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The Leverage Entrepreneurial Orientation to Enhance Organizational Effectiveness among Jordanian Industrial SMEs

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Abstract. This study analyzed the impact of entrepreneurial orientation on organizational effectiveness among industrial SMEs in Jordan. A questionnaire was administered to 200 employees. The results of regression analysis showed that entrepreneurial orientation positively influenced organizational effectiveness as well as the dimensions of productivity, adaptation, resource optimization, and stability. Entrepreneurial orientation explained a substantial proportion of variance in organizational outcomes. The findings provide empirical evidence that entrepreneurial orientation enhances effectiveness and competitiveness of SMEs in the Jordanian industrial sector. The study contributes to knowledge on leveraging entrepreneurial strategies and mindsets to improve performance within a developing country context.

Keywords: Entrepreneurial Orientation, Organizational Effectiveness, Jordanian Industrial SMEs

1. Introduction

Entrepreneurship has become one of the most important topics in the business area; this aspect was perceived as a main driver related to innovation that ultimately leads to economic growth. It is the degree to which a company understands entrepreneurial characteristics in several dimensions, such as innovation, competition, risk-taking, proactiveness, autonomy, and aggressiveness. This concept has been studied in literature and has been found to have a positive impact on organizational performance (Covin & Miller, 2014). Jordan has a small economy, and the small and medium enterprises SMEs in Jordan, especially in the industrial sector are facing several challenges such as the lack of skilled employees or laborers, the absence of the main business functions such as planning, the difficulty of financial accessing, the huge competition, finally the low use of new technologies, and a lack of innovation and technology (Sandri et al., 2020). Years ago, entrepreneurship accelerated Jordanian industrial growth, since entrepreneurship is particularly important to companies in this sector, as it can help them overcome challenges in a highly competitive environment (Hanif, Malik, & Hamid, 2018; Al-Jinini et al., 2019).

Organizational effectiveness refers to the extent to which an organization achieves its goals by using available resources efficiently and effectively, whatever the resources are. This concept is multidimensional and includes dimensions such as financial performance, customer satisfaction, employee satisfaction, and innovation. Organizational effectiveness is crucial for ensuring long-term success as well as sustainable growth, and this is particularly true of industrial companies based in Jordan that operate in a difficult economic environment (Androwis et al., 2018; Ali et al., 2020). The implication from the literature is that entrepreneurial orientation (EO) has a positive influence on organizational effectiveness in numerous ways. First, EO enhances innovation by encouraging employees to generate new ideas and develop new products and services. Second, it promotes risktaking, which can lead to higher levels of performance by enabling organizations to be alert and to seize opportunities that others may overlook (Androwis et al., 2018). The third point is that EO promotes proactiveness. This enables organizations to predict changes that occur in the market and then react to them effectively. The fourth point to consider is that EO encourages autonomy, which can lead to a rise in employee satisfaction and motivation. This in turn can result in enhanced productivity and performance. Finally, it promotes competitive aggressiveness, which can help organizations gain a competitive advantage in the market, and more than this to be the first in creating competitive priority (Tuan Luu, 2017). At the same time, entrepreneurial orientation's impact on organizational effectiveness can vary depending on circumstance. EO and organizational effectiveness may be affected by market rivalry, resource availability, and cultural and institutional issues (Butkouskaya et al., 2020; Masa'deh et al., 2018). The industrial sector in Jordan is considered important because of the number of laborers – it constitutes 15% of the national workforce, and because it makes up 40% of the country's gross domestic product GDP. It also has an indirect contribution from many other sectors such as agriculture, transportation, banking, and insurance. This means that the industrial sector has a qualitative connection and supports performance among varicose economic aspects and sectors. Due to the rapid shifts in technology in recent years, an urgent need has been created for researchers to keep understanding how entrepreneurship can impact effectiveness in the industrial sector. Therefore, this study aimed to determine the impact of entrepreneurial orientation on organizational effectiveness among industrial SMEs in Jordan.

1.1. The Research Gaps

The industrial sector in Jordan is witnessing many challenges, represented by the difficulty of entering markets and the difficulty of obtaining financing, in addition to high competition and lack of workers' skills, which prompted researchers to study entrepreneurial orientation on organizational effectiveness variables, as the focus on this topic was limited in studies. The precedent, especially regarding the Arab world and Jordan, as noted by Cho et al. (2020) stated that organizations lack consideration of strategic

orientation and organizational effectiveness, and Rezaei and Ortt (2018) added that there are large gaps in the impact of entrepreneurial orientation on the performance of company functions, and accordingly, this study was conducted to benefit from entrepreneurial orientation in enhancing organizational effectiveness in industrial SMEs in Jordan

1.2. Research Questions

The problem with the study was the answer to the following main question: impact of entrepreneurial orientation on organizational effectiveness among industrial SMEs in Jordan It has two sub-questions:

- What is the level of utilization of entrepreneurial orientation in industrial SMEs in Jordan.
- What is the level of enhanced organizational effectiveness in industrial SMEs in Jordan.

1.3. The Research Importance

The importance of the current study lies in what is facing the business environment, which has become more complicated by accelerated changes, significant technological development and increased competition. So, the industrial SMEs in Jordan are looking for new trends and options that will enable them to keep pace with these changes and adapt to them. The importance of the study comes from taking advantage of the entrepreneurial orientation to be able to manage companies and achieve their organizational effectiveness in terms of increased productivity, continuous improvement and permanent development to ensure their durability and support their competitive position.

1.4. The Research Objectives

- To find the impact of entrepreneurial orientation on the organizational effectiveness
- To know and understand how entrepreneurial orientation can play its role in the industrial SMEs in Jordan
- To know and understand what most aspect of organizational effectiveness in Jordan affected the most by entrepreneurial orientation in the industrial SMEs in Jordan.

2. Literature Review

2.1. Entrepreneurial Orientation

EO is an important variable it is the concept that enhances the success of a start-up, and it is perceived as an important variable in any company's competitiveness (Khan & Ahmed, 2019). It also plays a main role in leading economic growth through creation and innovation in any field. The concept of entrepreneurship is very important, especially in recent changes in the business area and the need to protect the environment, as it allows employees and companies to respond to opportunities. Entrepreneurship is also effective at improving sustainability and enhancing the social environment by meeting its needs and devising solutions. At the same time, entrepreneurs are the main power behind the establishment of any new-to-market service or product (Thurik & Wennekers, 2004; Ribeiro-Soriano, 2017).

