

Entrepreneurial Orientation and Firm Performance in Algerian Small and Medium Enterprises

Dr. Arabeche Zina¹, Fattouche Soumeiya², Djafar Henni Mohamed³

¹Member of LAPDEC Laboratory, University of Mascara. Algeria University Center Ahmed Zabana of Relizane, Algeria

²Ph.D. Student, University of Muhamed Khidher -Biskra,Algeria

³Institute of Economic, Commercial and Management Sciences, University of Ghilizane, Mestghanim, Algeria

Abstract

Many researches ,all over the world, have studied entrepreneurial orientation , many of them adoptedCovin and Slevin (1989) dimensions and focused on Small and Medium Sized Enterprises (SMEs). This study aims to examine the relationship between entrepreneurial orientation (EO) and firm performance in a sample of 101 Algerian SMEs. According to Covin and Slevin (1989), OE is described as a strategic position characterized by three dimensions: innovativeness, proactiveness and risk-taking. The results of the study indicate that entrepreneurial orientation is positively related to firm performance. This result is due to the willingness to innovate, to take risks, and to be more proactive than competitors entailing to improve their performance.

Keywords: Entrepreneurial Orientation (EO), firm performance, risk-taking, innovation, proactiveness, Algerian SMEs.

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I. INTRODUCTION

Small and Medium Enterprises (SMEs') have been the backbone of economic growth. SMEs have become an important source of employment in most countries, especially for new jobs and a major source of technological innovation and new products, essential for a competitive and efficient market, critical for poverty reduction (Thottoli, Thomas, & Ahmed, 2019a; Abdul Razak& Othman, 2012). SMEs also act as a supplier of goods and service to large organizations. Most SMEs have been characterized as dynamic, innovative, efficient and their small size allows for flexibility, immediate feedback, short decision-making chain, better understanding and quicker response to customer need (Thottoli, & Ahmed, 2021; Mahmood & Hanafi, 2013).

It has become increasingly uncertain for firms to maintain continuous cash flow by relying upon existing lines of business, as business environment becomes more complex and dynamic (Alabdullah, 2020). Where product and business model life cycles are shortened, and where the future profit streams from existing operations are uncertain and businesses need to constantly seek out new opportunities (Wang, 2008). Firms have to foster entrepreneurship to seize opportunities and to obtain sustainable competitive advantages (Ahmed, Rahim, Alabdullah, & Thottoli, 2019b; Yao, Wen, & Ren, 2009). This business environment requires a firm to regularly innovate, take risk into account, to be proactive in order to maintain or find a new position in the market place (Alharbi, Yahya, & Ahmed, 2018; Thottoli, Thomas, & Ahmed, 2019). The characteristics and motivations of small firm owner-managers have considerable influences on the performance of their firms. (Wang, 2008; Ahmed, Islam, Alabdullah, & bin Amran, 2018) posits that EO is important for firm performance. Other research suggests that entrepreneurial firms may benefit more from imitation than from high levels of innovativeness. (Lumpkin & Dess, 1996). In summary, the results of many studies indicate the positive relationship between EO and performance. Cited in (Kosa, Mohammad, & Ajibie, 2018)

The phenomenon of an entrepreneurial orientation (EO)- as a driving force behind the organizational pursuit of entrepreneurial activities- has become a central focus of the entrepreneurship literature and the subject of more than 30 years of research (Covin& Wales, 2012). Both from a theoretical and empirical point of view (Peris-Ortiz & Navarro-García, 2015). Moreover, has recently been recognized as one of the most important factors for a firm's growth and profitability (Rahim, Ahmed, & Faeq, 2018; Thottoli, Thomas, & Ahmed, 2019c; Rahim, Ahmed, Sarkawi, Jaaffar, & Shamsuddin, 2019). Hence, growth can be associated with innovativeness, pro-activeness and risk-taking behavior of the firm, which refers to an entrepreneurial orientation (EO) dimension (Zainol & Ayadurai, 2011).

Entrepreneurial orientation (EO) refers to "the processes, practices, and decision-making activities that lead to new entry" (Lumpkin & Dess, 1996) . EO is revealed through firm-level characteristics as summarized by

(Miller, 1983) as follows: "An entrepreneurial firm is one that engages in product-market innovation, undertakes somewhat risky ventures, and is first to come up with 'proactive' innovations, beating competitors to the punch."

The significance of EO lies in its potential to help the firm's top management to delineate the purpose of the organization, sustain firm's vision and formulate a way to achieve competitive advantage over competitors (Al Mamun, Kumar, Ibrahim, & Bin Yusoff, 2017). Some scholars agreed that entrepreneurial orientation is a significant contributor to a firm's success and contributes to a healthier business performance (Mahmood&Hanafi , 2013) and (Zainol&Ayadurai, 2011). Provided evidences that firms with higher entrepreneurial orientation tend to have superior performance (Noordin, Othman, &Kassim, 2018).

1. **Main question:** What is the relationship linkingentrepreneurial orientation and firm performance?
2. **Sub-questions:** We have developed a set of sub-questions to support the larger area of focus on entrepreneurial orientation elements and their relationship with firm performance.
 - ❖ **The first sub-question:** What is the relationshiplinkinginnovativeness and firm performance?
 - ❖ **The second sub-question:** What is the relationship linkingproactiveness and firm performance?
 - ❖ **The third sub-question:** What is the relationship linkingrisk-taking and firm performance?

II. THEORETICAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

1. **The main characteristics of Small and medium-sized enterprises:** Small businesses are easier to describe than to define as follows: (Bums & Dewhurst, 1996)
 - ❖ In economic terms, a small firm is one that has a relatively *small share of its market*.
 - ❖ It is managed by its owners or part owners in a *personal way*, and not through the medium of a formal listed management structure.
 - ❖ It is independent in the sense that it is not apart form of a larger enterprise and that the owner/managers should be *free from outside control* in taking their principal decisions.

2. International definitions of small and medium-sized enterprises:

2.1. The European Commission: the European Commission (2017) defines SMEs based on two variables; the number of employees and the turnover or balance sheet. Within this group, firms can be either small or medium. Small firms have approximately between 10-50 and a turnover and balance sheet below 10 million euros. Medium enterprises have about 50-250 employees and a turnover below 50 million euros, alternatively a balance sheet below 43 million euros. In order to be qualified as an SME both criteria should be fulfilled. SMEs comprise a wide range of firms, thus it is common that they belong to a group, under the group's name there are several firms, which can be in different sizes and industries , so SMEs can be found in these types of groups (Eurostat, 2017; Alabdullah et al., (2018), Alabdullah et al., (2020a), Alabdullah, & Ahmed, (2020b). The authors have also established to accept such SMEs, however only those that are independent. Hence, those SMEs that manage their finance, HR and operations by themselves. (Stoica, Ellinor, & Elsa, 2017)

2.2. The World Bank: defines SMEs as follows: Small enterprise - up to 50 employees, total assets and total sales of up to US\$3 million; Medium enterprise - up to 300 employees, total assets and total sales of up to US\$15 million. (Salimzadeh, Jerry, &Raveendranath, 2013)

