

Effectiveness Implementation of eCommerce in the Developing Countries: Empirical Study on Jordan

Sahem Nawafleh
University of Petra, eBusiness Dept
snawafleh@uop.edu.jo

Abstract

this study aims to analyze a significant and vital topic in all over the world which is E-commerce this study dealt with consumer trends to use e-commerce techniques in Jordan. The research study tests the opportunities and risks that lie ahead. Through which reader will be able to identify the technological, business, and social forces that have shaped the first era of e-commerce and extend that understanding into the years ahead.. Data collected from a random population sample (n=177) Identify the unique features of e-commerce technology and discuss their business significance. This study findings show the significant factors which play a major role in the growing importance of e-commerce such as high quality, competitive prices and access to it from all over the world. In this paper, researchers present and discuss these findings, and identify the criteria that must be taken into account such as product quality, providing security and protection elements for e-payment operations.

1. Introduction

Web is one of the most revolutionary technologies that has changed the development of business and has a dramatic impact on the future of electronic commerce (EC) that will accelerate the shift of the power toward the consumer, and in the way companies relate to their customers and compete with one another (Slywotzky, 2000). The information technologies (IT) increasing development have significantly affected both firms and markets. In the new economy, where knowledge is the most important strategic resource, firms are forced to review their traditional routines and take advantage of the tools, Internet, able to create new value. The Internet and the Web are revolutionizing the way people, businesses and governments transact business via electronic commerce (e-Commerce). This process is having an enormous impact on our activities and the way we relate to people and organizations. Electronic commerce, known as e-commerce, is the buying and selling of product or service over electronic systems such as the Internet and other computer networks. Electronic commerce draws on such technologies as electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and automated data collection systems. Modern electronic commerce typically uses the World Wide Web at least at one point in the transaction's life-cycle, although it may encompass a wider range of technologies such as email, mobile devices and telephones as well. Electronic commerce is generally considered to be the sales aspect of e-business. It also consists of the exchange of data to facilitate the financing and payment aspects of business transactions. E-commerce can be divided into:

E-tailing or "virtual storefronts" on Web sites with online catalogs, sometimes gathered into a "virtual mall" The gathering and use of demographic data through Web contacts and social media, Electronic Data Interchange (EDI), the business-to-business exchange of data E-mail and fax and their use as media for reaching prospects and established customers (for example, with newsletters) Business-to-business buying and selling The security of business transactions (Wikipedia) Even though e-commerce opens a world of businesses to customers and vice versa; e-Business incorporates both this function and the provision of more significant opportunities for interaction, transaction and profitability in back office and supply chain systems. Many supply chain systems are, in fact, e-commerce tools, eg: procurement, inventory management, CRM and some ERP systems.

2. The Study Significant:

Technological development and the emergence of e-commerce and online purchase in the developing countries, especially Jordan, The reason behind people's reluctance to buy through the internet; reasons and factor.

2.1 STUDY QUESTIONS:

1. Does the social and cultural factors affect on the e-commerce purchasing process.
2. Do technological and technical factors affect on the e-commerce purchasing process.
3. Do legal and legislative factors affect on the e-commerce purchasing process.
4. Is there a law in Jordan that pursues mail Scams.

2.2 STUDY OBJECTIVES:

This study aims to

1. Analyze and identify the main factors affecting a person's preference to buy in traditional ways rather than over the internet, which is social, cultural, and technological factors that represents the culture of customs and traditions, individual behaviors, and using net skills.
2. Identify customers' perception about the security of online payment methods.
3. Identify if Current laws and regulations in Jordan sufficient for protection of consumers

2.3 LITERATURE REVIEW:

It is difficult to pinpoint just when e-commerce began. There were several precursors to e-commerce. In the late 1970s, a pharmaceutical firm named Baxter Healthcare initiated a primitive form of B2B e-commerce by using a telephone-based modem that permitted hospitals to reorder supplies from Baxter. This system was later expanded during the 1980s into a PC-based remote order entry system and was widely copied throughout the United States long before the Internet became a commercial environment. The 1980s saw the development of Electronic Data Interchange (EDI). (Introduction to E-commerce) With the advent of the Internet, the term e-commerce began to include:

- Electronic trading of physical goods and of intangibles such as information.
- All the steps involved in trade, such as on-line marketing, ordering payment and support for delivery.
- The electronic provision of services such as after sales support or on-line legal advice.
- Electronic support for collaboration between companies such as collaborative online design and engineering or virtual business consultancy teams.