Entrepreneurs are also important because they are the root of creation, and they keep seeking out new methods to improve business models. Overall, it is essential for growth and progress both economically and socially (Drobyazko et al., 2019). On the other hand, the primary aim of EO is to encourage and enable employees and companies to be more competitive whenever the opportunity arises and to come up with new products and services in response to changes in the market (Ferreira et al., 2020). By that, companies are advised to create and stick to a proactive plan to facilitate ongoing creativity and innovation, so they can establish a competitive mindset and be as self-reliant as possible. Ultimately, entrepreneurial orientation aims to achieve concrete value for stakeholders, society, and customers, to maximize profitability and growth (Lee et al., 2020).

2.2. The components of the Entrepreneurial Orientation

The components of the EO can be seen through Flexibility which is one of the most critical aspects of entrepreneurial orientation. It means being able to evolve and adapt to fluctuating market conditions and changes in customer needs. It also means enabling organizations to make the most of new opportunities that arise and to adjust their market business plan when required. It demands a willingness to be experimental, flexible, and adaptable whenever faced with uncertainty (Sahi et al., 2019). Another aspect of EO that needs to be practiced is creativity, and constantly looking for new ideas and approaches. Organizations that can think outside the box and solve problems creatively are more likely to succeed, especially if they are adept at leveraging new technologies and trends (Ferreira, Coelho, & Moutinho, 2020). Risk-taking is another crucial factor of entrepreneurial orientation; if an entrepreneur wants to succeed, they need to be prepared to take calculated risks. They need to be committed to investing both time and money in new concepts and projects, often in the face of uncertainty. Entrepreneurs are more likely to be a success if they can forge an equilibrium between risk and reward, and if they are experts at assessing and managing risks (Al-Mamary et al., 2020). Another factor of EO that should be considered is proactivity in establishing and actioning opportunities. Proactive entrepreneurs will not wait for opportunities; instead, they are always on the lookout for new prospects, ideas, audiences, and markets. They are deft at identifying gaps in the market and creating dynamic new products and services to fill those gaps (Kusa et al., 2021; Al-Mamary et al., 2020).

3. Organizational Effectiveness

Organizational effectiveness is the degree to which a company has the ability to use its available resources to achieve its goals. Organizational effectiveness is a multidimensional model that includes aspects of organizational efficiency such as adaptability, innovation, and customer satisfaction; it also includes an organizational behavior approach (George, Walker, & Monster, 2019). It is often measured through several combinations of indicators of financial and non-financial performance, like market share, customer feedback, and employee satisfaction. Measuring the level of company effectiveness can assess a company's performance and create a critical benchmark for performance indicators as well. In the end, long-term success and prosperity are related to a high level of effectiveness (Singh et al., 2016; Van Looy & Shafagatova, 2016). Organizational effectiveness is directly related to a company's goals and objectives. Assessing effectiveness allows companies to evaluate their performance and determine aspects for improvement (Bryson, 2018). Furthermore, a high level of organizational effectiveness can lead to increased productivity, improved customer satisfaction, and increased financial performance, all of which contribute to an organization's long-term success and sustainability (Almatrooshi et al., 2016). Also, through organizational effectiveness, organizations can remain competitive in their respective markets and adapt to changing environments. Therefore, it is crucial for organizations to prioritize and invest in initiatives that enhance their organizational effectiveness (Baruah & Ward, 2015).

In the context of organizational effectiveness, goals refer to the specific outcomes that an organization aims to achieve. Scientifically defined goals are critical in guiding an organization's decisions, strategies, and actions (Omotayo, 2015). Effective goal setting involves establishing specific, measurable, achievable, relevant, and time-bound (SMART) objectives that align with the organization's mission, vision, and values. Precisely defined goals play a pivotal role in guiding and concentrating employees' efforts, fostering accountability, and simplifying the monitoring of advancements and performance. Furthermore, these goals should be both demanding and achievable to ignite enthusiasm and dedication among staff. By establishing scientifically defined objectives, businesses can elevate their operational efficiency by allocating resources effectively, raising performance levels, and attaining the desired results (Mwalim et al., 2019).

3.1. Organizational Effectiveness components

Components of organizational effectiveness can be seen in Productivity: This pertains to a business's

ability to create products and services successfully using the resources at its disposal. It is typically quantified by the company's output, showcasing how well resources are utilized to achieve objectives proficiently (Sarid, 2021). Also, Adaptation is a business's capacity to adeptly respond to various changes, encompassing shifts in market dynamics like evolving customer needs, technological progress, and alterations in legislation. A company displaying strong adaptive abilities can flexibly modify its strategies, structures, and processes to tackle challenges and identify opportunities (Arnett et al., 2018). This leads to the third part of organizational effectiveness which is Optimization: it involves the utilization of a company's resources, be it financial or human. It is about maximizing output while minimizing duplication and waste. Companies that embrace the optimization of resources can hit their objectives in a cost-effective manner without using up their resources (Sari & Maifizar, 2023). And the fourth variable is Stability: Stability reflects an organization's ability to maintain consistent and steady performance levels over an extended period. In other words, it is the ability of an organization to set suitable and stable processes and procedures and to adhere to all prescriptions. This includes financial stability, operational stability, and stability in the external environment. A stable organization is able to withstand challenges and disruptions and continue to operate effectively over the long term. This dimension of organizational effectiveness is important for ensuring the sustainability and longevity of an organization (Kulachai et al., 2021). To achieve the purpose of the study and reach its specific objectives, a special research model was developed, as shown in Figure (1).

