The Importance of Managerial E-Cultivation as a Competitive Advantage in E-Commerce Organization's Development

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Abstract. Daily growing of internet technologies presents complicated opportunities and challenges to organizations and guiding them to develop new managerial roles and practices. Academic researchers and business associations worldwide, conducted several studies which emphasized on clarifying managers' skills and competences, but there isn't an overall outlook on today's requirements for e-commerce management. Different companies have different points of view on what the e-commerce manager's roles and functions are. Some businesses believe that e-commerce management includes marketing functions; others dedicate it to IT functions or web design and web development. In fact, e-commerce managers are in charge of all related aspects of their business, from financial perspective to website maintenance. Moreover, managerial decisions play a substantial role in organization's performance efficiency and competitiveness in the irregular electronic era. So it is crucial for business owners to be aware of latest e-skills to get their business started successfully or either to help it develop. This paper studies why and how e-commerce managers are trained to deploy IT infrastructures for business achievements. Particularly, as e-commerce introduces new ways to international business in which even small firms can operate as global rivals, this article aimed to have a brief overview about current business and academic attempts which lead to managerial e-skills improvement and achieving desirable competitive advantages.

Keywords: electronic commerce, managerial competences, e-business skills, business needs, business schools.

1. Introduction

Enormous extension of dot-com businesses makes e-commerce as a vital component and heart of global economy in the twenty-first century, which its impact is undeniable in almost all organizations and segments [2, 5 and 13]. It was reported that the money transactions which shoppers spend online is almost doubled each year [3]. The presence of e-commerce is also leading to important changes in the way business is operated [1, 3, 19 and 20]. As a result, e- commerce firms could save 5%–10% or more in their business costs [1]. Such changes are developing the way companies gain wealth and create shareholder's value. Furthermore, e-commerce allows companies to simply make their businesses effective, increase customer service and provide digital services and products[3]. So that, organizations consider e-commerce ups and downs as giving strategic opportunities to boost their ordinary situations [3,6] and acquiring competitive advantages to reach their organizational goals more effectively and efficiently rather than other rivals

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[16,18,19 and 20]. This study tends to show that e-business' impacts on firms' performance is influential just when accompanied with strong managerial supervision [4]. As one of the top chiefs within an organization, a manager is the architect and central power of the firm's ability for competitive improvements. She/he has to blend different sets of competences to navigate the organization in the right direction [5].Therefore, e-commerce management as a controversial issue has attracted a lot of attention in all countries worldwide [8] and bring universities the huge responsibility of satisfying the demand of labor market and industry to cultivate those who entering the workforce and those from the existing workforce with the needed e-skills [8]. This article has been written in seven sections. The first part outlines the managerial e-competences and skills which are highly demanded by e-commerce workplaces today. In the next section, the most influential managerial characteristics which make differentiation between traditional management programs and e-commerce needs will be debated. In the third part, previous and recent academic approaches toward the fulfilment of e-commerce needs and career space is going to discuss. Forth section includes three practical evidences of implementing e-commerce in business schools' curriculum, that the cases' strong points will be remarked. The last two parts are dedicated to discussion and conclusion.

2. E-commerce Needs of Management Skills

E-Business and E-Commerce growth experiences dramatic rates these days which has resulted in equally growing demands for knowledgeable employees in the same area [14]. Industry has "hundreds and hundreds of jobs that cannot be filled because of the skills shortage". The most desirable positions are related to Internet and e-commerce [17]. Recent statistics show that Europe's growing shortage of competent and skilled e-commerce experts is influencing the effectiveness and competitiveness of most businesses. The UK industry labor market alone demanding 110,000 new professionals which is greater than the present supply [15]. As a matter of fact, today as well as even the economic crisis time, many companies around the world are increasingly competing to employ experts who are qualified in information technology and business management, professionals with comprehensive understandings of both technical and business capabilities [8]. Interestingly, the analysis of new researches indicate that out of nearly one thousand available job positions, 60% were technical and 40% were managerial offers. These positions are mostly demanded by functional sectors like healthcare, telecommunication and finance which requested for specialized experts with the acceptable knowledge of e-business and e-commerce [6]. According to what has been already mentioned, an e-commerce manager of the 21st century has to be able to face the workplace's needs in an inter-, multi-and trans-disciplinary way. Business and IT intersection expecting experts with various experiences, multidisciplinary understanding and technological knowledge- "hybrid professionals", who can manage resources and utilize the ultimate potential of the available technology [15].

