



# “The impact of intrapreneurship on operators’ performance of Jordanian Telecom organizations”

<b>AUTHORS</b>	Samah Toubasi Shafiq Al-Haddad 
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Samah Toubasi, Department of Business Administration, King Talal School of Business Technology, Princess Sumaya University for Technology, Jordan.

Shafiq Al-Haddad, Ph.D., Department of E-Marketing and Social Media, King Talal School of Business Technology, Princess Sumaya University for Technology, Jordan. (Corresponding author)



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Samah Toubasi (Jordan), Shafiq Al-Haddad (Jordan)

# THE IMPACT OF INTRAPRENEURSHIP ON OPERATORS' PERFORMANCE OF JORDANIAN TELECOM ORGANIZATIONS

## Abstract

The purpose of this study is to investigate the impact of intrapreneurship on the performance of telecom operators in Jordan. Three different dimensions are investigated that represent the independent variable of intrapreneurship – corporate culture, corporate entrepreneurship, and re-engineering corporate thinking, while the dependent variable performance included five dimensions such as the volume of production, sales volume, production process, diversification, and employee enhancement. A quantitative method was used; a survey was targeted at Telecom Jordan employees who were participating in the company's intrapreneurial program Oz. 140 employees participated in the intrapreneurial program as a comprehensive population, and 102 questionnaire forms were retrieved. The findings showed that there is a significant effect of intrapreneurship on the performance of Telecom Jordan. The coefficient of determination ( $R^2$ ) is 0.394, indicating that the intrapreneurship explains 39.4% of the change in operators' performance. Moreover, the results revealed that the highest effect of intrapreneurship is on employee enhancement, followed by the process of production, sales volume, the volume of production, and diversification, respectively. The study highly recommended giving more attention to the intrapreneurial studio, as it is considered a factory of various diversified ideas.

## Keywords

corporate culture, corporate entrepreneurship, re-engineering corporate thinking, productivity, diversification, employee enhancement

**JEL Classification** L26, J46

## INTRODUCTION

Nowadays, intrapreneurship is defined as a strategy that companies use to achieve innovation and growth (Åmo, 2010). Moreover, the adaption in intrapreneurship is initiated and desired by an employee in a bottom-up way, unlike corporate entrepreneurship where the initiation of an idea comes from a manager (organization) to guide employees toward achieving a company's goals. In other words, initiation starts with an employee. On the one hand, intrapreneurship is a method for creating change within a company and overcoming a competitive and challenging economic environment. On the other hand, it gives a chance to entrepreneurial employees who lack resources to capture opportunities and transform them into a business (Antoncic & Antoncic, 2011). However, the wireless industry is facing a dramatic change in technologies due to the effect of digital transformation, especially as customers are also getting digital. Following up behavior of telecom operators' customers through history, considering the evolution in telecom vendors and devices, the research noticed that people have moved from focusing on voice calls to mobile data. Moreover, customer

churn is more rapid in this sector than in any other industry, which makes it difficult for a company to keep its customers (Hwang et al., 2004).

Therefore, the objectives of the study are to investigate the effect of intrapreneurship on the operators' performance (volume of production, production process, sales volume, diversification, and employee enhancement) of Telecom operators in Jordan and to find out and arrange the effect of intrapreneurship on different performance factors. An innovative solution is proposed for different companies in the telecom sector such as Oz (the intrapreneurial program in Telecom), since it performs a new revenue stream for a company due to diversification in new products and services. Moreover, some employees come up with new ideas for software that rapid daily work and jobs. This study is expected to contribute to the existing literature in this field by providing a model that illustrates the effect of intrapreneurship on the volume of production, sales volume, and production process, diversification, and employee enhancement in Telecom Jordan. This could be a model for other companies operating in Jordan under one dependent variable (performance). Such a model can be used by any other company in the other sector to achieve innovation and sustainability. Moreover, it seems there are no previous studies in Jordan or outside the region that collected all these parameters together under one dependent variable (performance). It can be found that previous studies provided the effect of intrapreneurship on productivity, employee enhancement, or growth (diversification) alone.

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## 1. LITERATURE REVIEW AND HYPOTHESES

Entrepreneurship means that the entrepreneur's responsibility is solo, while a company shares the responsibility with the intrapreneur in intrapreneurship. Moreover, the research mentioned another difference related to intellectual rights, in which the owner of the idea is the company in the case of intrapreneurship, while the owner is the entrepreneur in the case of entrepreneurship. Another difference is that intrapreneurs rely on the company's resources and capabilities to execute their ideas, while entrepreneurs depend on themselves to secure resources (Baruah & Ward, 2014). The dimensions of intrapreneurship can be divided into corporate entrepreneurship, re-engineering corporate thinking, and corporate culture (Ekeh et al., 2016). One of the key dimensions of intrapreneurship is Corporate Entrepreneurship (CE), in addition to corporate venturing and entrepreneurial orientation (Blanka, 2019). In early studies, entrepreneurial orientation was presented by innovation, risk-taking, and pro-activeness. Later on, two further dimensions were added such as autonomy and competitive aggressiveness (Blanka, 2019).