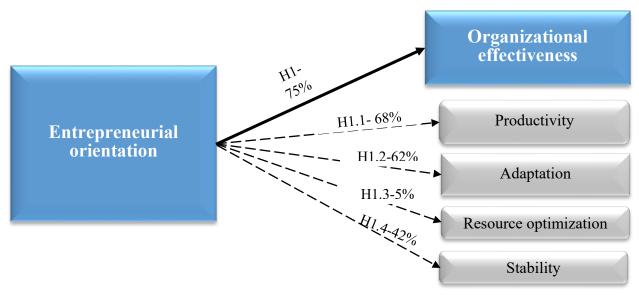


Fig.1: The Framework of the study

4. Hypothesis Development

4.1. The Impact of EO on Organizational Effectiveness

The performance of various tasks inside a company is related to several aspects of entrepreneurial orientation. Innovativeness and research and development R&D performance, as well as proactivity and marketing and sales performance, were found to be positively correlated with organizational effectiveness. The findings of Rezaei and Ortt (2018) revealed that there is an inverse link between production performance and risk-taking which is a part of EO. However, a positive linear association was found between EO total business performances, which indicates performance effectiveness. As Drobyazko et al. (2019) stated, there is an entrepreneurial innovation model for how information and communication technology businesses should operate. According to this model, all organizational

structures should be focused on the demands of the consumer and work to meet those needs as fully as possible to enhance performance. The following tasks are accomplished concurrently: guaranteeing organizational effectiveness in using sources of financing for innovation and boosting the enterprise's competitiveness. According to Cho et al. (2022), EO did not affect absorption capacity, although EO and market orientation did. Coordination capability wasn't considerably impacted by entrepreneurial orientation. The assumptions were accepted that EO has no impact on organizational effectiveness while absorption capacity and coordination capability had an impact on organizational effectiveness. In this case it is noted that EO could has no direct impact towards organizational effectiveness. The impact could be either inversely or partial or has no relation as suggested by Mathafena &Msimango (2023) that the relationship between EO and BP is not significant. Based on the above, the following hypothesis can be proposed:

H1: Entrepreneurial Orientation has a statistically significant impact on organizational effectiveness in SMEs industrial in Jordan.

4.2. The Impact of EO on Productivity

The relationship between EO and productivity is complex). Studies could reach to the relationship between the variables using mediated aspects. This criteria was used in Jordan but on SMEs in general (AbuSaif ,2023). Politis (2015) examined and investigated the impact of self-leadership strategies on entrepreneurial orientation, creativity, and productivity. The results showed that behaviorally focused strategies significantly influence entrepreneurial orientation, while natural reward strategies have no effect. These strategies account for 51% of EO variance and 40% and 52% of creativity and productivity variance, respectively. To maintain innovativeness, proactiveness, creativity, and productivity, organizations should train employees to strengthen positive behaviors like goal setting, self-observation, self-reward, punishment, and practice. By that we can note that productivity can be affected and examine either directly or by using mediated variables. Results from Prasetyo (2019) indicate that the entrepreneurial productivity factor is the primary and leading driver of regional economic growth and employment; this is followed by the entrepreneurial commercialization and competitiveness factors. The findings of Rico and Cabrer-Borrás (2019) suggest that entrepreneurial activity and net company creation have a beneficial impact on productive efficiency and can account for regional differences in economic growth. The level of technological innovation, the encouragement of innovation, and the stock of human capital also serve as catalysts for regional economies' productivity. Finally, the findings support the Schumpeter effect, which holds that entrepreneurial capital stimulates economic growth.

Based on the above, the following hypothesis can be proposed:

H1.1: Entrepreneurial Orientation has a statistically significant impact on improving productivity in SMEs industrial in Jordanian.

4.3. The Impact of EO on Adaptation

It well known that the effectiveness includes planning and developing strategies as well as allow organizations to take a step forward action passed on adaptation. And thus several study examine the relationship between the two variables based on many direction such as EO towards adaptation and Adaptation towards EO. By that, Bouhalleb & Tapinos (2023) suggested that planning and proactivity has no effect towards EO. Now a days, businesses are increasingly taking part in cross-sectoral partnerships to lessen their impact on the environment, Doh et al. (2019). In order to encourage environmental advances, organizations are concurrently pursuing more entrepreneurial endeavors. However, environmental concerns are becoming a global issue that could cause profound changes to organizational and societal systems that go beyond the objectives or spheres of influence of particular businesses. As a result, creative solutions that make the most of all key actors' resources and competencies will be necessary for successful adaptation to these problems. Doh et al. (2019) suggested that collective environmental entrepreneurship was a tactic to aid adaptation to shifting global

ecosystems, drawing on studies on cross-sectoral collaborations and environmental entrepreneurship. According to Basu et al. (2022), entrepreneurial adaptation is defined as a set of cognitively derived, action-oriented strategic entrepreneurial choices that foster specific dimensions of adaptive capabilities and, in turn, sustain entrepreneurship in emerging markets. This concept complements the idea of an entrepreneurial mindset and incorporates the concepts of strategic orientation and adaptive capabilities.

Based on the above, the following hypothesis can be proposed:

H1.2: Entrepreneurial Orientation has a statistically significant impact on adaptation in SMEs industrial in Jordanian

4.4. The Impact of EO on Resource Optimization

Choi et al. (2020) found a positive association between EO and companies' performance, with resource orchestration capability and environmental dynamics playing moderating roles. High environmental dynamics led to more positive entrepreneurial orientation, while low resource orchestration capability led to more positive entrepreneurial orientation. This study highlights the importance of these factors in enhancing firm performance. According to Xiaobao et al. (2022), when start-ups encounter resource restrictions, the resource bricolage technique significantly improves entrepreneurial orientation, and the connection is positively moderated by the heterogeneity of the top management team (TMT). TMT behavioral integration, meanwhile, adversely modifies the relationship. The findings should theoretically help start-ups overcome resource limitations and achieve survival and growth.

Based on the above, the following hypothesis can be proposed:

H1.3: Entrepreneurial Orientation has a statistically significant impact on resource optimization in SMEs industrial in Jordanian.

4.5. The Impact of Entrepreneurial Orientation on Stability

A company's EO is reflected in how much autonomy, competitive aggressiveness, innovation, reactiveness, and risk-taking are valued. McKenny et al. (2018) study showed various patterns that companies have created to have an impact on their performance. Managers should create an entrepreneurial dimension profile (directions, processes, and instructions) that works well for their sector. For example, businesses in expanding but stable industries typically function best when they prioritize autonomy and competitive aggression over proactiveness, innovation, and risk-taking. This strategy, however, would not produce great performance in more competitive businesses where innovation is crucial. Manzano-Garcia and Ayala-Calvo (2020) used a time-lagged design with two data-collection points based on a sample of manager-owners of small businesses and considered EO as an individual concept to explain the impact of innovative orientation (IO), risk-taking orientation (RTO), and proactive orientation (PO) on the subjective success of entrepreneurs. According to the findings, just one aspect of entrepreneurial orientation—proactive orientation—is linked to entrepreneurs' happiness with their work, life, organization, and business expansion.

