

# **The Effect of Innovation on the Financial and Non-Financial Performance in Palestinian Organizations**



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## **Dedication**

I dedicate this work to God, my Parents (Sameh and Dalal) , my sister Hadeel, my brothers Haitham and Mohammed. and many friends and my beloved country Palestine.

## **Abstract**

This thesis examines the Effect of Innovation on the Financial and Non-Financial Performance in Palestinian Organizations. A regression analysis of 49 conducted surveys found a positive significant effect between Product and service innovation, process innovation, and organizational culture and financial performance. Moreover, the finding reveals that Process Innovation also has a positive effect on financial Organizational innovation performance (product & service Performance). On contrary, the finding reveals no evidence that there is a relationship between Product and service innovation and non-financial performance (employee, costumer and product), Process Innovation and employee and customer satisfaction. and no evidence that cultural innovation has any effect on non-financial performance.

## ***Keywords***

Innovation; Product and Service Innovation; Process Innovation; Organizational Culture; Organization Performance; financial Performance; Non-Financial Performance.

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## **Introduction**

Innovation is essential in the business environment because it gives organizations an advantage in entering markets faster and gives a connection to creating markets, which can lead to greater opportunities, especially in rich countries. Innovation can also help generate unique ideas while giving the innovator a proactive and affirming attitude to take on challenges and get things done (Henderson, 2017). Over time, researchers identified three major benefits that innovation brings to the organization, pointing out the long-term economic growth as a key element that innovations attribute at both national (Amara, 1990) and organizational levels (Utterback, 1994). Moreover, these positive stans that the organizations adopt towards innovation motivate and invigorate companies to scan the surrounding environment searching for innovative opportunities (Kimberly, 1981).

In addition, in the long run, Innovation considers a key component for organization survival, thus it is important for organizations to evolve and strive to adopt the evolutionary process in order to maintain its status within the business environment, and this would only be accomplished through innovation. Furthermore, literature has identified other external factors that drive organizations to adopt innovation that would contribute to organization growth, such as Technological development (Porter, 1990), Deregulation (Da Mota de Pina & Verhallen, 1998), Globalization (Grupo de Lisboa, 1994), Shortening of innovation cycles (Amara, 1990, Kessler & Chakrabarti, 1996) and New buyer needs (Clark & Fujimoto, 1991).

In the past two decades, much research has been done examining the importance of Innovation and performance for private and public institutions. Many organizations have been

utilizing innovation in order to develop and enhance their performance (Powell & Snellman, 2004). While many studies found empirical evidence of the relevance of innovation in achieving higher performance in both the private and public sectors (Hashi & Stojčić, 2013; Powell & Snellman, 2004; Taalbi, 2017). At the same time, many scholars argue that this field is still lacking scientific investigation in which it creates a distinct gap between the theoretical and practical knowledge in the field of innovation and its relevance to performance (Ivanova & Leydesdorff, 2014; Stek & van Geenhuizen, 2016). Therefore, as a result, economic growth has been linked with the level of technology, where at the same time researches found an obvious connection between innovation and performance (Aghion & Howitt, 1998). Organizations direct motivation to utilize and implement Innovation strategies whether the simple or complex ones has proven its effects in increasing organizations' product performance, productivity, and competitive advantage in the new marketplace, simultaneously lowering the cost of production.

This study comes to investigate the Effect of Innovation on the financial and non-financial performance in Palestinian Organizations as this field of investigation up until now has been unexplored in the literature. Thus, this study comes hoping to provide and add preliminary guidance and framework for future research on Innovation and its effect on performance in Palestine. In order to achieve so, the study used innovation types as the independent variable and organizational performance (financial and non-financial performances) as the dependent. The variables were operationalized in line with the objectives of the study.





## Literature review

### **Innovation**

In the past decades, innovation has been studied and defined from various perspectives. In general, the term innovation has been defined as "a new idea, creative thoughts, new imaginations in the form of device or method" (Merriam-webster.com). In literature, the concept of innovation has been defined in diverse forms, Rogers (1983) defines innovation as "an idea, practice, or object that is perceived as new by an individual or other unit of adoption" (p.11), while Porter (1990) defined Innovation to "include both improvements in technology and better methods or ways of doing things. It can be manifested in product changes, process changes, new approaches to marketing, new forms of distribution, and new conceptions of scope." (p.45), Mezias & Glynn (1993) agreed that innovation "embodies a new idea that is not consistent with the current concept of the organization's business" (p. 78).

### **Level of Innovation**

Despite the diversity of definitions, innovation as a concept has been linked to the newness of creating and adopting new ideas (Ambile, 1988) whether in the individual, group, organizational level (Gopalakrishnan & Damanpour, 1997). Previous literature indicates that these three factors are the key factors in influencing innovation.

