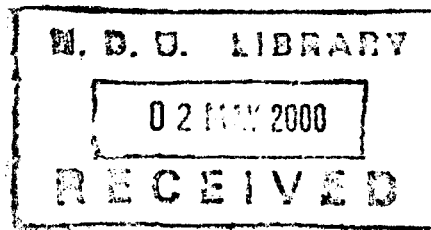# DEVELOPMENT OF E-COMMERCE IN LEBANON
OBSTACLES & SOLUTIONS

Ziad J. ASMAR

A Research Project Submitted in Partial Fulfillment of the
Requirements for the Degree
Of
Master of Business Administration

NOTRE DAME UNIVERSITY
LEBANON
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**NOTRE DAME UNIVERSITY
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By

Ziad Asmar, Master in Business Administration
NDU, 2000

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E-commerce is now becoming one of the largest industries in the world, especially that it is accessible to all communities and markets at very low costs. Lebanon is now witnessing developments in the state, banks and business sectors to embrace this trend and capitalize on it. Major problems and opportunities, however, need to be explored especially due to the complicated technology and advanced nature of the issue.

(77 pages)

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Chapter One: History and Development of the Internet

1.1   Introduction

The Internet, as we call it today, has come a long way to become the "information super highway". Its origin goes back to the mid 50's, 1957 to be more precise. With the launch of the Russian Sputnik, the first artificial satellite, the United States formed the Advanced Research Projects Agency (ARPA). Its mission was to establish US lead in science and technology applicable to the military. Ray Tomlinson of BBN created the first E-mail program in 1972. In that same year, the ARPA was renamed the Defense Advanced Research Projects Agency (or DARPA). In 1973, development began on the protocol that was later called TCP/IP. It was developed by a group headed by Vinton Cerf from Stanford and Bob Kahn from DARPA. This new protocol allowed diverse computer networks to interconnect and communicate with each other. In 1974, Vinton Cerf and Bob Kahn used the term the Internet for the first time on paper. In 1976, DR. Robert M. Metcalfe develops the Ethernet, which allowed coaxial cable to move data extremely fast. In that same year, the Department of Defense began experimenting on the TCP/IP. USENET (the decentralized news group network) was created in 1979 by Steve Bellovin, a graduate student at University of North Carolina, and programmers Tom Truscott and Jim Ellis.

1.2   Developments through the '80s and '90s

In 1983, the Internet Activities Board was created. The university of Wisconsin created the Domain Name System (DNS). Then, in 1985, the National Science Foundation began deploying its new T1 lines, which would be finished by 1988. After its completion, traffic increased so quickly that they had to start upgrading the network immediately. The ANS came up with the concept of the T3 lines, which quickly adopted and integrated by the end of 1991. In 1992, the Internet Society is chartered and the WorldWide Web was released by CERN. What was significant in 1994 was the growth. Hundreds of thousands of new hosts were added to the Internet during this time period.

The father of the Internet, scientist Vinton Cerf may have never imagined what the Internet would eventually become, that is, the highway that would connect the entire world. The official birth of the Internet in its present form owes itself to the English scientist, Timothy Berners-Lee who initially developed for the European Organization for Nuclear Research in 1989 (Rutkowski, CD-ROM, p.2). Eventually, the Internet turned into a very powerful medium of communication, a medium that was to turn the globe into one small village where interactive audio-visual connection was to become an easy, fast and efficient possibility. Today, the Internet is becoming a medium of communication that is enjoying increasing

importance in Lebanon. This is partly because the number of PC users in the country is increasing incredibly, while at the same time, the telephone communication network is becoming more reliable and much cheaper to use.

Chapter Two: E-Commerce

2.1 Introduction

Electronic commerce (E-commerce) is the sharing of business information, maintaining business relationships, and conducting business transactions by means of telecommunications networks. It includes the relationships and transactions between companies, as well as the corporate processes that support the commerce within individual firms. E-commerce is much more than buying and selling over the Internet. With E-commerce, it is now possible to conduct virtually any traditional business function electronically, from marketing to sales to delivery to post-sales support to accounting, customer service and business-to-business links.

The Internet was simply a way to communicate and get information. No one foresaw the advantages that this new technology has to offer. No one imagined himself configuring and ordering his car from his own desktop computer.

2.2 Development of E-commerce

Electronic commerce is a new and certainly trendy name, but the practice it refers to originated a half-century ago. This practice became electronic data interchange (EDI); the computer-to-computer exchange of standardized electronic transaction documents. Although what can now be

called traditional E-commerce has not been limited to EDI and has included business practices built around computer-to-computer transmissions of variety of message forms, bar codes, and files.

It is the arrival of the commercial use of the Internet, driven by its World Wide Web that has been defining new E-commerce since 1993. E-commerce now emerges from the convergence of several major information technologies and business practices. Among the principal technologies directly enabling modern E-commerce are: computer networking and telecommunications; client/server computing; multimedia, and hypermedia in particular; information retrieval systems; electronic data interchange (EDI); message handling and workflow management systems; groupware and electronic meeting systems; and public key cryptography.

In a broader sense, all the major computer and telecommunications technologies, and database management in particular, are a part of E-commerce. The set of technologies driving E-commerce is portrayed today in the Internet. The Internet offers an open platform for new E-commerce.

It would be entirely wrong to interpret E-commerce as a largely technological development. The use of transformational technologies challenges the pre-existing ways of doing business, of collaborating, and of competing. In a wider realm, the underlying technology of global, accessible

connectivity changes many aspects of our life in the public and private domains.

2.3 E-Commerce Performance

Basically two types of products can be sold in cyberspace. These are the following:

- Physical Goods: As the name implies, physical goods or products are any product that exists physically in its own right. Here, we are talking about a product that has to be packed, shipped, and mailed to an address. The product has to be handled properly until received by the customer before the transaction is complete. Products in this category range from anything as small as buttons to anything as large as computers, cars, or trucks.

- Digital Goods: Unlike physical goods, digital goods are any product or service that can be transferred to the buyer through cyberspace. The revolutionary digital and information technology advancements have boosted such products and services. Here we are talking about documents, data, information, all which can be saved and electronically mailed or directly downloaded using internet browsers. One of the most common products that fall under this category are databases of governments, companies or even libraries, and Encyclopedia Britannica is perhaps the most popular example in this context. Other services in

this respect involve legal services, consultation, and even psychiatric services.

In 1999, online sales amounted to $1.9 billion in financial services, $769 million in travel and $210 million in books and music. Analysts estimate that e-commerce is bound to explode over the next few years, and is expected to have significant impact on the business-to-consumer and business-to-business markets:

- Forrester Research estimates that E-commerce could account for $3.2 trillion in worldwide corporate revenue by 2003 and could represent 5% of sales in the global economy.

- International Data Corp. and RelevantKnowledge project that, online purchase of goods and services will explode to $54 billion by 2002.

- Forrester Research reports that business trade via the Internet reached $43 billion in 1998 and anticipates that it will explode to $1.3 trillion in 2003.

- International Data Corp. says in the U.S., corporate spending in the Internet will surpass $203 billion by 2002.

- Deloitte Consulting (CNets News, 23rd June 1999) forecast that E-commerce revenues would increase to $1.1 trillion globally by 2002

from $15 billion in 1997. Out of the $1.1 trillion, $842 billion (76.5%) would be from the US.

2.4 Problems of E-Commerce

2.4.1 Acceptance

The main problem in E-commerce all over the world is payment. It is not just about coming up with ways of securing a payment, but more of convincing people of a whole new concept of buying. People had a hard time accepting credit and debit cards, and now new means are being introduced to the consumer in order to secure his transactions. In addition to various types of currency, companies should also be able to accept multiple payment types. Credit-card transactions are fairly easy to process electronically and have the advantage that credit-card processors will do the currency exchange for you automatically. The big issue with credit cards is security, which I will discuss further as we continue. Credit cards, however, are not the only means of payment over the Internet. Just as one can go down to the grocery store and use his or her bank debit card to buy food, one can also use it to purchase products on the net. Wire transfers are becoming a significant payment type for electronic commerce, especially for large orders between companies. In addition to wire transfers for electronic purchase orders, promises by known customers to pay later, are becoming popular payment mechanism. It is expected that electronic/digital cash (e-

cash) will evolve over time, ultimately becoming the dominant payment type on the net. The main issue is one of acceptance, and researchers fear that it will take a generation or two for e-cash to truly catch on.

2.4.2 Security

Few years back, the major worry of online purchasers was the possibility of their credit card numbers being hacked. With the advansment in technology however, three facts since 1995 have developed to make Online shopping increasingly attractive: In the first place, at least 90% of Web surfers use a Web browser capable of SSL (Secure Sockets Layer) security, according to people who keep such statistics. When a person using Netscape or Microsoft Internet Explorer browser connects with a Web site that is running an SSL Secure Server, all the information transmitted by the customer is scrambled and encrypted. Although these codes can be broken by hackers, however, but the danger of having ones'credit card hacked is minimal, excepting with large trading is taking place. In these cases, traders set up their own SSL secure servers and have a digital certificate that identify them when claiming who they are. Other recent alternative for payments are the Virtual Wallets where companies are now offering a secure way of promoting commerce on the Web. CyberCash, DigiCash, First Virtual, and others have various systems by which the customer sets up an account with just a single Internet company -- for example, CyberCash --

and gives them the credit information. CyberCash, then, confirms to merchants who are set up with this system that the customer indeed has credit. The merchant accepts the CyberCash, and the sale is made.

Furthermore, the main credit card companies such as Visa and MasterCard, supported by a number of on-line software giants came up with Secure Electronic Transaction (SET) for the Internet. These systems allow the credit card number to be encrypted so that no one can read it. Only the bank or merchant's credit card service will have the decryption code.