2.3.1 Improvements to customer responsiveness and service

By allowing customers to track delivery of parcels in real time, the Federal Express website keeps customers in touch with the location of their goods and when they will arrive. Provision of this sort of information creates greater customer satisfaction and sense of control. Automatic Teller Machines (ATM's) are now well used by most bank customers, who, although some still express feelings about the lack of personal interaction with bank staff, generally would not want to return to the old system of standing in a queue for personal service. They feel more in control of the transaction process and can access their information any time. Publishing Frequently Asked Questions (FAQ's) on a website saves customers time and money waiting on the phone for a response. They also allow the business to concentrate on generating more business rather than dealing with often simple issues.

Automatic email responses provide customers with instant information to their inquiries and help create more sales by answering general queries more quickly and comprehensively. Web sites with interactive features, e.g. chat line, bulletin board, email, e-forms. These facilities help keep the customer in touch with the "real person" in the business. Some customers respond better in this environment and the business owner can ask more direct questions of the customer to help build personal profile information. Useful information about products, services, prices etc. and something FREE or value adding. This again provides the customer with what they are generally looking for in their first contact with a business and helps to create a successful sale more quickly.

2.3.2 Across the board cost savings

2.3.2.1 Labor costs

Reduce Wages by engaging labor via the Internet on performance based rewards. Incur labor expenses only when you need them by outsourcing work like invoicing, debt collection and customer support, advertising, copywriting etc. turning fixed costs into variable costs. Labor costs can also be reduced by automating business processes which require less human intervention.

2.3.2.2 Materials costs

Reduce materials costs by requesting and receiving both expressions of interest and quotes from materials suppliers worldwide. Collaborate electronically with other businesses to bulk purchase materials.

2.3.2.3 Overhead and other costs

- Outsourcing labor and casual work and automating business processes both help reduce space and equipment requirements.
- Using email for communicating and information dissemination saves phone, fax and courier costs. Also other Internet tools can be similarly used to communicate with suppliers, staff and customers.

- MS Netmeeting, IRC Chat and other tools allow voice, image and word communication saving travel, airfares, accommodation and teleconferencing costs.
- The Voice recognition software helps minimize the need for secretarial support and increasing your typing speed.
- Most communication costs can be significantly reduced with a combination of email, other Internet tools, phone answering machines, voice response systems, call diversion and mobiles.
- Reduction of inventory holdings.
- Reduction of working capital requirements.
- Reduction in transaction costs.

2.3.2.4 Cash flow improvements

Reduce Interest charges, bank fees, collection fees, postage and printing by using Electronic Funds Transfer (EFT), Point of Sale (POS) and electronic banking facilities. (Benefits of E commerce)

The level of e-commerce can be measured by using an e-commerce capability indicator by Molla and Licker (2004):

- No e-commerce indicates company without e-mail or Internet connection.
- Connected e-commerce represents company that has Internet connection and e-mail.
- Informational e-commerce indicates company using website to publish basic information about the company and its products/services in static manner.
- Interactive e-commerce allows users to search the company's product catalogue, make queries, and enter orders.
- Transactional e-commerce allows online selling and purchasing of products/services including online payment and customer service.

2.4 Informational/communications strategy

In the information/communications strategy, the Web is used to support but not to replace a company's main business activity. Companies are not limiting themselves to just marketing on the Web. As a matter of fact, they look at other traditional media of advertising and marketing study in order to meet their business goals and marketing objectives. Looking at Web marketing as another tool in the company's marketing arsenal (Clark, 1997), the information/communication design is the most common use of Web marketing today. Liu et al. (1997) report that 93 per cent of Fortune 500 companies have publicly accessible sites, but less than 26 per cent of those sites support transactions. On the other hand, there is no doubt that informational/ communication design on the Web can also produce significant sales in other areas of business. For example, Insight Direct, a discount computer cataloger selling mostly to business, generates only 10 per cent of its sales from its on-line catalog, but more than 75 per cent of its new customers come from the site.