3. Why Traditional Management Programs Should be Revised based on Ecommerce Criteria?

Regarding what has been mentioned so far, e-commerce development has caused tremendous changes to the way companies are conducted, which requires managers to have sufficient e-competences to be able to respond to all technological and businesslike issues. In this part, the most essential managerial skills for e-business and lack of them in traditional management programs will be debated briefly.

a. E-commerce managers should react to the accelerated challenges and constant changes of dynamic Internet economy timely and effectively [3].
b. In addition, they should be capable to recognize assets, resources, employees' qualifications and those appropriate mechanisms that will bring a competitive advantage rather than other competitors and cause the best performance [2, 3].
c. Furthermore, e-commerce managers should carefully define the outside forces, internal resources and their main competencies that result in a close connection of organization strategy and e-commerce [3].
d. Management commitment and support is another essential factor that differs successful from unsuccessful e-commerce investment. Absence of awareness and understanding of the potential advantages and values which e-business investments are designed to achieve, can be a major difficulty in implementing a successful strategic e-business [20].
e. Negative attitude of negative-orientation managers toward e-business can unfavorably influence

organization's commitment to strategic IT implementations, and respectively, resource availability and deployment [20].

f. Changing the characteristics and rules of business competition by e-commerce through electronic transactions of information and money is another issue in this comparison. Cultivated managers will search and accept these opportunities, use practical strategies and unique resources, as well as their technological and managerial e-skills, to improve their business ranking in the Internet-oriented world [19].

g. The next critical concern in e-commerce businesses is management style, attitudes and skills. Managers have to invent and communicate a certain vision and an appropriate mission. They should have enough knowledge of the impacts of e-business on traditional business operations, ROI, effective management, customer matters, and technology issues. They are supposed to combine technology and management functions together [5].

h. And the last but not least is that e-commerce business managers should be able to define, expand, and employ the e-commerce infrastructure to make their business enough powerful to gain more from the new business opportunities. Development of actual strategies for reaching competitive advantages through e-commerce is a must for being successful in the 21st century [11].

4. E-commerce Academic Approaches

Whereas, e-commerce big-bang found most academic institutions not able to answer the needed programs and courses, Internet economy driving the tremendous raise in the whole world and make business schools accept the responsibility to prepare business professionals for this recent situation [6]. Coming up with this demand, universities have seen an apparent ascension in e-business programs to defeat this dullness. US top business schools are good instances to support this idea [6]. China also focused on e-commerce management by deploying the information technology to meliorate the traditional way of work and management [21]. But, during the past years and according to the high and growing demand for e-commerce education which is gradually turning from technical to managerial skills, the controversial question is that what are universities doing to meet this demand? How are these future e-commerce employees being prepared? Should e-commerce be a detached academic subject, program, major, or it should be joined to other business courses? Where e-business programs are on target and are they appropriately fill the needed gaps? [1, 6, 14]

On the one hand, according to the empirical researches of this paper, there have been courses in e-commerce offered in many schools and departments, ranging from crash courses, regular courses, concentrations , full degree programs (undergraduate, graduate or certificate programs) , or even founding new Schools within the University[6,14]. Based on recent analysis, among total of 391 different e-commerce courses 52 (13.3%) undergraduate and 339 (86.7%) graduate courses were identified, which were arranged into 24 categories. More detailed study on the courses provided by business schools shows that there are two common specializations in e-commerce curricula. One is e-business career with concentration on the business aspects, whereas the other is a career focusing on IT and Web-based systems technology [6].

On the other hand, high importance of e-commerce and e-business education encourages industries to make effective collaborations with academic sector. As a matter of fact, U.S. businesses have been willing to back up initiatives at all levels. Not just US but many other developed countries around the world like Korea, England, and most of European countries support this model and idea. The only point is that, selection of a model by willing businesses depends on that School, related faculties and administrator's viewpoint and their orientation towards e-commerce and e-business [14]. Supporting this fact, an European research indicates that between 1998 and 2002, the Career Space initiative consisted top universities, ICT firms and various shareholders such as British Telecom, Cisco Systems, IBM Europe, Intel, Microsoft Europe, Nokia, Nortel Networks, Philips Semiconductors, Siemens AG, Telefonica S.A. and Thalès, In addition, the European Information and Communications Technology Industry Association (EICTA), the Convention of National Societies of Electrical Engineers of Europe (EUREL), the E-skills National Training Organization (NTO UK), and many other associations to take part in this leading activity[8].