In spite of SSL security and Cyber Cash, some customers may prefer to print out a completed order form (or have one e-mailed to them), and consummate the transaction by phone, fax, or snail-mail. Some shopping cart programs such as SoftCart support that approach, too.

Chapter Three: E-Commerce in Lebanon

3.1 IAW Survey on E-Commerce in the Middle East

Since Lebanon is considered the jewel of the Middle East, it is important for us to look at studies that have been done on E-commerce in the Middle East. The Internet Arab World, IAW, has recently conducted its first comprehensive survey on E-commerce in the Arab World. No surveys were done on the Lebanese market, instead the survey targeted the bigger picture. From those results we could draw up on conclusions on E-commerce in Lebanon.

According to IAW, only 4 % of internet users in Arab countries purchased over the internet within a year. Internet users are very weary about sending their credit card numbers through the internet. 92% of those who did make a purchase say they bought the product/services from companies that were not located in the Middle East. Most of their purchases were: Computer software (23%), books (22%), miscellaneous gifts (10%). The mount spent on a single purchase ranged from $50 to $4000.

When they were asked about the method of payment, 92 % used credit cards for the transactions. Although this may seem positive at first, only a few of them relayed this information online. When a website failed to offer a secure transaction (a secure form), they refused to give their numbers and tried other means. 27% sent their cards numbers by calling, 31% sent a fax and

15% by e-mail. This means that non-secure websites have problems earning potential customers. However, 77% trust secure transactions, and none of them trust non-secure transactions.

Few of the technology providers cited the high cost of building and managing sites as a significant obstacle to the adoption of e-commerce in the region. The ISPs estimate that the average costs for building a Web storefront are $500 for a small site; an exponential jump to $10,500 for a medium sized one; and $35,000 for a large site.

3.2   DIT Survey on the Middle East User Profile

In 1998, DIT who are the publishers of PC magazine released its survey results on the internet users in the Middle East. The findings were the first available data on internet use that was objective and quantified. According to the study, 96% of internet users in the Middle East are men. It also seems that there is a correlation between internet use and educational attainment. The average user is highly educated: 60% are university graduates, 19% went on to obtain higher degrees and 21% had completed at least secondary school.

The survey also shows that there's an even 50-50 split between the people who the internet at home and those who use it for work. The ones that are using it for work are mostly found in large educational and governmental organizations. In the private business enterprise, only

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companies that deals with information technology provide internet access to the web. Banking and insurance companies are among the lowest of enterprises that are likely to provide internet access to their employees. The predicted global trend towards E-commerce may be delayed in the middle because of the low percentage rating of 2%.

Problems that were encountered and caused dissatisfaction are; 69% reported slow lines (which is the case here in Lebanon) and 50% reported broken lines. Only 5% reported that their inability to access 'forbidden sites' as annoying. 85 % reported having an internet connection at home and 6 out of ten home PC users had internet connection.

In short, the findings suggested that the average internet user in the Middle East is young, male and well educated. He uses the internet at home as much as at work. He uses the internet for about one hour and a half. He hates how much it costs but he still loves doing it. And finally, he uses it mostly to communicate.

3.3   The Internet in Lebanon

When the Internet was first launched in Lebanon in 1996, the majority of the users belonged to the younger generation, aging between 15 and 25. Today, the number of Internet users has not only increased substantially, but it has also diversified. In specific, the number of users below the age of 15 and above the age of 40 has increased dramatically.

In the first two years, the Internet was an expensive service that was available only to those who could pay. ISPs required that subscribers have bank accounts with a delegation to the ISP to withdraw the amount of the subscription on a monthly or per-hour basis. This imposed further restrictions on the Internet and its expansion.

Eventually, however, competition and increasing demand forced ISPs to launch new offerings, mostly through time unit credits. The typical card in 1997, for example, offered the user five hours of access at $20, and these units could be consumed within thirty days after which the account would become obsolete, unless the customer recharged his card. In 1998, unlimited offers appeared for the first time, offering either unlimited day or unlimited night offer. Competition increased and by the end of 1998, the typical card offered customers unlimited day and night access for only $29. The prevailing offer in the market now however include a combination of Satellite and Digital Internet connections with unlimited access ranging from $6 to $19 per month.

3.4 E-Commerce in Lebanon

The possibility of introducing e-commerce in Lebanon witnessed two landmarks in the past. The first landmark was at the end of 1997 when Master Card issued a special cash card that could be used to conduct electronic purchases online. This card had a limited ceiling and enabled

Lebanese users to conclude any purchases they wanted from any place over the world without worrying about security concerns. The spread of the card made the Lebanese more aware of e-commerce.

The second landmark was the introduction of e-commerce technology in 1998, mainly the result of efforts made by Master Card, Bank of Lebanon and the Gulf, and Global Sign. The efforts of these three companies resulted in assembling what is known as the technology infrastructure for e-commercial activities in the country. In effect, any person or company could post a page on the internet, but the problem is money generation. To be able to conduct commercial transactions online, a company needs to have an account bank that can charge the credit cards of its customers online. At the same time, this mechanism had to be safe and secure so that neither customers nor the financial institutions involved would be exposed to theft, robbery or hacking. Master Card provided the mechanism, Global Sign provided the security, and Bank of Lebanon and the Gulf provided the financing. By the beginning of 1999, the service was fully integrated and ready to attract the attention of companies.

Other landmarks are also noticed. The most important of these took place at the end of 1999 when a number of banks, such as Bank Audi, Credit Libanais and others joined the cyberspace fray, offering the first services of what will in the future be known as online banking. Beginning the year

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2000, we have also witnessed many Lebanese sites offering online trading activities and targeting the young generation in specific. These movements made it clear to Lebanese companies that financial transactions online will be increasing dramatically in the coming few years.

3.5   The Development of the Market

Although the Internet has been available in Lebanon since 1996, e-commerce has only started to emerge toward the end of 1998. Initially, the Internet was still perceived as a medium of communication, used for entertainment and research rather than for conducting business. Awareness of the capabilities of the Internet to generate revenues and profits for business was still developing but then, the technology infrastructure in Lebanon was not yet available.

Furthermore, the web was mainly perceived to be a medium accessible more by the youth, individuals who basically had no incomes of their own. Thus while an internet 'community' was developing in Lebanon, this community mainly constituted people who did not generate incomes. This was a major impediment to the possibility of developing e-commercial activities in Lebanon.

Today, several years have passed since the introduction of the internet in Lebanon. It is estimated that more than 300,000 people are connected to the internet in Lebanon. Of these, there are about 100,000 income generating

adults who may constitute a target for businesses involving in e-commerce in Lebanon.

3.6   Market Size

The market size in Lebanon for e-commerce is very limited. According to the statistics of Byblos Bank, there are at most 100,000 adult Internet users who may be capable in the future of making purchases online. At the same time, the statistics of Master Card show that there are somewhere between 5,000 and 10,000 users in Lebanon who are actually capable of completing e-commercial transactions with the use of their credit cards. Needless to mention, most e-commercial transaction in Lebanon are done through Internet Cards rather than through regular credit cards which are deemed too risky to use online due to the exposure to hacking and electronic theft.

The market size, in reality, is not limited, unless a company is willing to limit itself to this market. To illustrate, if ABC decides to open a virtual mall online for its customers in Lebanon, will most probably limit its scope to the Lebanese market, mainly because of limitations on logistics. ABC as a department store can only make deliveries to Lebanese customers within the national borders of Lebanon.

On the other hand, if a magazine widely popular among businesspeople and students such as *Lebanon Opportunities* decides to go

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online, it will definitely not limit itself to the actual 10,000 or potential 100,000 customers in Lebanon. Rather, it is going to try and reach a much larger global market, seeking customers anywhere in the world. As a magazine, *Lebanon opportunities* will not be limited by logistics because it can deliver the hard copy to its customers anywhere through snail mail (eg. DHL, Aramex or the Libanpost). At the same time, the management of the magazine can establish an online copy of the magazine that is updated every time a new issue is printed and this online copy can be accessed only by subscribers anywhere as long as they pay their subscription rates through credit card.

Hotels, car rental businesses and other enterprises that depend on reservations do not face market size limitations either. Through the Internet, they can be contacted by customers interested in reservations from any place on earth that is connected online.

The bottom line is that the market size is dramatically relative, depending on the nature of the business, the limitations that it faces with respect to its products and goods, and more importantly, on the nature of the goods it is selling online. The most important fact to consider, however, is that once in cyberspace, national, political and geographic borders become of minimal significance.

3.7 Competition

The tremendous opportunity represented by the fact that a business has the entire globe as a market is quite assuring, but at the same time, it is quite threatening. While it implies that customers are anywhere all over the world, it also implies that competitors will be just as abundantly available. If a Lebanese business that sells books in the local market is looking forwards to expanding its sales by going online, it will also find out that there are hundreds if not thousands of book stores that sell similar and competitive products online.

By going online, businesses are simply changing the rules of competition. Instead of dealing with competitors who exist in the same geographic location, online they are dealing with competitors who are not limited by location. Rather, limitation exists in terms of quality, price and reliability to serve customers.

In other words, the internet transcends all kinds of local, regional, national and international barriers, and instead, constitutes the ideal global market where globalization is reflected with all its advantages and disadvantages. Still, however, the nature of the products sold will determine the degree to which rivalry exists. For example, a Lebanese law firm doing business online will have basically taken rivalry to the national level, since most of its activities are in Lebanon. But at the same time, and as it is

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dealing in Lebanese law online, it will have also taken rivalry on the international level as it will be attracting international customers who own property or face legal problems in Lebanon. Yet still, the competition in such a field will remain among Lebanese law firms and not among international law firms each which is specialized in its own legal domain.