2.3. The Australian Bureau of Statistics: (ABS) defines an Australian small business as an actively trading business with 0-19 employees and a medium-sized business as an actively trading business with 20- 199 employees. Thus, the two common ways of defining an Australian small business is by annual turnover and the number of employees or a combination of the two. (Salimzadeh, Jerry, &Raveendranath, 2013)

2.4. Canada: in Canada a company is "small" if the number of employees is not more than 50 employees for a service company, or not more than 100 employees for a goods-producing company and above these sizes, and up to 500 employees, a firm is considered medium-sized. (Baleseng, 2015)

3. The definition of small and medium-sized enterprises in Algeria

The definition of small and medium-sized enterprises is summarized in the law 02-17 of 2017/01/10 containing the law of development of small and medium-sized enterprises where these enterprises are defined according to the articles 8, 9, 10. And the article 11 decrees that if the enterprise is categorized in a particular type according to the number of employees, and in another type according to its turnover or the total assets, the priority will be given to the standard of the turnover or the total assets. (Journal oficial 02, 2017)

❖ **Small and medium enterprises:** these enterprises, whatever their legal nature are defined as the enterprises that produce goods and services and employ between 1 and 250 employees and annual turnover does not exceed 4 billion Dinars or not exceeding the total annual assets 01 billion dinars with the accordance of independence standard.

❖ **Medium enterprise:** defined as an enterprise between 50 and 250 employees and the turnover between 400 million dinars and 40 billion dinars or the total annual assets between 200 million to 10 billion dinars

❖ **Small enterprise:** defined as an enterprise between 10 and 49 employees and annual turnover does not exceed 400 million dinars or the total annual assets do not exceed 200 million dinars.

❖ **Micro enterprise:** defined as an enterprise between 01 to 09 employees, and achieves a turnover of less than 40 million dinars, or the total annual assets do not exceed 20 million dinars.

4. Conceptualization of Entrepreneurial Orientation (EO)

Researchers agree that EO is a combination of three dimensions: innovativeness, proactiveness, and risk-taking behavior (Covin&Slevin, 1991) and (Wiklund, 1999). (Lumpkin &Dess, 1996) suggest that “EO refers to the processes, practices, and decision-making activities that lead to a new entry. ...” . It involves the intentions and actions of key players functioning in a dynamic generative process aimed at new-venture creation”.

(Miller & Friesen, 1982) posited that entrepreneurial firms “innovate boldly and regularly while taking considerable risks in their product-market strategies.” Adding the attribute of “proactivity,” (Miller, 1983) posited that a firm is entrepreneurial when it “engages in product-market innovation, undertakes somewhat risky ventures, and is first to come up with ‘proactive’ innovations, beating competitors to the punch.”

According to (Miller, 1983) theorists would not call a firm entrepreneurial if it changes its technology or product-line ... simply by direct imitating competitors while refusing to take any risks. Some proactiveness would be essential as well. By the same token, risk-taking firms that are highly leveraged financially are not necessarily considered entrepreneurial. They must also engage in product-market or technological innovation.

(Zucchella&Scabini, 2007) Suggests that organizations that have an EO are more able to see opportunities, take risks and exploit these opportunities, committing adequate resources.

4.1 Innovativeness: Schumpeter (1934) was one of the first authors to show its significance. In a company, the propensity to innovate reflects a tendency to engage in and maintain the process of generating ideas, creativity, development opportunities that can lead to the emergence of new products, new services, and new technologies. Cited in (Bchini, 2015)

Innovativeness, an attribute of the entrepreneur, refers to the willingness to try new methods, which differs from the existing, enthusiasm to bring on board new methods in the way the business is being operated, and the willingness to implement the innovative strategy (Ogunsiji&Kayode, 2010). Joseph Schumpeter has listed the innovation forms as follows: cited in (Brem, 2008).

The introduction of a good or a significant improvement in the quality of an existing good.

❖ The introduction of a new method of production, i.e. an innovation in processes.

❖ The opening of a new market, in particular an export market in a new territory.

❖ The conquest of a new source of supply of raw materials or half-manufactured goods.

❖ The creation of a new type of industrial organization, i.e. an administrative innovation.

4.2. Proactiveness: (Miller & Friesen, 1978) view proactiveness as changing the environment by introducing new products and technologies. (Venkatraman, 1989) Defined proactiveness as “seeking new opportunities which may or may not be related to the present line of operations, introduction of new products and brands ahead of competition, strategically eliminating operations which are in the mature or declining stages of life cycle”. (Lumpkin & Dess, 2001) explained it as perspective characteristic of a marketplace leader that has the foresight to act in anticipation of future demand and shape the environment. Moreover, proactiveness involves adopting initiatives in an effort to shape the environment to one's own advantage, while responsiveness involves being accommodative towards competitors' challenges. (Al Mamun, Kumar, Ibrahim, & Bin Yusoff, 2017)

In other words, firms are proactive when they shape their environments i.e. through the introduction of new products and services ahead of competitors, eliminating declining brands, entering new emerging markets ahead of competitors and identifying new opportunities. (Ogunsiji & Kayode, 2010) Translated to the level of the firm, proactive companies are leaders in the market, rather than followers. (Schillo, 2011)

4.3. Risk-taking: is associated with a willingness to commit large amounts of resources to projects where the cost of failure may be high (Miller & Friesen, 1978). It also involves a large amount of investment in a new technology and always sells new product or services in new market (Dess& Lumpkin, 2005). Also, firms have to take risk to obtain high financial returns by assuming high levels of debt, committing a large amount of firms' resources (Awang, ahmad, Said Asghar, &Subari, 2010). Entrepreneurs generally take more risks than non-entrepreneurs do. (Ogunsiji&Kayode, 2010)

5. Firm performance (FP) refers to the level of achievement of the business organization toward its goals: profit maximization (Alsulmani, Alkindi, & Ahmed, 2021; Alyaarubi, Alkindi, & Ahmed, 2021; Ahmed, 2020). Hence, sustainable profit maximization is associated with some measure items, which are sales growth, employment growth, gross profit, return on asset, return on investment, and return on sales (Al-Aamri, Al-musallami, Ahmed, & Qazi, 2021). Pratono and Mahmood, (2015) and Covin & Slevin, (1991) Defined "improved performance" defined in terms of a wide variety of organizational effectiveness criteria, a narrower financially based definition is proposed for the current model. A firm's economic performance is generally acknowledged to have two primary dimensions-growth and profitability (Gani, Rahbi, & Ahmed, 2021).

Therefore, efficiency, growth, and profit were the most commonly considered dimensions (Dess & Lumpkin, 2005).

6. Brief background of EO-performance relations

Previous studies have used different performance measures to find the link between EO and firm performance, including financial measures like profit growth, sales growth, and market share growth (Grünhagen, Wollan, Dada, & Watson, 2013).

Covin & Slevin, (1989) suggested that EO is related to performance among small firms in hostile environments. Lumpkin & Dess, (1996) have argued that firms benefit from highlighting newness, responsiveness, and a degree of boldness.