Based on the above, the following hypothesis can be proposed:

H1.4: Entrepreneurial Orientation has a statistically significant impact on improving stability in SMEs industrial in Jordanian.

5. Research Methodology

We utilized a descriptive and analytical approach to gather data, test hypotheses, and address research questions pertaining to the current state of the study subject. The questionnaire was designed to measure the impact of entrepreneurial orientation on organizational effectiveness among industrial SMEs in Jordan, by reviewing theoretical literature and benefiting from previous studies. The questionnaire also included trends, opinions, demographic information, conditions, and procedures.

5.1. The Study Population and Sample

The targeted population of this research consisted of all the Jordanian industrial companies listed on the Amman stock exchange ASE. The industrial sector consists of eight subsectors:

- Pharmaceutical and Medical Industries
- Chemical Industries
- Food and Beverages
- Tobacco and Cigarettes
- Mining and Extraction Industries
- Engineering and Construction
- Electrical Industries
- Textiles, Leathers, and Clothing

We have chosen the industrial sector because it faces challenges like high competition and risks that come from changes in the environment, which affect its ability to control and maintain the required resources and achieve organizational goals. In addition, employees in the administrative departments in this sector need to employ their skills – managerial skills – and ideas, which help their companies when they encounter challenges.

The size of the target population was relatively large, which was making it difficult to reach all the companies to collect data. This led to the use of convenience sampling, we have chosen convenience sampling because it is a method which data can be collected from an available group of respondents and to facilitate access to members to be part of the sample. The researchers were able to distribute 350 questionnaires to the identified industrial companies. The questionnaire tool was built based on the theoretical part of the study variables. And thus, each variable has its questions which were created based on the theoretical concepts and were measured based on the Likert scale to rate the response's opinions. On the other hand, the questionnaire contained 30 questions distributed among the study variables, and 200 questionnaires were retrieved from all industrial companies.

5.2. Statical methods

To achieve the objectives of the study and test its hypotheses, the following statistical measures were used based on (SPSS) program: Cronbach's alpha coefficient test to verify the stability of the study tool, extract frequencies and percentages of personal variables, in order to display the characteristics of the sample, in addition to measuring the arithmetic means and standard deviations to determine the extent of agreement of the researched sample members on each of the study variables, and the simple regression coefficient and correlation coefficient in order to test the hypotheses.

5.3. Reliability Test

Cronbach's alpha was calculated to verify the consistency and appropriateness of the items included in the questionnaire. If the result is greater than 0.70, the value is statistically acceptable, and the closer it is to one (or 100%), the more stable the search tool (Sekaran and Bougie, 2016). As shown in Table 1, Cronbach's alpha ranges from 0.71 to 0.86. In other words, the study tool is stable, and the data it produces are accurate and reliable in measuring variables. Reliability has been confirmed, since all dimensions of independent and certified variables are more than 70%.

Table 1: Cronbach's alpha coefficient

	Number of items	Cronbach's alpha
Entrepreneurial variable	10	0.71
Productivity	5	0.86
Adaptation	5	0.78
Resource optimization	5	0.84
Stability	5	0.75
Organizational effectiveness	20	0.83
All	30	0.85

5.4. Correlation between Variables

Bivariate Pearson correlation coefficient was used to test the strength of the relationships between the variables,. Table (2) shows that the relationships between the dimensions are strong, where r ranges between 0.474 and 0.697.

Table 2: Bivariate Pearson's Correlation

No.		1	2	3	4
1	Flexibility	1.000			
2	Creativity	.677	1.000		
3	Risk-taking	.573	.687	1.000	
4	Proactivity	.474	.677	.697	1.000

5.5. Multi-collinearity:

Variance Inflation Factor (VIF) and the Tolerance Variant Statistics, was used to check there is no multicollinearity. It suggest that there is no multi-collinearity among all dimensions, demonstrating that multiple regression analysis can be used to test study hypotheses.

Table 3: Tolerance and VIF

	Number of items	Cronbach's alpha
Entrepreneurial variable	10	0.71
Productivity	5	0.86
Adaptation	5	0.78
Resource optimization	5	0.84
Stability	5	0.75
Organizational effectiveness	20	0.83
All	30	0.85

5.6. Demographic Characteristics of Respondents

The next section describes the demographic characteristics of respondents, including their gender, educational qualification, job title, and number of years' experience.

Table 4: The demographic characteristics of the study sample

<u> </u>	J 1	
Variable	Frequency	Percentage (%)
Gender		
Female	66	33

Male	134	67
Education		
Intermediate diploma	68	34
Bachelor's	90	45
Master's	34	17
PhD	8	4
Job title		
Manager	6	3
Head of Department	30	15
Administrative employee	90	45
Customer service employee	74	37
Years of experience		
Less than 5 years	61	30.5
From 5 to 10 years	71	35.5
From 10 to 15 years	38	19
More than 15 years	30	15

Table 4 shows that the majority (67%) of the respondents were male, with 134 males participating in this research, while there were 66 female participants, making up 33% of the total study sample, which is low. This is because the working opportunities in these industrial companies suit males more than females. Also, the greatest proportion of the respondents (90, or 45%) held a bachelor's qualification, while 68 (34%) had an intermediate diploma, 34 (17%) had a master's degree, and only 8 (4%) had a PhD. The ratios are consistent with the nature and requirements of work at industrial companies, which mostly require the employment of qualified academics and holders of bachelor's degrees. Regarding the participants' job titles, there were 90 administrative employees (45% of the sample), who made up the largest group, while 74 (37%) were customer service employees. Of the remainder of the sample, 30 participants (15%) had the job title Head of Department, while only 6 (3%) were managers.

In addition, the greatest proportion of respondents (71, or 35.5%) had between 5 and 10 years of experience. The next largest group of respondents (61, or 30.5%) had less than 5 years' experience. Of the remaining participants, 38 (19%) had from 10 to 15 years' experience, while 30 (15%) had more than 15 years' experience. These percentages show industrial companies' interest in attracting younger age groups who have suitable work experience.

