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# IDENTIFYING MANAGEMENT GAPS TOWARDS E-BUSINESS: A STUDY FROM LEBANON

by

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# **Identifying Management Gaps Towards e-Business:**

# A Study from Lebanon

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#### Abstract

The last decade, since the end of the Lebanese war in 1990, had witnessed a very progressive and attractive program of reconstruction and development of Lebanon. Since 1993, billions of dollars had been spent to revive the Lebanese infrastructure including all vital sectors that may characterize Lebanon as an independent country capable to standalone after the costly devastation of all its productive sectors. Projects included sea ports, the Beirut International Airport, the highway network, the Arab highway, bridges, tunnels, and most importantly the technological infrastructure that covers the telecommunications and the computerization of vital areas. All to serve the future of Lebanon after a lag of almost 20 years in technology use and implementation.

One area of special interest to this paper is the technology infrastructure and its impact of delivering automated solutions to the Lebanese Industrial and productive sectors. In particular, businesses in Lebanon faced new challenges as they confront the realities of the current dynamic and aggressive external business environment.

Although almost ten years had elapsed for the complete renovation of technology resources of the country, still hundreds of Lebanese businesses are not up to the challenge of surfing the realm of modern technology in a strategic manner. Most of the solutions sought are directed toward short-term goals that reflect a deficiency in appreciating the real value of adopting technology. More specifically the adoption of electronic commerce with all what it demands from top management

The purpose of this paper is to shed light and assess the behavior and willingness of Lebanese managers toward the adoption of sound decisions to implement electronic commerce. The challenge is to be part of the global village of the twenty first century.

#### Introduction

#### The Consumer Market

Markets are places of exchange where demand and supply meet. A market is a set of firms ranging from government agencies, to individuals offering their products or purchasing the products, all within a set of standardized goals to which the entities are loyal to. Within these markets, a continuous exchange activity occurs where goods, services, and money interchange hands. According to Wigand (1997, p. 3) competitive markets are characterized having the following:

- (1). Many buyers and sellers,
- (2). Homogeneous products,
- (3). Easy entrance to and departure from the market,
- (4). Low switching costs for consumers who wish to choose among suitable goods from competing firms, and
- (5). The availability of perfect information.

Customers are regularly described as "time poor, cash rich" and repetitive shopping expenditures now compete with a host of more exciting leisure activities for the customer's time. Consumers are attracted by those sellers offering easily accessible sources of data describing to the utmost details, passively or interactively, what they are looking for.

Consumers look for perfect information, through firms' advertising and news media, to make informed, rational decisions about what goods or services they desire to purchase from the market place.

#### Information Technology and the Internet

Recently, business developments have shown that information technology (IT) is vital for a modern organization's endeavor to achieve optimal performance. The efficient use of IT capabilities enables a firm interconnectivity to add efficiency and effectiveness into the product life-cycle so as to deliver what customers would like to receive in return for their money.

Malone et al (1987) and later Wigand (1995a) identified four effects of information technology on business transactions within the business and among the firms:

- 1. The communication effect- More information is communicated in the same unit of time, thus reducing transactions costs.
- 2. The electronic integration effect- A tighter linkage between buyer and seller is enabled.
- 3. The electronic brokerage effect- An electronic marketplace where buyers and sellers come together to compare offerings.
- 4. The electronic strategic networking effect- Information technology (including networks) enables the design and deliberate strategic deployment of linkages and networks among cooperating firms intended to achieve joint, strategic goals to gain competitive advantage.

Thus the \$ 4 billion to \$ 5 billion home shopping market that McKinsey and other consulting firms have predicted, in the United States in 2003, will involve not new retail spending, but a switch of customers from shops and catalogues to computers and interactive television (Wigand, 1995b).

## **Electronic Economy in Perspective**

The winds of globalization have caused huge impact on businesses in all productive sectors of the economy. Whatever definitions may have been used for the electronic revolution taking place nowadays, one should recognize that the dynamics of change take place in a larger economic context. Examples abound and not limited to global competition interest rates, laws and regulations, social concerns, and industry traditions but it includes consumer preferences as well. All form part of the broader "environment" that can affect any business activities.

Electronic or non-electronic businesses share an infrastructure of economic resources, utilities, structures, equipment, telecommunication and other services, employees, and workforce skills. While keeping this larger context in mind, the emphasis in this paper is to assess the management gap characterizing Lebanese firms in their adoption of electronic commerce.