2.5 Shopping Safely Online

Online fraud can take many forms from non-delivery of goods to non-return of damaged goods. In many cases, online fraud can be deterred by following a few simple practices. Just as consumers should take obvious measures to protect themselves in brick-and-mortar stores – not leaving a purse in an unguarded shopping cart, protecting their PIN (personal identification number) at checkout, not carrying large amounts of cash in their wallets – online shoppers should consider sensible precautions, as well:

1. Learn as much as possible about the product and seller: Shoppers will feel more secure and confident if they are familiar with the merchants from whom they're buying. The Internet offers the platform for retailers to provide information about their companies and histories while the buyers are empowered to do their research about the products and companies. Shoppers might also learn about a retailer from its reputation, from previous purchases, from referrals through friends or from reviews and comments by other shoppers found online.
2. Understand the retailers' refund policies: Look for and ask about what the refund policies are. Questions to ask include: the required timeframe a buyer must contact the retailers and return the items, if a full refund will be offered or a merchandise credit, and if an item that has been opened can be returned. For retailers without refund policies, consumers can use buyer protection programs from either the site or through the payment method. This ensures that if there is a problem with a transaction, the payment will be covered or refunded as a result of the protection guarantee.

3. Choose a secure password to protect account information: Many people use passwords for online stores that could be guessed, like their birthday, Social Security Number or a family member's name. Instead, a password should contain a combination of upper and lower case letters and numbers and symbols that no one else will know. (The e-Commerce Safety Guide, Robert Chesnut)
4. Use a secure checkout and payment process: Many Web sites use a technology called Secure Sockets Layer (SSL) to encrypt the personal and financial information sent over the Internet. To know if the retailer is offering a safe checkout process, look for the logos from companies like VeriSign or TrustE logo. A browser will also display the icon of a locked padlock at the bottom of the screen to indicate encryption. When it comes to choosing which method to use when paying online, consumers should take precautions when entering credit card or checking account information at each online retailer they visit. By entering this on several different merchant Web sites, the likelihood of this information being compromised increases. A safe and easy-to-use payment service allows shoppers to enter account information only once at a highly secure and reputable site that protects this financial information from merchants and other intruders. Future purchases should be made from that one account to avoid the need to enter credit card information separately into the Web sites of individual retailers.
5. If an offer sounds highly suspicious or too good to be true, it probably is: As with any purchase, shoppers should read the fine print (or, in some instances, click the links describing the purchase agreement). While Internet shops frequently offer lower prices than brick-and-mortar stores, shoppers should be wary of unreasonably low bargain prices or unusually attractive promises.
6. (The e-Commerce Safety Guide, Robert Chesnut)

3. Study Methodology:

Simple random sampling was carried out to select a sample population. Each member of the defined population has an equal opportunity to be part of the study. The randomly selected sample answered a survey written questionnaire. Data gathered from this research instrument analyzed by SPSS for interpretation. In order to achieve better insight about the research and reach the target population which is the most avid user of net shopping websites that are able provide relevant responses; Total number of subjects participated in the study (177 shopping website users) from Amman, Irbid and Jaresh cities. Samples varied from school to university students and employees, who form the major chunk of people that are using networks. The number of males was (102 users = 57.63%) and females were (75 users = 42.37%).

The population sample was stratified into 2 categories:

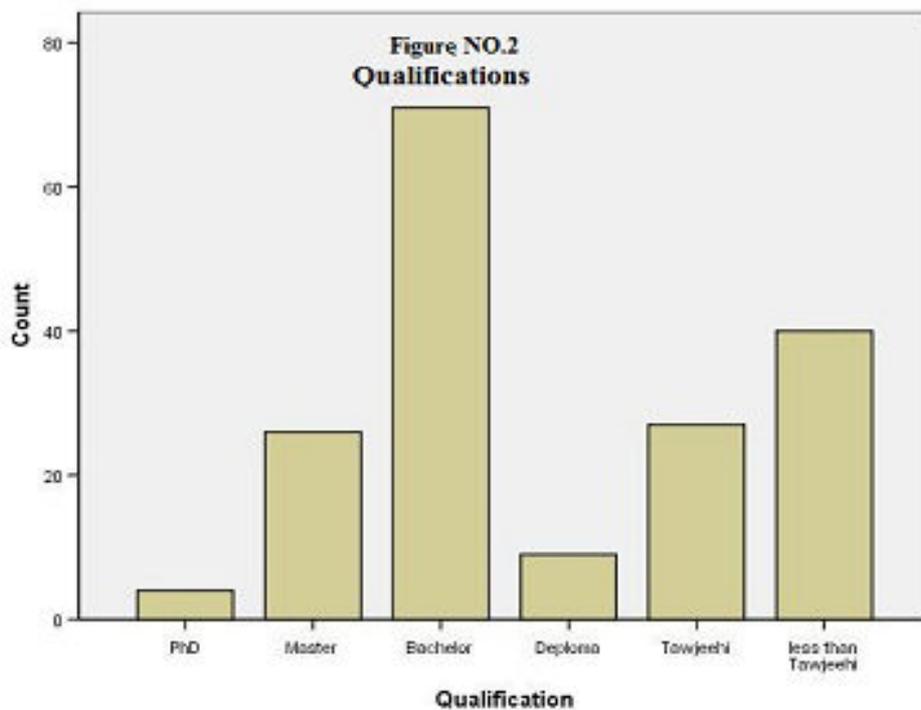
- Random sample of Petra & JUST university students (18 – > 26) Total NO. (94 participants)
- Random sample of age category between (26 <) Total NO (83 participants)