#### *Individual-level*

On an individual level, literature has recognized the characteristics of individuals who play a crucial role in the innovation process and who at the sometimes consider as vital actors in the organizational innovation process. These individuals are usually designated as

intrapreneurs (Hisrich, 1990) or as product champions (Peters & Waterman, 1982). Personality, e.g.: openness, flexibility, and self-efficacy (Feist and Gorman,1998), motivation e.g.: Intrinsic and extrinsic motivation (Amabile, 1983; Mumford et al., 2002, Sauermann and Cohen, 2008) and cognition, e.g.: Knowledge, expertise, divergent and convergent thinking (Amabile et al., 1983; Woodman et al.,1993) are the main common personality characteristics that are identified by scholars in which creative individuals are shared in innovative organizations.

### *Group-level*

In organizations, groups are considered the energetic key factor of supporting the innovation process and the key element in the survival of the organization and the development of new products (Dussauge et al., 1987). Groups deem to be the major dynamic micro-contexts for innovation (Kidder, 2011). Katz (1982) argues that it takes two years to build what he called “a good team” whereas it takes five years when the same group starts to lose their motivation, quality and fall under boredom.Over the last decades, scholars and researchers have identified several factors that play a major role in group-level that determines innovation and creativity in organizations. These factors are; structure, climate, leadership and task characteristics (Zennouche et al., 2014). Cohesiveness in group *structure* has been taken as the main factor of generating innovation outcomes, where diversity, background and knowledge also play a vital role in composing a successful cohesive team (Paulus & Yang, 2000). Group *climate* has been a key factor in group innovation. In order to innovate, groups need to work on building a social network, to communicate and to interact with internal and external workplace (Bain et al., 2001; Mann, 2005). *Leadership* is considered as an essential element in the innovation process as it creates the perfect atmosphere for creativity and the ideal circumstance

to flourish innovation (Shalley & Gilson, 2004). Lastly, scholars believe that the characteristics of the tasks that are given to employees have a huge influence on innovation outcomes, suggesting that employees should be stimulated by intellectual challenging tasks avoiding mundane tasks (Hunter et al., 2007)

### *Organizational level*

When it comes to innovation on an organizational level, Literature has mainly addressed three main components; structures, Processes, and contextual variables. Organization structures centralization and hierarchy has a huge influence in determining an organization's innovation capability (Burns & Stalker, 1961; Damanpour, 1991). Processes deal with the free-flowing of information and its consequences on the innovation process across the organization (Ebadi & Utterback; 1977; Hauschildt, 1992)and finally, contextual variables deal with the organizational environment characteristics, the sophistication of consumers, and the product's nature and its development cycle (Tushman & Moore, 1988). Concurrently, scholars have identified four Key factors influencing innovation in organizational level. These factors are summarized as; Structure, e.g.: Specialization, formalization, centralization, functional differentiation, internal and external communication (Burns and Stalker, 1961; Damanpour, 1991; Mumford et al., 2002), Culture, e.g.: Support for innovation, risk-taking, openness, trust, experimentation, espoused/enacted (Amabile, 2005), Strategy, e.g.: the adoption and implementation of strategies (Argyres & McGahan, 2002) and lastly Resources, e.g.: Information, time, money and expertise (Woodman et al.,1993).

## **Characteristics of innovation**

Scholars have labeled three essential characteristics of innovation; Uncertainty, Ubiquity, Cumulativeness (Da Mota de Pina & Verhallen, 1998). Innovation is an uncertain process (Dosi, 1988), ubiquitous when it relates to “newness” of markets, services, and products of modern economies (Lundvall, 1992) and cumulative that incorporate with the existing technological and knowledge base of the organization (Dosi, 1998). At the same time, they distinguished these characteristics from other related concepts such as change, invention, and creativity.

For a long time, the Innovation concept has been misused and confused with the Change concept, according to Fonseca, Cunha & Gonsalves, 1996, being a change should hardly be treated as an innovation. Linking the above-mentioned definitions of innovation, scholars such as Roger (1983) have distinguished invention from innovation as the latter is the adoption of process, service, or product that already existed and invented; i.e.: created or discovered. Lastly, Woodman, Sawyer and Griffin (1993) disagree with Cardoso de Sousa, Pellissier & Monteiro, 2012) who argues that “Organizational innovation is a synonym for organizational creativity” asserting that creativity is related to creating new things by individuals in the organization and is a process that is involved in the broader process of organizational innovation, and thus the organizational change, where at the same time creative behavior does not have to be involved in the process of innovation.

## **Stages of the innovation process**

Building on previous literature, scholars and academics have identified and classified three stages of the innovation process; Initial phase, Intermediate phase, and Final phase. At the *initial phase*, the organization must recognize the importance of implementing innovation as a tool of their economic growth (Van de Ven, 1986) whether by initiating (Pierce & Delbecq, 1977), inventing (Roger, 1983), generating ideas (Kanter, 1988), or even adopting new ideas (Kimberly, 1981). To do so, organizations tend to borrow or/and copy from an external organization in the same industry. The *intermediate phase* is the phase where the organization tries to transform the opportunities by adopting (Pierce & Delbecq, 1977), developing (Roger, 1983), realizing (Kanter, 1988) and utilizing (Kimberly, 1981) the new ideas (processes, services, products) and turn them into reality. The *final phase* of the innovation process is represented by implementing (Pierce & Delbecq, 1977), diffusing and adopting (Roger, 1983), transferring (Kanter, 1988) and rehearsing the exnovation (Kimberly, 1981) of the new processes, services and/or products across the organization or the society.