According to the study carried out by the University of Texas, and sponsored by Cisco Systems (www.internetindicators.com), there are four layers of the Internet economy from a conceptual standpoint. Consequently, the Internet Economy Indicators were founded as metrics and measurement indices to understand and analyze issues involving this Internet economy. There are four layers whose details are shown in Exhibit 1.

#### Exhibit 1. Layers of the Internet Economy. (www.Internetindicators.com/indicators.html)

Layer One: The Internet Infrastructure Layer. This layer includes companies with products and services that help create an IP based network infrastructure, a prerequisite for electronic commerce. The categories in this infrastructure layer include:

Internet backbone providers (e.g., Qwest, MCI Worldcom)

Internet service providers (e.g., Mindspring, AOL, Earthlink)

Networking hardware and software companies (e.g., Cisco, Lucent, 3Com)

PC and Server manufacturers (e.g., Dell, Compaq, HP)

Security vendors (e.g., Axent, Checkpoint, Network Associates)

Fiber optics makers (e.g., Corning)

Line acceleration hardware manufacturers (e.g., Ciena, Tellabs, Pairgain)

Layer Two: The Internet Applications Layer. Products and services in this layer build upon the above IP network infrastructure and make it technologically feasible to perform business activities online. Categories include:

Internet consultants (e.g., USWeb/CKS, Scient, etc)

Internet commerce applications (e.g., Netscape, Microsoft, Sun IBM)

Multimedia applications (e.g., RealNetworks, Macromedia)

Web development software (e.g., Adobe, NetObjects, Allaire, Vignette)

Search engine software (e.g., Inktomi, Verity)

Online training (e.g., Sylvan Prometric, Assymetrix)

Web-enabled databases (e.g., Oracle, IBM DB2, Microsoft SQL Server, etc; only

Internet/intranet related revenues are counted)

Layer Three: The Internet Intermediary Layer. Internet intermediaries increase the efficiency of electronics markets by facilitating the meeting and interaction of buyers and sellers over the Internet. Categories include:

Market makers in vertical industries (e.g., VerticalNet, PCOrder)

Online travel agents (e.g., TravelWeb.com, 1Travel.com)

Online brokerages (e.g., E\*Trade, Schwab.com, DLJDirect)

Content aggregators (e.g., Cnet, Zdnet, Broadcast.com)

Portals/Content providers (e.g., Yahoo, Excite, Geocities)

Internet ad brokers (e.g., Doubleclick, 24/7 Media)

Online advertising (e.g., Yahoo, ESPNSportszone)

Layer Four: The Internet Commerce Layer. Internet commerce involves the sales of products and services to consumers or businesses over the Internet. Categories include:

E-tailors (e.g., Amazon.com, eToys.com)

Manufacturers selling online (e.g., Cisco, Dell, IBM)

Fee/Subscription-based companies (e.g., thestreet.com, WSJ.com)

Airlines selling online tickets

Online entertainment and professional services

It is also useful to think of the electronic economy as having three primary components (Khatib et al., 2000, p.3):

I. Supporting infrastructure,

- II. Electronic business processes, and
- III. Electronic commerce transactions.

The common feature among the last two components is the reliance on the use of computer networks, and the benefit this can provide, which is the "bottom-line" difference between electronic and other kinds of business.

#### **Electronic Business Infrastructure**

Is the sharing of total economic infrastructure used to support electronic business processes and conduct electronic commerce transactions. Examples of e-business infrastructures are:

- 1. Computers, routers, and other hardware
- 2. Satellite and optical communications and network channels
- 3. System and applications software
- 4. Support services, such as web site development and hosting
- 5. Human capital, such as programmers

#### **Electronic Business Processes**

Includes any process that a business organization conducts over a computer-mediated network. In this case, a business organization is any business for-profit, governmental, and non-for-profit ones. Their processes include production-, customer-, and internal or external management focused business processes. Examples include,

- -1 Production- focused processes: include procurement, ordering, automated stock replenishment, payment processing and other electronic links with suppliers, as well as production control and processes more directly related to the production process.
- -2 Customer- focused processes: include marketing, electronic selling, processing of customer orders and payments, and customer management and support.
- -3 Internal or management- focused processes: include automated employee services, training, information sharing, video conferencing, and recruiting.