Similarly, Lebanese virtual malls and supermarkets will not compete against American, Canadian, Swiss or British virtual malls. The reason is that each of these malls competes with other companies that cover the same vicinities and geographic locations in which they exist. At the same time, they also compete against the department stores, taking away business from them and changing the structure of the market for their own advantage by convincing people to purchase online rather than taking a trip to a real store for shopping.

3.8   Growth Rate & Growth Cycle

On a global level, e-commerce is growing faster than any other industry. The reason is that it is made up of a large number of diversified industries, all which share the same medium of exchange and communication, namely the cyberspace. The United States, Canada and Western Europe generally witness the highest growth rates in e-commerce. This is mainly due to the high income rates in these countries, the availability of credit cards in the hands of large sectors of the community,

the availability of technology, and more importantly, the cheap accessibility of the internet. Although e-commerce has been growing for more than five years in most of these countries, some experts believe that the industry is still in the infancy stage especially that very few are actually fully aware of the available technology, expertise and potentials. Others, on the other hand, argue that the industry is still in the early stages of fast growth and that ten years from now, stability should be expected.

In Lebanon, the situation is totally different because e-commerce has just started. In fact, the industry is only a few months old, and in comparison to the rest of the world, it is still in the earliest stages of infancy. To illustrate, the possibility of selling physical goods has only been available for Lebanese businesses in February 1999. The potential to sell digital goods was introduced this year. Nonetheless, the with big Lebanese banks entering cyberspace for real opportunities, it may not take more than a couple of years before e-commerce becomes an integrated aspect of business in Lebanon. This is specifically as Lebanese businesses are suffering due to economic recession in Lebanon, and thus in need of searching for new and more rewarding opportunities for expansion and profitability.

3.9   Structure of the Market

A market is characterized by two main components, namely suppliers and buyers. For parties to be identified as buyers and suppliers in a certain

market, they should be conducting activities in this market. With respect to e-commerce, geographic limitations do not restrict opportunities or rivalry. However, when dealing with e-commerce in Lebanon, the following should be considered:

3.9.1 Suppliers

The number of Lebanese companies that are selling their products online is still very limited. One major company that has already joined the online business in Lebanon is Exotica. Exotica only sells its products in Lebanon. Therefore, its rivals are florists and greenery shops that geographically exist in Lebanon. Accordingly, Exotica does not face rivalry online because no other Lebanese company operating in the same domain. The fact that demand for online services of this type is still weak discourages competitors from investing to enter the market.

On the other hand, hotels such as Portemelio and Commodore are competing against each other in order to catch customers on the web. But what these hotels are offering online are only reservation services, and still, they have not initiated full e-commercial offerings to their customers.

Newly developed virtual trading sights such as Yalla.com and Buy4Less have been recently introduced, however, still primitive in design and interaction.

At this point, e-commerce businesses in Lebanon still do not exist in the serious manner, nor does there exist rivalry in the proper business manner. Therefore, it is not surprising to find a Lebanese firm existing online without any competition from another rival in Lebanon.

Yet, for a company such as Media Soft, rivalry is a very serious issue. This company develops a variety of software products that it markets in several countries. Among the products it develops are software for teaching Arabic typing, Arabic language, in addition to databases of the Holy Koran and other Islamic materials. The company has not yet gone online, but it is still considering the risks, especially that it will be facing from a large number of Turkish, American, Saudi and Kuwaiti companies that are already selling similar products online. A company such as Media Soft will not only be selling its products in Lebanon but also in other countries through the web. Therefore, for a company of this type, entering cyberspace will bring it face to face with an unlimited number of rivals of various sizes. But at the same time, if the company does not join the cyber-market, it fears that sooner or later, Lebanese buyers will be making purchases from these cyber-rivals, especially if they offer more diversified products, lower prices, or more interesting packages.

3.9.2 Buyers

Once a business goes online, anyone all over the world could become its customer. The most regular buyers online are individuals and households. These buyers are generally young adults who have credit cards, thus belonging to the middle and upper classes. They are also aware of the internet technology and willing to upgrade their lifestyle such that they are accepting changing traditional purchasing behaviors with new ones, such as online shopping.

In the case of Exotica, buyers can be diversified. On the one hand, there are buyers in Lebanon, limited in number as they are, and on the other hand, there are buyers outside Lebanon. For example, a Lebanese working in Saudi Arabia, the US, or in China can purchase flowers from Exotica online, and these flowers till be delivered to a specific address in Lebanon on a specified date and time. Exotica, therefore, might be more appealing to Lebanese customers living outside Lebanon and having relatives and friends in the country, more than to customers who are actually living in Lebanon and who would prefer in this case to do their purchases in person as part of a tradition.

For hotels the situation is different. When these companies sell their services online, their customers are actually outside Lebanon already. They

are not interested in Lebanese customers in the first place, since these can easily make their reservations using the local phone.

For a company such as Media Soft, identifying buyers is even more elusive. Going online for a company like Media Soft necessitates targeting international customers rather than local customers. For example, to sell and deliver a product such as the $22 "Al-Muhtarif" CD that tutors English and Arabic typing to a local customer, the company's profit margin will disappear. Meanwhile, selling online will be much more advantageous since the costs of snail mail can be added to the customer's bill. Meanwhile, a local customer is less likely to place a purchase online when the product is available in every software store all over the country, that is, less than ten minutes away from home or office. The ideal buyer that Media Soft would be targeting in this case will be a person who is living in the United States, Europe, Canada, Australia, or any other part of the world, a person who does not have direct access to the product but certainly has a need for it, and accordingly is willing to pay additional money to get it.

In *Virtual Piggy Bank* that appeared in the March issue of The *Executive* Magazine, P. Williams and M. Baz explored the wave of Internet banking in general and the future of E-Banking in Lebanon in specific. They explained that E-Banking has reached the Lebanese Banking industry. Although still in its infant stage where few banks have informative presence

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on the Internet and few others do perform on-line banking operations, the industry, as explained in the article, is expected to crystallize in a period of three years. The current online banking services offered by Lebanese banks include browsing services, check books ordering, the management of funds and accounts and the monitoring of stock and exchange rates.

Although on line banking in Lebanon offers the efficiency and convenience that is also available in foreign banks available on the Internet, however, E-banking in Lebanon still suffers from major drawbacks. Internet banking for the Lebanese is not going to be easy mainly because of the low number of Internet users, the need for a more secure on line transfer of information and the failure of banks to realize the desired economies of scale resulting from the use of technology. Furthermore, the high prices of computers added to the high cost of telephone bills are discouraging facts to the growth of online banking in Lebanon. Last but not least, the Lebanese are used to conventional banking and it is going to be a hard job to change their habits. This is why the future of E-banking in Lebanon will depend on the expatriates used to such services and the new generation of graduates forming a new target market.

Finally, whereas banks on the Internet are exploring new services to be added to their existing ones and where this development is going at a very fast paste, Lebanese banks have joined in the revolution however with

much more reluctance. The growth of E-banking in Lebanon will depend on how much pressure the market will impose of local banks to offer more efficient, convenient, profitable and wide services for the Lebanese.

For the ultimate majority of Lebanese businesses that are already online or that are willing to get online, the typical buyer is an individual or at most, a household. Lebanese industries still do not have the potential to provide services to institutional or industrial buyers, and this is due to the nature of Lebanese industries, most of which are small or less developed than most foreign competitors.

3.10   Problems in Business Applications on the Internet In Lebanon

3.10.1   The impact of design

Graphic design has been affected by the development of the Internet, perhaps more noticeably than any other industry. In Lebanon, graphic design is among the fastest growing fields of study and career, and hundreds of graphic designers are graduating from specialized schools every year to join the market, especially in response to the pressuring demand resulting from the development of the Internet market in Lebanon. Rather than just offering their services through the world wide web, Lebanese graphic designers have established sales teams to sell their ideas and services to existing companies in Lebanon that are planning to go online.

Knowing that nowadays most of the major companies in Lebanon have adopted the Internet as an important part of their work, their website in most cases becomes the first and most important impression of the company. The designer has to be constantly aware of the progressing technology involved in the world of the Internet. As graphic designers are usually used to working with print materials and packaging, multimedia seems to be rapidly dominating most of their works. However, designers should be taught and trained for designing for the Internet.

3.10.2   Problems in Web design

In the Lebanese market, website design faces quite a few problems. One of the main problems is the fact that Lebanese people are "Do it all" kind of people. This is true in all fields of work in Lebanon. You might find a businessman working as an interior designer with no experience whatsoever or you may find a plumber who will also fix your electric problems. In our case, websites are being designed by people that have no experience in design. Programmers or "coders" are the ones who build the website. But in our country, they have a much bigger responsibility: designing the website.

This is a serious problem that until recently, no one has considered its consequences. One of the most important aspect in creating a successful website is the design and concept of the site. It is like owning a store and

asking one of the engineers to design the interior of the store. In that case the engineer has no experience in designing a store nor does he have any idea on how to come up with a concept for this store and then faithfully implement it. So what happens now? The coders will be responsible for the most important aspect of your business, the first impression. Unfortunately the programmer will undoubtedly fail in portraying the image that your website wants to give. So why does it happen? Since the Internet is still in its infancy stages in Lebanon, professionals did not have the time to get the proper training they need to start designing on the Internet. Back in 1992, the first university to start teaching graphic design was the American University of Beirut. For a student to get the bachelor degree in Graphic design it required 4 years, so the first qualified designers were available in 1996. Backs then, people were just learning about this new technology called the Internet. So in fact there won't be any truly qualified web designers before the year 2002. This is because of the fact that only recently (1998-1999) Lebanese are starting to create their own websites. The point that I am trying to make is that graphic design has just been recently introduced to our society, people did not have the chance to get used to this new field. They are still unaware of the importance of a web designer. There should be an awareness campaign in order to make the clients and the companies aware of that problem.