In early research, corporate entrepreneurship consisted of two streams, corporate venturing, and re-thinking or renewing corporate capabilities.

Afterward, research has differentiated between the two parameters, in which they separated corporate venturing from re-engineering corporate thinking or renewing corporate capabilities (strategic entrepreneurship). Regarding the corporate venturing concept, it is not related to intrapreneurship, because it focuses on creating a new business rather than innovating the existing one (Blanka, 2019). The intrapreneurship discipline varies between corporate entrepreneurship and corporate venturing (Nicolaidis & Kosta, 2011).

Currently, some scholars have defined one difference between the two concepts; in the case of CE, the request (initiation) comes from the top management to senior managers and employees, while in the case of intrapreneurship, the initiation comes from the employees themselves in a bottom-up approach (Åmo, 2010; Blanka, 2019). Unlike corporate entrepreneurship which starts from employees, intrapreneurship starts from company managers who aim to achieve the goals that pour into the mission of the company (the company's strategy) (Åmo, 2010; Antoncic & Antoncic, 2011). Moreover, CE does not necessarily lead to intrapreneurship, because entrepreneurial employees have their own decision, whether to submit to the intrapreneurial program or not. Moreover, corporate entrepreneurship is referred to both organizational level (existing organization) and individual level (new venture) (Blanka, 2019).

Corporate culture is defined as a set of behaviors of employees within an organization and how employees interact with behaviors. The culture contains the organization's values, beliefs, vision, norms, assumptions, systems, language, symbols, and habits. Moreover, all employees starting from junior levels to top management levels in an organization come up to the workspace with their own culture, including ethics and knowledge. Corporate culture reveals different types of norms for an organization, such as moral, social, and behavioral norms, based on the beliefs, values, and employee attitudes (Ahiabor, 2014). Intrapreneurship is a wide concept; different researchers have discussed it many years ago. In 1998, intrapreneurship was defined as the entrepreneurial capabilities of an established corporation. They saw intrapreneurship as the methods and tools through which companies define new philosophies, ideas, and products (Rule & Irwin, 1998).

An International Study defined intrapreneurship as the process in which employees come up with new business ideas for their companies (Bosma et al., 2010). Intrapreneurship is a strategy that companies use to achieve innovation and growth (Åmo, 2010). The purpose of intrapreneurship is to obtain values for the business through the transformation that will be done by the employees' intrapreneurial ideas and increase business responsibility toward the community by giving employees the chance to submit and exchange their ideas in a friendly environment (Baruah & Ward, 2014).

The concept of intrapreneurship was known also by Miller in 1983 as entrepreneurship, but at the companies' level, including risk-taking, innovation, and competition (Miller, 1983). Later on, researchers collected all these terms in a company under one term and called it intrapreneurship (Baruah & Ward, 2014). Afterward, the concept has been added to the American Heritage Dictionary, which defined intrapreneurship as an individual within an organization who is responsible for converting the idea into a profitable product/service through innovation and risk-taking (Baruah & Ward, 2014). The intrapreneurship discipline appeared more than 36 years ago with Pinshot and Kanter, who defined it as creating new business ideas and developing them by entrepre-

neurial employees inside an organization (Pererva et al., 2018). Blanka has defined it as a new sub-field of entrepreneurship. Based on that, intrapreneurs can be defined as entrepreneurs inside an existing organization (Blanka, 2019).

Intrapreneurship is directly proportional to the innovative performance of a company (Alpkan et al., 2010). Intrapreneurship is vital for organizational performance, since it improves innovation in processes, production, and techniques, diversifies business or creates new business incorporate contexts, as well as satisfies and motivates employees, in addition to employing resources in new different methods (Alipour et al., 2011). Data collected from 217 Portuguese organizations by a questionnaire showed that enterprises' intrapreneurship (with its three different variables such as financial measurements, growth, and productivity) affects firm performance (Felicio et al., 2012). In a study of the impact of entrepreneurial orientation on organizational performance, data were collected through a survey targeting 500 industrial firms in Turkey, entrepreneurship in firms was referred to as intrapreneurship positively influences organizational performance, especially the financial dimension that researchers have connected with the sales volume (Bayarçelik & Özşahin, 2014). In China, intrapreneurship affects the performance of enterprises in terms of product innovation and business; so, developing intrapreneurial activities have a great impact on developing new markets and businesses, finding new market niches and introducing new products (Antoncic et al., 2018). This is related to diversification as mentioned by Johnson et al. (2011). The manufacturing sector in Nigeria showed more influence on non-financial measurements, where intrapreneurship tends to increase employee satisfaction levels, which pushes them to put more effort and increase sales revenue and business performance (Eze, 2018).