#### **Electronic Commerce**

The European Commission (1997) defined e-commerce as follows:

"Electronic commerce is about doing business electronically. It is based on the processing and transmission of data, including text, sound, and video. It encompasses, any diverse activities including electronic trading of goods and services, online delivery of digital content, electronic fund transfers, electronic share trading, electronic bill of lading, commercial auctions, collaborative design and engineering, online sourcing, public procurement, direct consumer marketing, and after sales services. It involves both products (e.g. consumer goods, specialized medical equipment) and services (e.g.

information services, financial and legal services); traditional activities (e.g. healthcare, education) and new activities (e.g. virtual malls)."(Hobeika, 2000, p.2)

Wigand (1997, p.5) states that the term electronic commerce is poorly understood and frequently used to denote different meanings, very often depending on the individual's job function, professional orientation, and background, focal product or service, and type of information technology deployed. Furthermore, Wigand adds that Electronic commerce denotes the seamless application of information and communication technology from its point of origin to its endpoint along the entire value chain of business processes conducted electronically and designed to enable the accomplishment of a business goal. Table 1 identifies some criteria leading toward a typology of electronic commerce (Wigand, 1995c).

Table 1 shows that the various types of electronic commerce range and ascend from: one-way teleshopping broadcasts via cable and satellite television channels, via automated electronic markets, to electronic shopping on the Internet and WWW, to full fledged electronic commerce utilizing an electronic market maker with a market choice or set-up box in the consumer's home.

The final stage will not be very practical without the use of an effectively working intelligent agent assisting the consumer in searches, comparisons, and evaluations. However, under all conditions it is the buyer's deliberate choice or decision at the time the transaction is assumed or required (Wigand, 1997, p. 7)

# Types of Electronic Commerce (EC)

According to Jonathan Morell at the Center for Electronic Commerce, a research division of the Environmental Research Institute of Michigan (Microsoft white paper, 2000, p. 5), five distinct types of EC are recognized:

- 1. *Information access*: search and retrieval capabilities for public domain and proprietary data archives. The most common information services are Dialog, Nexus-Lexus, and ABI Informs. These maintain a database and charges for access.
- 2. **Self Services**: These businesses provide important commercial and personnel information 24 hours a day, seven days a week. Examples include self-service applications for online employee benefit enrollment, access to shipping status of customer orders, and online banking.
- 3. *Interpersonal communication*: services provide methods for parties with mutual interests to exchange information, "discuss" ideas, and improve their cooperation. For example, customer and supplier design groups jointly working out product specifications, updated files being sent by a publisher to a printer, and a purchasing agent using electronic mail to negotiate an expediting schedule with a supplier.
- 4. *Shopping services*: allow people to seek and purchase goods or services through electronic networks and online auctioning. It applies to retail sales, to purchase of used industrial equipment, commodities, or freight capacity.
- 5. Virtual enterprises: are business arrangements in which trading partners separated by geography and expertise are able to engage in complex joint business activities, as if they were a single

enterprise. One example would be true supply chain integration, where planning and forecast data are transmitted quickly and accurately throughout a multi-tier supply chain. Another example would be non-competing suppliers with a common customer to do "one stop shopping" with the assurance that a single phone call will bring the right materials to the right location at the right time.

# **Advantages of Electronic Commerce**

Advantages of EC are considered from two angles. The business side and the customer side.

#### Advantages to Businesses

- i. Less physical establishment cost: EC offers companies a global market place from a single site, and hence fewer numbers of stores and fixed costs. The company can attain one store for its goods and this means that duplicate inventory costs are eliminated.
- ii. **More functioning time**: The company is always open and the service is available 24-hours. Internet makes it possible for companies to function without their personal presence.
- iii. Less time spent with customers: The transaction of getting product information and selecting it by customers becomes faster. Web sales take 2 minutes compared to an average of 20 minutes with traditional customers (Fares, 2000).
- iv. Easier to reconcile order, receipt, and invoice: 25% of error rate for orders by phone, fax or e-mail is reduced to only 2% for orders over the Internet. (Fares, 2000)
- v. Less staffing cost: Using online shopping, the company needs fewer workers but higher skills. Online customer service saves 20,000 hires or 14% of the total labor force (Fares, 2000). Research results on Online banking in the US supported that less costs are incurred. For example, a transaction in a full-service bank costs the bank \$ 1.07, while a Web-banking transaction costs one cent (Boone and Kurtz, 1999, p. 657).
- vi. Quick adjustments to market conditions: companies can quickly add products to their offerings and change prices, descriptions and ads.
- vii. Audience sizing and control: companies can learn more about their customers. They can know how many people visited their online site and how many stopped at particular places on the site. They can also get feedback. This improves their products and ads. (Kotler, 2000, p. 654)

#### Advantages to the Consumer

i. Better quality and competitive products offered: products become more qualified and efficient leading to increasing competition between companies, and this in turn results in lowering prices of the products.