### **Organizational innovation**

Scholars have defined three types of Organizational innovation; Product and Service Innovation, Process Innovation and Organizational Culture.

#### *Product and Service Innovation*

Product and Service Innovation is new for the marketplace (Peter, 2009). According to Alegre, Lapiedra, & Chiva (2006), product innovation is the enhancement and the modification that the organization tends to make whether in its design or supplies of the original product. Moreover, Product and Service Innovation goes with the newness phase that the organization

implements in order to find a diverse new product from the original one (Herrmann, Tomczak, & Befurt, 2006) that include the invention of new Product or/and improvement or/and giving technical specification to the existing product (Rennings, Andreas, Kathrine, & Esther, 2006, Rogers & Blenko, 2006).

In addition, actions such as “design, research, development, administration, and marketable” are included in the process of promoting the new product (Ettlie & Elsenbach, 2007). Over time, product innovation demonstrated to be a key factor for organizational development and performance that contributed to organizational profit (Wheelwright, 1992).

### *Process Innovation*

Even though process innovation plays a major strategic role in the innovation process, this process has received less attention than other types of innovation in literature. Process Innovation is the execution of a new or upgraded /enhanced product or final product delivery that yields in less amount of input of the given output of the product (Cote, Booth, & Louis, 2006). In addition, process innovation enables the organization to manufacture and formulate a better product that other organizations cannot (Hall & Andriani, 2002). It also enhances the product value and worth with less cost of manufacturing and delivery (Brown & Frame, 2004).

### *Organizational Culture*

2016 Gartner Financial Services Innovation Survey found that "the biggest threat to innovation is internal politics and an organizational culture which doesn't accept failure, doesn't accept ideas from outside, and/or cannot change (Cancialosi, 2017)". Organizational

culture is an intangible part of any organization (Rutherford, 2001) that resides in the mind of employees such as assumption, norms, belief and behavior that is dynamically reformed over the period of time.

### **Organizational performance**

According to Mahapatro (2013), Organizational performance is defined as the ability of the organization to achieve its goals and objectives under the guidance of talented administration, and governance. Thus, in order to understand how an organization performs in the marketplace and among its competitors, two main indicators are used to measure performance; financial performance and non-financial performance (Chen & Quester, 2006).

### **Financial Performance**

In organizations, Financial performance has always been associated with profit that the organization generates in a certain period of time utilizing the organization's assets or capital from investors or even from the stakeholders themselves (Van Meter & Van Horn, 1975). Profitability is measured by the revenue, asset, and profit of the organization (Yee, Yeuin & Cheng, 2008).

### **Non-Financial Performance**

#### *Employee Satisfaction (Learning and Growth Performance)*

In implementing innovation strategies, organizations tend to rely on their employee to achieve higher performance, by creating a climate that encourages innovativeness (De Jong & Den Hartog, 2007). Moreover, innovative organizations attempt to improve and develop



employees' willingness and ability to innovate in tri-level (individual, group and organizational level) ( Huhtala & Parzefall, 2007).

#### *Organizational innovation performance (product & service Performance)*

Product and process innovation performance are the two main keys factors that conceptualize organizational innovation performance (Ar & Baki, 2011; Schumpeter & Backhaus, 2003). These two key factors are vital for the growth of the organizations In the comitative climate of the marketplace. Fagerberg et al. (2005) found that “the effect of product innovation tends to be more visible to the external market than the process innovation”. According to O'Sullivan & Dooley (2008), “whenever new products require a manufacturing and delivery process to reach customers, process innovation can affect the idea-to-launch process of product innovation and also inspire “new” products”

#### *Customer integration and Satisfaction*

The main goal of an Innovative Organization is to provide a product or service that fulfill costumers wish and expectations. Kotler& Keller (2007) defines customer satisfaction as “a person's feelings of pleasure or disappointment resulting from comparing a product perceived performance (or outcome) in relation to his or her expectations”. On the other hand, according to Zeithaml et al. (1990), costumers' satisfaction is the pleasant level of fulfillment that customers would have from the provided product or service. Two key factors are used to measure customer satisfaction; the fulfillment of costumers expectations and feelings. Thus, customer satisfaction considers one of the major measurements to determine organization success.



## **Effects of Innovation Strategy on Organization Performance**

Hashi & Stojčić (2013) in their latest study, “*The Impact of Innovation Activities on Firm Performance Using a Multi-Stage Model: Evidence from the Community Innovation Survey*” found a positive relationship of the effect of innovation on organization performance where R&D was used as the major measurement of innovation, in which was also analyzed and proved by other scholars such as Löf & Heshmati (2002); Van Leeuwen & Klomp (2006); Hall, Mairesse & Mohnen (2009).

