

**A research on Innovation barriers facing MENA countries service firms based in China****Othman Abada**

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**Abstract**

Innovation is generally omnipresent in all fields, enterprises are facing unpredictable changes in their surrounding, and also a growing consumer expectations, its hard for firms to survive these challenges, therefore now its becoming an urge for firms to innovate and offer new services or products with a good price to their consumers .If an enterprise is not innovating this doesn't mean that's its rival is not doing so, innovation can lead to keeping a sustainable growth and help enterprises to stay one step ahead of competition .in order for a firm to succeed in its innovative policy it should be engaged in a wide range of changes to any of its technologies processes, service or business model .the number of MENA countries' firms based in china in rapidly growing which rise competition to higher levels .for this reason firms have to cope with these challenges ,by implementing innovative strategies however these strategies are hampered by some barriers .that can be divided into internal barriers and external ones .this results have an important impact on the innovation policy ,as on the enterprise .

Keywords: innovation, challenges, service firms, Mena countries, china

**1 - Introduction:**

In a world of fast growing economies, globalization, intense competitive environment, many firms tend to relocate their businesses to look for more chances of growth and expansion. Firms not only need to establish or relocate their business successfully to a new market but also they need to be competitive .in order to achieve this firms are forced to innovate.

With The market expansion, and increased customers' expectations and competition among firms, innovation has become more market-driven, more rapid and intense, more closely linked to scientific progress, more widely spread throughout the economy (OECD, 2000). Organizations may also facilitate innovation through project teams or R&D departments (Morton, 1971; Zaltman et al., 1973). Services sector R&D, for example, rose from less than 5% of total business enterprise R&D for the OECD area as a whole in 1980 to more than 15% in 1995. In countries that measure services R&D well, such as Canada, it now amounts to about 30% of total business enterprise R&D (OECD, 2000). Steve Jobs defined Innovation has nothing to do with how many R&D dollars you have, It's not about money. It's about the people you have, how you're led, and how much you get it. He argued that there are no definitive metrics for innovation. Measures of innovative success vary by company and industry.

As many studies show, innovation has positive effects on the firm; it is interesting to find out why not all firms engaged in innovation activities. Palmer-Noone (2000) discussed that Most of these leaders believed that their greatest challenges to innovation were to be found inside their institution. In her findings traditional institutional culture, or institutional inertia cited as a significant barrier to innovation.

A number of studies show that firm differences in barriers to innovation were related to cost, institutional constraints, human resources, organizational culture, flow of information, and government policy (Mohen and Roller 2005; Baldwin and Lin, 2002). Support of employees for changes in their firms depends on the kind of innovation implemented. (Thomas Zwick). It is not always a barrier against innovation but it may retard or change the innovation plans (Schaefer, 1998).

**2 – Concept and Definition:****2.1 - Innovation barriers:**

Firms may experience difficulties when implementing innovation policies, therefore an innovative project might be seriously delayed or terminated after being started, and sometimes the project may fail even before its launched. These difficulties can be translated into barriers. Which may vary with

regard to the firm size, resources and managerial skills. These barriers could be the firm's lack of information, economic or financial risk of innovation project, organizational rigidities or inadequacies that include the absence of skilled technical and/or managerial personnel, clients or customers responsiveness to innovation, difficulties with regulations or standards.

### 3- Literature review:

The empirical literature based on innovation surveys, such as the European CIS, which explores the nature and impact of innovation across firms and sectors, is large and consolidated. Regarding the role of barriers to innovation, empirical work largely focuses either on (i) the factors affecting perceptions of the importance of barriers (Mohnen and Rosa, 2000; Baldwin and Lin, 2002; Baldwin and Hanel, 2003; Galia and Legros, 2004; Iammarino et al., 2009) or on (ii) the impact of (mainly financial) obstacles on the propensity to innovate and/or the intensity of innovation (Arundel, 1997; Tourigny and Le, 2004; Mohnen and Röller, 2001, 2005; Savignac, 2006, 2008; Tiwari et al., 2007; Mancusi and Vezzulli, 2010). Needless to say that these two categories of contributions (whose main findings substantially converge), don't succeed in identifying the different nature of the barriers to innovation in terms of their revealed versus deterring effects, and the contexts in which they might co-exist. Also, most survey-based contributions tend to focus on the effects of financial obstacles where there is a sizable set of non-financial barriers, market, knowledge, information, and also regulations that are very important and be decisive in the context of innovation policy and management.