A study in Ghana about the effect of corporate culture (which is one of the major dimensions of intrapreneurship) on productivity, data was collected from 100 employees and customers of Vodafone Ghana through a constructed survey, concluded that intrapreneurship increases the productivity and organizational performance of Vodafone. Changing the corporate culture within a company reduces cost, increases the volume of production,

and improves speed to market (Ahiabor, 2014). Similar to Telecom Jordan, Vodafone Ghana was owned by the government before its privatization. Therefore, it faces a change in its culture due to the merger and acquisition, which makes it a good case study to investigate the effect of this change on productivity. Using a survey to collect a sample from 50 manufacturing organizations in Bosnia and Herzegovina, they confirmed their hypotheses that intrapreneurial practices positively affect productivity (Brigić & Umihanić, 2015). In north-central Nigeria, intrapreneurship has been shown to enhance the efficiency of a firm by increasing the volume of production and reducing the cost, keeping in mind that innovation in packaging, content, and marketing will increase customer demand, which will, in turn, increase the volume of production (Ekeh et al., 2016).

According to a field research study on 140 production organizations listed on the Istanbul Stock Exchange (ISE), it was found that corporate entrepreneurship components (risk-taking, pro-activeness, and innovation) have a significant relationship with the financial performance of the firms. These three dimensions of corporate entrepreneurship significantly affect different financial parameters related to profitability and sales volume (Karacaoglu et al., 2012). According to a sample of 200 manufacturing firms in Kenya, corporate entrepreneurship dimensions significantly affected the financial performance of manufacturing organizations in Kenya. Corporate entrepreneurship was represented by five components such as risk-taking, innovation, autonomy, pro-activeness, and competitive aggressiveness. Pro-activeness and autonomy were rejected, since their relationship with financial performance is insignificant, while the other dimensions significantly affected financial performance (Lwamba & Bwisa, 2014). Intrapreneurship affects an increase in a company's financial indicators, such as sales volume, income, and profit (Brigić & Umihanić, 2015). There is a significant relationship between intrapreneurship dimensions (corporate culture, corporate entrepreneurship, and re-structuring corporate thinking) and the manufacturing companies' sales volume in Nigeria (Ekeh et al., 2016).

The process of production refers to new production methods and procedures or the development

of techniques and technologies in production or administrative tasks done by employees at all levels, which affects the production of goods and services in a company (Nicolaidis & Kosta, 2011). Innovation in manufacturing procedures, processes, techniques, and technologies is one of the most important factors due to which intrapreneurship has a great effect on production processes (Antoncic & Antoncic, 2011). Joseph Schumpeter identified several methods for intrapreneurship. Introducing new methods and techniques for producing goods and services is one of them. From their side, Antoncic and Hisrich mentioned that intrapreneurship provides new technologies for developing products and services in addition to administrative tasks (Nicolaidis & Kosta, 2011). Intrapreneurship works successfully in agile companies, where employees can take decisions and actions independently without referring back to their managers for every single detail. Therefore, as a result, intrapreneurship pushes companies to agility, which enhances the process of production. This also will allow employees to create new ideas and improve business performance (Ekeh et al., 2016). In the context of talking about agility, intrapreneurship pushes a firm to innovate in old products, services, systems, and processes used for doing things. Moreover, intrapreneurship affects how the company delivers its services and products to customers. Companies get rid of traditional methods and start using new, digital ones (Ekeh et al., 2016). Based on the results of a questionnaire collected from 300 managers from different levels in manufacturing organizations in Bosnia and Herzegovina, the implementation of intrapreneurial activities significantly affects the innovation in production processes (Brigić & Alibegović, 2019).

Intrapreneurship affects internal factors in a company, which can be classified as follows. Product/service creation and innovation of new businesses are related to current markets and products. These create new departments or organizations under the umbrella of a company, in addition to renewing the company's capabilities for transformation/diversification in products and gaining a sustainable position among competitors (Antoncic & Antoncic, 2011). Antoncic and Hisrich argued that intrapreneurship does not only provide new technologies for developing products, services, and administrative tasks, but also pushes toward



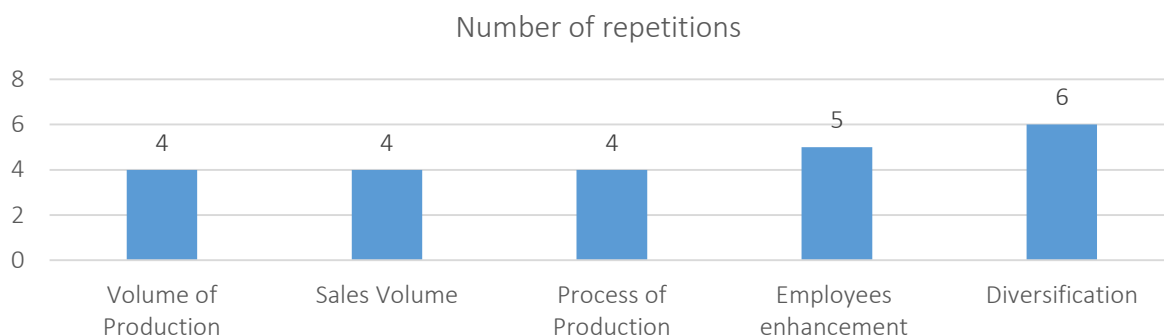
new business ventures under the umbrella of the main company (Nicolaidis & Kosta, 2011). In other words, intrapreneurship in companies is considered to be a tool for business diversification (Johnson et al., 2011). Intrapreneurship has a significant impact on diversification in new products or services, as well as in new markets. (Brigić & Alibegović, 2019). Diversification of new products and services is considered to be a positive result of intrapreneurship (Ekeh et al., 2016). This was confirmed by Johnson et al. (2011) and Bry (2019), who pointed out that intrapreneurship pushed companies to come up with new business lines; diversify for new business ideas.