This later was criticized by Kemp, et al., (2003) in their 2003 *Innovation and firm performance* book. Kemp, et al. argues that using R&D to measure the effect of the innovation process on organization performance has many shortcomings as it provides little information about the innovation process. Later studies on the effect of the innovation process on organization performance have shifted its focus to include the complexities of innovation processes where more innovation channels have been added in order to achieve better organizational performance (Bessler & Bittelmeyer, 2008). Gu & Surendra (2004) have reported that using more complex innovation strategies leads to better organizational performance, however, surprisingly, literature has focused mainly on the effect of product innovation on organizational performance and has little on the impact of complex innovation such as process, market and organizational innovation on organization performance (Miller 2001; Ngyen, et al. (2007). At the same time other scholars such as Damanpour & Evan (1984) claim that in order to help organizations to achieve a better performance, organizations need to incorporate both non-technological and technical innovations in parallel and at a more balanced rate.

So far, as previously stated, , existing literature on the effect of innovation on organization performance has come with no definite conclusion on what is the best innovation process that has the most effective influence on organization performance. In addition, the multi-dimensional nature of organization performance makes it hard to find a straightforward relationship between innovation strategies and organizational performance (Murphy, Trailer & Hill, 1996).

Furthermore, the effect on the other hand, scholars such as Walker (2004), suggested that in order to accomplish higher performance, different types of innovations should be utilized and implemented in conjunction. This also was concluded by Mairesse & Mohnen (2010) who suggested that adopting two or three simple innovation strategies would lead to higher organizational performance. Scholars also noted that in order to keep and achieve higher performance, organizations must have persistent efforts in implementing long-term innovation, giving the fact that this effect is temporary since competitors tend to imitate other organization innovations strategies (Cefis & Ciccarelli, 2005) and even sometimes improve upon. Original innovative organizations should work perpetually on developing new and better innovation strategies and not neglecting these signs as it might result in huge losses and decline of innovation and thus eventually be forced to leave the market (Schumpeter, 1934).

### **Innovation in Palestine**

the innovation limitation in Palestine because of the cost factor from a lack of financial resources and a high cost of innovation that limits the application of innovation, which is a key factor that has a completely negative and main impact on the product, the

innovation process and organizational structure. Also, the lack of demand on innovation lead to weak competition in the sectors(Morrar & Abdelhadi, 2016).

Implementing innovation well in Palestine by exchange knowledge, information and experience through academic partnerships between the public and private sectors that are a major reason for the success of innovation so that I found that innovative companies have high potential. Through the exchange of knowledge and the increase in national directives towards innovation, it is a good incentive for the success and implementation of innovation(Khatib, 2013).

**Thus, based on existing given literature on innovation and performance, *this study predicts that:***

H1.a: Product and service innovation has a positive effect on financial performance

H1.b: Product and service innovation has a positive effect on Employee Satisfaction (Learning and Growth Performance)

H1.c: Product and service innovation has a positive effect onOrganizational innovation performance (product & service Performance)

H1.d: Product and service innovation has a positive effect on Customer integration and Satisfaction

H2.a: Process Innovation has a positive effect on financial performance

H2.b: Process Innovation has a positive effect on Employee Satisfaction (Learning and Growth Performance)

H2.c: Process Innovation has a positive effect on Organizational innovation performance (product & service Performance)

H2.d: Process Innovation has a positive effect on Customer integration and Satisfaction

H3.a: Organizational Culture has a positive effect on financial performance

H3.b: Organizational Culture has a positive effect on Employee Satisfaction (Learning and Growth Performance)

H3.c: Organizational Culture has a positive effect on Organizational innovation performance (product & service Performance)

H3.d: Organizational Culture has a positive effect on Customer integration and Satisfaction

### 3. Research Methodology

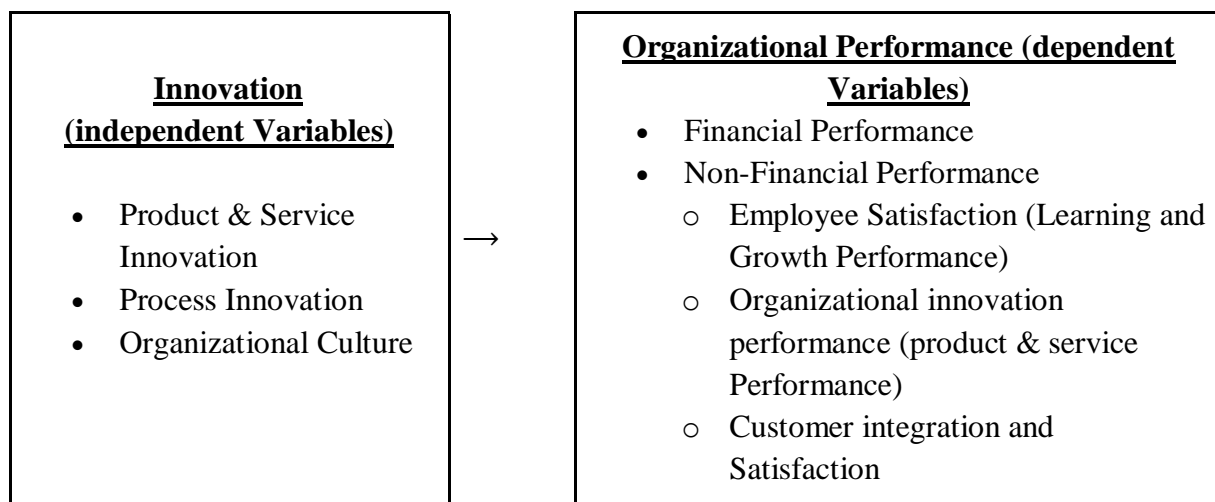
The purpose of this study is to explore **The Effect of Innovation on the Financial and Non-Financial Performance in Palestinian Organizations**

