

e-Supply Chain Management: The Role of Social Media Networks Platform

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Abstract: According to the huge effects of internet and strong impacts of social media networks on all aspects of our life generally and on the business environment specifically because it is too dynamic environment and strong changeable one many of business owners and entrepreneurs who are looking for increasing their income or establishing their own work transferred to virtual world specially when they looking for promotion. For previous reasons this topic was selected to work with and determine in how way social media networks platform effect on business process and specially studied their impacts on supply chain management and selected most two useable components of social media networks which are Facebook and Whatsapp. The results show clearly that there were many influences for Facebook and Whatsapp on e-Supply chain management components.

Key words: e-Supply chain management, internet, social media networks, platform, impact, aspects

INTRODUCTION

Nowadays, social media networks are one of the most important components of our life. It had grown rapidly and entered to our life then imposes itself on us and on our life. One of reasons which made an ability to these networks to be a huge influencers ,their opportunities to connecting people together easily and allowing them to share and spread huge amount of information regardless if these information true or not. In these days social media networks allowing their users to build their special community and allowing them to choose their surrounds which means these networks also imposes their self on how we living our life. From previous words we can determine which element had a large affected from these networks. The environments are a primary affected by large amount of changes which happened for them. One of the environments which affected is a business environment in all respects because when talking about business environment that means talking about so dynamic environment with a rapid response to changes (Bayraktar *et al.*, 2009).

Social media networks opened new dimensions for entrepreneurs to enter all markets strongly which increased the number of competitors in all business aspects.

In addition to increase the dimensions of earnings to the organizations that already exist in the markets by improving new ways to promoting their products and showing their services also social media networks reduced a firm's costs in a way or another by the direct contact between costumers and producers, allowing producers to show their products directly via. them or for some firms by replacing all their activities to the social media networks which mean they will reduce their fixed

costs like rent, salaries, etc. This study the impacts of social media networks platform on the business's environment and especially on supply chain management and how these networks changed what we learned and adapted with to make us work with them, also making producers and services providers to adapt with their new dimensions and ways and how these networks allowing their users to adapt with a huge number of competitors which they allowing them to enter to the same market (Devaraj and Kohli 2003).

Problem statement: In line with the current evolution of internet and social media platforms power a lot of business owners either transferred their work to virtual life or transferred part of it. In addition to owners who already have their business also new entrance to markets and entrepreneurs find good platform for building good costumer's relationship and worthy platform for generating income from their ideas and also they see it as a good place for promoting ideas rably with low advertising's costs. According to previous reasons it was important to studying how social media platforms influencing on the business and on the entrepreneur's projects. This research will study these influences by studying the impact of these platforms on one of the important part for companies that working via. virtual life which is electronic supply chain management (e-Supply chain management).

Questions of study:

- Does a social media platform influence on business?
- Does this influence is positive or negative?
- Does this influence will effect on traditional business process?

- Does this influence will effect on the profit platform for business which does not use a social media platform?
- What is the future of the social media platform if it uses as business platform?

Rationale of study: The researcher selected this topic according to the huge evolution of social media and its impact on our life in all aspects and on our business. After this evolution occurred a lot of business dimensions changed such as rapidly growth and expanding for entrepreneurial who entered to the market via. social media.

In addition, a social media networks are one of the new resource for income to a lot of low-income people and new source for profit organizations to generating their profit, expanding their segment which they selected it and increasing their market shares by increasing number of their beneficiaries.

In contrast to the previous benefits which mentioned also in this study there is a disadvantage to the users who using social media platform in their business like a distortion their reputation rapidly and bluster a traditional media by obsessed numbers of their market shares.

Statement of research objectives:

- This study will focus on the influences of the social media platforms power and their impacts on the business
- The study emphasis-specifically-on the part of e-Supply chain management for companies which work via. virtual life
- The study will see if the traditional business and companies which does not use virtual life in their work will influence negatively if businesses in virtual life growth and increased their segment
- Finally, it will look generally on the future of social media platforms

Hypothesis: The researcher has set one main major hypothesis:

- H_{a1} : there is a significant relationship between social media networks platform and e-Supply chain management: This main hypothesis has two minor hypothesis:
- H_{a1-1} : there is a significant relationship between Facebook and e-Supply chain management
- H_{a1-2} : there is a significant relationship between Whatsapp and e-Supply chain management

Previous studies: According to Khosrow-Pour (2008) Supply Chain Management (SCM) define as combination of art and science that goes into improving the way your company finds the raw components it needs to make a product or service and deliver it to customers. There are two basic components of supply chain management. The internet, the recent technology development. Ivanovska and Kaleshovska (2013) mentioned the advent of the Internet has made it possible for companies tochange the way they conduct their businesses, e-Procurement, e-Tailing, e-Marketplaces are but a few examples of internet able business applications that have revolutionized certain processes in supply chains and have given rise to e-Supply chains. To ensure success, it is contended that a proper needs analysis is necessary before a company should embark on the e-Business journey.