Chapter Four: Research

4.1   Research Objectives

My research addressed the following issues. First if all, it is going to

define the characteristics of the companies using the Internet in Lebanon, the

notion of e-commerce for these companies, how e-commerce is improved

and how their usage is going to be different from that applied by

international companies. Besides, we also need to know whether e-

commerce in Lebanon is efficient or not, and how this efficiency can be

improved, and of equal importance, whether e-commerce in Lebanon is

effective or not, and how it can be made effective. Finally, it is important to

define the target audience of e-commerce in Lebanon.

Another objective of the research was to study the manner in which

the Lebanese companies going online were dealing with the Internet. Are

they using the Internet merely for advertising and entering the electronic

age? Are they trying to test the potentials in this market? Are they serious

about their e-commercial obligations? Are they trying to invest heavily in e-

commerce or is their investment still in the initial phase? Are they planning

for future investments, and how do they see these future plans in the light of

the changes taking place on the e-commercial level in Lebanon?

4.2   Methodology

4.2.1 The Questionnaire

One major methodology for this research was the use of the questionnaire. This is due to the nature of the project. We are looking here for information about several business sectors and about many users. The opinion, behavior and attitudes of a few respondents cannot and will not serve our objectives, especially that what we want to know is related to a major trend taking place in the business community. Hence, we need to know as much as possible from as many respondents as possible. Since the objectives of the research are clear and can be measured, the use of a standard questionnaire is most suitable as a methodology for this project.

4.2.1.1   Sample

The sample chosen for this project included 100 managers or officers working in different companies and industries. Those people are the ones that are involved in decisions about their companies. The aim of this diversified distribution was to get the largest possible data collection that could cover a number of industries at the same time in order to provide a full picture of the usage of Internet in Lebanese businesses. Before distributing the questionnaires, it was necessary to ask the respondents whether they had Internet access in their companies. It was important to distribute the questionnaires to those who had Internet access because the objective of the

study is not to measure the percentage of those who had or had not Internet in their business, but rather, to measure factors related to the use of Internet in business and e-commerce. Hence, having Internet access in the business was a requirement.

The size or type of the business was relevant. The size of the business was relevant in the sense that it would enable us to see which sectors in the economy were using the Internet. Moreover, such data enables us to understand how the usage of the Internet varies from one sector to another, in addition to providing a future outlook for how such usage may be developed or changed.

4.2.1.2   The Questionnaire

The questionnaire was composed of the following sections:

I-Demographic Section

Q1-Age _____

Q2-Occupation _____

Q3-Residence or business area (where Internet connection is established)

_____

Q4-Income

A. High   *B. Medium*   *C. Low*

II-General Information Section

Q5-How long have you been working on Internet?

A. One to six months

B. Six months to one year

C. One to two years

D. More than two years

Q6-What do you mainly use the Internet for?

A. Business   *B. Leisure*

C. Communication   *D. Information*

Q7-How often do you log into the Lebanon site?

A. Several times a week   *B. Once a week*

C. Once in two weeks   *D. Never heard of it*

III. Marketing and Business Related Section

Q8-How often have you actually purchased a product or a service from a Lebanese company through Internet or due to information received through Internet?

A. Frequently   *B. Sometimes*

C. Rarely   *D. Once*

E. Never

Q9-What kind of products do you expect yourself to buy from a Lebanese company through the Internet?

A. Retail goods

B. Insurance

C. Legal services

D. Entertainment

E. Reservations (air-line, restaurants, hotels, etc.)

F. Renting cars

G. Others

Q10-Which kind of people do you think will actually respond to marketing through Internet?

A. Professional surfers

B. Foreigners

C. Lebanese students

D. No answer

Q11-What do you think prevents you from using the Internet as a medium through which you may do business in Lebanon (not including e-mail)?

A. Low speed of Internet

B. High costs of usage

C. Limited number of users

D. High costs of listing homepages

The first part of the questionnaire, including Q1 through Q4 deals with the demographic factors. Knowing the age of the respondent gives an idea about the trend in using the Internet as a business tool in Lebanon today. This tells us whether only younger managers are using Internet or whether older managers are also involved in this.

Knowing the occupation of users shows the trend in technology in various industries. For example, we need to know whether Internet is used by industrial businesses, service businesses, or other sectors in the economy.

The third question informs us about the areas where Internet is used and where the concentration of users is. For example, because the majority of Internet servers are located in Beirut, it might be expected that the tendency to use Internet is more common in Beirut than in other areas. By contrast, this may not be true.

In addition to this, the income level of the respondents informs us about the type of people and managers who are using the Internet. Are these managers with high incomes? Are companies that pay lower salaries also paying the Internet? Besides, are only highly paid people using the Internet or is this also extending to include people whose incomes are low?

The second part of the questionnaire includes three general information questions. Q5 deals requires knowing the period during which the user has been using the Internet. Apparently, the majority of the users will be new users because the Internet in Lebanon has only been in use for a little more than three years. Yet, the responses to this question will inform us about the speed at which technology is traveling in Lebanon among the business sectors.

In Q6, we will receive answers that are related to the fields of usage of the Internet. This question enables us to know why the Internet is used. Is it used for the sake of business or only leisure, for communication or for gathering information? Knowing these factors provides us with a clear picture of how Internet use in Lebanon is applied, and whether this use is efficient or not.

People may be logging in the Internet several times a day, but this does not mean that they are actually logging in for business purposes. It was better therefore to ask a specific question that would give a general answer. Hence, in Q7, our need is to know the degree to which the business users of Internet are actually logging into the Lebanon business site. The Lebanon site on the World Wide Web (www.Lebanon.com) is considered to be the most important and advanced site about Lebanon, and it is both an information provider and a business communication medium. Knowing whether users are familiar with this site and whether they are using it or not tells us how serious the users are in using the Internet for business purposes. Serious users who use the Internet for business are more likely to know about this site and also to know the site managers. Besides, knowing how frequently a user is logging into this site tells us exactly what kind of user this is. If he is using the Internet for fun, he will probably enter once a month whereas a business user is more likely to log in more frequently.

In part III (Marketing and Business Related Section), the aim is to find out information about the nature of usage of the Internet by the respondents. Q8 for example tells us about the purchasing frequency via the Internet. Purchasing products through the Internet, also known as cyber-shopping has become popular, even in Lebanon. However, purchasing products from Lebanese companies is something different, because it reflects a new mentality. Whether the purchase has been made via the Internet or due to information received on the Internet, the objective is the same. What we are concerned about here is that the Internet has been used as a medium of doing business in Lebanon. Q9 reflects on the expectations of people with respect to the Internet. We need to know what the respondents expect themselves to be purchasing through the Internet. Actually, this question is important because it tells us a lot about the users. If the users is only going to purchase retail goods through the Internet, we can tell that his expectations with respect to the Internet are actually very low. On the other hand, if the products he is going to purchase through the Internet are sophisticated, this means that the user is expecting many more developments in the Internet. By telling the expectations of the respondents, we can tell what they actually think of the Internet as a medium of doing business and whether they are indeed serious about the future of the Internet or not.

The tenth question in the questionnaire also tries to measure the expectations of the users by finding out what kind of users they think will be using the Internet for marketing purposes. The last question is related to the obstacles that are facing the use of Internet in Lebanon as a medium through which business can be done. The aim of this question is to find out what kind of problems people expect to face when doing business on the Internet. It is important to point out that the use of e-mail is excluded from the question because e-mail belongs to a different category, since it does not involve surfing, graphics and other related functions.

4.2.2 Interviews

The interview was seen as a necessary methodology in order to widen the scope of the research. The need to use interviews as a methodology for this research developed at an advanced stage in the research. One reason for using the interviews was that there was vagueness with respect to the future picture of e-commerce in Lebanon. Eight interviews were conducted, and these were with the following people:

- Mr. Hussein Atwi, a sales supervisor at Cyberia. Cyberia was the first ISP in Lebanon and continues to be one of the largest ISPs in Lebanon.

- Mr. Bahaa Daher, a sales representative for X-Net in Lebanon.

- Mr. Khalil Itani, a sales representative for Inconet, one of the most competitive ISPs in Lebanon.

- Mr. Mohammed Taher, major shareholder in Intracom, one of the most competitive and fast growing ISPs in Lebanon.

- Mr. Ali Mukaddam, the owner of PC-Club, a club which provides Internet access to 35 people at any given time, located in the commercial district of Hamra in the capital city of Beirut.

- Mr. Tarek Smith, the owner of the Smith Info Village which provides Internet Access to 30 people at any given time, holds conferences on e-commerce, and offers training sessions to the public in collaboration with Microsoft.

- Mr. Wakim Tayyar, MIS consultant for Hala Rent a Car and who is responsible for the company's strategy on the Internet.

- Mr. Arakel Topalian, the managing director of ANL (Arab Net Lebanon) which is affiliated with Arab Net in London.

Each of the individuals mentioned above represents an authority in a different field of expertise. The interviews definitely reflect their personal opinions, but they also reflect the e-commerce trends in the different business fields that they represent. The interviews in general focused on the following areas:

- To what extent has e-commerce become established in Lebanon?

- How seriously are Lebanese companies considering e-commerce?

- What are the major limitations that e-commerce faces in Lebanon?