The idea of an employee enhancement does not require to be matched with the organization's strategy and the employees innovate instead of the organization, which presents a chance for the employee as an entrepreneur to secure resources to start his/her idea (Åmo, 2010). The correlation between intrapreneurship and the satisfaction of employees are positive and significant, in which employees are always supported to come up with solutions, new ideas, and knowledge; this will encourage and motivate employees to improve their skills and knowledge. Moreover, employee satisfaction increases confidence and loyalty and improves the output quality of employees. Furthermore, successful firms are characterized by intrapreneurship. To conclude, intrapreneurship is directly proportional to employee satisfaction, and employee satisfaction positively affects firm performance. So, intrapreneurship positively affects an organization's performance (Antoncic & Antoncic, 2011). In Turkish manufacturing firms, organizational performance was divided into two categories, financial and non-financial measure-

ments. It was found that intrapreneurship is directly proportional to customers' and employees' satisfaction (Ağca et al., 2012). Employees will become more confident of their selves when they are given the chance to build something of their own. Intrapreneurship gives employees a kind of freedom, where if it is lost, employees might quit the organization and look for another. Also, it is considered to be a method for funding both the company and employees who have innovative ideas (Ekeh et al., 2016). Bry (2019) stated the effect of intrapreneurship on organizational performance must be reviewed, where he has focused on employees, and how to guide them to come up with their best innovative ideas by improving employees' leadership skills, where intrapreneurship improves project management skills, group work skills, communication skills, builds and strengthens a network of entrepreneurs. Moreover, intrapreneurs contribute to changing the culture and mindset of employees, as intrapreneurs deal with many units in the company to execute their business ideas. As a result, they affect other colleagues and this might push them to innovate and generate new ideas that will increase intrapreneurship inside the company (Bry, 2019).

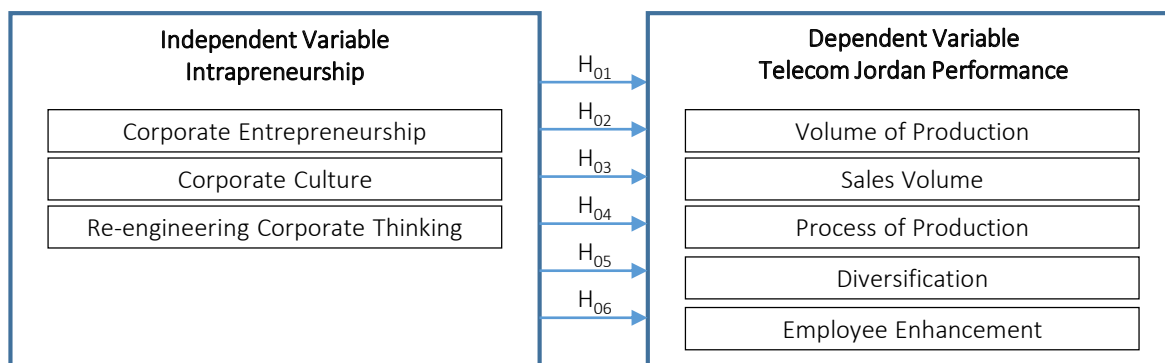
Based on the discussion above, this study tries to test the relationship between each variable and the number of repetitions in previous articles, to rank the above variables from the most affected by intrapreneurship to the lowest affected one, which will be used to develop research model hypotheses. Figure 1 shows this relationship.

Figure 1 shows that diversification is the most affected variable, followed by employee enhancement, while the volume of production, sales vol-



**Figure 1.** Relationship between the dependent variables and the number of repetitions in previous articles

Source: Developed based on Ağca et al. (2012), Amo (2010), Antoncic and Antoncic (2011), Ekeh et al. (2016), and Johnson et al. (2011).



**Figure 2.** The study model

ume, and process of production got the lowest effect. Upon the above literature, the following hypotheses are formulated:

- $H_{01}$ : *There is no effect of intrapreneurship on the performance of Telecom Jordan at  $\alpha \leq 0.05$ .*
- $H_{02}$ : *There is no effect of intrapreneurship on the volume of production of Telecom Jordan at  $\alpha \leq 0.05$ .*
- $H_{03}$ : *There is no effect of intrapreneurship on the sales volume of Telecom Jordan at  $\alpha \leq 0.05$ .*
- $H_{04}$ : *There is no effect of intrapreneurship on the process of production of Telecom Jordan at  $\alpha \leq 0.05$ .*
- $H_{05}$ : *There is no effect of intrapreneurship on the diversification of Telecom Jordan at  $\alpha \leq 0.05$ .*
- $H_{06}$ : *There is no effect of intrapreneurship on employee enhancement of Telecom Jordan at  $\alpha \leq 0.05$ .*

Figure 2 shows the model of the study.