#### 3.1. Sample and Data Collection Method

The population is based on Organizations in Palestine. The source of our data to test the above hypotheses is a questionnaire that was created by Qualtrics and sent to the employees and/or directors of these organizations by e-mail. The questionnaire had been translated into English and Arabic and have been sent to 280 organizations by e-mail in Palestine and only 49 organization that filled out the questionnaire. Thus, the sample of this study is 49 organizations. Limited time and Covid-19 lockdown are two major limitations of the research to collect more questionnaires.

#### 3.2. Research Model of the Study

The research model of the study is as follows:



### ***3.3. Measures of the Study***

The questionnaire has been developed upon previous studies that investigate the effects of innovation on organizational performance. This study adopts a former tested valid and reliable survey questionnaire to test the predicted hypotheses of this study. The questionnaire is constructed in three parts; First part is about General (demographic) data, and composed of four questions, which are the name of the organization, number of employees of the organization, whether the organization has an innovation strategy, and lastly the Percentage of the revenues of new products developed in the last 3 years to annual revenue.

The second part is on Innovativeness, the innovation section is composed of three main dimensions that state and study the three types of innovation. These three are product and service innovation, process (administrative) innovation and innovative culture. Product and service innovation with nine questions and process (administrative) innovation with four questions. To measure the first two dimensions (product and service innovation, process innovation), the author used items from “Daft (1982), Liao et al. (2008), Tsai (1997) and Wang & Ahmed (2004)” previous studies. The third dimension, innovative culture with three questions, was measured using “Hurley and Hult (1998)” study. All questions have used five-point Likert scale (Strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree and Strongly agree).

Finally, the last part is the organizational performance is composed of two dimensions the first one is the financial performance with five questions. The second one is the non-financial performance with three main sub-dimensions; Organizational innovation performance



(product & service Performance) with seven questions developed based on “Boer & During (2001) and Tracey & Tan (2001)”. Employee Satisfaction (Learning and Growth Performance) with four questions developed based on “Dorenbosch et al. (2005) and Scott & Bruce (1994)”, and Customer integration and Satisfaction with four questions developed based on “Swink et al. (2007); Enkel et al. (2005) and Sherman et al. (2000)”. All questions have used five-point Likert scale (Strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree and Strongly agree).

### ***3.4. Data Collection Method & Analysis Technique***

#### ***3.4.1. Primary Data***

The source of our data to test the above hypotheses is a questionnaire that was created on Qualtrics and sent to the employees and/or directors of these organizations by E-mail.

## **4. Data Analysis and Results**

### **4.1. Analysis**

The collected was entered and analyzed by SPSS. In order to test our hypotheses, we needed first to test our reliability, to do so the Cronbach’s Alpha coefficient was used. Thus, Reliability analysis and Linear Regression were used to test the relationship previously hypothesized between our independent and dependent variables.

#### ***4.1.1 Reliability***

The first part is the composite reliability. Reliability test the reliability value between the giving variables that we used in our survey. Table 1. shows the output of composite

reliability, in which the composite reliability is good if the value is above 0.70. Based on the output table, it is shown that the composite reliability value for our independent variables; Product & Service Innovation variable is 0.816, for Process Innovation variable is .782, and for the Organizational Culture variable is 0.742. whereas for our dependent variables; for Financial Performance is .753, for Employee Satisfaction (Learning and Growth Performance) is .747, for Organizational innovation performance (product & service Performance) is .865, and for Customer integration and Satisfaction is .752.

**Table 1.**

	<b>Variables</b>	<b>Reliability (Cronbach's Alpha)</b>
<b>IV</b>	Product & Service Innovation	<b>.848</b>
	Process Innovation	<b>.782</b>
	Organizational Culture	<b>.742</b>
<b>DV</b>	Financial Performance	<b>.753</b>
	Non-Financial Performance Employee Satisfaction (Learning and Growth Performance)	<b>.747</b>
	Organizational innovation performance (product & service Performance)	<b>.865</b>
	Customer integration and Satisfaction	<b>.752</b>

#### ***4.1.2 Testing Hypotheses***

The phase of hypotheses testing consists of testing each independent variables (Innovation) with each dependent variable (Performance; Financial and no-financial performance). The influence of each innovation type on financial performance (Financial and

no-financial performance )was tested with Linear Regression analysis that included the factors identified as measures of innovation and financial performance.