5.7. Descriptive Statistical Analysis

According to Table 5, the mean for the variable "entrepreneurial orientation" was calculated to be 3.62. This indicates a high level of agreement among the respondents regarding this variable. Upon examining the individual item responses, it is evident that "The company takes bold decisions despite the uncertainty surrounding it" received the highest average rating (3.89). On the other hand, "Competitiveness helps improve the company's ability to be more efficient than others" had the lowest average rating (3.43). This also indicates that the entrepreneurial Orientation receives wide attention in industrial SMEs in Jordan, and this may stem from their keenness to make appropriate decisions to keep pace with modern developments considering intense competition.

Table 5: Descriptive statistics – mean and standard deviations of entrepreneurial orientation

No.	Items	Mean	SD	Rank	Importance
1	The company takes bold decisions despite the uncertainty surrounding it.	3.89	0.64	1	Medium
2	The company adopts new ideas even if their application faces some obstacles.	3.67	0.89	3	Medium
3	The company tends to take risks in order to reach the expected benefit from the amount of this risk.	3.77	0.76	2	High
4	Competitiveness helps improve the company's ability to be more efficient than others.	3.43	0.98	10	Medium
5	Exploiting opportunities leads to continuity and better competitive advantage.	3.6	0.86	6	Medium
6	The company promotes the characteristic of challenge in order to find new ideas.	3.65	0.81	4	Medium
7	The company has the ability to perform logical analysis and deep thinking.	3.56	0.97	7	Medium
8	The company provides full support for creativity and seizing opportunities.	3.64	0.89	5	Medium
9	The employees of the company are allowed access to information commensurate with their tasks.	3.48	0.92	9	Medium
10	The company has complete freedom in the process of planning and achieving competitive advantage.	3.5	0.84	8	Medium
	Entrepreneurial orientation	3.62	0.65		Medium

The mean of organizational effectiveness is 3.65. According to Table 6, the mean for the variable "Productivity" was calculated to be 3.46. This indicates a high level of agreement among the respondents regarding this variable. Upon examining the individual item responses, it is evident that "Your organization can produce products and services on time" received the highest average rating (3.67). On the other hand, "Your organization is making efforts to improve production efficiency" received the lowest average rating (3.27).

The mean for the variable "Adaptation" was calculated to be 3.55. This indicates a high level of agreement among the respondents regarding this variable. Upon examining the individual item responses, it is evident that "Your organization has adjusted marketing strategies regularly" received the highest average rating (3.67). On the other hand, "Your organization has to adjust according to the needs of customers" received the lowest average rating (3.41). The mean for the variable "Resource optimization" was calculated to be 3.73. This indicates a high level of agreement among the respondents regarding this variable. Upon examining the individual item responses, it is evident that "Various departments within the organization have integrated the use of resources" received the highest average rating (3.85). On the other hand, "Your organization focuses on the savings by reducing costs" had the lowest average rating (3.6). The mean for the variable "Stability" was calculated to be 3.70. This indicates a high level of agreement among the respondents regarding this variable. Upon examining the individual item responses, it is evident that "Your organization has the ability to develop products and

services to create business security for the organization" received the highest average rating (3.83). On the other hand, "Your organization is stable and able to compete with competitors" received the lowest average rating (3.57). This indicates that industrial SMEs in Jordan seek to enhance organizational effectiveness in all its dimensions by improving their productivity in addition to the products and services they provide and adopting new strategies that are compatible with developments in the external environment.

Table 6: Descriptive statistics – mean and standard deviations of the organizational effectiveness dimensions

No.	Items	Mean	SD	Rank	Importance
11	Your organization is making efforts to improve production efficiency.	3.27	0.97	5	Medium
12	Your organization can produce products and services on time.	3.67	0.81	1	High
13	Internal and external customers are satisfied with the services of the organization.	3.42	0.95	4	Medium
14	Your organization can produce products/services to meet the needs of customers.	3.46	0.91	3	Medium
15	The production of products/services of your organization provides good results.	3.5	0.88	2	Medium
	Productivity	3.46	0.73		Medium
16	Your organization can adapt to the environment well.	3.52	0.82	4	Medium
17	Your organization has adjusted the image of the organization all the time.	3.53	0.88	3	Medium
18	Your organization has to adjust according to the needs of customers.	3.41	0.98	5	Medium
19	Your organization has adapted to meet technological changes.	3.65	0.86	2	Medium
20	Your organization has adjusted marketing strategies regularly.	3.67	0.79	1	High
	Adaptation	3.55	0.72		Medium
21	Your organization endeavors to optimize most of its resources.	3.76	0.84	2	High
22	Your organization focuses on the savings by reducing costs.	3.6	0.82	5	Medium
23	Various departments within the organization have integrated the use of resources.	3.85	0.75	1	High
24	Your organization attaches great importance to the use of resources for the greatest benefit.	3.77	0.79	3	High
25	Your organization can reduce unnecessary expenses.	3.7	0.79	4	High
	Resource optimization	3.73	0.68		High

26	Your organization has made great efforts to provide stability to the organization.	3.75	0.78	2	High
27	Your organization is stable and able to compete with competitors.	3.57	0.83	5	Medium
28	You feel stable while working here.	3.65	0.74	4	Medium
29	Your organization has the ability to develop products and services to create business security for the organization.	3.83	0.75	1	High
30	Executives have the potential and the ability to create business security for the organization.	3.7	0.69	3	High
	Stability	3.7	0.61		High

6. Hypothesis

To test the first main hypothesis, a regression analysis was performed. We used regression model to be able to describe the correlation between the dependent and independent variable. Also regression can show the percentage value of the dependent affected by Independent variable, to predict interpolation and the continuity.

The first main hypothesis of the study was as follows: "There is a statistically significant impact at the level of ($\alpha \le 0.05$) of EO on organizational effectiveness in Jordanian industrial companies."

Table 7: The Impact of Entrepreneurial Orientation on Organizational Effectiveness in Jordanian Industrial Companies

	Model summary		1.				ANOVA		Coefficients				
D.V.	R	\mathbb{R}^2	F	Sig F*	Variable	В	Standard error	Т	Sig T*				
Organizational effectiveness	0.870	0.756	151.106	0.00	Entrepreneur-ial orientation	0.474	0.052	9.136	0.00				

^{*}The effect is statistically significant at the level ($\alpha \le 0.05$)

It is clear from Table 7 that there is a positive, statistically significant impact of EO on organizational effectiveness. The value of the correlation coefficient was 0.870, and the value of determination was 0.756, which indicates that EO explained 75.6% of the change for organizational effectiveness, and the significance of the model is clear from the table as well, where the calculated F value amounted to 151.106 and the significance level (Sig F = 0.00) is less than 0.05. It appears from the coefficients table that the value of (B) for the entrepreneurial orientation reached (0.474) and that the value of (t) was (9.136) with statistical significance reaching (0.000), which indicates that the effect of this dimension is significant.