## 2. METHODOLOGY

The methodology followed in this study is quantitative. The quantitative approach gives an inductive nature to the research. A quantitative method is based on collecting numerical data that will be processed through analysis and changed into clear results that are related to the main aim of the study (Creswell,

2014). Therefore, the quantitative approach is used to collect data from the sample and interpret it into useful information that can answer the questions and test research hypotheses. A questionnaire is described as a sheet, including paragraphs and items to get information suitable for analysis (Acharya & Sanothimi, 2010). In this study, the final version of the questionnaire is presented in two parts; the first part presents the demographic variables (gender, age, job title, and unit), while the second part takes into account the variables of the study, including the independent variables (intrapreneurship variables) and the dependent variables (organizational performance variables).

The study depended on the literature review and some previous studies (for example, Antoncic & Antoncic, 2011; Ekeh et al., 2016) to formulate the questionnaire. An online survey, including 40 questions, was conducted using Google Form. The study has set questions to include all the variables illustrated above in the study model. In addition to the survey, which is considered to be a primary source of data, secondary resources were also used, such as previous studies and books (illustrated in the literature review), in addition to different interviews held with the member of the Crown Prince Awards Entrepreneur Evaluation Committee.

### 2.1. Data collection

The study used a quantitative method; a survey that was targeted at Telecom Jordan employees who participated in the company's intrapreneurial program Oz. The questionnaire was distributed to 140 employees who participated in the intrapre-

**Table 1.** Sources of variables

Variables	Sub-Variable	Items	Reference
Intrapreneurship (Independent Variable)	Corporate Entrepreneurship	Questions (8-11)	(Ekeh et al., 2016)
	Corporate Culture	Questions (1-7)	(Ekeh et al., 2016)
	Re-engineering Corporate Thinking	Questions (12-15)	(Ekeh et al., 2016)
Performance (Dependent Variable)	Volume of Production	Questions (20-23)	(Ekeh et al., 2016)
	Sales Volume	Questions (16-19)	(Ekeh et al., 2016)
	Process of Production	Questions (28-31)	(Antoncic & Antoncic, 2011)
	Diversification	Questions (24-27)	(Antoncic & Antoncic, 2011)
	Employee Enhancement	Questions (32-36)	(Antoncic & Antoncic, 2011)

neural program as a comprehensive population, and 102 questionnaire forms were retrieved.

Face validity, according to Taherdoost (2016), indicates how the measures match with the construct. The questionnaire was sent to an evaluation committee consisting of professors of business administration at Princess Sumaya University for Technology and Amman Arab University. In addition, the research sought an assessment from the member of the Crown Prince Awards Entrepreneur Evaluation Committee, as well as from the fabrication labs and innovation managers in Telecom Jordan to evaluate the questionnaire.

The reliability of a questionnaire means that it enjoys a certain degree of stability, meaning that it gives the same result if it was redistributed more than once under the same conditions. The questionnaire consistency is validated through Cronbach's alpha coefficient. Reliability is described as how test scores are free from measurement error (Ghazali, 2016). Cronbach's alpha is used to test the consistency of the questionnaire and if the results are accepted, if the values of Cronbach's alpha coefficient were greater than 0.60 (Griethuijsen et al., 2015). As shown in Table 2, all independent and dependent variables and dimensions are more than 0.60.

**Table 2.** Reliability test

Variables/Sub-Variables	Cronbach's $\alpha$
Corporate Culture	0.645
Corporate Entrepreneurship	0.822
Re-engineering Corporate Thinking	0.814
Intrapreneurship Variables	0.786
Sales Volume	0.765
Volume of Production	0.662
Diversification	0.745
Process of Production	0.79
Employee Enhancement	0.84
Organizational Performance Variables	0.911

### 3. RESULTS

After assuring that reliability and validity are confirmed, the multicollinearity test was carried out.

**Table 3.** Multicollinearity test

Model	Collinearity Tolerance	VIF
Corporate Culture	0.725	1.379
Corporate Entrepreneurship	0.793	1.260
Re-engineering Corporate Thinking	0.904	1.106

Table 3 shows that the values of VIF were all less than 10, while the tolerance values were more than 0.05, which confirms that the model is free of multicollinearity (Gujarati & Porter, 2009).

#### 3.1. Hypotheses testing

The research used multiple linear regression to test the research hypotheses.

$H_{01}$ : *There is no effect of intrapreneurship on the performance of Telecom Jordan at  $\alpha \leq 0.05$ .*

Tables 4 and 5 show regressing intrapreneurship variables on total OJO performance. Table 4 shows that there is a positive significant correlation between intrapreneurship and OJO performance, where  $r$  equals 0.628. The table also shows that intrapreneurship variables can explain 39.4% of variations related to total OJO performance, where  $R^2 = 0.394$ ,  $f = 21.270$ ,  $\text{Sig.} = 0.000$ ). Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted, which states that there is an effect of intrapreneurship on the performance of Telecom Jordan at  $\alpha \leq 0.05$ .