Covin & Slevin, (1991) have argued that some managers may feel compelled to adopt a more entrepreneurial style if they perceive that bold, entrepreneurial actions are needed to improve their firm's performance. Other top managers in poorly-performing firms may feel that risky, entrepreneurial actions are exactly what their firms must avoid. Likewise, it is conceivable that some top managers in high-performing firms may feel that the inherent risk of an entrepreneurial style will jeopardize their firm's performance, and should therefore be avoided. Other top managers in high-performing firms may feel that an entrepreneurial style is a key to their success (Shaharudin, Fernando, Ahmed, & Shahudin, 2020).

Wiklund, (1999) Suggested that seeking to increase EO may be worthwhile for small firms because a positive relationship has been identified between EO and firm performance. He examined the sustainability of the relationship between EO and firm performance. He analyzed the data from small Swedish firms and found a positive relationship between EO and firm performance. Where firms monitor market changes and respond quickly, thus capitalizing on emerging opportunities. Innovation keeps them ahead of their competitors, gaining a competitive advantage that leads to improved financial results. Proactiveness gives firms the ability to present new products/services to the market ahead of competitors, which also gives them a competitive advantage.

(Rauch, Wiklund, Lumpkin, &Frese, 2009), have argued that corporations' profit streams are under constant threat given the general tendency in today's business toward shorter product and business model life cycles. In these circumstances, EO can boost firms' profitability by ensuring that they constantly seek new opportunities, which enable firms to create first-mover advantages, charge premium prices, and skim the top of the market ahead of their competitors. Also (Rauch, Wiklund, Lumpkin, &Frese, 2009) viewed EO as the entrepreneurial strategy-making processes that key decision makers use to enact their firm's organizational purpose, sustain its vision, and create competitive advantage(s).

(Gupta & Gupta, 2014) Argued that Firms with a strong EO create a substantial advantage and differentiation over their competition, facilitating both market share and profitability.

A firm needs to adopt an entrepreneurial orientation (EO) pro-actively in terms of continuous innovation to counteract the adverse impact of shortening product life cycle and innovative efforts of the competitor at the far corners of the world. While lacking the benefits of perfect information about the emerging opportunities and also lacking the knowledge of how markets would actually behave in the near future. Such innovativeness and pro-activity in dealing with an uncertain market behavior entail risk and risk-taking, although it may also give rise to a potent strategic posture, enhancing the firm's competitiveness and having a positive impact on performance. (Etemad, 2015)

In addition to the results of many previous studies repeatedly and constantly demonstrate a positive relationship between EO and firm like (Lee & Lim, 2009) ; (Yao, Wen, &Ren, 2009) ; (Fairoz, Hirobumi, & Tanaka, 2010) ; (Zainol&Ayadurai, 2011) ; (Mahmood&Hanafi , 2013) ; (Arief&Thoyib, 2013) ; (Pratono&Mahmood, 2015) ; (Khedhaouria, Gura'u, & Torre's, 2015) ; (Kosa, Mohammad, &Ajibie, 2018). Based upon these findings, we hypothesize as follows:

- ❖ **Main Hypothesis:** Entrepreneurial orientation is positively related to Firm Performance
- ✓ **The first sub-hypothesis:** Innovativeness is positively related to Firm Performance
- ✓ **The second sub-hypothesis:** Proactivity is positively related to Firm Performance
- ✓ **The third sub-hypothesis:** Risk-taking is positively related to Firm Performance

III. METHODOLOGY

1. Data Collection and Sampling

In Algeria, data collection is very problematic. Researchers face a number of obstacles, including the distrust of mail surveys. To overcome this obstacle, we conducted face-to-face interviews to collect data using structured questionnaires.

We have chosen a sample of 180 owners/managers of Algerian small and medium-sized enterprises, the surveyed enterprises were selected from the database developed by the Ministry of Industry and Mines. We focused on firms working in the manufacturing sector. Out of these firms, the responses of 101 questionnaires were validated and analyzed. With a response rate of 56.11%.

2. Questionnaire Development

The original questionnaire was first developed in English. It was then translated into French. There were three sections in the questionnaire. The first part (A) consists respondent’s and firm’s profiles. The second part (B) consists the questions relative to EO, while the last part (C) includes the questions of measuring Firm performance.

The measures of this research paper were adopted and validated by many previous studies that have examined the relationship between the entrepreneurial orientation and firm performance, but we had adapted the questionnaire depending to the Algerian context.

2.1. Entrepreneurial Orientation (EO): EO was measured with a questionnaire widely used and validated in prior research (e.g., (Covin&Slevin, 1989); (Miller & Friesen, 1982) ; (Rauch, Wiklund, Lumpkin, &Frese, 2009) evaluating the firm’s emphasis on innovation, risk-taking and pro-activity. In our paper, we used these three dimensions of EO by using five point Likert scale (5=strongly agree and 1= strongly disagree). The alpha reliability of the scale is 0.858.

Table 01. Measuring the components of Entrepreneurial Orientation

EO Component	Typical Assessment Items
Innovativeness (innov)	<input type="checkbox"/> In general, the top managers in my firm favour a strong emphasis on R&D, technological leadership and innovation <input type="checkbox"/> How many lines of products or services has your firm marketed in these last years ? - Very many new lines of products or services. - Changes in product or service lines have usually been quite dramatic <input type="checkbox"/> My firm prefers to design its own unique new processes and methods of production
Risk-taking (RT)	<input type="checkbox"/> My firm usually has a strong proclivity for high risk projects (with chances of very high returns) <input type="checkbox"/> Owing to the nature of the environment, bold wide-ranging acts are necessary to achieve the firm’s objectives.
Proactiveness (Pro)	<input type="checkbox"/> In dealing with competitors, my firm usually initiates actions which competitors then respond to. <input type="checkbox"/> In dealing with competitors, my firm is very often the first business to introduce new products/services, administrative techniques, operating technologies, etc. <input type="checkbox"/> In general, the top managers of my firm have a strong tendency to be ahead of others in introducing novel ideas or products

Source: Covin, J. G., & Wales, W. J. (2012). “The Measurement of Entrepreneurial Orientation. Entrepreneurship”: Theory & Practice, 36(4), 677-702. Original Publication: Covin, J. G., &Slevin, D. P. (1989). Strategic management of small firms in hostile and benign environments. Strategic Management Journal, 10(1), 75-87.