The selection of these groups was based according to the researcher's perception that different age category uses e-commerce for different reasons. Answering the questionnaire was under participants' consent, after they were informed that all information concerning them will remain confidential and shall only be used for the purpose of the study.

The questionnaire was divided into two sections: participants' profile and the survey questions. The profile contains socio-demographic characteristics of participants such as age, gender, marital status and qualifications. In the survey questions, participants responded to twelve questions. The survey included statements regarding e-commerce usage and its impact on participants based on their perception. Some of these questionnaire copies were sent via email to participants in Petra University and Jaresh camp, due to limitation of time, while others were given directly to participants.

4. Discussion:

Participants were asked to respond to a question about their highest degree earned, and the participants had completed rather an undergraduate or had a university degree or lower than secondary school education.



However, most of the participants had a Bachelor degree (71 participants, 40 %)

Question No. 1: For how many years you are using e-commerce	Gender					
	Male			Female		
	Age Category			Age Category		
	18>25	25>35	35<	18>25	25>35	35<
Less than one year	13	23	16	15	13	6
One year but<five year	0	11	6	2	3	5
More than five years	8	6	12	11	10	4
Don't know / cannot say	0	6	1	3	0	3

Table No.1

Participants were asked about the time period they used e-commerce, as the table reveals that male users of the age category (35>), are the highest in percent. This can be related to their perception and awareness about using internet and e-commerce, which represent the category that used e-commerce for less than one year followed by those who used it for more than five years.

Table NO.1 reveal that the male users (35>) using e-commerce much more female users; this can be related to male frequent usage and they're working in internet and e-commerce areas more than females do.

Question No. 2 For what purpose do you use e-commerce?		Gender						Total
		Male			Female			
		Age Category			Age Category			
		18>25	25>35	35<	18>25	25>35	35<	
Personal Use	14	3	6	9	3	12	47	
Business Use	15	18	12	11	7	13	76	
Both personal and business	10	14	4	4	13	1	46	
Cannot say	1	5	0	1	1	0	8	

Table NO. 2

In Table.2, the participants answered about the purpose of using e-commerce, their answers revealed that both male and female users are using e-commerce for business and trading purposes, this can be related to that most workers in Jordan are mostly working in private companies not private business.

Question No. 3 What factor (s) is (are) likely to prompt your interest in purchasing goods and services on-line?		Gender						Total
		Male			Female			
		Age Category			Age Category			
		18>25	25>35	35<	18>25	25>35	35<	
Access to goods/services which are not available in your neighborhood	7	2	5	7	1	0	22	
Access to products/services sold in your neighborhood but at a more favorable price,	11	15	6	10	8	7	57	
Access to goods and services sold "physically" in your neighborhood but which are available in a more efficient or higher quality versions,	2	15	21	13	15	5	71	
Access to goods and services sold "physically" in your locality in a more practical way (time saving, home delivery, etc).	1	14	3	1	2	6	27	

Table NO. 3

In Table 3, the participants answered about the factor to prompt their interest in purchasing goods and services on-line, their answers revealed that both male and female users using them for two reasons; first reason, that internet products are of better quality and second reason + is the availability of these products on the Internet and e-commerce sites at better prices than those in the physical world.