- What facilities should be introduced to make e-commerce work in Lebanon?

- What are the future outlooks for e-commerce in Lebanon?

4.3   The Survey

In addition to the questionnaire, I also decided to launch a survey in which I contacted Lebanese companies and firms that existed online. In this sense, I selected twenty Lebanese firms in different categories (food industry, banking industry, advertising & public relations, hospitality and web design). Once this survey was completed, each of these companies was contacted through e-mail. The e-mail contained questions and inquiries relating to the services and products offered and provided by these companies. Interest in purchasing the services or products of these companies were included in the e-mails. To reach the web pages of these companies, I related to the search engines available on the Internet such as Yahoo.com and Altavista.com, in addition to contacting a British based company known as Arabnet.com, which has headquarters in Lebanon.

All the e-mails were sent on the same day, namely on the same Sunday evening. The reason for sending the e-mails on a Sunday evening was to

make sure that the counting of the days needed to respond would start on the first business day of the week.

The information sent to the companies indicated that a foreign or a local customer was trying to contact them for serious business contacts. For example, the message sent to the banks required information on transferring money to Lebanon by a British citizen who intended to spend a vacation of two months in Lebanon, in addition to inquiries about the process, delays, and benefits. With respect to the food industry, the mails inquired about certain products, whether links in Europe were of interest for the company, and what kind of limitations may be faced with respect to quality, quantity, or delivery. The mails sent to the web design companies inquired about the costs of constructing a web page for a business firm existing in Lebanon, and about the prices of banners or other advertising vehicles on the Internet. The mails sent to hospitality companies indicated that a British family was planning to spend vacation in Lebanon and inquires were made about rates, facilities, discounts and benefits. Inquiries sent to the advertising companies demanded information on prices, offers and coverage in Lebanon and abroad.

Chapter Five: Results & Analysis of the Research

5.1   The Questionnaire

5.1.1 Results

The questionnaire samples were all returned and they were fully answered because I made sure that every respondent took his time to understand the questions and to answer them without leaving anything out. This was successfully done. The questionnaires were then gathered, counted, and the data was sorted and finally processed until it became readable in tabular form.

Exhibit 1- Distribution of Age Groups			
22-30 years	31-40 years	41-50 years	Above 50 years
43%	28%	22%	7%

Exhibit 2- Occupation categories			
Info-tech	Financial	Industrial	Professional
33%	21%	29%	17%

Exhibit 3- Area where Internet use is established		
Ksirwan	Beirut	Byblos
28%	65%	7%

Exhibit 4- Income Categories		
High	Medium	Low
66%	32%	2%

Exhibit 5- History of working on Internet			
1-6 months	6-12 months	1-2 years	More than 2 years
46%	31%	23%	0%

Exhibit 6-Main uses of Internet			
Business	Leisure	Communication	Information
18%	5%	31%	47%

Exhibit 7- Frequency of logging into the Lebanon Site			
Several times a week	Once a week	One in 2 weeks	Never heard of it
15%	34%	29%	22%

Exhibit 8-Frequency of purchasing through Internet				
Frequently	Sometimes	Rarely	Once	Never

1%	7%	18%	35%	39%

Exhibit 9- Expected purchases on Internet

Retail goods	Insurance	Legal services	Entertainment	Reservations	Car Rentals	Others
17%	1%	3%	47%	18%	8%	0%

Exhibit 10- People expected to respond to marketing on Internet

Professional Surfers	Foreigners	Lebanese Students	No Answer
41%	5%	27%	6%

Exhibit 11- Obstacles to using Internet for business purposes

Low speed	High Costs	Limited users	Costs of listing
19%	27%	30%	24%

5.1.2 Demographic Analysis

The results show in the exhibits show that 43% of the respondents were between 22 and 30 years; 28% were between 30 and 40 years, whereas 22% were between 40 to 50 years and only 7% were above fifty in age (Exhibit 1). The distribution of the respondents among the age groups is

very logical. A larger number of users belonged to the younger generation of managers and officers because these were more acquainted with modern technology and automation. Accordingly, they did not find any problem learning how to use the Internet. On the other hand, only seven managers are more than fifty years old. This also shows that even among the older generation of managers, there are some that are interested in learning about the Internet and learning how to use it in business. The largest group of respondents, however, (43%) remains within the 22-30 year-old group (Exhibit 1).

The use of the Internet among the various occupations was generally evenly distributed. However, the only exception was the information technology sector. Of all the respondents in the study 33% belonged to this sector, whereas the least represented sector in the study was the professional one with 17%. The industrial sector had 29% of the total percentage while the financial sector had 21% (Exhibit 2). On the other hand, information technology firms were more involved in the use of Internet and almost all the managers in this industry had access to the Internet.

The results also show that 28% of the businesses that had Internet were located in Ksirwan, 65% in Beirut and 7% in Byblos (Exhibit 3). In Beirut, it was very easy to find many companies that had Internet (the

majority did). In Ksirwan this was not very difficult, but in Byblos the difficulty was overwhelming.

The users of Internet services seem to be people who belonged to higher income groups, since 66% of the respondents claimed that they belonged to high income groups, whereas 32% said that they belonged to middle income groups, and finally only two respondents said that they came from low income groups (Exhibit 4).

5.1.3 Internet Use Data analysis

46% of the respondents reported that they have been using the Internet for one to six months only. Actually, the majority of new server providers have been in the market for longer than this period. At the same time, none of the respondents had any Internet services for more than two years whereas 31% reported that they have been receiving the services for period between six months and one year. At the same time, only 23% reported that they have been receiving the services for more than one year (Exhibit 5). The results show clearly that the majority of business users (and perhaps personal users as well) have only been using the Internet in the past few months, which is the period that witnessed a high competition among service providers. This competition reduced the prices very substantially from $4 and $5 per hour of service (excluding the costs of the telephone network) to unlimited service for a monthly fee of $11. In addition to this,

we need to take into consideration the fact that the telephone network in the majority of the Lebanese areas has only recently been completed, and without a reliable telephone network, Internet service is very difficult to get even with the current very shy introduction of Internet Networks.

Lebanese users surf the Internet for various purposes. The majority however, are concerned with information. In a country where statistics and information have not been updated for many years, the Internet provides a fast and reliable window to the world and even Lebanon itself. The www.Lebanon.com site for example, is considered to be one of the most important financial, economic, and business sources of information on Lebanon. Much of the information provided on this site is not even provided by the government sources. This thirst for information explains why 47% of the respondents are using the Internet for information. Besides, the Internet is the only way through which to reach information about other businesses in the world without having to wait for a long time. One only needs to log in and search. Communication ranks second after information as a need by users. Exactly 31% of the respondents said that they used the Internet for communication purposes. By communication, they mainly meant three services. The first service is the e-mail which enables the users to exchange documents and messages instantly and at almost no cost. The second service is the free fax by using the Internet, whereby the user can send and receive

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local and international fax services through a special program connected to the Internet, and without any additional costs to the user. And finally, the third service related to here is audio-visual interaction. These programs provide users with verbal, visual and written communication at the same time through the use of microphones and special cameras. Only 18% of the respondents said that they used the Internet for business purposes. This is not to be seen as a disappointing fact, since the use of Internet has only been very recent in Lebanon, and since the majority of these users are still inexperienced with the ways through which the Internet can be utilized as a business instrument. Finally, only 5% of the users said that they used the Internet for leisure that is, for the fun of using the Internet and discovering new areas of knowledge and fun (Exhibit 6).

The Lebanon site accessed through www.Lebanon.com proved to be quite popular among business users. The number of users who said that they logged in more than once a week was 15% in comparison to 34% who logged in once a week. On the other hand 29% logged in at the rate of once every two weeks. Those who never heard of the site, however were a considerable 22%. The different logging rates may be due to a number of causes (Exhibit 7). First of all, the site is updated frequently, but usually at the rate of once or twice a week. Therefore, by logging several times a week, a user is not likely to find much new items available. On the other

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hand those who have not heard of the site are probably not looking for business prospects of using the Internet in Lebanon. Rather, these may be interested in communication and gathering information, particularly information related to international business and industries.

A major problem that often arises with doing direct business through the Internet, that is, purchasing, is the problem of payment. Payment has to be done through the credit card or any other recognized card that provides instant cash transfer to the owner of the goods and commodities. Yet, the risks of theft and fraud are very high, especially by sites that cannot be trusted. A site owner may simply use the credit card number in order to make several withdrawals without notifying the owner of the card. Besides, the difficulty of getting credit cards in Lebanon makes it difficult for many users to make purchases through the Internet. This explains why only one respondent said that he has frequently made purchases through the Internet. In contrast, 39% of respondents have never purchased any items through the Internet. In between these two extremes, 18% have rarely made such purchases in comparison to 7% did that sometimes and in contrast to 35% who made a single purchase (Exhibit 8).

The purchasing and shopping expectations among the users were generally not oriented towards business services. Rather, 47% said that they are more likely to be buying entertainment services from Lebanese

companies. At the same time, 18% said they would be purchasing hotel services (reservations and others) and 17% would be purchasing retail goods. On the other hand, 3% said they would purchase legal services; 8% said they would arrange for car rentals; 6% said they would purchase other services whereas only one respondent said that he would purchase insurance services through the Internet from a Lebanese company (Exhibit 9).

In addition to this, although all the users were actual Internet users, the largest category (41%) believed that professional surfers are the most likely group to be responding positively and actively to marketing through the Internet. Lebanese students were also perceived as a likely group to be responding to marketing on the Internet as reported by 27% of the respondents. Of all the respondents, 6% preferred to provide no answer, probably because they were not sure of the answer. It is noticeable that only 5% said that they expect foreigners to respond to Lebanese use of marketing on the Internet (Exhibit 10).

