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# Analyzing challenges toward on-demand economy applications using external factors of PESTEL model: Case of Saudi applications''

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#### Abstract

Nowadays; the growth in popularity of on-demand applications opens up new opportunities for conducting information system studies. Considering that on-demand applications are a relatively new phenomenon which extensively used in Saudi Arabia. In addition, the lack of understanding of its potential, some problems arise from the increasing numbers of economy business where they run them. Moreover, due the rapid using is extensively in the business Sharing-based business sector, specifically in the case of Saudi Arabia where they play a major role. The researcher wanted to investigate and find out the challenges that limit of on-demand applications to interact with customers, and on the value such applications provide in order to rise under the government's Vision2030. This research results in to fill the gap that was not discussed in the adoption of recent technologies as enablers for Saudi Arabia's Context.

For the research methodology, analytical qualitative approach data were collected using the main types of interviews; which mentioned in Chapter 3. This preliminary study provides the proof of the factors for which the on-demand applications use of the external factors of (PESTEL) analyst which Political, Economic, Social, Technological, Legal and Environmental. It gives a bird's eye view of the whole environment from many different angles and track of while contemplating on a certain idea/plan.

The researcher found that on-demand economy is perceived as a valuable tool in customer acquisition. The study also reveals that on-demand sharing applications have many positives with major concern of the apprehension of dealing with unknown service providers. These challenges summarize on chapter 5.Until now, in kingdom of Saudi Arabia there is no formal umbrella to organizing these applications, granting licenses, training them or marketing their products / services. Moreover, the absence of a specific statistic numbers of those applications, activities and service areas.

Finally, the researcher suggested the on-demand economic applications business perspectives (OEAB). This research helps the Saudi Arabia's decision makers and applications owners to enhance and determining a specific strategy for adopting their business.

**Keywords**: Islamic culture of Saudi Arabia, privacy, public awareness, Saudi architectural elements, , PESTEL analyst , Political, Economic, Social, Technological, Legal and Environmental.

## 1. INTRODUCTION

Nowadays, Saudi Arabia has undergone a great deal of transformation, from sustaining a simple and vast desert country to becoming a powerful, wealthy, and famous country in the Middle East (Taylor, 2017). During the last two decades, Saudi Arabia witnesses rapidly changes and developments in its economic absorption and social structure. Saudi Arabia's rapid technical growth has caused a crisis. E-commerce growths to prop up diversification strategy, In addition to current developments, investments in the e-commerce market are set to rise under the government's Vision2030 (Factbook, 2018). Considering that the on-demand economy

applications are a relatively new phenomenon which extensively used in Saudi Arabia. In addition, the lack of understanding of its potential, some problems arise from the increasing numbers of economy business. The researcher believes that the "on-demand economy applications" is an issue that deserves studying; especially its business as a SMEs are really important part of an economy of 2030 vision. So, it is great importance's to know what challenges "on-demand economy applications" are facing (Techopedia, 2018).

In the business world, the rise of E-commerce growth to prop up diversification strategy, In addition to current developments, investments in the e-commerce market are set to rise under the government's Vision 2030. Moreover, it focused on supporting small and medium-sized enterprises (SMEs), placing them as one of the most important drivers of economic growth, and the applications business sector in Saudi Arabia known as "on-demand economy applications". The contributions of the research are both theoretical and practical. This work has identified the gaps in research of OEAB and relations between sharing economy, business model and Internationalization. The researcher realizes that the concepts have never been under research focus mutually.

In my opinion and according to my observation, it's time to provide investment opportunities for start-ups. Contribute to increase the non-oil economy Contribution and develop the technical infrastructure which aligns with the Vision of 2030. However, this economic model is a real substantive phenomenon and should no longer be considered a passing fad. Therefore, it is interesting to highlight its opportunities but also to study its impacts on removed the legal and economic grounds. it is a great importance to know what challenges "on-demand economy applications" are facing. The researcher wanted to investigate the adoption of "on-demand economy applications" to find out the challenges that limit them to development running business. Therefore, the main question in this study it can be formed as (what are the challenges that limit of "on-demand economy applications" development running the business? And how they can develop their using by PESTEL analysis?).