2.2. Firm Performance: Several and huge studies have dealt with firm performance (Alabdullah, 2017; Ahmed et al., 2014; Ahmed et al., 2020; Ahmed et al., 2019; Ahmed et al., 2017; Alabdullah & Ahmed, 2020; Alabdullah et al, 2018; Abushammala et al, 2015; Ahmed et al., 2019; Ahmed et al., 2021; Alabdullah, 2016a; Ahmed et al., 2014;Alabdullah & Ahmed, 2019; Alabdullah, 2016a, 2016b, 2016c, 2016d; Ahmed et al., 2018; Alabdullah et al., 2014; Alabdullah et al, 2016; Ahmed, 2014; Ahmed et al., 2020; Alabdullah et al, 2020; Alabdullah et al, 2018; Alabdullah et al, 2019; Alabdullah et al, 2019; Alabdullah et al, 2020; Ahmed et al., 2018; Alabdullah et. Al. 2020; Almashhadani, 2020; Alabdullah et al., 2021; Almashhadani, 2021; Alabdullah & Ahmed, 2018; Alfadhl & Alabdullah, 2016; Alabdullah, 2019; Ahmed et al., 2020; Alabdullah, 2018; Ahmed et al., 2020; Ahmed et al., 2016; Alabdullah, 2021a, 2021b; Alabdullah et al, 2018; Alabdullah et al, 2021; Nor et al., 2020 Alfadhl & Alabdullah, 2013;; Ahmed et al., 2021; Essia, 2014 Alabdullah et al, 2014a, 2014b). (FP) our research was based on the study of (Murphy, Trailer, & Hill, 1996) to measured firm performance variable with three dimensions: efficiency, growth, and profit. Three items measured each dimension. The yearswers were obtained by using a Likert scale ranging from (1) too worse to (5) much better. The alpha reliability of the scale is 0.741. It is essential to emphasize that in our paper, we used the same plan of the yearswer to avoid confusion of respondents. It is a Likert scale of 5 points.

Table2:Measuring the components of Firm Performance

FP Component	Typical Assessment Items
Efficiency (Eff)	<input type="checkbox"/> My firm is usually satisfied with return on investment <input type="checkbox"/> My firm is usually satisfied with return on equity <input type="checkbox"/> My firm is usually satisfied with return on assets
Growth (Grw)	<input type="checkbox"/> My firm is usually satisfied with sale growth <input type="checkbox"/> My firm is usually satisfied with employee growth <input type="checkbox"/> My firm is usually satisfied with market share growth
Profit (Prf)	<input type="checkbox"/> My firm is usually satisfied with return on sales

- My firm is usually satisfied with net profit margin
- My firm is usually satisfied with gross profit margin

Source: Murphy, G. B., Trailer, J. W., & Hill, R. C. (1996). "Measuring performance in entrepreneurship research". *Journal of business research*, 36(1), 15-23.

IV. DATA ANALYSIS AND RESULTS

1. Respondents and Enterprises' Profile

One hundred one (101) surveys were analyzed. The characteristics of the respondents and the firms are found in Table 3. Approximately 80% of the sample members were male. Most of the respondents (67%) are between the age 41-50. Levels of education among respondents indicate that 33% having University degrees and 58% have advanced level qualifications.

According to the firm's profile, 48% are from the Food/ Agriculture sector, followed by Manufacturing (29%), Construction (17%), and 6% the least from services.

In term of size, the majority of the entrepreneurial firms are Medium enterprises constituting 77%, followed by Small enterprises with less than 50 employees, constituting 16%.

The age of the surveyed SMEs shows that 15 % of them are more than 5 years old, 28% have existed for more than 10 years, and finally 26% have existed for more than 20 years.

Table 3. Sample Profile

	Demographic characteristics	SMEs Algerian	
		Frequency	Percentage (%)
Gender	Male	81	80.19%
	Female	20	19.80%
Respondents 'age	30 - 40 years	20	19.80%
	41 - 50 years	67	66.33%
	> 50 years	14	13.86%
	Level of Education		
Firmage	Bachelard degree	11	10.89%
	Level qualifications	58	57.42%
	University degrees	32	31.68%
	1 - 5 years	4	3.96%
Number of Employees	6- 10 years	15	14.85%
	11 - 20 years	28	27.72%
	21 - 30 years	26	25.74%
	31 - 40 years	18	17.82%
	41 - 50 years	10	9.90%
	10 - 50	16	15.84%
	51- 100	35	34.65%
Field Business	101 - 200	41	40.59%
	201-300	09	8.91%
	Food/Beverages/Agriculture	48	47.52
	Manufacturing	29	28.71
	Building/Construction	18	17.82
	Services	06	5.94

Source: Results of the questionnaire using SPSS.V 21

2. TESTING OF HYPOTHESES: Pearson Correlation

The bivariate Pearson Correlation produces a sample correlation coefficient, *r*, which measures the strength and direction of linear relationships between pairs of continuous variables. By extension, the Pearson Correlation evaluates whether there is statistical evidence for a linear relationship among the same pairs of variables in the population, represented by a population correlation coefficient, ρ ("rho"). The Pearson Correlation is a parametric measure.

Table 4: hypothesis testing

Hypothesis	Results	Conclusion
Innov*FP	All Sig>0.05	<i>Hypothesis 1 refused</i>
RT1* Grw	Sig=0.006/coe=0.545	<i>Hypothesis 2 was supported</i>
Rt1*Prf	Sig=0.000/coe=0.678	
Rt2*Prf	Sig=0.001/coe=0.789	

Pro1*Eff	Sig= 0.000/coe=0.205	<i>Hypothesis 2 was supported</i>
Pro1*Grw	Sig=0.021/coe=0.452	
Pro1*Prf	Sig0.012/coe= 0.333	
Pro2*Grw	Sig= 0.028/coe=-0.122	
Pro2*Prf	Sig=-0.041/coe=-0.350	
Pro3*Eff	Sig0.002/coe= 0.422	
Pro*Grw	Sig= 0.030/coe=-0.243	

Source: Results of the questionnaire using SPSS.V 21

Despite some statistically significant links between EO- innovativeness and firm performance, however, most of the relationships between these two variables are insignificant.

The Algerian economic environment is more and more globalized and competitive, and in such a context, it seems vital for Algerian SMEs to boost their R&D and innovation efforts. This effort allows them to improve their competitiveness, develop new markets, achieve social responsibility or simply survive. Unfortunately, Algerian entrepreneurs do not innovate enough. According to the direct contact with them, the main reasons are:

- 1) Finance difficulties,
- 2) Weak collaboration with university research laboratories,
- 3) Weak orientation to internationalization,

The Algerian entrepreneur has a proactive attitude with the ambition to play a pioneering role within the company that allows performance to be achieved.

For hypothesis 2, our findings indicated support for the relationship between proactiveness and performance. Without a doubt, proactiveness contributes significantly to predict the performance of the Algerian firms.

We found that Algerian entrepreneurs practice proactive behaviors to achieve performance, respond to competition and environmental changes, overcome competitors, and to get new market shares.

V. DISCUSSIONS

This research paper aims to investigate the impact of EO on Algerian SMEs firm performance when such firms face a quite market uncertainty and instability. This study has consolidated the results found by the other authors, on the existence of a positive relationship between, entrepreneurial orientation and business performance.

So, in the Algerian context, we noted the existence of a particular entrepreneurial environment, mainly related to socio-economic and socio-cultural dimensions (informal economy and unemployment), routine administrative procedures, lack of funding, skills, and training...etc. Current changes such as: the decrease of the oil prices, political and economic changes requires from Algerian Government should be more interested of entrepreneurship.

The findings of this study suggest that in Algerian industrial context, business owners who posit a higher entrepreneurial orientation in terms of pro-activeness, and risk taking, will favor a higher entrepreneurial performance in the market. So the results of this study is very important, because the industrial sector in Algeria recently faced many organizational changes that require further administrative and regulatory procedures for new ventures.