As for the factor that would prevent the Internet users from using it as a medium through which they could do business in Lebanon, respondents were almost evenly divided among the four factors. 30% of the respondents believed that the limited number of Internet users in Lebanon represented a problem since it would make Internet an inefficient medium of doing business. The second major reason was the high costs of Internet usage as

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accounted for by 27% of the respondents. The high cost of the internet usage

in Lebanon today however is no longer due to high ISP chargers, but rather,

high telephone bills and computer prices. This is why it is expected that the

Internet Networks being introduced today will be in high demand in the very

near future. On the other hand, 24% of the respondents considered that the

high costs of listing homepages was the major obstacle. Only 19%, however,

considered the slow speed of Internet to be the major problem (Exhibit 11).

5.1.4 Important Results

This study has come out with a number of important results. First of

all, it showed that the Internet is still in a maturity stage and orientation

towards business is still in the infancy stage. Secondly, it showed that

although many businesses were using the Internet in the business area, very

few actually used it for e-commerce or business purposes. Rather, the

concerns of gathering information and of communication tend to be much

more prevailing. The research has also shown that the younger generations

of managers are more concerned and interested in using the Internet as an

important medium through which to do business. Application of Internet as

a business medium in Lebanon is still faced by a number of problems. For

example, there is the problem of technology because the Internet in Lebanon

is still slow. Yet, the major problem so far is the payment medium, which is

credit cards. The use of credit cards on the Internet can make users highly

vulnerable to fraud, something which makes users avoid posting any purchase orders through the Internet.

5.2 Survey

5.2.1 Results

The companies included in the survey responded in different manners. The worst records were made by the banking firms. In fact, only two of the six banks contacted responded to the e-mail. The other three never responded and did not show any indication that they received the mails in the first place or whether they were interested at all. One of the responses, received after 48 hours indicated the information as demanded. The other demanding the sending of a facsimile or the dialing of the bank's number was received four business days later. It is to be noticed that although the potential customer was clearly a foreigner residing abroad, the response expected the customer to pay for an international call or facsimile in order to inquire formally.

All three food companies that were contacted responded to the mail. One company responded with a mail that was written in very poor English. It provided a list of numbers to call on or to send facsimile. This mail was received two days after the contact was initiated. The second company also reported two days later and proposed the contacting of a certain manager on a specified number and date for further information. The last company

responded five days later, demanding an address on which information can be sent.

The three advertising and public relations firms that were chosen also responded to the mails. One of them responded after two days, requiring an address to send the company's brochures and providing phone numbers to call upon. The second company responded at the end of the first business day after the message was received, and it provided a comprehensive explanation of the company's offers. The third company responded after two days, also demanding an address on which the brochures could be sent, in addition to providing phone and facsimile numbers through which the company can be contacted, together with the names of personnel who may respond to the inquiries.

E-mails sent to the three web-design companies were replied to immediately on the next day after the messages were sent. One company provided a short history of its operations, the type of services that offers, but not about the prices. For inquiries about the prices, the response demanded visiting the company's premises or arranging for a meeting with named personnel. Another company offered general information about its services in addition to approximate prices. The third company only provided the numbers and names at the sales department to be contacted by any potential customer, with a warm thank you message.

Five hospitality firms were targeted. Only two of them responded on the next business day. One responded after two days, one after four days, and one failed to send any response. The responses that came first were very well organized; accurate and contained all needed information. They also provided information on the services and the various benefits received. In addition to this, these two mails recommended tourist service offices in their country to be contacted to make all reservations before the potential customer left to Lebanon. The other two mails did not contain such suggestion. In addition to this, the two mails that were received at a later date provided phone numbers through which the companies could be reached. With respect to reservations, all four companies indicated to the potential customer that he could fill in the order online. However, only one company cared to mention that the online order did not guarantee a reservation and that reservations had to be confirmed through a travel agency. Neither of the four companies mentioned that it was possible to make any payments online.

5.2.2 Analysis

The small number of companies involved in this study makes it evident that these companies do not necessarily represent the Lebanese business sectors. Accordingly, it is not possible or even wise to conclude figures and ratios about the behavior of Lebanese companies online. For

example, it is difficult to argue that hospitality firms are more dedicated to serve their customers online than Lebanese banks are, even though this could be true. However, a general picture can be drawn of the situation of e-commerce online from this survey. The following results may be concluded:

- First of all, none of the Lebanese companies involved in the survey could actually complete a business transaction to the end. Since no payment could be made online, the transaction had to be completed through the traditional media. In other words, Lebanese companies are not using the Internet in an efficient manner because final agreements and payments are not conducted and concluded through the net.

- Secondly, it is obvious that the majority of the companies do not yet have the require resources, capabilities and skills to handle e-commerce. Business in Lebanon is still done in the traditional way, and this is perhaps one reason why companies are still reluctant to devote substantial resources to integrating e-commerce into their business processes. Hence, it is noticed that the majority of the responses received were practically treated casually and not professionally, except in very few cases. It is not likely that there were dedicated personnel to respond to the mails in most cases, but

rather, the more likely was that an employee responded when time was available.

- Thirdly, the fact that the Internet was not used as medium through which payment could be done to Lebanese companies reflects a serious problem. Not only are companies reluctant, but practically, they are unable to request payments online because of the lack of mechanism and legal framework that would protect their rights.

5.3 Results of Interviews

5.3.1 Cyberia

According to Mr. Atwi, while the Internet usage in Lebanon has boomed, e-commerce remains in the early stages. Many people are already making purchases over the Internet, but Lebanese businesses have not really started to use the Internet as is taking place abroad. The picture of a manager navigating the Internet and looking up for addresses or links is something very familiar, but with respect to e-commerce this is only a very early stage. Mr. Atwi sees e-commerce as a give-and-take relationship over the Internet where Lebanese companies are capable of selling their business directly online.

Mr. Atwi believes that Lebanese companies have from the beginning considered e-commerce seriously. His evidence is that within a few months after Cyberia started offering its services, a large number of executives

started asking about the prices of advertising on the Cyberia server, in addition to demanding web hosting services. This high demand continues until today and the trend reflects an increase in the competition among ISPs to provide web hosting services.

The major limitations to e-commerce in Lebanon, again according to Mr. Atwi is the financial aspect. Banks are reluctant to support companies that are going online. At the same time, security is lax and there are no laws or regulations that protect the rights or claims of companies online. In addition to this, the fact that the cost of telecommunications in Lebanon is still considered to be high, especially if compared to other countries such as the Gulf States. This is one reason why e-commerce has not yet developed as it is supposed to be.

On its side, Cyberia has introduced a large number of facilities to push the development of e-commerce in Lebanon forwards. First of all, there was the cutting down of costs and prices; secondly there was the expansion of the server and the improvement of the connection speed; thirdly, Cyberia signed sponsorship contracts with a number of alliances, and this in turn has encouraged many companies to invest in e-commerce. In addition to all, this, Cyberia continues to develop new services and options for companies, and right now, the management is discussing security options for its business customers in order to make transactions secure.

The future outlooks for e-commerce in Lebanon are very good, but it all depends on changes in the banking, financial and legal areas. E-commerce will also be affected by the competitiveness of Lebanese companies and products, because while the Internet makes trade easier, it also makes competition shrewder. The general outlook for e-commerce is positive, but Mr. Atwi's personal view is that Lebanese businesses will not be able to make any real profit from e-commerce in the four or five coming years.

5.3.2. X-Net & TMI

Mr. Bahaa Daher believes that many businesses in Lebanon are now oriented towards e-commerce. What companies are waiting for, however, is the green signal, and this is not seen anytime in the future right now. What is happening is that the grounds for e-commerce are being laid. There can be no e-commerce if there are no Internet users. There can be no business online if customers cannot afford buying things online, and this requires not only credit cards but also a high rate of people using banking services. It is all a network, but it is on the way to develop. What is good at this point is that the Lebanese are exploring the Internet, and the number of houses and offices into which the Internet is entering is increasing by thousands every month.

Mr. Daher does not see the Lebanese companies showing a serious consideration for e-commerce. The culture in Lebanon, he argues is still not

ready for this. There are companies advertising on the Internet, but this is just seen as a radical new technique, just as advertising on busses and cabs started a couple of years ago. The point is that the business community in Lebanon should be ready for e-commerce because they are trying to fix themselves. They are facing an economic depression that had persisted for several years. They are trying to reassemble themselves after the war. E-commerce can be considered seriously when there is enough cash for that, and when the companies are ready to invest in such a business, and this is the right time to start.

In Mr. Daher's opinion, e-commerce will have to navigate its way in Lebanon before it becomes an established business reality. One major limitation to e-commerce in Lebanon is awareness. Mr. Daher points out that even those companies that have already started advertising on the Internet are not yet aware of the capabilities of the Internet. They are still finding out and trying to know the potentials on the Internet. Another problem is the lack of facilities in the markets. Mr. Daher wonders why a Lebanese company will be interested in initiating e-commerce applications when there are very few credit-card holders in the market, and even fewer card holders who will dare use their cards on the Internet. He also wonders why a company will sells services when it has no guarantees that it will receive its money or not. He also points out that if a customer decides to

purchase a product from Lebanon and to pay through a money transfer, the money has to be wired to the US first before it arrives in Lebanon. With such poor facilities, e-commerce does not have a chance to develop.