5. Practical E-commerce Programs in Business Schools

In this part, noticeable results and practical evidences of implementing e-commerce in business school management programs will be reviewed and the cases' strength and success keys is going to be remarked.

i. Business Information Systems Department of Utah State University, US, integrated the e-commerce skills into their main business curriculum by offering series of e-commerce modules. As at least two-thirds of the IS curriculum have the same importance for e-commerce students as well, they introduce their program starting with common subjects and then narrow the specialization by adding e-commerce business, web design and database knowledge. Finally the program is finished by at least 300 hours of internship. Surprisingly, most companies welcomed internship programs and asked for cooperating with these competent interns to assist them in initiating their e-commerce sites. As a result, by completing this program, graduates will be expert in technical, business, and managerial skills. This program strong point is professional graduates who are highly technically productive from the first working day. They also will have a progressive career by good understanding of business implications of e-commerce decisions. Moreover, they have managerial skills to timely and cost-effectively supervise e-commerce projects [1].

ii. The second case talking about the attempt made at the Auckland University of Technology, New Zealand, which offered a comprehensive program in e-commerce studies by introducing a new field of study and a different technological environment to deliver it. This university works tightly with its shareholder associations specifically in clarifying this new program's needs to be certain of keeping balance between technical skills and business concentrations [17].

iii. One another example is how e-commerce and e-business inquiry were being handled at Merrick School of Business, University of Baltimore, US. The Merrick graduate school founded a faculty committee named The Electronic Commerce Committee, which its responsibility is to recognize e-business needs and offer students the required knowledge and skills which ensure their functionality and success in e-commerce and e-business world. The committee offered series of four, three-credit-hour classes that would guarantee graduates expectations of finding out proper job positions in e-commerce firms [14].

Overall, a common point can be concluded from reviewing these three experiences. E-commerce is a kind of ever-changing field that crossed all traditional academic disciplines; therefore, the purpose of these programs is to keep the module outline open and free to change. Therefore, if other faculties or departments invented new modules with the content of e-commerce, they are expected to add them to the previous e-commerce curriculum. In addition, as technological and managerial learning materials may overlap other courses, some existing credits may change, and some can be eliminated. This is what a dynamic program means [8, 14].

6. Discussion

E-commerce is the heart of the contemporary economy worldwide. It completely changes the organizations rules and even culture. Although it brings companies advantages like more customer, wider target market, easier communications and effective marketing, it has some serious disadvantages like information and money security problems, etc. These controversial e-business issues open a new door in business education system which cultivates managers to overcome these challenges and use them as competitive advantages in return. As e-commerce make an intensified global competition in each industry segment, it is crucial for managers to be trained professionally. They have to be able to defeat both internal and external barriers from the technical as well as managerial point of view. They should be capable enough to take care of their business major infrastructure, their company website- the most vital means of communication in e-business environment- and its components including e-commerce hardware & software. They also should have a good understanding of their business transactions, organizational structure, present and future plans, etc. These essential aspects of managing an e-commerce firm increasingly drive the industry demand to hire competent professionals to help organizations facilitate their way of transforming or starting an electronic business. As a matter of fact, academic education is the most popular solution which can appropriately meet the organizations' need. Therefore, business schools create and offer various e-commerce programs. It should be considered that, because e-commerce has a dynamic nature, business schools have a more critical role in this economy evolution, since they should constantly supervise the workplace changes and revised, improve and implement their programs respectively.

7. Conclusion

This paper intended to investigate one of the most controversial issues in e-commerce management which is the importance of managerial training as a competitive advantage in the e-business firms' development. To support this topic, following items were narrowly studied.

First of all, e-commerce needs of management skills and competences were surveyed. Widespread and epidemic implementation of e-commerce nowadays forces complicated issues to businesses. In comparison with traditional commerce, managers confront with such problems like extra costs resulted by changing IT belongings' version, staffs' resistance to comply with this new environment, e-commerce economy rules and regulations, etc. Therefore, the importance of revising traditional management programs based on e-commerce criteria was discussed secondly. As mentioned earlier, e-commerce growth make a tremendous claim of skilled professionals in small and large organizations which all demand competent managers from technical, managerial and financial point of view, who are able to overcome upcoming problems and mutually deploy them as competitive advantages. Then, the role of business education system in fulfilling the industry and labor market's needs was studied. In this regard, business school's faculties and administrators did so many researches to identify industry demands and develop them in their new curricula. Apart from that, as e-commerce has a dynamic nature, it requires eager lecturers who have a fruitful e-commerce experience, desired to share their knowledge with students, and learn along with students. Furthermore, the actual cases of top universities e-commerce programs were analyzed. Where, companies also have a significant role in improving the classes' value and learning process by permitting their professions to be a part of teaching activities. Supporting this idea and summing up with all mentioned opinions, discussions and argumentations, it is recommended that in order to provide a sufficient academic program which effectively meet both overall and fundamental industries needs, the interaction between academia and business should be maximized. For instance, universities can entertain industry events, and firms may offer elective programs and informative seminars to increase students' knowledge about related job opportunities and professional positions.

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