## **2. RELATED WORK**

In order to understand the theoretical background of this problem by PESTEL model; the researcher was analysis many previous related Studies. According to my reading, these previous researchers deal with three specific topics that are rarely discussed together: sharing economy, on-demand economy applications and Saudi Sharing-based business. Above all, a gap exists in the understanding of the challenges toward on-demand economy applications in Sharing-based business sector which have received little attention in the literature.



Figure 8: The gaps in literature

The weakness of such literature is that those same strategies do not necessarily work for business in Saudi

Arabia. In addition, most of the kinds of literature in Sharing-based business sectors have been written about the strategic sector (Gilson & Julie, 2016). According to the researcher knowledge, there is no previous study has determined the most challenges that impacting on on-demand economy applications at Saudi Arabia; specifically, Sharing-based business sector with presenting some suggested solutions. In order to provide the snapshot of these firms that has applications, and how to overcome the current obstacles. This study is an attempt to bridging this gap with an interview of applications, challenges that faces in on-demand economy.

During the research readings, she observed that many terms were being used to describe models that use digital technologies in a directly way match services and goods providers with consumers. Indeed, the terms "sharing economy", "peer-to-peer economy", "collaborative economy", "on-demand economy" and "collaborative consumption" are often being used interchangeably. The term "collaborative economy" is a rapid evolving phenomenon and its definition may evolve accordingly (Gilson & Julie, 2016, p. 11). Therefore, for the purpose of consistency, we will use "on-demand economy" or " on-demand services" to broadly define this emergent economic model that connects consumers to services providers. This term refers to « the immediate availability of services through digital platforms. As (Gilson & Julie, 2016) their define.

Sharing economy, term used by Rachel Botsman, is defined as an "economic model based on sharing, swapping, trading or renting products and services enabling access over ownership. That is reinventing not only to what we consume; but alsohow we consume it" (Hamari, et al., 2015, p. 6). The term Economy is defined as in terminology of the economic activity created by technology companies that fulfill customer demand via the immediate provisioning of goods and services where everybody shares access to products or services rather than having an individual ownership. In this way, we can optimize the use of goods and services (Gilson & Julie, 2016, p. 10).

The On-Demand Economy also is revolutionizing commercial manners in urban around the world (Hamari, Sjöklint, & Ukkonen, 2015). As The group of companies act the businesses in this new business economy represent the demonstration of years of technological innovation and a development in consumer behavior. An economy a digital market contribution will get immediate access to goods and services often delivered by contract or demand, or gig, workers – continues to development and to develop into new industries or project. Other an emergence of on-demand services, particularly in the transportation, (Karim, Ubra , Taxi), retail, accommodation , food delivery and grocery businesses, , is created on mobile technologies that are especially attractive to middle profits Millennia's., be a focus for investors and work with policymakers to build up compassionate regulatory structures (Techopedia, 2018). The increase of the on-demand economy application is varying to client habits, supply chains, regulations, competition and venture. The economy's future may include drones or robots conducting deliveries and clients getting goods even before they realize they need them, based on their purchasing history (Hamari, et al., 2015, p. 9).

## 3. WHAT PESTEL ANALYSIS FRAMEWORK

PESTLE analysis is a concept in marketing principles. Moreover, this concept is used as a tool by companies to track the environment they're operating in or are planning to launch a new project/product/service etc (sheffieldUnion, 2013).

PESTLE is denotes P for Political, E for Economic, S for Social, T for Technological, L for Legal and E for Environmental. Once these features are analyzed organization can take superior business decisions. PEST Analysis facilitates organizations take better business decisions and progress efficiency by studying an assortment of factors which might influence leads a business such as political, economic, social, and technology. PEST Analysis is a quantity tool which is used to evaluates markets for an exacting product or a company at a given time casing. (sheffieldUnion, 2013). this model help to analyzing the current and future impact of each of the factors on the operation of the organization is considered. The analysis should focus on a given product or service in a particular geographic market or region, since the impact of the four factors will vary for different products and different countries (sheffieldUnion, 2013). Once these features are analyzed organization can take superior business decisions. PEST Analysis facilitates organizations take better business decisions and progress efficiency by studying an assortment of factors which might influence leads a business such as political, economic, social, and

technology. PEST Analysis is a quantity tool which is used to evaluates markets for an exacting product or a company at a given time casing. (sheffieldUnion, 2013).