To make e-commerce a possible success in Lebanon, many facilities must be developed and introduced, argues Mr. Daher. The first thing is to make credit cards available. The idea of launching online debit and cash cards was a smart idea but these cards are only useful for some transactions. Another facility is legislation to regulate the commercial transactions on the Internet in Lebanon. Another facility is to educate the public on the uses of the Internet as a medium of commercial exchange. In addition to this, banks should become part of the e-commerce game, otherwise e-commerce will not really work in Lebanon.

5.3.3 Inconet

Barely two years in business, Inconet has become one of the major ISPs in Lebanon, but according to Mr. Itani, Inconet does not attribute its success to the selling of ISP, but rather, to the e-commerce facilities that it provides to its customers. "Most of our customers are companies, and they want to be on the Internet to sell their products to the nation and to the world," he said. Thus, according to Mr. Itani, e-commerce is no longer a matter of prestige. It is also a survival and a competition tactic among companies. To prove that e-commerce has become well established in the

country, Mr. Itani emphasizes that the number of businesses dealing with Internet-related services has increased dramatically in the past two years.

Whether Lebanese companies are considering e-commerce seriously or not is a matter that Lebanese companies cannot decide for themselves, argues Mr. Itani. It is competition and trends in the economy that decides. He relates to the banking industry for example. When the first bank launched its web site, most other banks followed trail. When the first restaurant started advertising online, many other restaurants opened their pages. So, in Mr. Itani's view, the entire process starts with a leader and then the others follow. Competition from foreign firms will also play an important role in making businesses in Lebanon consider e-commerce seriously, especially when these foreign companies start attracting Lebanese buyers online.

The problem, however, is that Lebanese companies are not even able to reach Lebanese customers online. The Lebanese customer's decision to buy is influenced online, but the decision to purchase is executed offline. Security concerns are another problem because hacking is not a serious crime in Lebanon. At best, a hacker will spend six months in jail and pay a fine of $300, as was the case when two hackers were able to steal $4,000 online late in 1998. A sane business owner is not going to let himself be vulnerable to such dangers, especially if he knows that the law does not protect him.

To facilitate e-commerce in Lebanon, Mr. Itani argues that the government should first of all impose harsh penalties on hackers and to make it clear to businesses that the law protects them. Another facility is to make credit cards available, or at least, any means of payment in the hands of the public. This, in his opinion is the most important single issue related to e-commerce in Lebanon at present. Audi and Byblos bank have already started doing that with their Internet accounts. The future outlooks for e-commerce in Lebanon will remain hostage to the introduction of facilities, regulation by the government, and advancement in technology.

5.3.4 Intracom

Mr. Taher boasts that the company has been well established in France, England, and soon will be in Italy and Venezuela. In Lebanon, however, the situation is very different. "We provide Internet services, and we offer web hosting, and everything, but still, we have not done anything in comparison to what we have achieved elsewhere." Mr. Taher is not complaining about the number of customers (10,000 in less than two years, 30% of which are business customers). He is complaining about the unfulfilled promises of the government to pass bills to enhance e-commerce. Rather, the government has made things worse by making credit laws stiffer and this is sufficient to scare any business from considering e-commerce seriously.

Banks are now becoming more conservative, he argues, because they want to protect their profits at a time when the economy is not moving. However, this is only making e-commerce suffer because it is discouraging businesses from venturing on the Internet. To go online, businesses do not only need servers and designers. They also need to invest to change their structures and systems, to respond to the world around them, to modify their products, and so on, but none of this is happening.

Mr. Taher is happy with the profits Intracom is making from e-commerce services such as web hosting and web design, but in his words, this is "children's work" in comparison to what opportunities there are outside. The solution is to lobby the government and banks for improvements and this has already been showing in the banking services. This can be done if Internet companies and businesses interested in e-commerce stand together, unite their efforts and press the banking sector, the government and the Central Bank for facilities and developments, and nothing is impossible. If Lebanon is to turn into a regional commercial center, it better start working on taking e-commerce seriously because the future of the world is online.

5.3.5 PC-Club

At first, PC-Club looks like an entertainment center with 35 screens shining with different colors, in addition to a huge screen reflecting Tele-

text news in the middle of the place which is located underground. Eventually, however, one realizes that behind each screen, someone is accessing the world through the Internet. Customers there vary very widely: young students hardly 13 years old chatting, people in their forties or fifties sending e-mails or navigating, men, women, just anybody who is interested in the Internet.

According to Mr. Mukaddam, the technology revolution has reflected itself in Lebanon, but not necessarily in the form of e-commerce. Mr. Mukaddam helps many of his customers, especially the older ones who are usually executives and other decision makers to access the Internet in search for suppliers, possible customers, and business alliances. But then, that is the end of it.

There really are very few people who actually venture to use their credit cards to buy anything online. And as far as he knows, there are no Lebanese companies making real money out of e-commerce, with a few exceptions of course. He mentions the Inter Relay Chat program (IRC) on which Channel Lebanon on the Dalnet Server has flourished, hosting several hundred chatters at any time of the day. The Lebanese owner of the channel requires businesses such as PC-Club to pay at least $250 a month in order to let their multiple users access the Internet. According to the calculations of Mr. Mukaddam, the 23-year old owner is making at least $5,000 a month

without any effort, and if the money is not paid, the users of PC-Club, for example, are banned from entering the popular channel. However, this is an exception, although it reflects how eager people in Lebanon are to make money out of the Internet.

A few customers come in every other day and gamble online. They play poker and other games, not to mention the lottery, and they are not afraid of using their Surfer Cards because they have a ceiling.

Where e-commerce is going to be in the coming Mr. Mukaddam says that sooner or later, e-commerce is going to prevail, and there is no way to stop it.

5.3.6 Smith's Info Village

Mr. Smith is one of the firm believers that e-commerce is now starting seriously in Lebanon. Although his Smith's Info Village provides 30 people with access to the Internet, he is more interested in holding seminars and conferences that are sponsored by industrial groups, banks, colleges and other organizations, specifically on e-commerce. So far, e-commerce is very limited in Lebanon, but things are changing. Mr. Smith argues that in the coming 18 months, things will be very different, for the better, he hopes. Right now, many companies are trying to deal with the Internet and to get used to it, whilst others are already preparing for more.

Currently, e-commerce in the mind of most Lebanese businesspeople means this: "someone opens his e-mail, sees an ad, and later buys the product." This, he argues, is "naïve" but it is the only choice available.

Mr. Smith believes that e-commerce is just like ordinary commerce, but that it has much more potentials for faster growth and profitability. But even limitations would not stop some businesses from innovating. Smith's Supermarket, one of the biggest in the area of Hamra introduced the home delivery service several years ago, and today, with professional help from the Smith's Info Village which has the appropriate personnel and capabilities, a Smith grocery online business is underway. The question, however, is how this online store is going to get paid, especially with the given limitation on credit card usage in the country.

5.3.8 Hala Rent A Car

Mr. Tayyar was one of the initiators of the idea of Hala Rent A Car going online. For several years now, the company has been a sponsor of the Lebanon web site (www.lebanon.com). According to Mr. Tayyar, the company's page on the site is nothing but a brochure which might be reviewed by any hitter or visitor to the main site. In other words, this is an advertisement and not a real involvement in e-commerce.

Mr. Tayyar argues that customers can make reservations through the Internet for cars before they arrive in Lebanon, but he admits that the

company's policy is to give priority to those customers who come in person or who provide their credit card numbers in person after signing the car rental contract. A customer can make an order online, and after submitting all the necessary information, the car may be delivered to his door, but he has to sign a contract, to pay in cash (or in credit card, but only after signing the contract), and this means that completing the transaction online is practically very difficult or even impossible. Besides, identification has to be verified, and certain other conditions have to be checked (making sure that the driving license has been issued for at least three years, etc.) in addition to the fact that the customer has to sign a statement on the condition of the car at the time he received it. All these matters make an online transaction impossible. However, the company still insists that it will continue to advertise online because this way, it is attracting many customers and making customers aware of the brand name.

On the long run, Hala Rent A Car does not expect to achieve much out of e-commerce, but since the opportunities of e-commerce are changing all the time, no one can really tell what the future will bring with it.

5.3.9 Arab Net Lebanon

After three years of operating in England, Arab Net finally decided to establish a regional office in Lebanon. This is how Arab Net Lebanon started, and in the 13 months after its establishment, Arab Net has become a

reference for e-commerce in Lebanon and the Arab World. Basically, Arab Net provides web hosting and design services to its customers. It is called Arab Net because its sees itself as a gate to the Arab World for any interested visitors. The company claims and boasts four million hits on its web site every month.

Although Lebanon was one of the first Arab countries to introduce the Internet, it is still behind the Gulf States with respect to e-commerce. Many companies in the Gulf have already invested in the sufficient infrastructure to initiate their e-commercial services and transactions. In Lebanon, legal limitations and restrictions in the business and financial media are still hampering such a development.

However, Mr. Topalian sees in these impediments a benefit, "It is better to wait for things to change and improve." To prove his point, Mr. Topalian points out that the majority of Lebanese buyers online will want their deliveries to be on time, but if they are to buy CDs and books for example, they will have to wait until the censorship agency allows the material into the country.

Mr. Topalian thinks that e-commerce is not an issue that can be rushed because it is better to do it right than to do it fast and regret it. He thinks that Lebanon is not ready yet, even if there are a million Internet users. The systems that facilitate e-commerce should be prepared to handle

it, otherwise things would turn into a chaos. However, he does not expect to wait for long, and in his opinion, it is all a matter of less than two years before Lebanon joins the e-commerce revolution.