- ii. Less cost: similar offerings lead to lower prices, in addition to lower costs due to the absence of intermediaries' costs. Buying products over the Internet and delivering it directly to customers without intermediary services decreases the cost of product by around 6% in wholesaling and 9.6% in retailing (Fares, 2000).
- iii. **Less time spent on shopping**: one retrieves the type of the product needed faster and finish the selling process in minimal time (Fares, 2000).
- iv. **Convenience**: Internet makes it possible to order and buy a product 24-hours a day. A working person for example, can always find some time to buy the required product (Kotler, 2000, p.665).
- v. Ease of collecting information: customers can easily find information about companies, products, competitors, prices, quality and availability of products.
- vi. **Fewer interactions and pressure of sales people**: customers do not have to face sales people or open themselves up to persuasive and emotional factors (Kotler, 2000, p. 665).

Table 1. An Electronic Commerce Typology (Wigand, 1997, p. 6)

Type of electronic commerce, by increasing electronic interactive capabilities	Buyers' deliberate choice/decision at time of transaction	•	Degree of Interactivity	Buying choice/decision made by computer/software on behalf of buyer	Direct buying choice/decision made by human	Potential for full- fledged electronic market	Role of market maker
Tele-shopping via TV (e.g., QVC)	Yes	One-way only	Limited, One- way	No	Yes	High & successful but only partially electronic	High
Automated market (A): simple, largely automated transactions (e.g., EFT, EDI, SWIFT, valueadded services)	Yes & No	Largely Yes	High	Largely Yes	No	Limited only transaction and processing system	Small
Automated market (A): simple, largely automated transactions (e.g., EFT, EDI, SWIFT, value-added services) Automated market (B): simple transactions with some human choice/decisions required (e.g., SABRE, APOLLO, stock market transactions)	Yes	One-way only	High	Generally no	Yes	High and successful	Medium
Mobile and wireless cellular phone/PCs-based applications (e.g., construction industry)	Yes	No	High	No	Yes	High	Small
Electronic shopping (e.g., via Internet, WWW)	Yes	No	High	No	Yes	High	High
Full-fledged electronic commerce utilizing electronic market maker with market-choice box (e.g., available in the future via 500 cable television systems, phone, maybe wireless, etc.)	Yes	Mainly one- way only	High	No	Yes	High	Very High

#### **Barriers to E-Commerce**

According to Kotler (2000, pp. 670-672), the following issues were identified as main challenges to conducting electronic commerce:

1. Limited consumer exposure and buying:

Web users are doing more surfing than buying. Only an estimated 18% of surfers actually use the Web regularly for shopping or to obtain commercial services. The major on-line buyers today are businesses rather than individual consumers.

2. Skewed user demographics and psychographics:

On-line users are more upscale and technically oriented than general population, making them ideal for computers, electronics, and financial services but less so for mainstream products.

3. Chaos and clutter:

The Web offers millions of Web sites and a tremendous volume of information. Navigating through the Web brings frustration. Many sites go unnoticed if failed to capture visitors' attention within eight seconds.

4. Security:

Consumers worry about the susceptibility to alteration or theft of credit card numbers or other financial accounts. Although the Internet is becoming more secure, there is always a continuous race between security measures and code-breaking measures.

5. Ethical concerns:

Several issues are mentioned here.

- 1. Consumers' Information Privacy: There is continuous worry about companies unauthorized use of information or selling it to others.
- 2. Prevalent use of "cookies" for collection of further consumer buying behavior.
- 3. Internet helps upscale consumers shop more efficiently leaving poorer consumers having less access to the Internet to pay higher prices.
- 6. Consumer backlash:

The Internet has empowered the consumer by giving them more product information than ever before, a fact that at the same time will impact the firm's reputation if that consumer expresses his/her disagreement in an offensive manner.

7 Fraud

Is the unethical dealing with transactions carried out through the net. That is, somebody denying having conducted the transaction. Another form is when a person pretends to be a Web provider and hence obtains sensitive information from customers like for example, account numbers, passwords, or personal information.