All on-demand economic applications operate within the broad economic and Saudi social environment. The particular attributes and workings of that environment are in a large part which the organization is based.



Figure 9: PESTEL analyst

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## 4. Research Methodology

In the contemporary world, One of the most important aspects of a study is selecting a suitable research approach, that why technologies and methods of researching were expanding. Many different kinds of research have approached and methods were described in the literature; that why it was necessary to choose the correct method for a specific study. Galliers said there was no single framework which has taken into account all aspects of knowledge about IT (Galliers, 1992). This project could be conducted by using different methodologies and approaches, depending on nature and aim the research.

In compiling this project, the main sources of information are used, were secondary sources, accessible through internet, SDL library, and the existing literature in the field of economic, SMEs. Furthermore, the results of these project and the opinions of the research have been analyzed and compared to fulfill the aims of this project.

The researcher conducted one approach that has facilitated data collection process. The researcher has used interview to collect data toward conduct a qualitative and analytical. Within this research, The purpose of choosing interviews for this project is to understand how these applications businesses is to determine the challenges which toward on-demand economy applications in Saudi Arabia.

This study puts challenges toward Saudi on-demand application to development model and the case study of Saudi SMEs that using them. Therefore, the issue of SMEs selection is particularly important in this research because of some specificity of the sharing economy applications. This research has many criterions sample to choose the sample as following:

- The SMEs must be in KSA.
- They must have the applications either Android or IOS.
- The business must have been recognized for using social media.

## 5. Overview of Sample

The sample of this study consisted on-demand application economy in all region of kingdom of Saudi Arabia such as Al-Riyadh, Jeddah, Dammam act. As figure illustrated.

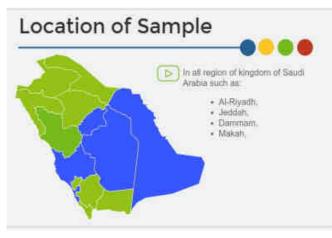


Figure 10: locations of sample (city)

And the genders of respondents are both male and female and ages between 25 and 50.

Mostly are Saudi also there are some non Saudi.

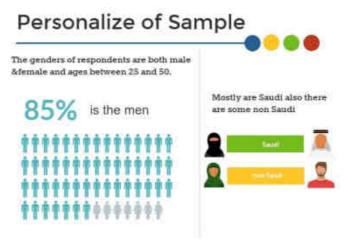


Figure 11: personalize of sample (interviewers)

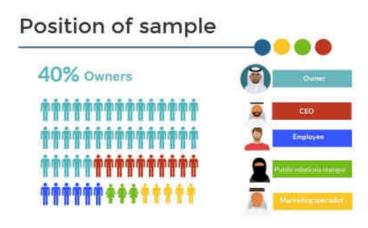


Figure 12: position of sample (interviewers)

Interviews were accomplished in period of seven weeks. Figure 6 showing the types of interview.

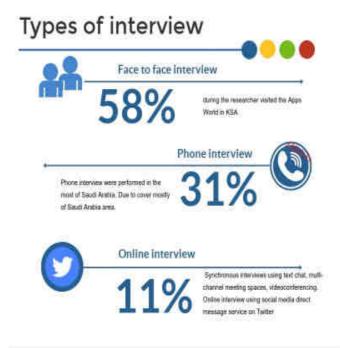


Figure 13: types of interview

The above figure is showing the types of activities.