#### 4.2. Findings

To test each of our hypotheses, Linear Regression was used to test the relationship between our independent and dependent variables as shown in Tables below.

**To test the effect of Product and Service Innovation on Performance, we predict that:**

***H1.a: Product and service innovation has a positive effect on financial performance***

**Table 2.**

*Regression Analysis Summary for Product and Service Innovation predicting financial performance*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.146	.532		4.032	.000
	ProdServInov	.381	.143	.362	2.662	.011

a. Dependent Variable: FinancialPerf

$$R^2=.131$$

A simple linear regression revealed that Product and Service Innovation has a positive significant effect on Financial Performance,  $\beta = .36$ ,  $t(49) = 2.66$ ,  $p < .05$

***H1.b: Product and service innovation has a positive effect on Employee Satisfaction (Learning and Growth Performance)***

**Table 3.**

*Regression Analysis Summary for Product and Service Innovation predicting Employee Satisfaction (Learning and Growth Performance)*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.779	.494		5.627	.000
	ProdServInov	.149	.133	.162	1.125	.266

a. Dependent Variable: NonFinancialPerf\_Employee

$$R^2 = .026$$

A simple linear regression revealed that Product and Service Innovation has no significant effect on Employee Satisfaction,  $\beta = .16$ ,  $t(49) = 1.125$ ,  $p > .001$

***H1.c: Product and service innovation has a positive effect on Organizational innovation performance (product & service Performance)***

**Table 4.**

*Regression Analysis Summary for Product and Service Innovation predicting Organizational innovation performance (product & service Performance)*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.910	.538		5.408	.000
	ProdServInov	.144	.145	.144	.997	.324

a. Dependent Variable: NonFinancialPerf\_Supply

$$R^2 = .021$$

A simple linear regression revealed that Product and Service Innovation has no significant effect on Organizational innovation performance,  $\beta = .14$ ,  $t(49) = .997$ ,  $p > .001$

***H1.d: Product and service innovation has a positive effect on Customer integration and Satisfaction***

**Table 5.**

*Regression Analysis Summary for Product and Service Innovation predicting Customer integration and Satisfaction*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.712	.613		4.427	.000
	ProdServInov	.221	.165	.193	1.345	.185

a. Dependent Variable: NonFinancialPerf\_Costumer

$R^2 = .037$

A simple linear regression revealed that Product and Service Innovation has no significant effect on Customer integration and Satisfaction,  $\beta = .19$ ,  $t(49) = 1.345$ ,  $p > .001$

**To test the effect of Process Innovation on Performance, we predict that:**

***H2.a: Process Innovation has a positive effect on financial performance***

**Table 6.**

*Regression Analysis Summary for Process Innovation predicting financial performance*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.013	.506		3.975	.000
	ProcessInov	.429	.140	.408	3.063	.004

a. Dependent Variable: FinancialPerf

$R^2 = .166$

A simple linear regression revealed that Process Innovation has a positive significant effect on Financial Performance,  $\beta = .41$ ,  $t(49) = 3.063$ ,  $p < .05$

***H2.b: Process Innovation has a positive effect on Employee Satisfaction (Learning and Growth Performance)***

**Table 7.**

*Regression Analysis Summary for Process Innovation predicting Employee Satisfaction (Learning and Growth Performance)*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.948	.483		6.103	.000
	ProcessInov	.106	.133	.116	.798	.429

a. Dependent Variable: NonFinancialPerf\_Employee

$R^2 = .013$

A simple linear regression revealed that Process Innovation has no significant effect on Employee Satisfaction,  $\beta = .11$ ,  $t(49) = .8$ ,  $p > .001$

***H2.c: Process Innovation has a positive effect on Organizational innovation performance (product & service Performance)***

**Table 8.**

*Regression Analysis Summary for Process Innovation predicting Organizational innovation performance (product & service Performance)*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.187	.495		4.419	.000
	ProcessInov	.350	.137	.350	2.559	.014

a. Dependent Variable: NonFinancialPerf\_Supply

$$R^2=.122$$

A simple linear regression revealed that Process Innovation has a positive significant effect on Organizational innovation performance,  $\beta = .35$ ,  $t(49) = 2.56$ ,  $p < .05$

***H2.d: Process Innovation has a positive effect on Customer integration and Satisfaction***

**Table 9.**

*Regression Analysis Summary for Process Innovation predicting Customer integration and Satisfaction*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.494	.587		4.248	.000
	ProcessInov	.289	.162	.251	1.779	.082

a. Dependent Variable: NonFinancialPerf\_Costumer

$$R^2=.063$$

A simple linear regression revealed that Process Innovation has no significant effect on Customer integration and Satisfaction,  $\beta = .25$ ,  $t(49) = 1.78$ ,  $p > .001$