In Algeria the main objective of the Ministry of Industry and Mining is to encourage the creation and the development of small and medium sized enterprises (SMEs), being the backbone of the national industrial fabric with programs and reforms to boost entrepreneurship. By taking a closer look at the results, we can summarize three major conclusions:

Firstly, there is a positive relationship between two dimensions of OE and firm performance of Algerian SMEs, which is working in the industrial sector. This finding contributes to a better comprehension of entrepreneurship and its influence on firm performance, but the experimental results are inconclusive; because the impact of the EO on performance is specific to context (Lumkin&Dess, 1996) and the liaison between EO and performance is linear.

Secondly, we found that two dimensions proactiveness, and risk taking define EO in Algerian SMEs. There is few significant relationship between innovativeness and performance, so we conclude that innovation is absent in Algerian SMEs.

Finally, we have applied a survey research in the three regions of Algeria (East, West, and North) to test our hypotheses. Even though the EO has been widely studied in developed economies, few researchers have been conducted in the emerging economies (e.g. Zhou & Lie, 2007)

Overall, this research contributes to the studies on entrepreneurial orientation in emerging countries; it joins a number of recent studies in this field.

VI. RESEARCH LIMITATIONS AND FUTURE DIRECTIONS

In the empirical phase, we faced some difficulties, during the distribution of the questionnaire:

- 1- The distribution of the final version to entrepreneurs of Algerian SMEs took up almost 6 months. We allocated 255 days for data collection.
- 2- The sample in the Algerian context relates to 03 regions, we were forced to visit some firms twice or three times often in order to meet the manager.
- 3- Some entrepreneurs refused to meet us. And they have justified their refusal by the lack of time, they also refused to give us information about their enterprises. Even though this information will be used in a scientific research and in spite of questionnaire anonymity.
- 4- The sample size was not large enough to test our hypotheses; this research should be replicated with a larger sample.

We suggest that future studies should investigate the relationship between the EO and firm performance with moderator variables (Ex: environment, manager characteristics, size of the firm). Additionally, we recommend taking cultural, situational and psychological factors into the relationship between the OE and performance firm. Finally, it might be interesting to test our hypotheses in a larger and more diversified sample affecting the Maghreb countries (Algeria-Tunisia-Morocco).

VII. CONCLUSION

In the theoretical part, our research enriches the knowledge of SMEs entrepreneurial orientation and firm performance, in emerging countries. In the same way, the present research makes it possible to explain the relationship between the entrepreneurial orientation and firm performance in the Algerian SMEs.

The importance of this study is not checking the practices of Algerian small and medium-sized enterprises, but it is necessary for Algerian SMEs to perform well through a strong entrepreneurial orientation.

Finally, we close this research paper. As we have seen in the theoretical part, research on the relationship of entrepreneurial orientation and firm performance in SMEs offers several important perspectives for development. We want to continue to collaborate in this field.

REFERENCES

- [1]. Abushammala, S. N., Alabdullah, T. T. Y., & Ahmed, E. R. (2015). Causal Relationship between Market Growth and Economic Growth. Comparison Study. *European Journal of Business and Management* 7(33).
- [2]. Ahmed, E. R., Alabdullah, T. T. Y., Ardhani, L., & Putri, E. (2021). The Inventory Control System's Weaknesses Based on the Accounting Postgraduate Students' Perspectives. *Journal of Accounting and Business Education*, 5(2), 1-8. DOI: <http://dx.doi.org/10.26675/jabe.v5i2.19312>.
- [3]. Ahmed, E. R., Islam, M. A., Alabdullah, T. T. Y., and bin Amran, A. (2018c). Proposed the pricing model as an alternative Islamic benchmark. *Benchmarking: An International Journal* 25, 2892–2912. doi: 10.1108/bij-04-2017-0077.
- [4]. Ahmed, E. R., Alabdullah, T. T. Y., Shaharudin, M. S., & Putri, E. (2020). Further Evidence on the Link between Firm's Control Mechanisms and Firm Financial Performance: Sultanate of Oman. *Journal of Governance and Integrity*, 4(1), 1-6.
- [5]. Ahmed, E. R., Alabdullah, T. Y., Islam, M. A., & Asmar, M. (2014) "Sukuk Legitimacy: A New Measurement Based on Content Analysis" 16th Malaysian Finance Association Conference in Sasana Kijang Central Bank of Malaysia, Kuala Lumpur, June 4-6, 2014.
- [6]. Ahmed, E. R., Alabdullah, T. T. Y., Thottoli, M. M., & Maryanti, E. (2020). Does Corporate Governance Predict Firm Profitability? An Empirical Study in Oman. *The International Journal of Accounting and Business Society*, 28(1), 127-143.
- [7]. Ahmed, E. R., Aiffin, K. H. B., Alabdullah, T. T. Y., & Zuqebah, A. (2016). Zakat and Accounting Valuation Model. *Journal of Reviews on Global Economics*, 5, 16-24.
- [8]. Ahmed, E. R., Islam, M. A., and Alabdullah, T. T. Y. (2017). The moderating role of Shariah supervisory board on sukuk pricing benchmark. *International Journal of Excellence in Islamic Banking and Finance* 6.
- [9]. Ahmed, E. R., Islam, A., Zuqibeh, A., & Alabdullah, T. T. Y. (2014). Risks management in Islamic financial instruments. *Advances in Environmental Biology*, 402-406.
- [10]. Ahmed, E. R., Islam, M. A., Alabdullah, T. T. Y., & Amran, A. B. (2019). A qualitative analysis on the determinants of legitimacy of sukuk. *Journal of Islamic Accounting and Business Research*, Vol. 10 No. 3, pp. 342-368.
- [11]. Ahmed, E. R., Alabdullah, T. T. Y & Shaharudin, M. S. (2020). Approaches to Control Mechanisms and Their Implications for Companies' Profitability: a Study in UAE. *Journal of accounting Science*, Vol. 4, no. 2, pp. 11-20.
- [12]. Ahmed, E. R., Rahim, N. F. A., Alabdullah, T. T. Y., & Thottoli, M. M. (2019). An examination of social media role in entrepreneurial intention among accounting students: a SEM study. *Journal of Modern Accounting and Auditing*, 15(12), 577-589.
- [13]. Ahmed, E. R., Alabdullah, T. T. Y., Amran, A., & Yahya, S. B. (2018). Indebtedness Theory and Shariah Boards: A Theoretical Approach. *Global Business and Management Research*, 10(1), 127-134.
- [14]. Ahmed, E. R., Islam, M. A., & Alabdullah, T. T. Y. (2014). Islamic sukuk: Pricing mechanism and rating. *Journal of Asian Scientific Research*, 4(11), 640.
- [15]. Ahmed, E. R. (2020). INSTITUTIONAL THEORY AND ISLAMIC FINANCIAL INSTITUTIONS: THEORETICAL APPROACH.5(2), 2020; 17-20.
- [16]. Alabdullah, T. T. Y. (2021). Management accounting insight via a new perspective on the risk management - companies' profitability relationship. *International Journal of Intelligent Enterprise* 7, In press.
- [17]. Alabdullah, T. T. Y., Ahmed, E. R., and Nor, M. I. (2020). The World Declining Economy And Coronavirus Pandemic: Systems Should Be Continued. *Russian Journal of Agricultural and Socio-Economic Sciences* 102, 89–96. doi: 10.18551/rjoas.2020-06.11.
- [18]. Alabdullah, T. T. Y. (2021). Ownership Structure and the Failure or Success of Firm Performance: Evidence from Emerging Market; Cross-sectional Analysis. *International Journal of Business and Management Invention*, 10(8).