Social network sites as web-based services that allow individuals to, construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection and view and traverse their list of connections and those made by others within the system.

MATERIALS AND METHODS

Operational definitions

Independent variable; Social media networks: Our life is totally changed, especially with social media evolution which happened and with imposes itself on our life. When talked about social media networks must focus on the two huge networks of them are Facebook and Whatsapp which will be the main factors in this study. Social network sites as web-based services that allow individuals to construct a public profile within a bounded system, articulate a list of other users with whom they share a connection and view their list of connections and those made by others within the system. According to the last report issued from “Arab Social Media Influencers Summit” 87% of users of the social media networks in Arab world using Facebook and 84% of them using Whatsapp and 83% of social media network’s users in Arab world using their smart phones in browsing networks (Fig. 1).

Facebook: A most common name which related to Facebook is “Mark Zuckerberg” a strong computer programmer. Mark established many social-networking websites for fellow students including course match which allowed users to view people taking their degree and face mash where you could rate people’s

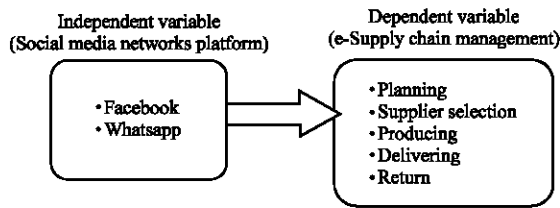


Fig. 1: Suggested study model

attractiveness and he made them in Harvard University when he was a student there. In February 2004, Mark established Facebook in this famous name and within 24 h, 1,200 Harvard students had signed up and after one month, over half of the undergraduate population had a profile. The network was rapidly spreader to other Boston universities (Coyle *et al.*, 2003).

Whatsapp: It is a free application for smart phones. It founded in 2009 by Brian Acton and Jan Koum. It enables users to send and receive location information, images, video, audio and text messages in real-time to individuals and groups of friends at no cost. It is a type of MIM applications (Mobile Instant Messaging Applications) and in these days Whatsapp handles with 10 billion messages daily.

Dependent variable; e-Supply chain management: A supply chain management is a combination of ways which uses by a company to find the raw components needs to producing goods or providing services to costumer and consumers. A supply chain management has five main steps which are (Efraim *et al.*, 2008).

Planning: A company formulating a strategy which will use it to managing its resources, a good plan will lead a company to developing a set of metrics to monitor the supply chain, so that, it will be efficient and work with the lowest costs which mean the company can delivering its final product or service with high quality and value to customers.

Supplier selection: Here, the company choosing suppliers to delivering goods which needed to producing goods or equipment to providing services to its customers. A supply chain manager must develop sets of pricing, delivery and payment processes which will work according to them, a supply chain manager must improving and developing a good relationship with the supplier. Then can start implementing all processes which nominated to managing their inventory, these processes including receiving and verifying shipments,

transferring received goods to the manufacturing facilities and authorizing supplier payments (Efraim *et al.*, 2008).

Producing: This step just uses by producers who are deals with physical goods and in this step a supply chain managers schedule the activities necessary for production, testing, packaging and preparation for delivery. This step is very important because it able a company to measure quality levels, production output and worker productivity.

Deliver: The part which referred by many supply chain managers as logistics in which companies coordinate the receipt of orders from customers, develop a network of warehouses, pick carriers to get products to customers and set up an invoicing system to receive payments.

Return: It can be a problematic part of the supply chain for many companies. Supply chain planners have to create a responsive and flexible network for receiving defective and excess products back from their customers and supporting customers who have problems with delivered products.

A previous five steps are related to supply chain in traditional companies and these steps are the same steps which implementing when virtual companies want to manage their supply chain via. internet because the main different thing between traditional business and management while electronic one is using internet when working and managing things.

Study population: The target population of this study is the (Cozmo) which was operating in Jordan, since, 2003 as the leading premium supermarket chain in Jordan with five branches in capital Amman and Cozmo was the first supermarket in Jordan that launched social media platforms and online shopping service through its website for this reasons it was chosen for objectives of the study.

Unit of analysis: Unit of analysis will be the senior managers, technical and operations staff. The number of distributed questionnaires was 50 questionnaires and return questionnaires were 39, 9 questionnaires were ignored because it has missed 30 questionnaires were valid for statistical analysis.

Population description: This section describes the population through the general characteristics of the respondents in term of gender, working experience and working position as shown in Table 1. Table 1 shows that the majority of respondents over half 53.3 were males

Table 1: Demographic characteristics of respondents (n = 30)

Characteristics	Frequency	Percentage
Gender		
Male	16	53.3
Female	14	46.7
Working experience		
<1 year	5	16.7
1-5	12	40.0
6-10	8	26.7
More than 10	5	16.7
Working position		
Operation staff	17	56.7
Technical staff	9	30.0
Manager/senior manager	4	13.0

and 46.7 were female. Table 1 shows that respondents who are The respondents have middle and long experience in Cozmo, 40% are among 1-5 years, 26.7% are from 6-10 years and only 5 % are more than 10 years working experience, this because Cozmo was operating in Jordan in 2003.