**Table 4.** Regressing intrapreneurship variable against OJO performance (ANOVA)

Model	r	R <sup>2</sup>	Adjusted R <sup>2</sup>	f	Sig
1	0.628	0.394	0.376	21.270	0.000



**Table 5.** Regressing intrapreneurship sub-variable against OJO performance (ANOVA)

Model	Unstandardized Coefficients		Standardized Coefficient		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.626	0.312		5.218	0.000
1 Corporate Culture	0.160	0.081	0.183	1.985	0.050
Corporate Entrepreneurship	0.380	0.065	0.518	5.867	0.000
Re-engineering Corporate Thinking	0.020	0.050	0.033	0.394	0.694

Table 5 shows that corporate entrepreneurship has the highest effect on OJO performance, where  $\beta = 0.518$ ,  $t = 5.867$ , Sig. = 0.000; then corporate culture, where  $\beta = 0.183$ ,  $t = 1.985$ , Sig. = 0.050, while re-engineering corporate thinking does not significantly affect total OJO performance, where  $\beta = 0.033$ ,  $t = 0.394$ , Sig. = 0.694.

$H_{02}$ : *There is no effect of intrapreneurship on the volume of production of Telecom Jordan at  $\alpha \leq 0.05$ .*

Tables 6 and 7 show regressing intrapreneurship variables on production performance. Table 6 shows that there is a medium relation between intrapreneurship and production performance, where  $r$  equals 0.480. The table also shows that intrapreneurship variables can explain 23% of variation related to production performance, where  $R^2 = 0.230$ ,  $f = 9.781$ , Sig. = 0.000. Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted, which states that there is an effect of intrapreneurship on the volume of production of Telecom Jordan at  $\alpha \leq 0.05$ .

**Table 6.** Regressing intrapreneurship variable on the volume of production

Model	r	R <sup>2</sup>	Adjusted R <sup>2</sup>	f	Sig.
1	0.480	0.230	0.207	9.781	0.000

Table 7 shows that only corporate entrepreneurship has affected production performance, where  $\beta = 0.371$ ,  $t = 3.730$ , Sig. = 0.000, while corporate culture does not affect the production performance,

**Table 7.** Regressing intrapreneurship sub-variables on the volume of production

Model	Unstandardized Coefficients		Standardized Coefficient		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.555	0.432		3.601	0.000
1 Corporate Culture	0.170	0.112	0.158	1.518	0.132
Corporate Entrepreneurship	0.335	0.090	0.371	3.730	0.000
Re-engineering Corporate Thinking	0.051	0.069	0.069	0.735	0.464

where  $\beta = 0.158$ ,  $t = 1.518$ , Sig. = 0.132, and re-engineering corporate thinking does not affect the production performance, where  $\beta = 0.069$ ,  $t = 0.735$ , Sig. = 0.464.

$H_{03}$ : *There is no effect of intrapreneurship on the sales volume of Telecom Jordan at  $\alpha \leq 0.05$ .*

Tables 8 and 9 show regressing intrapreneurship variables on sales volume. Table 8 shows that there is a medium relation between intrapreneurship and sales volume, where  $r$  equals 0.452. The table also shows that intrapreneurship variables can explain 20.4% of variation related to sales volume, where  $R^2 = 0.204$ ,  $f = 8.364$ , Sig. = 0.000. Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted, which indicates that there is an effect of intrapreneurship on the sales volume of Telecom Jordan at  $\alpha \leq 0.05$ .

**Table 8.** Regressing intrapreneurship variable on the sales volume

Model	r	R <sup>2</sup>	Adjusted R <sup>2</sup>	f	Sig.
1	0.452	0.204	0.179	8.364	0.000

Table 9 shows that only corporate entrepreneurship affected sales volume, where  $\beta = 0.379$ ,  $t = 3.743$ , Sig. = 0.000, while corporate culture does not have a significant effect on sales volume, where  $\beta = 0.084$ ,  $t = 0.797$ , Sig. = 0.427, and re-engineering corporate thinking does not have a significant effect on sales volume, where  $\beta = 0.112$ ,  $t = 1.178$ , Sig. = 0.242.

**Table 9.** Regressing intrapreneurship sub- variables on the sales volume

Model	Unstandardized Coefficients		Standardized Coefficient		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	1.492	0.465		3.205	0.002
Corporate Culture	0.096	0.121	0.084	0.797	0.427
Corporate Entrepreneurship	0.362	0.097	0.379	3.743	0.000
Re-engineering corporate thinking	0.087	0.074	0.112	1.178	0.242

$H_{04}$ : *There is no effect of intrapreneurship on the process of production of Telecom Jordan at  $\alpha \leq 0.05$ .*

Tables 10 and 11 show regressing intrapreneurship variables against the process of production. Table 10 shows that there is a medium relationship between intrapreneurship and the process of production, where  $r$  equals 0.522. The table also shows that intrapreneurship variables can explain 20.4% of variation related to the process of production, where  $R^2 = 0.272, f = 12.232, \text{Sig.} = 0.000$ . Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted, which indicates that there is an effect of intrapreneurship on the process of production of Telecom Jordan at  $\alpha \leq 0.05$ .