- [19]. Alabdullah, T. T. Y. (2019). Management Accounting and Service Companies' Performance: Research in Emerging Economies, Australasian Accounting, Business and Finance Journal, 13(4), 100-118. doi:10.14453/aabfj.v13i4.8.
- [20]. Alabdullah, T. T. Y. (2017). Compensation committee, company board attributes, and company performance: The moderating effect of leadership position. Paper presented at the 2017 Wei International Academic Conference Proceedings, July 24-27, 2017, Business and Economics.
- [21]. Alabdullah, T. T. Y. (2016a). Are Board Size And Ownership Structure Beneficial In Emerging Markets' Firms? Evidence from Jordan. International Journal of Management & Information Systems (IJMIS), 20(3), 87-94.
- [22]. Alabdullah, T. T. Y. (2016d). Agency Theory Perspective: A Quantitative Study Of Accounting Performance Measures In Emerging Economies. ICTE Proceedings, New York.
- [23]. Alabdullah, T. T. Y., Ahmed, E. R., & Nor, M. I. (2018). New Ideas from Management, Finance and Accounting Perspective: The Research for A New Link Between A Company's Outcome and Risk Management. 5th International Conference on New Ideas in Management, Economics and Accounting.
- [24]. Alabdullah, T. T. Y. (2016c). Corporate Governance from The Perspective of The Past and The Present and The Need to Fill an International Gap. Risk Governance & Control: Financial Markets & Institutions, 6(4).
- [25]. Alabdullah, T. T. Y., Yahya, S., & Ramayah, T. (2014b). Corporate Governance Development: New or Old Concept? European Journal of Business and Management, 6(7), 312-315.
- [26]. Alabdullah, T. T. Y. (2016b). The Performance of Companies and The Board's Characteristics From the New Perspective of Manipulation Avoidance. Corporate Ownership & Control, 13(4), 279-286.
- [27]. Alabdullah, T. T. Y., Maryanti, E. (2021). Internal Control Mechanisms in Accounting, Management, and Economy: A review of the Literature and Suggestions of New Investigations. International Journal of Business and Management Invention, 10(9).
- [28]. Alabdullah, T. T. Y., Ahmed, E. R. (2021). New Insights to Investigate the Impact of Internal Control Mechanisms on Firm Performance: A Study in Oman. Riset Akuntansi dan Keuangan Indonesia, Vol. 6,(2).
- [29]. Alabdullah, T. T. Y., Alfadhl, M. M. A., Yahya, S., & Rabi, A. M. A. (2014). The Role of Forensic Accounting in Reducing Financial Corruption: A Study in Iraq. International Journal of Business and Management, 9 (1), 26.
- [30]. Alabdullah, T. T. Y., Yahya, S., and Ramayah, T. (2014a). Corporate Governance Mechanisms and Jordanian Companies' Financial Performance. Asian Social Science 10, 247-247. doi: 10.5539/ass.v10n22p247.
- [31]. Alabdullah, T. T. Y., Ahmed, E. R., & Ahmed, R. R. (2021). Organization features and profitability: Implications for a sample of Emerging Countries. Journal of Accounting and Business Education, 5(2), 43-52. DOI: <http://dx.doi.org/10.26675/jabe.v5i2.16351>.
- [32]. Alabdullah, T. T. Y., Ahmed, E. R., Mohammed Almashhadani, M, Yousif S, Almashhadani H, Almashhadani R, Putri, E (2021). How Significantly to Emerging Economies Benefit From Board Attributes and Risk Management in Enhancing Firm Profitability? Journal of Accounting Science 5(2).
- [33]. Alabdullah, T. T. Y., Ahmed, E. R., (2020). A cross-sectional analysis of the influence of corporate governance features on the organizational outcomes: An assessment. International Islamic University Chittagong. 17(2). P.P 6-26.
- [34]. Alabdullah, T. T. Y., Yahya, S., Nor, M. I., & Majeed, F. Q. (2016). An Investigation of Corporate Governance from A New Perspective: Examining the Financial Performance of Companies and The Impact of Executive Turnover. Corporate Board: Role, Duties & Composition, 12(1).
- [35]. Alabdullah, T. T. Y., Ahmed, E. R., & Muneerali, M. (2019). Effect of Board Size and Duality on Corporate Social Responsibility: What has Improved in Corporate Governance in Asia?. Journal of Accounting Science, 3(2), 121-135.
- [36]. Alabdullah, T. T. Y., Ahmed, E. R. (2019). Board Diversity and Disclosure of Corporate Social Responsibility Link: A Study in Malaysia. Journal of Adv Research in Dynamic & Control System, 11(11).
- [37]. Alabdullah, T. T. Y. (2018). The relationship between ownership structure and firm financial performance. Benchmarking: An International Journal, 25(1), 319-333.
- [38]. Alabdullah, T. T. Y., Laadjal, A., Ries, E., & Al-Asadi, Y. A. A. (2018). Board Features and Capital Structure in Emerging Markets. Journal of Advanced Management Science, 6 (2).
- [39]. Alabdullah, T. T. Y., Nor, M. I., & Ahmed, E. R. (2018). The determination of firm performance in emerging nations: Do board size and firm size matter? Management, 5(3), 57-66.
- [40]. Alabdullah, T. T. Y., Ahmed, E. R., & Nor, M. I. (2019). Do board characteristics provide more enhancement for firm financial performance? A corporate governance perspective. New challenges in corporate governance: Theory and practice (pp. 89-91). https://doi.org/10.22495/ncpr_25.
- [41]. Alabdullah, T. T. Y & Ahmed, E. R. (2020). Audit Committee Impact on Corporate Profitability in Oman Companies: an Auditing and Management Accounting Perspective. Riset Akuntansi dan Keuangan Indonesia, Vol. 5, no. 2, pp. 121-128.
- [42]. Alabdullah, T. T. Y. and Ahmed, E. R. (2018). Corporate Governance: To What Extent it is important in the Arab Countries. International Journal of Science and Research 7.
- [43]. Alabdullah, T. T. Y. and Ahmed, E. R. (2018). New insights to Investigate the impact of Internal Control Mechanisms on Firm Performance: A Study in Oman. International Journal of Science and Research 7. Riset Akuntansi dan Keuangan Indonesia. In press.
- [44]. Alabdullah, T. T. Y & Ahmed, E. R. & Abushammala, S. (2020). Growth of Companies: Empirical Study of the Companies Listed in Developing Economies. Journal of accounting Science, Vol. 4, no. 2, pp. 1-10.
- [45]. Alfadhl, M. M. A. F. and Alabdullah, T. T. Y. (2013). Determinants of the Managerial Behavior of Agency Cost and Its Influential Extent on Performance: A Study in Iraq. International Journal of Humanities and Social Science, 3-3.
- [46]. Alfadhl, M. M. A., Alabdullah, T. T. Y. (2016). Agency Cost and Management Behavior: The Role of Performance as a Moderator. International Journal of Science and Research (IJSR), 5(1), 1858-1864.
- [47]. Almashhadani, M. (2021). How Dose Corporate Governance Leverage Organizational Performance: A Survey With Suggestions And Notes For Further Research. Russian Journal of Agricultural and Socio-Economic Sciences 3(111), 3-9.
- [48]. Almashhadani, M. (2020). Testing the effecting elements of R&D engineer's inventively in design industrialization Sector: A study in Singapore. Journal of Information and Computational Science, 10(5).
- [49]. Almashhadani, M. (2021). A brief Review of Corporate Governance Structure and Corporate Profitability in Developed and Developing economy. Journal of Information and Computational Science, 10(11).
- [50]. Al Fakhri, I., Alabdullah, T. T. Y. (2021). The Formation of Rebutts and Reliable Brand Experience Scale in the Malaysian Context. Business Ethics and leadership (BLE). In press
- [51]. Al-Aamri, A. K., Al-musallami, F. H., Ahmed, E. R., & Qazi, M. (2021). Impact of Audit Committees on Quality of Financial Reporting: A Study in Oman. International Journal of Business and Management Invention (IJBMI), 10(10), 35-43.