Chapter Six: Recommendations & Conclusion

6.1   Interpretations

The interviews reflected different ideas, points of view, perspectives, beliefs, attitudes and opinions. In general, however, it can easily be concluded that e-commerce has not yet started seriously in Lebanon. It is a matter of time as each and everyone of the experts interviewed believed, but it is also a matter of other things. There are facilities that are not available. There are limitations and obstacles, and these are of financial, regulatory or even cultural nature. The matter of e-commerce is not as simple as it was expected at the start, but it is not that complicated either. Lebanon is a country that is undergoing major transformations today, and the fact that the country is still trying to recover from the war aftermath is itself a problem that needs to be handled.

The views expressed in the interview show that there is awareness of e-commerce among the business community, even though this awareness is not yet mature. Since e-commerce in the real sense cannot be established in Lebanon right now, it is important to make sure that all the necessary requirements be met meanwhile. In this sense, several things are needed.

First of all, educating the public and businesspeople about e-commerce and the opportunities it creates is necessary. Secondly, passing laws and bills that will facilitate e-commerce and protect the interests of both the buyer and the seller is another. Thirdly, providing credit card facilities is necessary and vital for e-commerce. Fourthly searching for and finding means of protecting financial transactions from fraud, theft and abuse is also an important prerequisite.

What can be said of e-commerce in Lebanon in the light of the results of the interviews is that Lebanon is now in the preliminary and preparatory phases. The coming two or three years could be of serious importance for the Lebanese public and business community on the e-commerce level.

6.2   Limitations

Some limitations have caused a few problems during this study. With respect to the questionnaire, the majority of the users did not know exactly how the Internet worked. They had faint ideas and therefore, some of their answers may not reflect reliable answers. Secondly, it was not certain how many of the respondents were actually honest in their answers. For example, when only 5% of the respondents (Exhibit 6) say that they use the Internet for entertainment and leisure. Moreover, I think that the research only established general guidelines and basis to start from into deeper research, but it has not established a very clear picture of how the Lebanese are

planning to use the Internet as a medium of conducting business. This limitations have to be considered in the future when more research on the subject is to be made.

With respect to the survey on e-commercial behaviors of Lebanese companies, several limitations may be noticed. First of all, the number of companies was very small (only twenty). Secondly, the companies did not really reflect the streamline business community in Lebanon, and accordingly, the companies that were selected and contacted are not necessarily representative of the population. In addition to this, it might have been appropriate to contact these companies once again demanding them for an explanation for their responses (or lack of responses) in an attempt to understand their real limitations, problems and motives that led to their responses (or lack of responses).

6.3 CONCLUSION

Whether the Lebanese are using the Internet for marketing and business or not is an issue that cannot be discussed at this stage. Lebanon is still undergoing a transformation, and people are still learning how to use the Internet and discovering what its potentials are. There are very few users who are actually devoting the Internet for business use. The majority is still trying to find out how to handle it and how to use it in the future. Nevertheless, this stage of discovery is also used to provide the Lebanese

business users with a lot of information on the Internet and how it can be useful in later stages.

The research shows that there are still major difficulties preventing the Lebanese from taking the Internet as a serious medium of business exchange. The majority of Internet users in the country, and these may all be between 5,000 and 15,000 users in total, are mainly younger people. Accordingly, this will only create opportunities to market products that address the needs of this age category, which limits the opportunities of other industries to use the Internet efficiently and effectively, at least in the short run.

The final result of this research is that Internet use in Lebanon will not be taking long before it becomes effective, especially with respect to e-commerce. However there is almost a certainty that Lebanon is moving in the right direction, even though this might take sometime. Evidently, there are many issues that have been raised in this project. First of all, e-commerce is not only facing problems in developing countries such as Lebanon, but also in developed nations such as the UK. E-commerce in the UK is undergoing a major boom, but at the same time, there are also a number of problems and impediments that are hampering the development of e-commerce. E-commerce is not only about having grocery online shopping malls and centers. It is not only about purchasing books and CD's

online. Nor is it the mere sending of an e-mail to a potential customer telling him that his delivery will arrive on time. It is a complicated mixture of all these activities, in addition to hundreds others. E-commerce is about advertising online, reaching customers online, conducting marketing research online, surveying, buying, selling, and virtually any other possible business interaction or transaction online. It is for these reasons and many others that e-commerce may be hampered by different factors, factors that could be social, cultural, political, legal, financial or regulatory in nature.

In Lebanon, the obstacles are related to regulations and laws, as the government has not yet formulated a final attitude about the future of e-commerce. However, the prospects are positive. At the same time, the regulation of payment online is still in the infancy stage, and a lot of attention is needed in this respect .

Cultural difficulties are still available. Businesses and households in Lebanon are still not very aware of the Internet and its capabilities. The Lebanese in general use the Internet to communicate with relatives and friends, to find out about companies, to launch web pages, and for entertainment purposes. Nonetheless, it is noticeable that the Internet is mostly popular among the younger generations, that is among high school and college students. While these are the future baby boomers in the country, those who have the financial capabilities to involve in e-commerce

are still reluctant because in reality they do not have a clear picture of what the Internet is really about or how it can be used. Thus, I believe that e-commerce in Lebanon is going to develop at present, slowly but effectively. Yet, in the coming five or ten years, I expect Lebanon to catch up with the rest of the world, especially Europe, aided in this by the new infrastructure in the country and the increasing awareness of technology.

6.4 Recommendations for the Future of E-Commerce in Lebanon

In the short term, growth of e-commerce as an industry in Lebanon is still stumbling because the industry is still in the infancy phase. Businesses, banks, government and buyers are still trying to come to grips with this innovative industry, its implications and how it has to be handled. In the long term, however, the growth rate is expected to be high, but then, given that certain conditions be met.

First of all, Lebanese e-commerce businesses should not limit their activities to Lebanon (except for stores, florists and similar products and services whose nature imposes such a limitation). This means that globalization should be sought as an objective and as a strategy at the same time, at least for the majority of e-commerce businesses in Lebanon.

Secondly, Lebanese e-commerce businesses should continuously be updated with the latest developments in e-commerce technology so that they

will remain up to date with technological innovations that will protect their competitiveness and competitive advantages.

Thirdly, these establishments should develop their products and offerings to be able to compete with international businesses. The best opportunity available, however, is for businesses that can offer unique services and products (eg. Magazines such as *Lebanon Opportunities*, *As-Safire Newspaper*, databases on Lebanon, etc) to a global target market (eg. Lebanese expatriates, interested investors, students, etc). While the growth rate of the industry will globally rise, the growth of Lebanese e-commerce establishments depends on the ability of these enterprises to differentiate their products and product offerings.

The ability of Lebanese e-commerce businesses to develop new marketing innovations is also of grave importance. The majority of available Lebanese e-commerce establishments today depend on the use of banners to advertise their products on the Internet. E-commerce businesses are now using sponsorship of hot sites as an alternative. Sponsorship of active sites is effective, especially if administered in an innovative, attractive and persuasive manner. Another method is the development of mail-list groups since these are growing into reference groups that attract hundreds if not thousands of customers to a site.

Rivalry and competition among Lebanese e-commerce businesses is also still in its infant stage. Eventually, however, competition is expected to peak, not only on the national level, but also globally, particularly as more Lebanese e-commerce businesses try to reach more customers outside the borders of Lebanon.

In the long run, costs and efficiency are expected to change in a variety of ways. Firstly, it is expected that Lebanon will be joining the WTO. This means that tariffs and taxes on Lebanese businesses exported through e-commerce will drop, thus enabling these businesses to avoid sharp discounts on their products. Secondly, the costs of graphic design, technology and other related aspects that are still relatively expensive in Lebanon will start declining, thus offering businesses more space for profitability and cost cutting. Thirdly, the costs imposed by banks on collection processing will inevitably drop as competition picks up locally and even internationally through online banks.

A most important factor that will inevitably affect e-commerce in Lebanon relates to perceptions and attitudes. On the first level, the perceptions and attitudes of Lebanese customers should be considered. As people become more willing to use their Internet or credit cards online, a real e-commerce sector will start to develop as well. On the second level, as more Lebanese start making more purchases online, investors will be

attracted to invest in the industry in order to gain profits. On the third level, as Lebanese e-commerce businesses gain credibility in the global market, they are expected to enter a phase of strong growth, especially if they prove their ability to deliver high quality and highly differentiated products in a satisfactory manner.

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APPENDIX A

QUESTIONNAIRE

I-Demographic Section

Q1-Age _____

Q2-Occupation _____

Q3-Residence or business area (where Internet connection is established)

_____

Q4-Income

A. High   B. Medium   C. Low

II-General Information Section

Q5-How long have you been working on Internet?

A. One to six months

B. Six months to one year

C. One to two years

D. More than two years

Q6-What do you mainly use the Internet for?

A. Business   B. Leisure

C. Communication   D. Information

Q7-How often do you log into the Lebanon site?

A. Several times a week   B. Once a week

C. Once in two weeks   D. Never heard of it

III. Marketing and Business Related Section

Q8-How often have you actually purchased a product or a service from a Lebanese company through Internet or due to information received through Internet?

A. Frequently   B. Sometimes

C. Rarely   D. Once

E. Never

Q9-What kind of products do you expect yourself to buy from a Lebanese company through the Internet?

A. Retail goods   B. Insurance

C. Legal services   D. Entertainment

E. Reservations (air-line, restaurants, hotels, etc.)

F. Renting cars   G. Others

Q10-Which kind of people do you think will actually respond to marketing through Internet?

A. Professional surfers   B. Foreigners

C. Lebanese students   D. No answer

Q11-What do you think prevents you from using the Internet as a medium through which you may do business in Lebanon (not including e-mail)?

A. Low speed of Internet   B. High costs of usage

C. Limited number of users   D. High costs of listing homepages