Reliability of data collected: The reliability of data collected was measured using Cronbach alpha coefficient; the reliability test was conducted to check for inter-item correlation in each of the variables in the questionnaire. The test results are as follows: Cronbach alpha for independent variable = 0.8522, Cronbach alpha for dependent variable = 0.8840, Cronbach alpha for over all instruments = 0.9146 which exceeded the acceptable limit by William (2000).

RESULTS AND DISCUSSION

Results and hypothesis testing:

- H_{a1} : there is a significant relationship between Social Media networks platform

e-Supply chain management: Based on the results in Table 2 which relate to correlation relationship between the independent variable (social media networks platform) and the dependent variable (e-Supply chain management), we can find appositive and significant effect at function level at ($\alpha \leq 0.01$) which supports Hypothesis (H_{a1}) where ($r = 0.494^{**}$) which is in order to test the main hypothesis, there are two minor hypothesis: this main hypothesis has two minor hypotheses:

- H_{a1-1} : there is a significant relationship between Facebook and e-Supply chain management

Based on the results in Table 3 which relate to correlation relationship between the independent variable (Facebook) and the dependent variable (e-Supply chain management), we can find appositive and

Table 2: Correlations

Factors	Facebook	e-Supply chain
Facebook		
Pearson correlation	1	0.467**
Sig. (2-tailed)		0.006
N	30	30
e-Supply		
Pearson correlation	0.467**	1
Sig. (2-tailed)	0.006	
N	30	

Table 3: Correlation's relationships

Factors	Facebook	e-Supply chain
Facebook		
Pearson correlation	1	0.467**
Sig. (2-tailed)		0.006
N	30	30
e-Supply chain		
Pearson correlation	0.467**	1
Sig. (2-tailed)	0.006	
N	30	30

$r = 0.467^{**}$

significant effect at function level at ($\alpha \leq 0.01$) which supports Hypothesis (H_{a1-1}) where ($r = 0.467^{**}$) which is moderate:

- H_{a1-2} : there is a significant relationship between Whatsapp and e-Supply chain management

Based on the results in Table 3 which relate to correlation relationship between the independent variable (Facebook) and the dependent variable (e-Supply chain management), we can find appositive and significant effect at function level at ($\alpha \leq 0.01$) which supports Hypothesis (H_{a1-2}) where ($r = 0.642^{**}$) which is high.

The results shows that the influences of Whatsapp on producing phase just on the cost because working via. internet only can reduce a cost on dealers but cannot.

Determine a quality of products via. internet. And there also were influences of Whatsapp on the delivery phase focusing on reducing cost for costumer in addition to reducing time in delivering products which ordered from costumers (Klein *et al.*, 2007).

The statistical results show that there is a negative influence from Facebook on planning phase of an e-Supply chain management which means supply chain managers do not use Facebook while they planning their work and there is a moderate influences from Facebook when it uses in supplier selection phase which means supply chain managers do not ready yet to finding supplier via. internet but they do not care about working with them virtually and at the same time they do not ready for being a loyal customers for them and they preferred a traditional ways in selecting suppliers (Khan *et al.*, 2014).

The results shows also that there is influence of facebook on producing phase just on the cost because working via. internet only can reduce a cost on dealers but cannot determine a quality of products via. internet, there was a strong negative influence of Facebook on delivery phase because business owners are so strict in return policies also they are very important to costumers and they committed with them. And also there is influence of Facebook on the delivery phase focusing on reducing cost for costumer in addition to reducing time in delivering products which ordered from costumers (Straub and Klein 2004).

CONCLUSION

For researchers who are looking for study the impacts of virtual world generally on the business process they can choose entrepreneurs projects as sample for their researches because they changing rapidly and the components of the social media networks which influencing on the business environment which is a dynamic environment are always changeable with huge effects on the components of business environment. According to results which appeared from survey and data analysis Facebook and Whatsapp are good components of social media to measure the effect of social media networks platform via. them but they effected in some specific things such as cost and time and they do not effect on all other aspects of business process which means there are another component of social media networks that effect on other aspects of business than costs and time.

LIMITATIONS

The study talks about impact of social media networks platforms on the businesses and specifically focus on e-Supply chain management. There were some limitations faced this research which are business owners and managers were affair from working via. internet for many reasons major one of them is a low security level in data which transferred via. internet according to this reason they do not feel free while working in virtual world. In addition to previous, another limitation which faced a researcher is business owners and managers have not enough awareness about working via. virtual world and have not enough knowledge about power of the social media networks and their huge effects on the world (Pereira 2009).

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