- [52]. Alsulmani, A. H., Alkindi, S. S., & Ahmed, E. R. (2021). Customer Accounting Information and Omani Service Companies' Performance. *International Journal of Finance & Banking Studies* (2147-4486), 10(2), 79-88.
- [53]. Alyaarubi, H. J., Alkindi, D. S., & Ahmed, E. R. (2021). Internal Auditing Quality and Earnings Management: Evidence from Sultanate of Oman. *Journal of Governance and Integrity*, 4(2), 115-124.
- [54]. Alharbi, R. K., Yahya, S. B., & Ahmed, E. R. (2018). Characteristics of manager's and SMEs performance: the role of access to finance as a moderator. *International Journal of Engineering & Technology*, 7(4), 5115-5119.
- [55]. Abdul Razak, R., & Othman, M. (2012). "Entrepreneurial Orientation without Stress as a 'Tonic' in Magnifying the Malaysian Small and Medium Enterprises Productivity: A Theoretical Perspective". *International Journal of Academic Research in Business and Social Sciences*, 02(04), 163-180.
- [56]. Al Mamun, A., Kumar, N., Ibrahim, M. D., & Bin Yusoff, M. N. (2017). "validating the measurement of entrepreneurial". *Economics and Sociology*, 10(04), 51-66.
- [57]. Arief, M., & Thoyib, A. (2013). "The Effect of Entrepreneurial Orientation on the Firm Performance through Strategic Flexibility: A Study on the SMEs Cluster in Malang". *Journal of Management Research*, 05(03), 44-62.
- [58]. Awang, A., ahmad, Z., Said Asghar, A., & Subari, K. (2010). "Entrepreneurial Orientation among Bumiputera Small and Medium Agro-Based Enterprises (BSMAEs) in West Malaysia: Policy Implication in Malaysia". *International Journal of Business and Management*, 05(05), 130-143.
- [59]. Baleseng, M. (2015). "Factors Affecting The Sustainability Of SME In The Manufacturing Sector Of Gaborone, Botswana". Mini-Dissertation Submitted In Partial Fulfilment Of The Requirements For The Master Degree Of Business Administration, 12-14. The Faculty Of Commerce And Administration At The Mafikeng Campus Of The North-West University.
- [60]. Bchini, B. (2015). "entrepreneurial orientation and firms' performance: the case of tunisian companies". *International Journal of Economics, Commerce and Management*, 03(03), 01-15.
- [61]. Brem, A. (2008). "The Boundaries of Innovation and Entrepreneurship: Conceptual Background and Essays on Selected Theoretical and Empirical Aspects" (1st ed.). Wiesbaden, Germany: Gabler-Verlag.
- [62]. Bums, P., & Dewhurst, J. (1996). "small business and entrepreneurship (2nd ed.)". palgrave.
- [63]. Covin, J. G., & Slevin, D. (1991). "A Conceptual Model of Entrepreneurship as Firm Behavior." *entrepreneurship theory and practice*, 07-26.
- [64]. Covin, J. G., & Slevin, D. P. (1989). "Strategic Management Of Small Firms In Hostile And Benign Environments" *Strategic Management Journal*, 10, 75-87.
- [65]. Covin, J. G., & Wales, W. (2012). "The Measurement of Entrepreneurial Orientation". *entrepreneurship theory and practice*, 677-702.
- [66]. Dess, G. G., & Lumpkin, G. (2005). "The Role of Entrepreneurial Orientation in Stimulating Effective Corporate Entrepreneurship". *Academy of Management Executive*, 19(01), 147-157.
- [67]. Etemad, H. (2015). "Entrepreneurial orientation-performance relationship in the international context". *Journal of International Entrepreneurship*, 13(01).
- [68]. Essia Ries, A. (2014). Islamic Sukuk: Pricing mechanism and rating [Электронный ресурс]/Essia Ries Ahmed, Md. Aminul Islam, Tariq Tawfeeq Yousif Alabdullah. *Journal of Asian Scientific Research*, (4), 11.
- [69]. Falih Chichan, H., & Alabdullah, T. T. Y. (2021). Does Environmental Management Accounting Matter in Promoting Sustainable Development? A study in Iraq. *Journal of Accounting Science*, 5(2), 114-126.
- [70]. Fairoz, F. M., Hirobumi, T., & Tanaka, Y. (2010). "Entrepreneurial Orientation and Business Performance of Small and Medium Scale Enterprises of Hambantota District Sri Lanka". *Asian Social Science*, 06(03), 34-46.
- [71]. Grünhagen, M., Wollan, M., Dada, O. & Watson, A. (2013). "The moderating influence of HR operational autonomy on the entrepreneurial orientation-performance link in franchise systems". *International Entrepreneurship and Management Journal*, 10(04).
- [72]. Gupta, V. K., & Gupta, A. (2014). « Relationship between entrepreneurial orientation and firm performance in large organizations over time". *Journal of International Entrepreneurship*, 13(01).
- [73]. Gani, A. A. M. O., Al Rahbi, A. H. S. S., & Ahmed, E. R. (2021). Empirical Analysis on Corporate Transparency, Competitive Advantage, and Performance: An Insight of Muscat Securities Market. *Journal of Governance and Integrity*, 4(2), 96-102.
- [74]. Khedhaouria, A., Gura'u, C., & Torre's, O. (2015). "Creativity, self-efficacy, and small-firm performance: the mediating role of entrepreneurial orientation". *Small Business Economics*, 44(03), 485-504.
- [75]. Kosa, A., Mohammad, I., & Ajibie, D. (2018). "Entrepreneurial orientation and venture performance in Ethiopia : the moderating role of business sector and enterprise location". *Journal of Global Entrepreneurship Research*, 08-25.
- [76]. Lee, S. M., & Lim, S. (2009). "Entrepreneurial orientation and the performance of service business". (03), 01-13.
- [77]. Lumpkin, G. T., & Dess, G. G. (1996). "clarifying the entrepreneurial orientation construct and linking it to performance". *Academy of Management Review*, 21(01), 135-172.
- [78]. Lumpkin, G., & Dess, G. G. (2001). "linking two dimensions of entrepreneurial orientation to firm performance : the moderating role of environment and industry life cycle". *Journal of Business Venturing* (16), 429-451.
- [79]. Mahmood, R., & Hanafi, N. (2013). "Entrepreneurial Orientation and Business Performance of Women-Owned Small and Medium Enterprises in Malaysia : Competitive Advantage as a Mediator", *International Journal of Business and Social Science*, 04(01), 82-90.
- [80]. Miller, D. (1983). "The Correlates of Entrepreneurship in Three Types of Firms". *Management Science*, 29(07), 770-791.
- [81]. Miller, D., & Friesen, P. (1978). "Archetypes of Strategy Formulation". *Management Science*, 24(09), 921-933.
- [82]. Miller, D., & Friesen, P. H. (1982). "Innovation in Conservative and Entrepreneurial Firms: Two Models of Strategic Momentum". *Strategic Management Journal*, 03, 01-25.
- [83]. Murphy, G. B., Traylor, J., & Hill, R. (1996). "Measuring Performance in Entrepreneurship Research". *Journal of Business Research*, 36, 15-23.
- [84]. Noordin, F., Othman, A., & Kassim, E. (2018). Proceedings of the 2nd Advances in Business Research International Conference ABRIC2016. Gateway East, Singapore: Springer Nature Singapore Pte Ltd.
- [85]. Nor, M. I., Masron, T. A., & Alabdullah, T. T. Y. (2020). Macroeconomic fundamentals and the exchange rate volatility: empirical evidence from Somalia. *SAGE Open*, 10(1), 2158244019898841.
- [86]. Rahim, N. F. A., Ahmed, E. R., Sarkawi, M. N., Jaaffar, A. R., & Shamsuddin, J. (2019). Operational risk management and customer complaints: the role of product complexity as a moderator. *Benchmarking: An International Journal*.
- [87]. Rahim, N. F. A., Ahmed, E. R., & Faeq, M. K. (2018). Internal Control System and Perceived Operational Risk Management in Malaysian Conventional Banking Industry. *Global Business & Management Research*, 10(1).