In dynamic sectors such service organizations, firms should be capable of adapting to the rapid changes in the market, this reflects the firms readiness to adopt innovative strategies in order to be competitive in the market .

Most studies that focus on the factors affecting firms' perceptions of the importance of barriers, show that the greater the firm's involvement in R&D and other innovation activities, the greater will be the importance attached to the impediments to innovation. For instance, Baldwin and Lin (2002), in a representative sample of Canadian manufacturing firms, examine whether the proportions of firms that experience obstacles differ between innovators and non-innovators (and between adopters and non-adopters of advanced technologies). They find that a larger proportion of innovators and adopters of advanced technologies report impediments to technology adoption compared to non-innovators and non-adopters of advanced technologies. Mohnen and Rosa's (2000) results from an empirical analysis of Canadian services over the period 1996–1998, based only on innovators and using R&D intensity as a proxy for innovation intensity, are similar, as they find that the most innovation-intensive firms are also those reporting more frequent obstacles to innovation. Along the same lines, Iammarino et al. (2009), using data from the Italian CIS3 emphasizing on firm ownership (i.e. foreign multinationals versus nationally owned groups and single domestic firms) and regional location, that finds support for the hypothesis of a positive association between firms' perception of obstacles and their innovation propensity.

These studies tend to explain this somewhat surprising finding as due to innovators being more likely to have experienced the barriers to innovation and, therefore, being more likely to recognise their importance. As Galia and Legros (2004) (p. 1189) suggest "it is plausible that certain problems are not effectively encountered until firms face them. Innovative firms face problems and more innovative firms have more problems". This would imply that the perception of obstacles by innovative firms might slow, but not prevent firms' engagement in innovation activity. A more controversial interpretation of the positive link between innovation propensity/intensity and the likelihood of recognising the barriers to innovation as important, offered by Baldwin and Lin (2002) and Tourigny and Le (2004). They suggest that the obstacles to innovation, at least as measured in innovation surveys such as the CIS, should not be interpreted as preventing innovation or technology adoption, but rather as an indication of how successful the firm is at overcoming them.

This first group of studies thus offers a revealed barriers interpretation of the relationship between innovation efforts and obstacles. That is, engagement in innovation activity increases firms' awareness of the associated difficulties. increases consciousness and knowledge of the factors constraining innovation through the "disclosing" or "learning" outcome of direct experience), although it does not

prevent them from engaging in innovation activities or being successful innovators. this interpretation is confirmed by the evidence from another stream of literature in which a number of works examine firms' experiential learning from their own (Miner et al., 1999; Haunschild and Sullivan, 2002; Denrell, 2003) and other organisations' innovation failures (Kim and Miner, 2007; Baum and Dahlin, 2007). The innovation path is invariably punctuated by setbacks and failures (Ferriani et al., 2008), which might be more valuable for learning than accomplishments and successes (Miner et al., 1999; Baum and Dahlin, 2007).

#### **4- Research method and Data collection:**

##### 4.1 Research purpose:

The objective of this research is to examine the barriers that affect the implementation of innovation by MENA countries service firms based in china.

When firms learn about the factors leading innovation plans to fail, it will help them overcome this barriers, which increase the firms productivity, deliver a good service with minimal cost, maintain a sustainable growth and create competitive advantages, this research will also help future firms learn from previous experiences.