**Table 10.** Regressing intrapreneurship variable on the process of production

Model	r	R <sup>2</sup>	Adjusted R <sup>2</sup>	F	Sig.
1	0.522	0.272	0.250	12.232	0.000

Table 11 shows that corporate entrepreneurship has the highest effect on the process of production, where  $\beta = 0.385, t = 4.085, \text{Sig.} = 0.000$ , then corporate culture, where  $\beta = 0.214, t = 2.119, \text{Sig.} = 0.037$ , while re-engineering corporate thinking does not have a significant effect on the process of production, where  $\beta = -0.028, t = -0.439, \text{Sig.} = 0.662$ .

$H_{05}$ : *There is no effect of intrapreneurship on the diversification of Telecom Jordan at  $\alpha \leq 0.05$ .*

Tables 12 and 13 show regressing intrapreneurship variables on diversification. Table 12 shows

that there is a medium relationship between intrapreneurship and diversification, where  $r$  equals 0.422. Table 12 also shows that intrapreneurship variables can explain 17.8% of variation related to diversification, where  $R^2 = 0.178, f = 7.080, \text{Sig.} = 0.000$ . Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted, which indicates that there is an effect of intrapreneurship on the diversification of Telecom Jordan at  $\alpha \leq 0.05$ .

**Table 12.** Regressing intrapreneurship variable on diversification

Model	r	R <sup>2</sup>	Adjusted R <sup>2</sup>	f	Sig.
1	0.422	0.178	0.153	7.080	0.000

Table 13 shows that only corporate entrepreneurship has a significant effect on diversification, where  $(\beta = 0.343, t = 3.332, \text{Sig.} = 0.001)$ , while the corporate culture does not have a significant effect on diversification, where  $(\beta = 0.142, t = 1.318, \text{Sig.} = 0.191)$ , and re-engineering corporate thinking does not have a significant effect on diversification, where  $(\beta = -0.027, t = -0.285, \text{Sig.} = 0.777)$ .

$H_{06}$ : *There is no effect of intrapreneurship on employee enhancement of Telecom Jordan at  $\alpha \leq 0.05$ .*

Tables 14 and 15 show regressing intrapreneurship variables on employee enhancement. Table 14 shows that there is a medium relationship between intrapreneurship and employee enhancement, where  $r$  equals 0.595. Table 14 also shows that intrapreneurship variables can explain 35.4% of var-

**Table 11.** Regressing intrapreneurship sub- variables on the process of production

Model	Unstandardized Coefficients		Standardized Coefficient		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	1.860	0.406		4.587	0.000
Corporate Culture	0.223	0.105	0.214	2.119	0.037
Corporate Entrepreneurship	0.344	0.084	0.395	4.085	0.000
Re-engineering Corporate Thinking	-0.028	0.065	-0.040	-0.439	0.662

**Table 13.** Regressing intrapreneurship sub- variables on diversification

Model	Unstandardized Coefficients		Standardized Coefficient		
	B	Std. Error	Beta	t	Sig.
(Constant)	2.291	0.424		5.408	0.000
1 Corporate Culture	0.145	0.110	0.142	1.318	0.191
Corporate Entrepreneurship	0.293	0.088	0.343	3.332	0.001
Re-engineering Corporate Thinking	-0.019	0.067	-0.027	-0.285	0.777

iation related to employee enhancement, where  $R^2 = 0.354$ ,  $f = 17.931$ ,  $Sig. = 0.000$ ). Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted, which indicates that there is an effect of intrapreneurship on the employee enhancement of Telecom Jordan at  $\alpha \leq 0.05$ .

**Table 14.** Regressing intrapreneurship variable on employee enhancement

Model	r	R <sup>2</sup>	Adjusted R <sup>2</sup>	f	Sig.
1	0.595	0.354	0.335	17.931	0.000

Table 15 shows that only corporate entrepreneurship has a significant effect on employees' enhancement, where  $\beta = 0.519$ ,  $t = 5.695$ ,  $Sig. = 0.000$ , while corporate culture does not have a significant effect on employee enhancement, where  $\beta = 0.137$ ,  $t = 1.441$ ,  $Sig. = 0.153$ , and re-engineering corporate thinking also does not have a significant effect on employee enhancement, where  $\beta = -0.012$ ,  $t = -0.139$ ,  $Sig. = 0.890$ .