Identifying e-commerce transactions often is not a straight forward step. Some concerns should be watched for:

- 1. Agreement to purchase should occur over the electronic network.
- 2. Agreement to transfer ownership should occur over computer –mediated network.

## Critical Success Factors (CSFs)

Today, businesses are realizing that to stay competitive the customer is becoming more and more important hence the market has developed into a customer-driven market which means that businesses need to become, if not already, customer centric and not focused purely on business-centricity as in the past (Evans, Internet: 2000). Then, with the ever-increasing need for efficiency in a business and shifting towards customer-centricity, it is important to review the strategic management processes necessary to guide the migration from a traditional business setup to a new e-business system.

Having the strategic intent, it is important that a potential e-business focuses on developing a comprehensive e-strategy to enable the business to fulfil future expectations. For that purpose, a new business vision should be searched for after a comprehensive review of the current capabilities, core competencies, and where does the business stand in its infrastructure readiness. Amazon.com (Internet: Mathieu, 1999), for example, used the balanced scorecard (BSC) to enable a system of corporate performance measurement that is capable to supplement traditional financial measures of performance with three additional perspectives (customers, internal business processes, and innovation and learning). The purpose was to translate strategy into measures that uniquely communicate the vision to the organization (Kaplan and Norton, 1996).

Businesses follow five different approaches through which they view electronic commerce (Wigand, 1997, pp.7-12). These are:

- A. Transaction Cost Theory: Transactions may be broken into two classes, production and coordination costs depending on factors such as specificity, the parties' interests in the transactions, and ambiguity and uncertainty in describing the transaction.
  - Coordination costs include the transaction (governance) costs of the information processing necessary to coordinate the work of people and machines performing primary processes (Benjamin and Wigand, 1995, p.64). These are manifested in four forms, search costs, contracting costs, monitoring costs, and adaptation costs. Firms will choose transactions that economize on coordination costs. As information technology continues its rapid growth and cost performance improvement, the unit cost of coordination transactions will approach zero, thus enabling the design of innovative coordination and innovative use of the World Wide Web (WWW) to conduct business (Wigand, 1997, p. 8).
- **B.** Marketing: Three main aspects are identified: customer orientation (attitudes and patterns of conduct, customers wants, and customization), product orientation (superior merit as recognized by customers and loyalty), and profit orientation (differentiation of products coupled with customers' high demand and profitability).
  - Electronic commerce can provide direct linkage, an electronic marketing and information channel, between target customers and firm. Moreover, new forms of relationship marketing have evolved like for example, liquid marketing. Wigand (1997, p. 10) defines it as the "disintermediated, frictionless, personalized, individually accessible, customer-centric, immediate, cooperative, dynamic, rapid, fluid, computer-to-computer or –person, on-line, and interactive nature of this new form of relationship marketing". Such a new concept is enabled by the Internet.

- C. Diffusion: is the social process by which an innovation is communicated through certain channels over time among members of a social system (Rogers, 1995). Electronic commerce, for example, uses a communication media to carry out a transaction to a set of firms or customers (members of a social system). Here, time, speed, and cost vis-à-vis effectiveness are of essence. The Internet and WWW facilitate an interactive multimedia, one-to-many communication model, where feedback from customers plays an essential role.
- D. Information Retrieval: Today, most firms store their knowledge generated by soft data or their dispersed documents (correspondence) in various places throughout the organization. In electronic dissemination, it is obvious that users can retrieve information once that information is stored on the system. Many databases are available within firms that could be accessed through the Internet. Text and document retrieval experts face considerable challenges by finding means to search and retrieve both structured and unstructured information on-line while making needed information available instantly whenever and wherever it is needed. The design of appropriate information needed by customers and suppliers demand special attention. Unle. such design in inviting, encouraging, timely, informative, and user-friendly, the success of the system is highly questionable (Taylor, 1986).
- E. Strategic Networking: is the deliberate design and deployment of networks enabling new organizational forms, including all four of the preceding topics. Strategic networks are defined as the long-range, deliberate, cooperative, and goal-oriented organizational forms among distinct but related organizations that enable such network member organizations to gain or sustain competitive advantage vis-à-vis their competitors outside the network, by optimizing transaction costs and minimizing coordination costs. Their purpose is to carry out economic activities between the organizational form of "market" and "hierarchy."