##### 4.2 Research Methods

This study was carried out using a research survey design. A research survey design is a method of collecting information by administering questionnaires to a sample of individuals, The research was performed through a survey using a mixture of semi-structured questionnaires. The population of the study is MENA countries service firms based in china. The method of selection of sample is random sampling to find 200 firms. But we managed to have 103 questionnaires successfully fulfilled Efforts were also made to select a range of firms with different characteristics such as markets, sizes a history and duration of their operation, so the sample has a mix of homogenous and heterogeneous characteristics. Within the selected sample the interviewees were CEOs, business owners, entrepreneurs who can give value-added information about their experience with innovation.

##### 4.3 Sampling Design

Purposive sampling can be very useful for situations where we need to reach a targeted sample quickly and where sampling for proportionality is not the main concern.

In this study the target population include CEOs of firms, and business owners .We have narrowed the sample to one industry, our target population was only MENA countries service firms based in china that has been at least operating in china between the years 2012 and 2014.from the total of 200 firms that were purposively selected only 103 did meet our research characteristics.

##### 4.4 Data Collection:

The data of this study were collected using questionnaires. In order to achieve the aims of the research, the design of the questionnaires needed to be suitable for dealing with diversity among respondents.

The participants are CEOs of MENA countries service firms based in china, with different educational backgrounds, and based in different locations in china.

These interviews were conducted on both formal and informal base with a structured and an unstructured set of questions. It was conducted in Arabic, English, French and Arabic based dialects, depending on what is deemed to be appropriate to the participant's ease of expression. This method provides a broad spectrum of viewpoints about the operation as it has the goal of achieving an unbiased contribution from all parties. All interviews were consequently be transcribed and translated into English.

In order to make sure that I will obtain a speedy and efficient response to the surveys we intended to visit these firms personally.

#### **5 - Findings and Data evaluation (descriptive data analysis):**

5.1 Characteristics of MENA countries service firms based in china and their involvement in innovation activities:

5.1.1 – Firm’s years of operation:

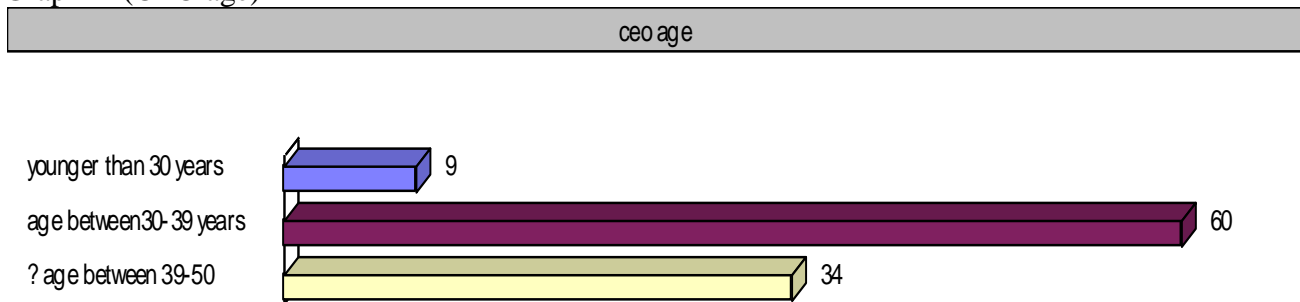
Table1 (firm age)

years of operation	Nb. cit.	Fréq.
less than 5 years	3	2,9%
from 5 to 10 years	53	51,5%
from 10 to 15 years	38	36,9%
from 15 to 20 years	9	8,7%
more than 20 years	0	0,0%
<b>TOTAL OBS.</b>	<b>103</b>	<b>100%</b>

Firm age is a variable that can decide firms engagement in innovation, from table 1 we can see that from overall MENA countries service firms based in china ,53 firms have been operating between 5 to 10 years ,followed by 38 firms that have been operating from 10 to 15 years ,9 firms have been operating from 15 to 20 years ,while only 3 firms have been operating for the period of less than 5 years ,

5.1.2 – Firm’s CEO’s age:

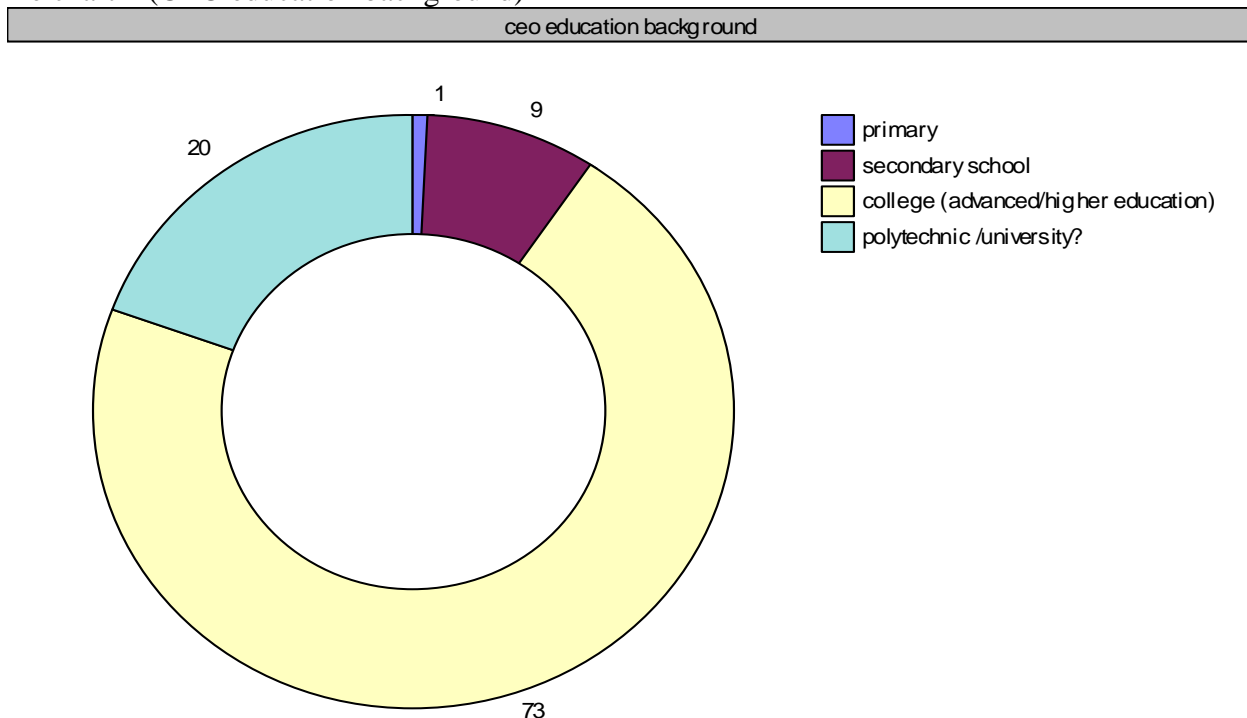
Graph 1 (CEO age)



from the graph 1 that describes the MENA countries service firms based in china ,we can see that between the years 2012 and 2014 ,firms that were mostly involved in innovation activities ,their CEOs were aged between 30 and 39 years with a number of 60 firms ,and 34 firms where the CEOs age were between 39 and 50 years old ,and only 9 firms where the CEOs were aged under 30 .

5.1.3 – Firm’s CEO’s education background:

Pie chart 1 (CEO education background)