Figure 14: types of Activates

#### 6. Data analysis

Analyst The researcher was applied online interview by sending the link to 590 active accounts on social media (instagram, whatsapp, Twitter and snap-chats....). Due to the concentration of the mostly productive family's online whom using social media for marketing and catch the attention of their prospected clients. way for marketing guides. In addition some - It is likely that he needs experience for the reason that he could be marketed to the whole set of society, modernization and nationalities because successful selling needs effort, productivity, photos and precise details conducting with carry out with products' specification. Some viewer agreed it needs gigantic budget for advertising, and advertising nowadays depending on completely on social media with professional experience marketing persuasion offers, definitely the advertise budget it is necessary. Moreover, other interviewers said it needs experience due to marketing skillfulness and needs to efforts in order

to cover whole prospect client and followers. Because the successful selling needs effort, productivity, photos and precise details conducting with carry out with products' specification. Other interviews believe that the marketing via social media is the certainly necessary for them in addition to the time because the individual product provides a service or product to the community. Certainly the community wants to get the best possible during the product that needs a period, so the people get used to its existence the duty of someone saying that people like the love of appearances and morphological form, you have to show your followers the most beautiful picture

# 7. FINDINGS

The research results can serve to understand the current and make a comprehensive review enriches existing knowledge in the application's business field. As result of this project, the researcher found that on-demand economy is perceived as a valuable tool in customer acquisition. The study also reveals that social media has many positives with major concern of the apprehension of dealing with unknown service providers. These challenges can summarize on figure8.

Until now, in kingdom of Saudi Arabia there is no formal umbrella to organizing these applications, granting licenses, training them or marketing their products / services. Moreover, the absence of a specific statistic numbers of those applications, activities and service areas.



Figure 15: Challenges that facing on-demand application

This research is one of the very few researches that have been which investigates the share based business sector in Saudi Arabia. As explained earlier, on-demand applications in Saudi Arabia have particular characteristics, and therefore it was essential to understand the problem from their perspective because

solutions and recommendation from other countries may not work there. Other types of e-commerce applications are not included.

After thoroughly studying 58 businesses in various industries of the sharing economy, here it is relevant to mention again that all researcher's studies were agree On-demand economy involves deeper social interactions than traditional methods of exchange. The agree with (Chungsang, 2011) consumers value their time and dislike waiting, which creates scope for OEAB, as they allow favorable trade-offs between prices and wait time. So the dynamic pricing is the driving force of RHPs in thick markets such as Manhattan and rush hours.

The sharing economy offers the potential to shift from 'asset-heavy' ownership to 'asset-light' access, so that consumers can opt to rent goods when they need them or pay for a service. As (Retamal & Hussey, 2017) study was result.

In Saudi Arabia like many rich and advanced countries, these applications are platforms that permit those with assets to connect with those who want temporary access to them. Both sides benefit, either by making money or gaining access to something more inexpensively than they could before. As the researcher agree with (Laukkanen & Patala, 2014).

The similarities result with Gilson's study (Gilson J., 2016) : On-demand economy is not just valuable for the money saved and earned in economy sector. It is also a purveyor of positive values as collaborative spirit: it builds a stronger community and inevitably rescues the decline in social capital.

On the other hand, agree with Gilson's study (Gilson J., 2016) in the policy of government or the public (political) power must apprehend the demands, changing or maintained those which come to light about prescribed and fiscal bounds that the on-demand practices destabilize and provoke at least an adaptation if not a change.

Also disagree with the Aleksandra who said "On-demand Service Providers have the lowest of all three categories propensity to internationalize" (Kosintceva, 2016). Saudi applications full depending on service providers which arise major issues. The original business alone would be representing the Marketplace business model, while together with other services available through the platform it provides an on-demand transportation service, thus employs an On-demand Service Provider business model. The technical problems, associated with both the quality of service and software compatibility (Al-zahrani, 2001).

In other than, the presence of physical resources in the value creation activities has inverse relation to internationalization. Figure 9 illustrated the critical Factors Identified after Analysis which influencing the Marketing via social media by productive families. This is the perspective framework for future work.