Strategic network's success is obtained when all member organizations continue to add value over time through adaptation, novel applications, learning, sharing of feedback, etc. This approach enables interaction with customers and suppliers that is simultaneous, almost fluid, efficient, interactive, may be collaborative, conductive to innovation, and adds value to processes and the firm. Electronic networking suggests the use of listserves, electronic bulletin boards, direct electronic inquiries, transaction-capable and interactive Web sites, and others.

Considering the five views of how businesses look at electronic commerce, one can observe that if measurement of performance is based solely on financial factors, decisions to go into the electronic economy will be hindered. Traditionally, managers sought financial performance measurement indicators to assess the attractiveness of adopting information technology or new approaches to conduct their businesses. However, recent studies have shown that non-financial information is extremely important. In 1998, the Ernest & Young Center for Business Innovation conducted a study of the factors influencing investors decisions, they found that "those analysts who rely more heavily on non-financial information are the ones producing the most accurate earnings forecasts." (Low and Siesfeld, 1998)

The top ten factors rated in order of importance are:

- 1. Execution of corporate strategy
- 2. Management credibility

- 3. Quality of corporate strategy
- 4. Innovativeness
- 5. Ability to attract and retain talented people
- 6. Market share
- 7. Management expertise
- 8. Alignment of compensation with shareholder interests
- 9. Research leadership
- 10. Quality of major business processes

Low and Siesfeld feel that the message to management is clear: "If a firm does not strategically manage, measure, and communicate about key areas of non-financial performance, its operating performance and the value of its securities will suffer." This is because the creation and analysis of non-financial performance measurements allows management to affect (and analysts to predict) the future, as opposed to simply reflecting on the past (Internet: Mathieu, 1999, p.3).

In consideration of the critical success factors determined by top management, goals and strategies of the business firms are adopted. Businesses that use electronic commerce to conduct their transactions include the following critical success factors:

Profitability	Customer satisfaction	Innovation
Growth	Market share growth	Thinking resource maximization
Survival	Quality and reliability	Diversification
Brand strength	Efficiency	

Moreover, Patricia B. Seybold, in her Customers.com book (1998), explores eight critical success factors for companies that are serious about competing in the information age. These factors are shown in Exhibit 2.

# Exhibit 2. Seybold's Eight Critical Success Factors

- 1. Target the right customer. Look for the loyal customers first.
- 2. Own the total experience. Deliver consistent, branded experience to the customers by saving them both time and aggravation. Give them control over their experience of doing business with you.
- 3. Streamline business processes. Understand who are the customers and involve a Variety of other key stakeholders in the redesign process.
- 4. **Provide a 360 degrees view**. Anyone in the organization who deals with a customer Needs to have a complete view of that customer's relationship with the firm.
- 5. Let customers help themselves. Customers want to be able to do everything Themselves: from research to configuring and ordering products to monitoring the Services they are getting.
- 6. Help customers do their jobs. Understand how a customer does his/her job and where your company fits into that process.
- 7. **Deliver personalized service**. Seek one-to-one marketing delivering a personalized service that is not possible any other way.
- 8. Foster community. Generate value by involving customers with each other.

# The Ten Driving Principles of the New Economy

The rules of business applicable during the last decades have been overturned with the advent of the Internet, and the e-commerce industry it helped to create. However, assessing and conducting the strategic management process is strongly valid to identify critical issues to be considered while planning for a new vision, mission, and setting strategic goals. One of the successful efforts to pin down the core characteristics and strategies that will create success in the e-commerce marketplace (Internet Economy or New Economy) was developed by Business 2.0 magazine in its "10 Driving Principles of the New Economy." (Business 2.0, Premiere Issue, March, 1, 2000)

Exhibit 3 shows a list of these principles as summarized by Mathieu (1999, pp. 4-5).

