser, S. S.; El Talla, S. A. (2020). The Reality of Applying Strategic Flexibility in Non-Governmental Hospitals, *International Journal of Academic Management Science Research*, 4(7), 144-170.

Al haraisa, Yazan Emnawer (2018). Strategic Flexibility and Its Impact on Enhancing Organizational Effectiveness: An Applied Study on Jordanian Hotels, *International Business Research*, 11(10), 165-173.

Alafeef, Mahmoud Abdel Muhsen Irsheid (2015). The Impact Of Innovation Marketing Orientation In Achieving The Competitive Advantage In Hotel Establishments In Saudi Arabia "Case Study-Al Baha City-KSA", International journal of scientific & technology research 4(3), 193-198.

Al-Azzawi, F. S; Al-Sabawi, I Q (2019). The Role of Total Environmental Quality Management in Flexible Manufacturing: An Exploratory Study in Badoush Cement Factory, *Journal of Economic and Administrative Sciences*, University of Baghdad, 25(110).

Al-Jinini, D. K., Dahiyat, S. E., y Bontis, N. (2019). Intellectual capital, entreprenership orientation, and technical innovation in small and medium-sized enterprises. *Knowledge and Process Management*, 26(2), 69-85.

Al-Sayer, Omar (2017). The relationship between entreprenership orientation and market orientation and their impact on competitive advantage, *Journal of Baghdad College of Economic Sciences*, 51 (1), 423-446.

Anderson, N, Potonik, K & Zhou, J (2014). 'Innovation and Creativity in Organizations: A State-of-the-Science Review and Prospective Commentary', Journal of Management, 40(5), 1297-1333.

Anwar, Muhammad ; Clauss Thomas and Issah, Wunnam Basit (2021). Entreprenership orientation and new venture performance in emerging markets: the mediating role of opportunity recognition, Review of Managerial Science.

Aref, Mohammaed (2019). The Role of Entreprenership Orientation in Achieving the Strategic Flexibility of the Egyptian Pharmaceutical Sector: A Comparative Field Study. Journal of financial and business research, issue3: 107- 151.

Atieh, K., & Hashem, T. (2024). Marketing Agility in the Age of Digital Transformation Industrial Sector Analysis. *Kurdish Studies*,12(1), 1321-1337

Ghorban, R., & Gholipour, K. (2018). Investigating the impact of strategic flexibility on organizational innovation. *International Review of Management and Marketing*, *8*(3),

Beltran-Martín, I., Bou-Llusar, J., & Salvador-Gomez, A. (2021). HR flexibility and firm performance in professional service firms. Journal of Management & Organization, 1-22.

Bujor, Adriana and Avasilcai, Silvia (2016). The Creative Entrepreneur: a Framework of Analysis, Procedia - Social and Behavioral Sciences 221, 21 – 28.

Cetinkaya. A. S.; Niavand, A. and Rashid, M. (2019), Organizational Change and Competitive Advantage: Business Size Matters, BMIJ, 7(3): 40-67.

Chang, S. C., Lin, R. J., Chang, F. J., & Chen, R. H. (2007). Achieving manufacturing flexibility through entreprenership orientation. Industrial Management & Data Systems, 107(7): 997-1017.

Covin, J; Green, K & Slevin, D (2006). Strategic Process Effects on the entreprenership orientation – Sales Growth Rate Relationship. *Entrepreneurship Theory & Practice*, 30 (1): 57-81

de Jong, Jeroen P.J.; Parker, Sharon K.; Wennekers, Sander and Wu, Chia-Huei (2013).Entreprenership Behavior in Organizations: Does Job Design Matter?, 1-15.

Farouq, T. and Dadwal, N. (2018). The Impact of Entrepreneurship on Economic Growth and Development in the UK, *International Journal of Entrepreneurship Management Innovation and Development*, 2(2), 116-146.

Freihat, S. M. S. S., Hashem, T. N., Moh'd Adnan Homsi, D., & Haikal, E. K. (2023). Analysis of Jordanian Commercial Banks' Business Intelligence Systems and Their Emphasis on Entrepreneurship. *Calitatea*, 24(196), 124-132.

Ghorban-Bakhsh, Raheleh and Gholipour-Kanan, Yousef (2018). Investigating the Impact of Strategic Flexibility on Organizational Innovation, International Review of Management and Marketing, 8(3), 1-5.

Han, Chen and Zhang, Shuman (2020). Multiple strategic orientations and strategic flexibility in product innovation, European Research on Management and Business Economics, 27(1).

Hashem, T. N. (2016). Commercial Banks Use of Decision Support System to Achieve Marketing Creativity. *International Review of Management and Business Research*, 5(3), 1059-1067.

Hitt, M; Hoskisson, R; Ireland, R & Dunane, T. (2013). Managemant of strategy concepts and cases. South Western College Publishing.

Homsi,D. Hashem, T. &Freihat, S.(2020). How can entrepreneurial marketing promote the entrepreneurship culture in an organization: case of banking sector in Jordan. *Innovative Marketing* , 16(1), 29-42. doi:10.21511/im.16(1).2020.04

Kahingo, M. K, and Muchemi, W (2020).Strategic flexibility, tmt cognitive capability and firm performance: a review of literature, African Journal of Emerging Issues (AJOEI), Vol (2), Issue 11, P.53-78.

Kharisma, Pratasha Putra; Irawanto, Dodi W. and Rofiq, Ainur (2020). Entreprenership orientation and its effect toward SME performance through strategic flexibility on fashion industry in Malang, *Journal of Business Theory and Implementation*, 11(2).

Kor B. (2016). The mediating effects of self-leadership on perceived entreprenership orientation and innovative work behavior in the banking sector. SpringerPlus, 5(1).

Liyanage A. S. and Weerasinghe T. D. (2018). The Effect of Strategic Flexibility on Strategy-Performance Nexus: A Conceptual Model, Kelaniya Journal of Management, 7(1), 26-39.

Najim, N. A., El-Refae, G. A., & Alnaji, L. (2013). The impact of the key dimensions of entrepreneurship on opportunities for the success of new ventures in the greater amman municipality. *European Journal of Business and Management*, *5*(4), 159-173.

Oni, O. et al., (2019). Entreprenership Orientation and Performance of Small Business in Vryburg Region North West Province South Africa, Journal of Reviews on Global Economics, Vol. 8, No. 1.

Sajjad, Wasif; Sajjad, Amber and Asif, Muhammad (2020). Impact of Entreprenership Orientation, Access to Finance and Strategic Flexibility on SMEs Performance, *Journal of Management and Research (JMR)*, 7(1), 1-23.

Schachter M.E., et al., (2015). Disentangling competences: Interrelationships on creativity, Innovation and entrepreneurship, Thinking Skills and Creativity, Vol. 16, No. 1.

Yu, F. (2012). Strategic flexibility, entreprenership orientation and firm performance: Evidence from small and medium-sized business (SMB) in China. *African Journal of Business Management*. 6(4), 1711-1720.

Zhou , Jing & Hoever, Inga J. (2014). Research on Workplace Creativity: A Review and Redirection, *Annual Review of Organizational Psychology and Organizational Behavior*, 1: 333-359.