#### 4. DISCUSSION

The results of the study indicate that (1) Intrapreneurship has a statistically significant effect on the performance of Telecom Jordan. This result matches with the results of Alipour et al. (2011), Antoncic et al. (2018), Bayarçelik and Özşahin (2014), Eze (2018), and Felício et al. (2012) who confirmed that intrapreneurship affects firm performance. (2) There is an effect of intrapreneurship on the volume of production of Telecom Jordan. This result is in line with Ahiabor (2014), Brigić and Umihanić

(2015), Ekeh et al. (2016), and Felício et al. (2012), who confirmed this effect in their studies. (3) There is an effect of intrapreneurship on the sales volume of Telecom Jordan. This result matches with Antoncic and Antoncic (2011), Brigić and Alibegović (2019), Brigić and Umihanić (2015), Ekeh et al. (2016), and Lwamba and Bwisa (2014), who confirmed this effect in their publications. (4) There is an effect of intrapreneurship on the process of production of Telecom Jordan. This result is in line with Antoncic and Antoncic (2011), Brigić and Alibegović (2019), Ekeh et al. (2016), Nicolaidis and Kosta (2011). (5) There is an effect of intrapreneurship on the diversification of Telecom Jordan. This result is in line with Antoncic and Antoncic (2011), Brigić and Alibegović (2019), Bry (2019), Ekeh et al. (2016), Johnson et al. (2011), and Nicolaidis and Kosta (2011). (6) There is an effect of intrapreneurship on employee enhancement at Telecom Jordan. This result matches with Ağca et al. (2012), Åmo (2010), Antoncic and Antoncic (2011), Bry (2019), and Ekeh et al. (2016).

According to the previous analysis, it is clear that the Corporate Entrepreneurship dimension is the dominant one over the other dimensions, corporate culture, and re-engineering corporate thinking. That can be attributed to the history of Telecom Jordan, which is different from any other operator in Jordan. That is one of the main reasons to choose Telecom Jordan to apply their study. Telecom Jordan belonged to the government before privatization. Consequently, it witnessed a change in culture due to mergers and acquisitions. That makes employees' mindsets differ from one to another, especially when it comes to culture and re-engineering corporate

**Table 15.** Regressing intrapreneurship sub- variables on employee enhancement

Model	Unstandardized Coefficients		Standardized Coefficient		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.072	0.446		2.401	0.018
1 Corporate Culture	0.167	0.116	0.137	1.441	0.153
Corporate Entrepreneurship	0.528	0.093	0.519	5.695	0.000
Re-engineering Corporate Thinking	0.010	0.071	0.012	0.139	0.890

thinking. Regarding corporate entrepreneurship, it is a new concept for them; therefore, all of them were looped with this concept and got the same training and awareness sessions. That helped them perform the same vision. In conclusion, it was plotted that corporate entrepreneurship is the most significant dimension.

In addition, from the values of Beta, it has been noted that employee enhancement is the most affected variable by corporate entrepreneurship, while the process of production, sales volume, and volume of production ranked second, third, and fourth, respectively. The diversification parameter got the lowest effect.

The investigation of the literature review revealed that the diversification parameter is the most affected by intrapreneurship. Meanwhile, the data analysis showed that intrapreneurial programs are more sensitive to employee enhancement, since they are designed for entrepreneurial employees. The reason behind this differentiation refers to the following: First, the current research studied a different sector; most of the previous articles in the literature review focused on the manufacturing industry and financial firms. Very few of them investigated telecom operators. Second, the region in which the previous studies were applied; none of the previous articles applied in Jordan.

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## CONCLUSION

The objectives of the study are to investigate the effect of intrapreneurship on the operators' performance (volume of production, production process, sales volume, diversification, and employee enhancement) of Telecom operators in Jordan and to find out and arrange the effect of intrapreneurship on different performance factors, so, this study investigates the impact of intrapreneurship on the operators' performance of Jordanian Telecom Organizations. The results show that intrapreneurship affects performance, sales volume, the process of production, diversification, and employee enhancement of Telecom Jordan. It is found that corporate entrepreneurship has the highest effect compared to corporate culture and re-engineering corporate thinking, which has the lowest effect on the performance of Telecom Jordan.

The study strongly recommends paying more attention to the Intrapreneurial Studio as it is considered a factory of various diversified ideas. Paying more attention to other dimensions of intrapreneurship. As corporate entrepreneurship was the dominant factor, Telecom Jordan should pay attention to corporate culture and re-engineering corporate thinking to increase performance. Telecom Jordan should carry out more injections of entrepreneurial thinking on a large scale. However, some managers in the company do not share all relevant information with their subordinates. The company should try to change the mindset of these managers and push them to share.

## AUTHOR CONTRIBUTIONS

Conceptualization: Samah Toubasi, Shafiq Al-Haddad.

Data curation: Samah Toubasi, Shafiq Al-Haddad.

Formal analysis: Samah Toubasi.

Investigation: Samah Toubasi, Shafiq Al-Haddad.

Methodology: Samah Toubasi, Shafiq Al-Haddad.

Project administration: Samah Toubasi, Shafiq Al-Haddad.

Resources: Samah Toubasi.

Writing – original draft: Samah Toubasi.

Writing – review & editing: Shafiq Al-Haddad.

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