**To test the effect of Organizational Culture on Performance, we predict that:**

***H3.a: Organizational Culture has a positive effect on financial performance***

**Table 10.**

*Regression Analysis Summary for Organizational Culture predicting financial performance*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.470	.644		2.284	.027
	Culturallnov	.580	.179	.428	3.249	.002

a. Dependent Variable: FinancialPerf

$R^2=.183$

A simple linear regression revealed that Cultural Innovation has a positive effect on Financial Performance,  $\beta = .43$ ,  $t(49) = 3.25$ ,  $p < .05$

***H3.b: Organizational Culture has a positive effect on Employee Satisfaction (Learning and Growth Performance)***

**Table 11.**

*Regression Analysis Summary Organizational Culture predicting Employee Satisfaction (Learning and Growth Performance)*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.400	.624		5.444	.000
	Culturallnov	-.020	.173	-.016	-.113	.910

a. Dependent Variable: NonFinancialPerf\_Employee

$R^2=.000$

A simple linear regression revealed that Cultural Innovation has no significant effect on Employee Satisfaction,  $\beta = -.02$ ,  $t(49) = -.11$ ,  $p > .001$

***H3.c: Organizational Culture has a positive effect on Organizational innovation performance (product & service Performance)***

**Table 12.**



*Regression Analysis Summary for Organizational Culture predicting Organizational innovation performance (product & service Performance)*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.245	.656		3.425	.001
	Culturallnov	.334	.182	.259	1.836	.073

a. Dependent Variable: NonFinancialPerf\_Supply

$R^2 = .067$

A simple linear regression revealed that Cultural Innovation has no significant effect on Organizational innovation performance,  $\beta = -.26$ ,  $t(49) = 1.84$ ,  $p > .001$

***H3.d: Organizational Culture has a positive effect on Customer integration and Satisfaction***

**Table 13.**

*Regression Analysis Summary for Organizational Culture predicting Customer integration and Satisfaction*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.000	.775		3.870	.000
	Culturallnov	.147	.215	.100	.686	.496

a. Dependent Variable: NonFinancialPerf\_Costumer

$R^2 = .01$

A simple linear regression revealed that Cultural Innovation has no significant effect on Customer integration and Satisfaction,  $\beta = .1$ ,  $t(49) = .69$ ,  $p > .001$

## 5. Discussion

In relation to the purpose of the thesis which was to examine the effect of innovation on performance in Palestinian organizations. Based on our result, this thesis concludes that Product and service innovation has a positive impact on financial performance. The finding shows that organizations in Palestine tend to be the first in the market to introduce new product and service, coping with the market demand and continuously modify products design, and managing to deliver special product flexibly to the costumers, while “continuously improve old products and raise the quality of new products”.

Nevertheless, Process Innovation has a positive effect on financial performance and Organizational innovation performance (product & service Performance). Innovative organizations in Palestine lean “to development of new channels for products and services and constantly emphasize and introduce managerial innovations such as computer-based administrative innovations, new employee reward/training schemes, new departments or project teams”. Lastly, this study also found that Organizational Culture has a positive effect on financial performance, where management actively seeks innovative ideas by welcoming innovation proposals in the organization.

On the other hand, the results show no evidence that there is a relationship between Product and service innovation and non-financial performance (employee, customer and product), Process Innovation and employee and customer satisfaction. While there was no evidence that cultural innovation has any effect on non-financial performance.

Linking the study result to existing literature, these results support the previously existing literature that have come with no definite conclusion on what is the best innovation process that has the most effective influence on organization performance. Furthermore, the effect on the other hand, scholars such as Walker (2004), suggested that in order to accomplish higher performance, different types of innovations should be utilized and implemented in conjunction. And this is what it could be missing in implementing Innovations in Palestinian organizations, who as we could conclude from the survey that they tend to implement one type of innovation ignoring the other main types, in which support Mairesse & Mohnen (2010) argument and suggestion that adopting two or three simple innovation strategies would lead to higher organizational performance. In addition, given the unstable political abnormality of Palestine, it seems hard to organization especially small businesses to have long-term innovation strategy as was suggested by Cefis & Ciccarelli (2005). Thus, it can be noticed that innovation has only effect mostly on financial performance, increasing and developing sales growth, total operating costs, market shares, productivity and return on asset relative to their competitors.

Therefore, it becomes a necessity and highly recommended that these companies should start working in finding an innovative way and pay more attention to creating new ways and work on the product, employee and customer satisfaction, rather than thinking of the profit as the main goal of the company. Therefore, organizations should work on having better new product functioning, quality and reliability than other competitors in the Market place. Whereat the same time, organizations should aim to achieve better effectiveness, speed and quality of process innovation performance. To do so, companies need to engage their employees more in

innovation as they consider the most productive asset if the company. Companies need to work in creating an innovative environment so the employees can share their knowledge and experience. They also have to work on hiring employees with a different perspective and create a collaborative space and new opportunities for old employees. Moreover, innovative organizations should make sure that their employees innovate actively and frequently, where at the same time they support innovative behavior at work and spend significant time innovating at work.