## Exhibit 3. List of Ten Principles of the New Economy

- \* Matter. It matters less. Processing information is more powerful and cost-effective
  Than moving physical products. Moving bits has a much higher margin than moving
  Atoms. Intangible assets are key: including people, ideas, and information driven assets.
- \* Space. Distance has vanished. Businesses can connect with customers around the world. Competition is no longer local or national, but worldwide.
- \* Time. It's collapsing. Constant change is a must. Instant interactivity is highly valued. The marketplace is "real-time".
- \* People. The crown jewels. People don't appear on the balance sheet but they truly are a company's most valuable assets. Smart ideas quickly leverage into huge value.
- \* Growth. It's accelerated by the network. Instant communication means that good ideas Spread quickly. Critical mass leads to explosive growth. First-mover advantages are more Important than ever.
- \* Value. It rises exponentially with market share. The "network effect" indicates that the more members a network has, the more valuable the network becomes (the opposite of the economic principle that value comes from scarcity).
- \* Efficiency. Infomediaries replace intermediaries. Middle steps (inefficiencies) in the value chain are being rapidly disintermediated. At the same time, the exponential growth in information requires infomediaries to sort through the clutter.
- \* Markets. Buyers gain new power, sellers new opportunities. A competitor is only a mouse -click away. Intelligent agents can find and negotiate the best price. Businesses that rely on relationships, unique services and/or lower costs will win.
- \* Transactions. A one-to-one game. Personalization and customization are in increasing Demand. Since information is easier to customize than hard goods, service becomes a larger part of the total value of a transaction.
- \* Impulse. Reduced gap between desire and purchase. Artificial constraints to commerce Disappear. The impulse to buy and the purchase itself are much closer together than ever Before, if not instantaneous.

# **Generic Strategies**

Conventional thinking has led people to believe that the Internet will offer an equalizer effect for companies to compete in a marketplace. However, as Internet companies continue to consolidate, it becomes harder and more difficult for new market entrants to build successful and sustainable position into the future. According to Matheiu (1999), the ten principles shown in Exhibit 3, indicate a specific set of "generic strategies" that most businesses engaged in e-commerce are now following. The strategies include:

•1 Focus on market share now, profitability later.

- •2 If at all possible, be first into the marketplace.
- •3 Build a network of customers as quickly as possible.
- •4 Use community and affinity programs to lock customers in to your e-commerce solution.
- •5 Customize and personalize all interactions with customers.
- •6 Price hard goods as a commodity.
- •7 Add value (and generate revenues) through superior service and other intangible factors.
- •8 Consider all sources of potential competition, no matter how indirect.
- •9 Consider all potential markets, no matter how indirect.
- •10 Minimize costs virtualize everything possible.
- •11 Attract and retain quality people.

By consolidating among these principles, and following the resulting strategies, companies engaged in e-commerce are attempting to maximize their future returns at the expense of the immediate profitability.

# Research Methodology

The Lebanese industry is a service-based industry that relies heavily on the customer service. According to Peter Senge (1990), businesses today that want to achieve a learning status and therefore be successful at implementing new practices, have to worry about several factors describing fundamental ways of how businesses become successful irrespective of their line products. He mentions five factors:

- 1. Systemic thinking,
- 2. Personal mastery,
- 3. Mental models,
- 4. Shared vision, and
- 5. Team learning.

If we try to assess these factors in any Lebanese organization, we find that the human factor is fundamental and the best approach is by conducting a Strategic Gap Analysis. Here, a comparison is made between current status and desired status of the practices that an organization undergoes. Therefore, as a result we can assess the awareness of Lebanese managers towards the behavioral factors necessary to implement e-business successfully.

Reviewing the common basis between critical success factors and the generic strategies, used by firms to implement e-business practices, one finds that customer delight is a must. Employees' preparation, motivation, and creativity in handling the customer is critical, and the continuous reviews of strategies should constitute a common exercise in the firm. This exercise can be conducted using continuous performance appraisals. The reason for that is that performance appraisal measures are derived from the needs-analysis matched with the database of skills existing in the organization. Then, results obtained from such appraisals reflect realistic internal behavior that is essential for the organization to adopt new systems.

In a previous study carried out to shed light on performance management practices by Lebanese managers, the researcher found that one possible approach to describe reality as practiced in Lebanon's service sector, one has to use the Human Performance Technology (HPT) approach (Ado Mikdashi, 1999). It is a method that relies on Gap Analysis describing desired outcomes (managers' or managers + employees' opinions) versus current outcomes (employees' opinion), and therefore shedding light on what an organization or firm has to do to implement new practices of management, new technologies, or new structures.

The next section of this paper uses the HPT approach and results found in the thesis so that a realistic assessment can be performed to describe how Lebanese managers see e-business practices by reviewing the behavioral factors inherent to the process.

## **Major Findings**

It is necessary to mention that the desired state reflects the future outcomes of the current strategy implemented by top management of the sampled firms. It is the final outcome of carrying a strategic planning exercise. In this exercise, external factors from the environment (general dimensions represented by: international pressure, economic realities, technology transfer, societal dynamics, and governmental policies and regulations are matched to task factors representing: competitive pressure, buyers behavior, suppliers availability, and many other factors as well) are reconciled with the firms' internal strengths and/or weaknesses. Moreover, the current state represents the operational practices reflected by the employees. Therefore, a comparison between management's opinion and employees' opinion shall reflect a gap describing major loopholes in the management system of the firm. Describing such a gap is helpful to forecast the current organizational preparation to adapt to new changes in any of the aspects of the general environment, and the decision to do e-business is of high concern here.