H1.1: There is a statistically significant effect at the level ($\alpha \le 0.05$) of EO on improving productivity in Jordanian industrial companies.

Table 8: The Impact of Entrepreneurial Orientation on Improving Productivity in Jordanian Industrial Companies

D.V. Model summary		ANOVA		Coefficients					
D.v.	R	R ²	F	Sig F*	Variable	В	Standard error	Т	Sig T*
Productivity	0.826	0.682	424.145	0.00	Entrepreneurial orientation	0.74	0.036	20.59	0.00

^{*}The effect is statistically significant at the level ($\alpha \le 0.05$)

It is clear from Table 8 that there is a positive, statistically significant impact of EO on productivity. The value of the correlation coefficient was 0.826, and the value of determination was 0.682, which indicates that EO explained 68.2% of the change for productivity, and the significance of the model is clear from the table as well, where the calculated F value amounted to 424.145 and the significance level (Sig F = 0.00) is less than 0.05. It appears from the coefficients table that the value of (B) for the entrepreneurial orientation reached (0.74) and that the value of (t) was (20.59) with statistical significance reaching (0.000), which indicates that the effect of this dimension is significant

H1.2: There is a statistically significant effect at the level ($\alpha \le 0.05$) of EO on adaptation in Jordanian industrial companies.

Table 9: The Impact of EO on Adaptation in Jordanian Industrial Companies

D.V.	Model summa		ANOVA		Coefficients				
D.V.	R	\mathbb{R}^2	F	Sig F*	Variable	В	Standard error	Т	Sig T*
Adaptation	0.791	0.626	331.925	.000	Entrepreneurial orientation	0.719	0.039	18.219	0.00

^{*}The effect is statistically significant at the level ($\alpha \le 0.05$)

It is clear from Table 9 that EO has a positive, statistically significant impact on adaptation. The value of the correlation coefficient was 0.791, and the value of determination was 0.626, which indicates that EO explained 62.6% of the change for adaptation, and the significance of the model is clear from the table as well, where the calculated F value amounted to 331.925 and the significance level (Sig F = 0.00) is less than 0.05 It appears from the coefficients table that the value of (B) for the entrepreneurial orientation reached (0.719) and that the value of (t) was (18.219) with statistical significance reaching (0.000), which indicates that the effect of this dimension is significant.

To test the third sub-hypothesis, **H1.3**: There is a statistically significant effect at the level ($\alpha \le 0.05$) of EO on resource optimization in Jordanian industrial companies, a simple linear regression analysis was conducted.

Table 10: The Impact of Entrepreneurial Orientation on Resource Optimization in Jordanian Industrial Companies

D.V.	Model summa		ANOVA	1	Coefficients				
	R	R ²	F	Sig F*	Variable	В	Standard error	Т	Sig T*
Resource optimization	0.707	0.5	198.22	0.00	Entrepreneurial orientation	0.683	0.049	14.079	0.00

^{*}The effect is statistically significant at the level ($\alpha \le 0.05$)

It is clear from Table 10 that there is a positive, statistically significant impact of EO on resource optimization. The value of the correlation coefficient was 0.707, and the value of determination was 0.5, which indicates that EO explained 5% of the change for resource optimization, and the significance of the model is clear from the table as well, where the calculated F value amounted to 198.22 and the significance level (Sig F = 0.00) is less than 0.05. It appears from the coefficients table that the value of (B) for the entrepreneurial orientation reached (0.683) and that the value of (t) was (14.079) with statistical significance reaching (0.000), which indicates that the effect of this dimension is significant.

A test was also carried out for the fourth sub-hypothesis, **H1.4**: There is a statistically significant effect at the level ($\alpha \le 0.05$) of EO on improving stability in Jordanian industrial companies.

Table 11: The Impact of Entrepreneurial Orientation on Improving Stability in Jordanian Industrial Companies

D.V.	Model summary		ANOVA		Coefficients				
	R	\mathbb{R}^2	F	Sig F*	Variable	В	Standard error	Т	Sig T*
Stability	.652a	0.425	146.441	.000ь	Entrepreneuria l orientation	0.701	0.058	12.101	0.00

^{*}The effect is statistically significant at the level ($\alpha \le 0.05$)

It is clear from Table 11 that there is a positive, statistically significant impact of EO on stability. The value of the correlation coefficient was 0.701, and the value of determination was 0.425, which indicates that EO explained 42.5% of the change for stability, and the significance of the model is clear from the table as well, where the calculated F value amounted to 146.441 and the significance level (Sig F = 0.00) is less than 0.05. It appears from the coefficients table that the value of (B) for the entrepreneurial orientation reached (0.701) and that the value of (t) was (12.101) with statistical significance reaching (0.000), which indicates that the effect of this dimension is significant.

7. Discussion

The primary aim of this study was to understand how EO can impact organizational effectiveness and investigate this impact of entrepreneurial orientation on organizational effectivness in Jordanian industrial enterprises. There has been limited focus on this subject in previous studies, especially in relation to the Arab world and Jordan. By using our research model, the study sought to elucidate the impact of entrepreneurial orientation on organizational effectivness. The research succeeds in shedding

new light on this critical feature of management, underlining the future benefits that it will offer to industrial companies.

Moreover, the findings of the study provide a valuable path for managers and those who are seeking to improve their business environmental culture and enhance its effectiveness for competitive advantage by enhancing its entrepreneurial orientation. The study emphasizes the importance of upcoming and future research in this field and calls for greater attention to be paid to the role of entrepreneurial orientation in shaping companies' strategies connected with culture. Ultimately, the study's contribution to the field of management lies in its ability to provide a roadmap for organizations seeking to leverage entrepreneurial orientation to enhance their internal and external environment, maintain their leadership position, and remain competitive in the labor market.