In addition, companies should realize and work on making customers the center if innovative efforts are very important for the survival of the company. A study shows that “knowledge of innovative products/services among customers has significant effects on their recommendation intentions: the higher their knowledge levels, the higher their recommendation intentions (Zhang et al., 2020).” Thus, customers are key factors that should take part in the organizations activities, and in order to achieve higher customer integration and satisfaction, organizations should maintain close contact with customers, track and analyze customer behavior using information systems, collect and share information about customer needs, and rapidly and proficiently capture customer reactions toward new products/services.

## **6. Conclusion**

By combining existing literature with recent empirical evidence, we conducted a survey to examine the effect of Innovation on the Financial and Non-Financial Performance in Palestinian Organizations. Our result showed the existence of a positive significant effect between Product and service innovation, process innovation, and organizational culture and

financial performance. We also found that Process Innovation also has a positive impact on financialOrganizational innovation performance (product & service Performance).

## **7. Limitations**

One of the limitations of the studies is the sample size, giving Covid-19 and also time limitation only 49 companies could fill the survey although the survey has been sent to 280 organizations in Palestine.

## **8. Suggestions for Future Research**

Future studies could target more companies and also look more in-depth whether or not the effect of innovation on financial performance changed according to moderating effect as firm size, education level of employees and years of experience.

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## APPENDICES

### **APPENDIX ONE:**

#### **LETTER TO ORGANIZATIONS**

Dear Sir/Madam,

I hope this email finds you well and SAFE!

My name is Anas Alhaddadeh, I am a student at Universitat Politècnica de València pursuing master's degree in Business, Product and Service Management. I am carrying out a research on "The Effect of Innovation on the Financial and Non-Financial Performance in Palestinian Organizations".

I am writing to you to request your participation in a brief survey as I am trying to examine the effect of innovations on organizational performance in Palestinian Organizations. The survey is very brief and will maximum take about 10-15 minutes to fill. Please, be objective and realistic in your answers as we assure complete confidentiality and anonymity of your answers, as this data will be used for just academic purpose.

Sincerely Yours,

Anas S. Alhaddadeh



**APPENDIX TWO:**  
**QUESTIONNAIRE**

**Innovation and Performance Palestine**

In the questionnaire we ask you about the effect of innovations on organizational performance in Palestinian Organizations. The survey is divided into three parts:

Part one: General Questions

Part Two: Address the issue of innovativeness at your organization

Part Three: Assess the financial and non-financial performance of your organization.

**GENERAL QUESTIONS:**

**Q1- Name of the organization:**

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**Q2- Number of employees of the organization:**

- 1 - 9 (1)
- 10 - 49 (2)
- 50 - 99 (3)
- 100 - 249 (4)
- 250 or more (5)

**Q3- Does the organization have an innovation strategy?**

- Yes (1)
- No (2)

**Q4- Percentage of the revenues of new products developed in the last 3 years to annual revenue:**

- 0% - 10% (1)
- 11% - 20% (2)
- 21% or more (3)

**Q5- INNOVATION  
PRODUCT AND SERVICE INNOVATIONS**

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
In new product and service introduction, our company is often first-to-market.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our new products and services are often perceived as very novel by customers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
New products and services in our company often take us up against new competitors.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In comparison with competitors, our company has introduced more innovative products and services during past 5 years.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We constantly emphasize development of particular and patent products.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We manage to cope with market demands and develop new products quickly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We continuously modify design of our products and rapidly enter new emerging markets.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our firm manages to deliver special products flexibly according to customers' orders.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We continuously improve old products and raise quality of new products.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Q6- PROCESS INNOVATIONS

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Development of new channels for products and services offered by our corporation is an on-going process.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We deal with customers' suggestions or complaints urgently and with utmost care.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In marketing innovations (entering new markets, new pricing methods, new distribution methods, etc.) our company is better than competitors.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We constantly emphasize and introduce managerial innovations (e.g. computer-based administrative innovations, new employee reward/training schemes, new departments or project teams, etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Q7-ORGANIZATIONAL CULTURE

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly Agree
Innovation proposals are welcome in the organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Management actively seeks innovative ideas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People are not penalized for new ideas that do not work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Q8- FINANCIAL PERFORMANCE**

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
My organization's sales growth relative to our competitors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organization's total operating costs relative to our competitors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organization's market shares relative to our competitors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organization's productivity relative to our competitors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organization's return on assets (ROA) relative to our competitors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Q9- NON-FINANCIAL PERFORMANCE

### Organizational innovation performance (product & service Performance)

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
My company has better new product/service functioning than others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My company has better new product/service quality than others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My company has better new product/service cost than others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My company has better new product/service reliability and security than others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My company has better quality of process innovation performance than others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My company has better effectiveness of process innovation performance than others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My company has better speed of process innovation performance than others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Employee Satisfaction (Learning and Growth Performance)**

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
In general, employees in my company innovate actively.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In general, employees in my company innovate frequently.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
in general, employees in my company support innovative behavior at work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In general, employees in my company spend significant time innovating at work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Customer integration and Satisfaction**

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
My company maintains close contact with customers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My company tracks and analyzes customer behavior using information systems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My company collects and shares information about customer needs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My company rapidly and proficiently captures customer reactions toward new products/services.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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