Question No. 4 : According to you how is e-commerce helpful to the consumer in the e-business domain?	Gender						Total
	Male			Female			
	Age Category			Age Category			
	18>25	25>35	35<	18>25	25>35	35<	
Broadens consumer choice	7	10	4	8	4	1	34
Encourages price transparency	9	12	13	11	7	5	57
Fastens business process	5	11	15	12	11	6	60
Do not know/ Cannot say	0	13	3	0	4	6	26

Table No.4

In Table 4, the participants answered about how is e-commerce helpful to the consumer in the e-business domain, their answers revealed that the second paragraph related to encourages price transparency has got the highest percentage, followed by the third paragraph, which states that e-commerce will help in Fastens business process and then the first paragraph, which states that the benefits of e-commerce is to broadens consumers' choices

Question No. 5 Do you agree that e-commerce as a commercial means has its advantages over the traditional commercial methods	Gender						Total
	Male			Female			
	Age Category			Age Category			
	18>25	25>35	35<	18>25	25>35	35<	
Strongly agree	7	8	5	14	4	3	41
Agree	10	10	5	10	5	4	44
Disagree	3	14	18	7	14	7	63
Strongly disagree	1	14	7	0	3	4	29

Table NO. 5

In Table 5, the participants answered about e-commerce as a commercial means has its advantages over the traditional commercial methods, their answers revealed that 63 disagree, 44 agree and 41 strongly agree. Also the table reveals that those who disagree are from age category (35>); this can be related to their preference to buy through traditional methods rather than electronic ones. While those who agrees & strongly agree are from age category (18>25 and 25>35).

Question No. 6: According to you how e-commerce is helpful for the business discourse?	Gender						Total
	Male			Female			
	Age Category			Age Category			
	18>25	25>35	35<	18>25	25>35	35<	
Effectively caters to customers' demands	7	7	5	14	5	2	40
Smoothens business by creating customer and businessman network	10	18	12	9	13	9	71
Ensures guarantee of payment	2	13	13	5	7	4	44
Do not know/ Cannot say	2	8	5	3	1	3	22

Table NO. 6

In Table 6, the participants answered about how e-commerce is helpful for the business discourse, their answers revealed that 71 related it to Smoothens business by creating customer and businessman network, 44 to that it Ensures guarantee of payment and 40 to that it Effectively caters to customers' demands.

Question No. 7 : How did you pay for your on-line purchases?	Gender						Total
	Male			Female			
	Age Category			Age Category			
	18>25	25>35	35<	18>25	25>35	35<	
Using a credit card or debit card on-line	1	12	4	5	0	1	23
Payment carried out off-line (cash on delivery, by cheque...)	7	7	16	12	7	7	56
By electronic transfer	12	13	6	12	13	6	62
Other	1	14	9	2	6	4	36

Table NO. 7

In Table 7, the participants answered about payments mean for online purchases, their answers revealed that 62 pay through electronic transfer, 56 prefer Payment carried out off-line, this can be related to the lack of security and protection, while 36 prefer other means and 23 prefer Using a credit card or debit card on-line. This explains that consumer's lack of confidence and awareness of e-payment means for electronic purchases.

Question No. 8: Please specify which delivery problems you have encountered:	Gender						Total
	Male			Female			
	Age Category			Age Category			
	18>25	25>35	35<	18>25	25>35	35<	
Product did not arrive	2	5	4	4	1	1	17
Uncertainty concerning contracts, terms of deliveries and guarantees	8	3	6	3	4	7	31
Logistical problems (speed & timeliness of delivery)	8	19	16	15	15	5	78
Delivery costs too high	3	19	9	9	6	5	51

Table NO. 8

In Table 8, the participants answered about which delivery problems participants have encountered, their answers revealed that 78 related it to logistical problem as the speed and timeliness of delivery followed by 51 related it to the high costs of delivery while 31 related it to uncertainty concerning contracts and 17 to that products did not arrive.

Question No. 9 : Which problems, according to your information, are the most important ones encountered by consumers in their on-line purchases?	Gender						Total
	Male			Female			
	Age Category			Age Category			
	18>25	25>35	35<	18>25	25>35	35<	
Technical problems during the ordering or payment	6	5	5	8	5	3	32
Lack of information on seller, the guarantee and consumer rights	10	17	17	12	9	10	75
Problems in settlement of disputes	3	16	9	8	8	3	47
Other	2	8	4	3	4	2	23

Table NO. 9

In Table 9, the participants answered about the problems encountered by consumers in their online purchases, their answers revealed that 75 related to Lack of information on the seller, the guarantee and consumer rights, followed by 47 related it to Problems in settlement of disputes while 32 related it to Technical problems during the ordering or payment and 23 to that other problem individuals face.