The results showed that EO has a statistically significant positive effect on organizational effectiveness, as entrepreneurial orientation accounted for 75.6% of the change for organizational effectiveness. This finding has been supported by a number of studies, such as those by Rezaei and Ortt (2018) except the risk taking dimension. Also EO was supported by Drobyazko et al. (2019) towards effectiveness. Results also showed that EO has a an effect on productivity, accounting for 68.2% of the variability in productivity, as noted by numerous researchers, such as Politis (2015), Prasetyo (2019), and Rico and Cabrer-Borrás (2019) that the effect is significant and indicated important. Conversely with Cho et al., 2022; Mathafena &Msimango (2023) who found no significant impact for EO towards organizational effectiveness. The Results also indicated that EO also has an impact on adaptation, accounting for 62.6% of the variance in adaptation. This finding also aligns with previous research. Notably, EO also yields a statistically significant effect on resource optimization, explaining 5% of the variance, as observed in studies by Choi et al. (2020) and Xiaobao et al. (2022). Lastly, the result showed that EO significantly influences stability, elucidating 42.5% of the variability in stability. This finding has been supported by McKenny et al. (2018) and Manzano-Garcia and Ayala-Calvo (2020).

8. Conclusion

The study reveals that entrepreneurial orientation has a significant positive effect on multiple aspects of organizational effectiveness for Jordanian industrial SMEs. The results align with expectations and imply that fostering entrepreneurial behaviors and processes can strengthen SME competitiveness and success in a challenging developing economy environment. The findings suggest managers of SMEs should promote entrepreneurial practices including risk-taking, innovativeness, proactiveness, and autonomy to improve outcomes. However, further research should investigate potential mediating and moderating factors between entrepreneurial orientation and effectiveness.

9. Recommendation

According to the obtained results the researchers provide a set of recommendations:

Benefiting from the entrepreneurial orientation in achieving the maximum amount of organizational effectiveness by providing adequate support, developing and training employees and urging them to lead so that they can be creative and innovative, which is reflected in proactiveness, exploiting available opportunities, and adopting risks, in addition to constantly developing services and products in a way that suits the needs of the market and exceeds their expectations. Relentless striving to constantly enhance organizational effectiveness by exploiting the company's resources by training employees to keep pace with technological developments to increase productivity, improve business outcomes, reduce waste and duplication of work, and continuously update the company's material and technological resources in a way that is compatible with developments in the business environment.

10. Limitation of the Study and Future Research

This study has limitations as a convenience sample was used for ease of conducting, and therefore its results cannot be generalized. Therefore, it is necessary to conduct more experimental studies on the

current variables using random samples so that we can generalize their results to other societies and sectors. While this study focused specifically on Jordanian industrial SMEs, future studies can build on the research model to assess different contexts. Overall, the study expands the knowledge in the scope of entrepreneurial and makes an important empirical contribution on utilizing entrepreneurial orientation to enhance SME performance and competitiveness in SMEs in Jordan. In our study we revealed that entrepreneurial orientation has a significant impact on productivity variable in Jordan, so it provided how entrepreneurial can make a significant impact on organizations' performance that includes the organizational functions. Future study can also examine EO by specifying on function and measure its productivity.

References

ABOU SAIF, J. O. M. A. H. (2023). Entrepreneurial orientation and firm performance in SMEs: The case of Jordan.

Ali, G. A., Hilman, H., & Gorondutse, A. H. (2020). Effect of entrepreneurial orientation, market orientation and total quality management on performance: Evidence from Saudi SMEs. Benchmarking: An International Journal, 27(4), 1503-1531.

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

Al-Mamary, Y. H., Alwaheeb, M. A., Alshammari, N. G. M., Abdulrab, M., Balhareth, H., & Soltane, H. B. (2020). The effect of entrepreneurial orientation on financial and non-financial performance in Saudi SMES: a review. Journal of Critical Reviews, 7(14), 270-278.

Al-Mamary, Y. H., Alwaheeb, M. A., Alshammari, N. G. M., Abdulrab, M., Balhareth, H., & Soltane, H. B. (2020). The effect of entrepreneurial orientation on financial and non-financial performance in Saudi SMES: a review. Journal of Critical Reviews, 7(14), 270-278.

Androwis, N., Sweis, R. J., Tarhini, A., Moarefi, A., & Hosseini Amiri, M. (2018). Total quality management practices and organizational performance in the construction chemicals companies in Jordan. Benchmarking: An International Journal, 25(8), 3180-3205.

Arnett, D. B., Sandvik, I. L., & Sandvik, K. (2018). Two paths to organizational effectiveness–Product advantage and life-cycle flexibility. *Journal of Business Research*, 84, 285-292.

Basu, S., Munjal, S., Budhwar, P., & Misra, P. (2022). Entrepreneurial adaptation in emerging markets: Strategic entrepreneurial choices, adaptive capabilities and firm performance. British Journal of Management, 33(4), 1864-1886.

Bouhalleb, A., & Tapinos, E. (2023). The impact of scenario planning on entrepreneurial orientation. Technological Forecasting and Social Change, 187, 122191.

Butkouskaya, V., Llonch-Andreu, J., & Alarcón-del-Amo, M. D. C. (2020). Entrepreneurial orientation (EO), integrated marketing communications (IMC), and performance in small and medium-sized enterprises (SMEs): gender gap and inter-country context. Sustainability, 12(17), 7159.

Chienwattanasook, K., & Jermsittiparsen, K. (2019). Influence of entrepreneurial orientation and total quality management on organizational performance of pharmaceutical SMEs in Thailand with moderating role of organizational learning. Systematic Reviews in Pharmacy, 10(2), 223-233.

Cho, C., Kim, B., & Oh, S. (2022). Effects of the entrepreneurial strategic orientation of social enterprises on organizational effectiveness: Case of South Korea. Administrative Sciences, 12(1), 19.