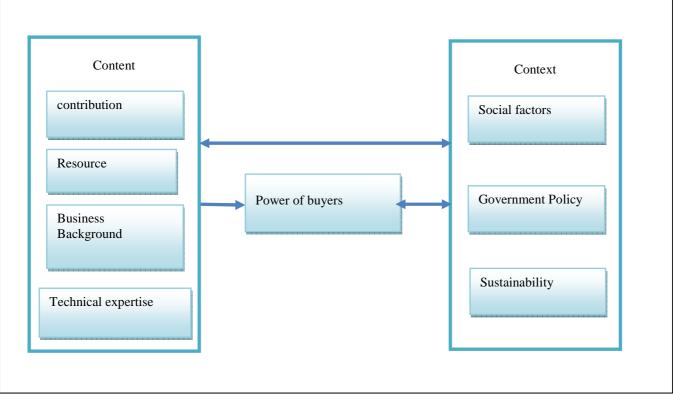


Figure 16: Critical Factors Identified on OEAB

## 8. Conclusion

This paper covered the challenges that affect the applications' business sectors which called "on-demand economy business". Furthermore, it focuses on the challenges on-demand applications face to interact with customers, and on the value such applications provide. So context of the research and the overall contribution which will be the Saudi on-demand applications that made to the field of research.

## References

- 1 Al-zahrani, S., 2001. Computer Network System for University Hospital in Saudi Arabia, Riyadh: s.n.
- 2 Chungsang, L. T., 2011. More than Taxis with An App: How Ride-hailing Platforms Promote Market Efficiency, s.l.: s.n.
- 3 Factbook, C. W., 2018. *Saudi Arabia Economy overview*. [Online] Available at: <u>https://www.indexmundi.com/saudi\_arabia/economy\_overview.html</u> [Accessed 15 8 2018].
- 4 Galliers, R. D., 1992. Information Systems Research: Issues, Methods and Practical Guidelines. *Oxford: Blackwell Scientific Publications*.
- 5 Gilson, J., 2016. On-demand Economy & Hospitality Services : Economic & Legal Issues. *matheo ulg*.
- 6 Gilson & Julie, 2016. On-demand Economy & Hospitality Services : Economic & Legal Issues. *Matheo* Uliege Bitstream, Issue https://matheo.uliege.be/bitstream/2268.2/1685/4/J.%20GILSON%20-%20Ondemand%20Economy%20%26%20Hospitality%20Services-%20Economic%20and%20Legal%20Issues.pdf, pp. 6,9,11,22,26.
- 7 GroupsEconomic, 2018. *New online payment platform boosts Saudi Arabian e-commerce*. [Online] Available at: <u>https://oxfordbusinessgroup.com/news/new-online-payment-platform-boosts-saudi-</u>

arabian-e-commerce [Accessed 4 8 2018].

- 8 Hamari, J., Sjöklint, M. & Ukkonen, A., 2015. The sharing economy: Why people participate in collaborative consumption. *Journal of the Association for Information Science and Technology*, Issue 10.1002/asi.23552, pp. 5-17.
- 9 Index, T., 2018. *Saudi Arabia*, https://www.heritage.org/index/pdf/2018/countries/saudiarabia.pdf: Heritage.Org.
- 10 Kosintceva, A., 2016. BUSINESS MODELS OF SHARING ECONOMY COMPANIES.
- 11 Laukkanen, R. & Patala, S., 2014. Analysing barriers to sustainable business model innovations: Innovation systems approach., Dublin: s.n.
- 12 Retamal, ,. M. & Hussey, K., 2017. Institutional barriers and enablers for collaborative consumption businesses in Southeast Asia, s.l.: forthcoming.
- 13 sheffieldUnion, 2013. sheffield student housing Co-op summaru and Business plan.
- 14 Taylor, A., 2017. Saudi Arabia wants to revitalize its economy. Letting women drive will be part of that. [Online] Available at: <u>https://www.washingtonpost.com/news/worldviews/wp/2017/09/29/saudi-arabia-wants-to-revitalize-its-economy-women-drivers-will-be-part-of-that/?utm\_term=.7ca159247a16
   [Accessed 28 8 2018].
   15 Tackanadia 2018 - </u>
- 15
   Techopedia, Available
   2018.
   On-Demand
   Software.
   [Online]

   Available
   at: [Accessed 26 8 2018].
   https://www.techopedia.com/definition/26710/on-demand-software