Question No. 10 : Do you trust online trade?	Gender						Total
	Male			Female			
	Age Category			Age Category			
	18>25	25>35	35<	18>25	25>35	35<	
I am fully confident	7	4	3	6	0	2	22
Kind of, but I keep being careful	5	5	8	10	2	7	37
I am confident enough	8	18	17	11	15	5	74
Not at all	1	19	7	4	9	4	44

Table NO. 10

In Table 10, the participants answered about whether they trust online trade, their answers revealed that 74 are confident enough, followed by 44 who are not confident at all while 37 Confirm the presence of confidence, yet there remain worried of e-commerce transactions and 22 are totally confident.

Question No. 11 : According to you what are the most important criterion when you buy online?	Gender						Total
	Male			Female			
	Age Category			Age Category			
	18>25	25>35	35<	18>25	25>35	35<	
Possibility to get back in touch with the reseller	4	4	5	6	0	3	22
Payment Security	10	7	8	8	7	7	47
Quality	6	15	18	13	10	3	65
Price	1	20	4	4	9	5	43

Table NO. 11

In Table 11, the participants answered about the most important criterion when buying online, their answers revealed that 65 interest in the quality of products that people want to buy more than other standards, followed by 47 who are interested in the standard of security and protection for e- payment operations being one of the most important criteria to be taken into account when making online purchases while 43 are interested the price standard as the basis for purchase through the Internet and 22 in the Possibility to get back in touch with the reseller.

Question No. 12 : what's your opinion about the security of the payment methods like using visa or credit card	Gender						Total
	Male			Female			
	Age Category			Age Category			
	18>25	25>35	35<	18>25	25>35	35<	
High security	4	4	5	3	1	2	19
Medium	7	5	8	4	5	4	33
Accepted	10	15	15	10	11	8	69
Low	0	22	7	14	9	4	56

Table NO. 12

In Table 12, the participants answered about customers opinion about the security of the payment methods, their answers revealed that 69 confirmed that the degree of protection and security are acceptable, followed by 56 confirmed that the degree of protection and security are low, while 33 are confirmed that the degree of protection and security are medium and 22 confirmed that the degree of protection and security are high.

Question No. 13 : Current laws and regulations sufficient for protection of consumers	Gender						Total
	Male			Female			
	Age Category			Age Category			
	18>25	25>35	35<	18>25	25>35	35<	
Strongly agree	6	7	5	7	0	1	26
Agree	8	7	10	7	3	4	39
Disagree	6	12	12	10	15	11	66
Strongly disagree	1	20	8	7	8	2	46

Table NO. 13

In Table 13, the participants answered if the Current laws and regulations sufficient for protection of consumers, their answers revealed that 66 disagree with such laws and regulations, followed by 46 are strongly disagreeing with laws and regulations being sufficient for protection of consumers, while 39 agree with laws and regulations being sufficient for protection of consumers and 26 strongly agree with laws and regulations being sufficient for protection of consumers.

5. Result and Recommendation:

The previous section discussed and analyzed the responses of the study sample to the questionnaire paragraphs, in order to identify the most important results of the study and access to a range of recommendations. Analyzing study questions we conclude the importance of discussing the issue of e-commerce in general and its increasing importance in developing countries in particular. The answers revealed a great interest and turnout toward the transition to e-commerce. The study highlighted some of the significant factors which play a major role in the growing importance of e-commerce; among the most prominent reasons are the availability of all products on websites with high quality, competitive prices and access to it from all over the world, As well as its larger availability than in the physical world, helping to connect businesses and expanding purchasing options for consumers. One of the topics highlighted by the study is e-payment process which is considered one of e-commerce most important issues that must be taken into consideration and the need to provide all means of sales e-payment during the use of electronic cards, cheques or allowing direct transactions. Another important topic was highlighted is Deliveries of goods that being bought electronically which faces a range of legal and regulatory problems related to lack of clarity and laws variation from state to state. As well as high delivery and pick-up costs, contracts and warranties lack of clarity related to goods receipt process. The study highlighted a set of criteria that must be taken into account when practicing e-commerce by consumers especially when purchasing such as product quality, providing security and protection elements for e-payment operations.

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