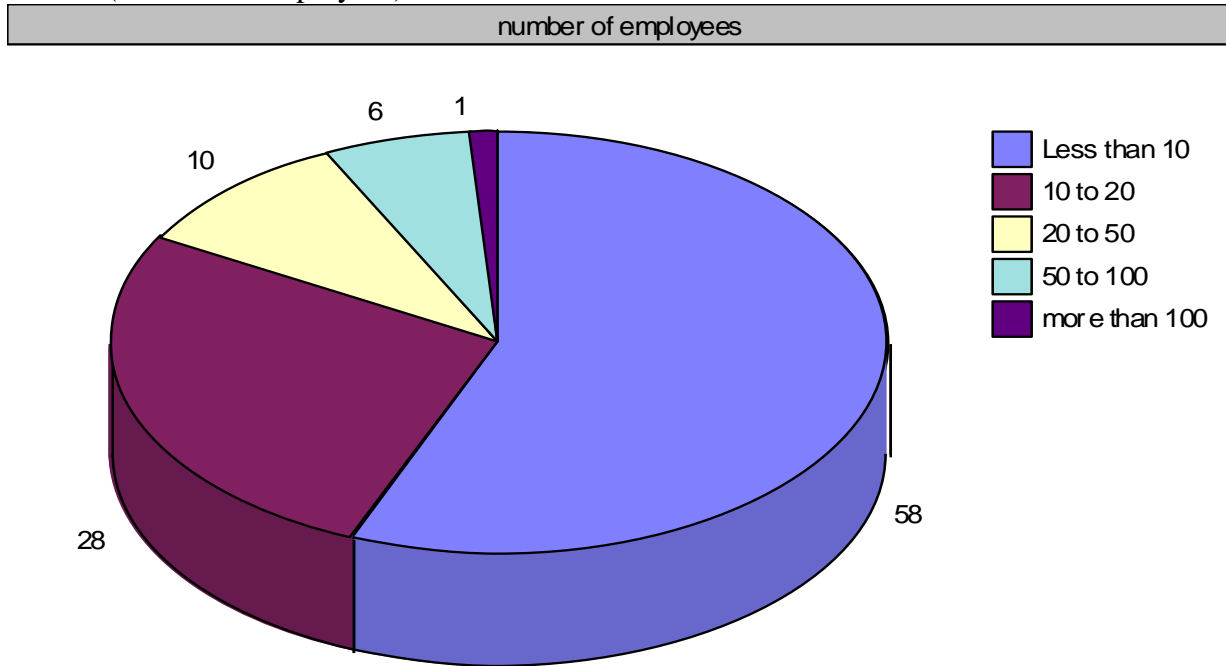




As many empirical studies showed that CEOs education background is very important in deciding the firms engagement in innovation activities, our findings in chart 1 also states that 73 of CEOs from MENA countries service firms based in china CEOs during the years 2012 and 2014 have been to college or had a higher education, 20 of the firms' CEOs had polytechnic studies or university, 9 of the firms CEOs went to secondary school and only 1 firms CEO had only primary education .

### 5.1.4 – Firm’s size:

Chart 2 (number of employees)