- [88]. Shaharudin, M. S., Fernando, Y., Ahmed, E. R., & Shahudin, F. (2020). Environmental NGOs Involvement in Dismantling Illegal Plastic Recycling Factory Operations in Malaysia. *Journal of Governance and Integrity*, 4(1), 29-36.
- [89]. Ogunziji, A. S., & Kayode, L. (2010). "Entrepreneurial Orientation as a Panacea for the Ebbing Productivity in Nigerian Small and Medium Enterprises: A Theoretical Perspective" *International Business Research*, 03(04), 192-199.
- [90]. Rauch, A., Wiklund, J., Lumpkin, G., & Frese, M. (2009). "Entrepreneurial Orientation and Business Performance: An Assessment of Past Research and Suggestions for the Future". *entrepreneurship theory and practice*, 761-787.
- [91]. Salimzadeh, P., Jerry, C., & Raveendranath, R. N. (2013). "Sustainability in Small and Medium Sized Enterprises in Regional Australia: A Framework of Analysis", *Small Enterprise Association of Australia and New Zealand 26th Annual SEAANZ Conference Proceedings* Sydney. Retrieved 09 19, 2018, from <http://www.seaanz.org/sites/seaanz/documents/2013SEAANZConference/SEAANZ-2013-Salimzadeh-Courvisanos-Nayak.pdf>
- [92]. Schillo, S. (2011) "Entrepreneurial Orientation and Company". *Technology Innovation Management Review*, 20-25.
- [93]. Stoica, A., Ellinor, M. S., & Elsa, M. O. (2017). "bachelor thesis of business administration" retrieved 09 20, 2018.
- [94]. Thottoli, M. M., & Ahmed, E. R. (2021). Information technology and E-accounting: some determinants among SMEs. *Journal of Money and Business*.
- [95]. Thottoli, M. M., Thomas, K. V., & Ahmed, E. R. (2019). Adoption of audit software by audit firms: a qualitative study. *Journal of Information and Computational Science*, 9(9), 768-776.
- [96]. Thottoli, M. M., Thomas, K. V., & Ahmed, E. R. (2019). Qualitative analysis on information communication technology and auditing practices of accounting professionals. *Journal of Information and Computational Science*, 9(9), 529-537.
- [97]. Thottoli, M. M., Thomas, K. V., & Ahmed, E. R. (2019). Examining the impact of information communication technology on auditing professionals: A quantitative study. *Journal of Advanced Research in Dynamical and Control Systems*, 11(12), 476-488.
- [98]. Peris-Ortiz, M., & Navarro-García, A. (2015). "New Challenges in Entrepreneurship and Finance: Examining the Prospects for Sustainable Examining the Prospects for Sustainable Innovation, and Economic Growth." (M. Peris-Ortiz, & J.-M. Sahut, Eds.) Switzerland: Springer International Publishing.
- [99]. Pratono, A. H., & Mahmood, R. (2015). "Mediating effect of marketing capability and reward philosophy in the relationship between entrepreneurial orientation and firm performance". *Journal of Global Entrepreneurship Research*, 05(05), 01-12.
- [100]. Venkatraman, N. (1989) "Strategic Orientation of Business Enterprises: The Construct, Dimensionality, and Measurement." *Management Science*, 35(08), 942-962.
- [101]. Wang, C. L. (2008). "Entrepreneurial Orientation, Learning Orientation, and Firm Performance" *Entrepreneurship Theory and Practice*, 32(04), 635-656.
- [102]. Wiklund, J. (1999) "The Sustainability of the Entrepreneurial Orientation Performance Relationship" *entrepreneurship theory and practice*, 37-48.
- [103]. Yao, X., Wen, W., & Ren, Z. (2009). "Corporate entrepreneurship in the enterprise clusters environment-Influence of network resources and entrepreneurial orientation on firm performance", *Frontiers of Business Research in China*, 03(04), 566-582.
- [104]. Zainol, F. A., & Ayadurai, S. (2011). « Entrepreneurial Orientation and Firm Performance : The Role of Personality Traits in Malay Family Firms in Malaysia". *International Journal of Business and Social Science*, 02(01), 59-71.
- [105]. Zucchella, A., & Scabini, P. (2007) "international entrepreneurship: theoretical foundations and practices" (01 ed.). New York, United states: palgravemacmillan.

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