- Choi, S. B., Lee, W. R., & Kang, S. W. (2020). Entrepreneurial orientation, resource orchestration capability, environmental dynamics and firm performance: A test of three-way interaction. Sustainability, 12(13), 5415.
- Covin, J. G., & Miller, D. (2014). International entrepreneurial orientation: Conceptual considerations, research themes, measurement issues, and future research directions. Entrepreneurship Theory and Practice, 38(1), 11-44.
- Doh, J. P., Tashman, P., & Benischke, M. H. (2019). Adapting to grand environmental challenges through collective entrepreneurship. Academy of management perspectives, 33(4), 450-468.
- Drobyazko, S., Barwińska-Małajowicz, A., Ślusarczyk, B., Zavidna, L., & Danylovych-Kropyvnytska, M. (2019). Innovative entrepreneurship models in the management system of enterprise competitiveness. Journal of Entrepreneurship Education, 22(4), 1-6.
- Drobyazko, S., Hryhoruk, I., Pavlova, H., Volchanska, L., & Sergiychuk, S. (2019). Entrepreneurship innovation model for telecommunications enterprises. Journal of Entrepreneurship Education. 2019. Vol. 22, Issue 2.
- Ferreira, J., Coelho, A., & Moutinho, L. (2020). Dynamic capabilities, creativity and innovation capability and their impact on competitive advantage and firm performance: The moderating role of entrepreneurial orientation. Technovation, 92, 102061.
- Ferreira, J., Coelho, A., & Moutinho, L. (2020). Dynamic capabilities, creativity and innovation capability and their impact on competitive advantage and firm performance: The moderating role of entrepreneurial orientation. Technovation, 92, 102061.
- Khan, C. B. A., & Ahmed, R. (2019). Organizational culture and entrepreneurial orientation: Mediating role of entrepreneurial leadership. Business & Economic Review, 11(4), 149-178.
- Kulachai, W., Vuttivoradit, S., Tedjakusuma, A. P., & Homyamyen, P. (2021). Organizational Effectiveness: A Second-order Confirmatory Factor Analysis.
- Kusa, R., Duda, J., & Suder, M. (2021). Explaining SME performance with fsQCA: The role of entrepreneurial orientation, entrepreneur motivation, and opportunity perception. Journal of Innovation & Knowledge, 6(4), 234-245.
- Ladib, N. B. R. (2015). Effects of capacity knowledge management and entrepreneurial orientation on organizational effectiveness in the best tunisian companies: Moderating role of social capital. Journal of Knowledge Management, Economics and Information Technology, 5(1), 1-34.
- Lee, A., Legood, A., Hughes, D., Tian, A. W., Newman, A., & Knight, C. (2020). Leadership, creativity and innovation: A meta-analytic review. European Journal of Work and Organizational Psychology, 29(1), 1-35.
- Manzano-Garcia, G., & Ayala-Calvo, J. C. (2020). Entrepreneurial orientation: Its relationship with the entrepreneur's subjective success in SMEs. Sustainability, 12(11), 4547.
- Masa'deh, R. E., Al-Henzab, J., Tarhini, A., & Obeidat, B. Y. (2018). The associations among market orientation, technology orientation, entrepreneurial orientation and organizational performance. Benchmarking: An International Journal, 25(8), 3117-3142.
- Masa'deh, R. E., Al-Henzab, J., Tarhini, A., & Obeidat, B. Y. (2018). The associations among market orientation, technology orientation, entrepreneurial orientation and organizational performance. Benchmarking: An International Journal, 25(8), 3117-3142.

McKenny, A. F., Short, J. C., Ketchen Jr, D. J., Payne, G. T., & Moss, T. W. (2018). Strategic entrepreneurial orientation: Configurations, performance, and the effects of industry and time. Strategic Entrepreneurship Journal, 12(4), 504-521.

Mathafena, R. B., & Msimango-Galawe, J. (2023). Entrepreneurial orientation, market orientation and opportunity exploitation in driving business performance: moderating effect of interfunctional coordination. Journal of Entrepreneurship in Emerging Economies, 15(3), 538-565.

Politis, J. D. (2015). Entrepreneurial Orientation, Creativity, and Productivity: The influence of self-leadership strategies. Management, 3(7-8), 203-213.

Prasetyo, P. E. (2019). The reliability of entrepreneurial productivity as driver of economic growth and employment. International Journal of Entrepreneurship, 23(4), 1-15.

Rezaei, J. and Ortt, R. (2018), "Entrepreneurial orientation and firm performance: the mediating role of functional performances", Management Research Review, Vol. 41 No. 7, pp. 878-900. https://doi.org/10.1108/MRR-03-2017-0092

Ribeiro-Soriano, D. (2017). Small business and entrepreneurship: their role in economic and social development. Entrepreneurship & Regional Development, 29(1-2), 1-3.

Rico, P., & Cabrer-Borrás, B. (2019). Entrepreneurial capital and productive efficiency: The case of the Spanish regions. Technological and Economic Development of Economy, 25(6), 1363-1379.

Sahi, G. K., Gupta, M. C., Cheng, T. C. E., & Lonial, S. C. (2019). Relating entrepreneurial orientation with operational responsiveness: Roles of competitive intensity and technological turbulence. International Journal of Operations & Production Management.

Sandri, S., Hussein, H., & Alshyab, N. (2020). Sustainability of the energy sector in Jordan: Challenges and opportunities. Sustainability, 12(24), 10465.

Santos-Vijande, M. L., López-Sánchez, J. Á., Loredo, E., Rudd, J., & López-Mielgo, N. (2022). Role of innovation and architectural marketing capabilities in channelling entrepreneurship into performance. Journal of Innovation & Knowledge, 7(2), 100174.

Sari, N., & Maifizar, A. (2023). Implementation of The Village Community Development and Empowerment Program through Priorities of the Use of Village Funds in the Coastal Area, Aceh Barat Regency. *Jurnal Sosiologi USK (Media Pemikiran & Aplikasi)*, 17(1), 172-180.

Sarid, A. (2021). Crossing boundaries: Connecting adaptive leadership and social justice leadership for educational contexts. *International Journal of Leadership in Education*, 1-22.

Sekaran, U., & Bougie, R. (2019). Research methods for business. John Wiley & Sons, Incorporated.

Thurik, R., & Wennekers, S. (2004). Entrepreneurship, small business and economic growth. Journal of small business and enterprise development, 11(1), 140-149.

Tuan Luu, T. (2017). Ambidextrous leadership, entrepreneurial orientation, and operational performance: Organizational social capital as a moderator. Leadership & Organization Development Journal, 38(2), 229-253.

Xiaobao, P., Rui, G., Jiewei, Z., & Xiaofan, S. (2022). The impact of resource bricolage on entrepreneurial orientation in start-ups: the moderating roles of TMT heterogeneity and TMT behavioral integration. Frontiers in Psychology, 13, 900177.

Yoo, Y. S., Kim, M. S., & Noh, S. Y. (2020). A latent profile analysis of job performance types based on task performance, contextual performance and counterproductive work behavior. Journal of the Korea Academia-Industrial cooperation Society, 21(4), 145-155.