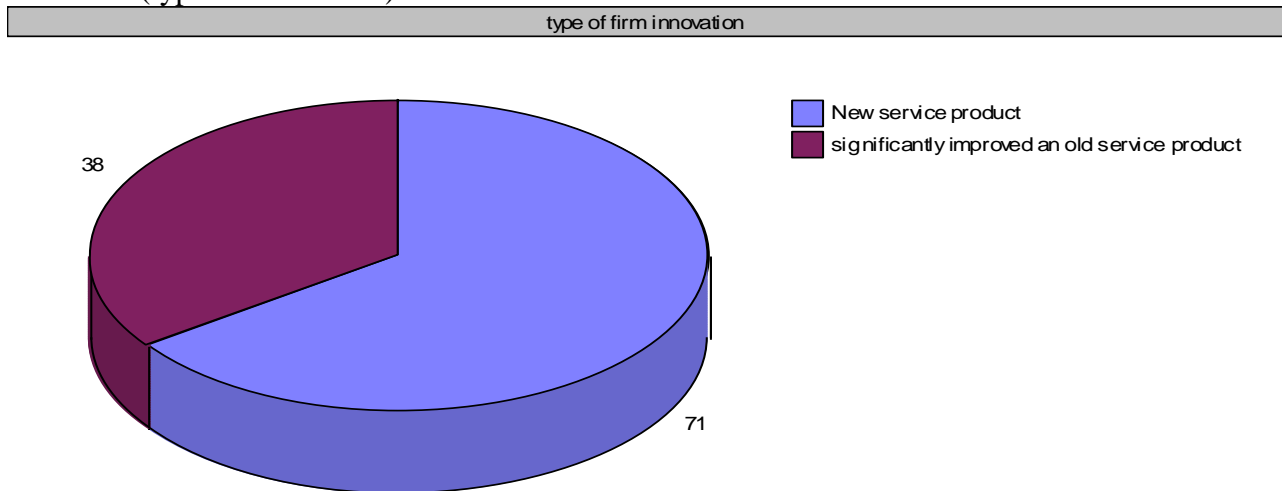


Firm size plays a significant role in the pattern of firm’s involvement innovation activities. But unlike what most of the empirical researches show, our findings in chart 2 conclude that from the overall of 103 MENA countries service firms based in china 58 of the firms has less than 10 employees, 28 has from 10 to 20 employees, 10 firms has 10 to 20 employees, 6 firms have between 50 to 100 employees and only 1 firm that has more than 100 employees .

### 5.2.1 – Firm’s innovation:

Firms’ Type of engagement in innovation:

Pie chart3 (type of innovation)



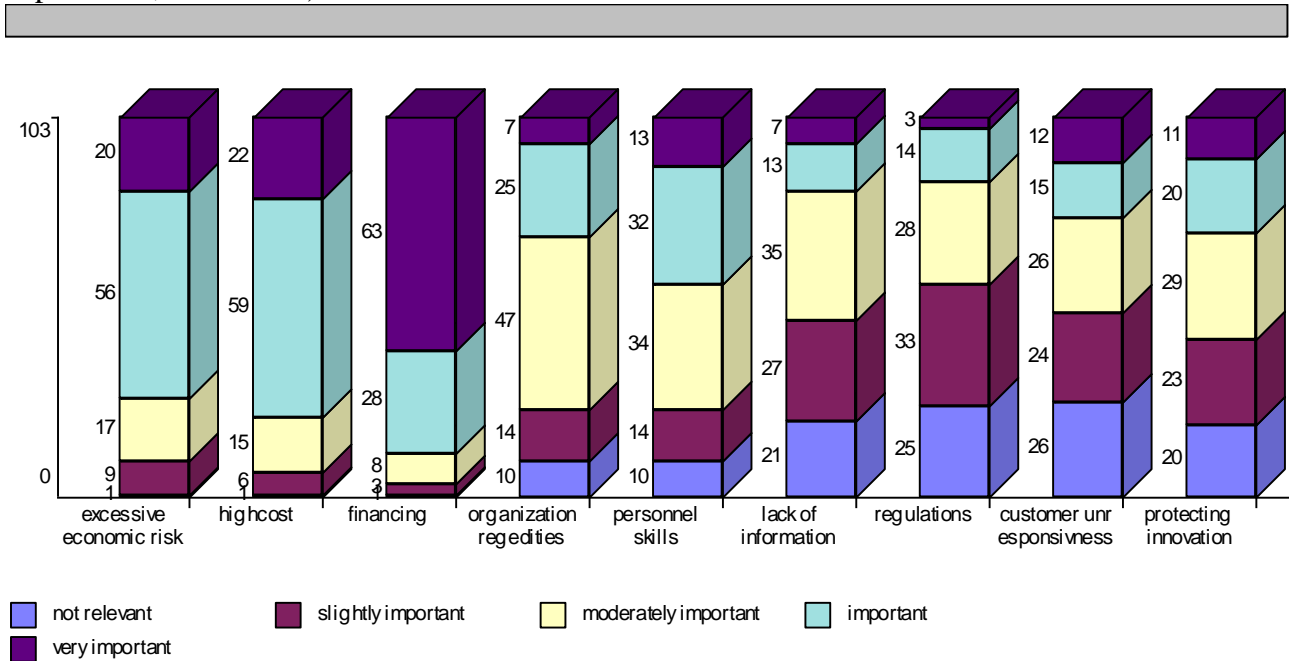
The ways firm are involved in innovation differ from a firm to another, depending on their decision, weather to come up with new ideas, and adopting them with regards to the firm needs or, improving an old product of innovation by bringing some changes that satisfy the firms and customers needs.

By analysing chart 3, it is seen that between the years 2012-2014, from all the 103 firms questioned 71 firms significantly improved an old service product while only 38 firms have come with new service product.

### 6 – Barriers that face MENA countries service firms based in china:

In this section we investigate the barriers that face MENA countries service firms based in china during the years 2012-2014 when implementing innovation strategies. This will help better understand those barriers in order to find good solutions to overcome those barriers.

Graph 2 (number of MENA service firms based in china identifying a factors according to their importance ,2012-2014 )



When investigating the graph 2, we can understand that firms between the years 2012-2014 have experienced some barriers that can be described according to their importance. The lack of financial sources is a major determinant of innovation, financing of innovation is considered to be the barriers with highest level of importance where 63 of the firms from overall 103 firms confirmed that is very important, 28 firms stated that its important 8 firms said that its moderately important and only 3 firms said that its not important. Followed by high cost of innovation where 22 of the overall firms consider the high cost of innovation is very important, 59 firms said its important, 15 firms said that its moderately important while only 6 firms said that its not important, another barriers is excessive economic risk in which 20 firms said that its very important, 56 of the firms said that its important, 17 firms said that its moderately important and only 9 firms stated that its not important. Another barrier is lack of personnel skills where 13 of the firms said that its very important 32 said that its important, 34 said its moderately important,14 slightly important and only 10 said its not relevant ,we can conclude that the lack of skilled labour is important but not as important as the other three financial barriers .customer irresponsiveness is another barrier where 12 of the firms said that its very important ,15 said that its important, 26 said its moderately important, 24 slightly important and 26 firms said its not relevant . Many firms suffer from the fierce competition in the market ,but what most firms suffer from the risk of having their innovation product or project copied ,but still firms rate financial barriers as highly important more than other barriers ,from our findings 11 firms believe that not being able to protect their innovation is very important ,20 said that its important, 29 said that its moderately important, 23 said that its slightly important and 20 firms said that its not relevant . there is another barrier that cant be denied which is the organization rigidities that can block the firm from

innovating successfully or lead its innovation project to fail ,but surprisingly it seems that only 7 firms said that organization rigidities is very important barriers ,25 said that its important , 47 said that its moderately important, 14 said that its slightly important and 10 firms said that its not relevant .lack of information can be also an obstacle 7 firms confirmed that the lack of information on technologies and also on the market is very important ,13 said that's its important , 35 said that its moderately important, 27 said that its slightly important and 21 firms said that its not relevant . Finally the regulatory constraints that include legislations, regulations, norms and standards can be another barriers that we can conclude from our findings, where 3 firms stated that its very important barriers to firms innovation, 14 said that its important, 28 said that its moderately important, 33 said that its slightly important and 25 firms said that its not relevant.

To sum up the main obstacles seen from the result found are more related to lack of finance ,innovation cost and economic risks but this should not distract decision makers from emphasizing the other barriers ,they should take all the other element into account before their innovation project starts and also during the process of innovation .

### 7 - Conclusion:

The results of this study revealed the barriers to innovation faced by MENA countries service firms based in china, these barriers varied from economic and financial constraints to organizational and human irresponsiveness to the changes weather inside or outside the organization. firms realize how important is innovation in order to stay one step ahead of the fierce completion .therefor decision makers should bare in mind that their perception of the innovation barriers an indispensable advantage to promote their maintenance in the market.

As most of these firms studies in our research pointed out the importance of financial barriers ,we hope that more and more financial organization will help more firms finance their projects by facilitating loans ,or by offering incentives for ambitious innovative firms, meanwhile firms should not be lamed by the financial chasm ,they should move on by figuring out some alternatives that rely less on financial means .

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