#### Gap Analysis

Ado Mikdashi (1999) reports in her thesis the results obtained by conducting a bivariate analysis. A null hypothesis was tested by equating the means of the two independent samples of data generated from managers (40) and employees (185). Here, a set of two questionnaires administered to employees and managers belonging to the service sector industry. Moreover, firms included banks, hospitals, hotels and an airline. These firms look attractive and adequate for this study although not holistic for the whole sector. The idea of conducting a bivariate analysis helps in identifying a gap between management and employee opinions that reflect at the same time how the strategy is put to operation. This fact helps in scanning and describing the general behavior existing for businesses in Lebanon to adopt new technologies as well as contemporary management practices.

The concepts under consideration are behavioral which either undermine or strengthen the b managers' attitude toward new concepts and technologies. Moreover, the behavioral characteristics match the business' requirements to successfully adopt e-business practices having in mind the wellbeing of internal as well as external customers.

Results describing the desired state as agreed upon by both managers and employees are depicted in Table 2. A set of fifteen questions were administered and the hypothesis were either accepted or

rejected, reflecting the gaps in attitudes which could indicate how managers will react toward the different concepts tested.

Table 2. Basic characteristics describing the desired state as pinpointed by performance appraisal used as a tool and as viewed by both parties.

Better horizontal and vertical communication

Improved employee morale

Reduced organizational costs

Increased employee awareness to quality standards

Improved quality of work

Enhanced effective problem-solving skills

Promoted personal growth and development

Increased job knowledge and awareness

Enhanced employee motivation and commitment

Better reward system

Better organization

The actual state was also described using performance appraisal with both sides agreeing or not. The following results were found:

# Areas of disagreement:

The following items were the resultant issues where a gap was identified, (anytime when managers agreed on an opinion with 75% consensus and above, employees agreed with 50% or less).

- Using Performance appraisal as a tool to evaluate the operation.
- Existence of written statements reflecting standards of work expected from employees.
- Supervisors providing feedback for employees' performance.
- Providing employees' training.
- Conducting needs assessments before training.
- Evaluating outcomes of training.
- Providing tools necessary for adequate performance.
- Employee involvement in finding causes to work-related problems.
- Existence of an established system to determine performance deviation.

These areas of disagreement when referred to the items of Table 2, one can detect several deviations that characterize the expected management's behavior. Such deviations have direct negative impact on the adoption of new practices. According to Scient corporation (2000), the electronic age demands new business actions to support e-business demands, for example,

- Value-based
- Intellectual capital and relationship barriers
- Customer and partner affinity
- First mover
- New non-traditional, and unpredictable competition
- Rapid, short, and iterative development cycles

Here, we observe that these factors necessitate an organizational culture suitable for creativity and innovation where employees find themselves in a healthy and pleasant environment. Not to forget that necessary resources are provided according to the realm of e-Business. Another observation is that customers are found at the center of attention of almost any possible competitor's plans. Therefore, a management behavior not based on an established management system; suitable to absorb the sudden impacts of the new technology with all what it demands from employee dynamic preparation, will certainly bring failure to the organization.

Implementation practices as advised by the Scient Corporation (2000), include an evaluation of the organization's readiness for e-Business across the following dimensions:

- Customer services (marketing, sales, distribution channels, call center, sales force, market, customer readiness, competitive positioning)
- Production (manufacturing, logistics, supply chain, development, R&D, products/services)
- People (culture, skills, learning, knowledge management, human resources, execu e commitment, training)
- Infrastructure (operations, finance, administration, logistics, investor relations, e-commerce infrastructure)

The demand on management here is clear. Deciding on a direction to take advantage of the opportunities, specify the required scope of the business by having a clear understanding of the current position of the business, develop and deliver applications that are action oriented, and enable the business by the adoption of adequate technology for these tasks. However, management can not take advantage of opportunities if operational gaps exist as was detected earlier.

Low and Siesfeld (1998) feel that the message to management is clear: "If a firm does not strategically manage, measure, and communicate about key areas of non-financial performance, its operating performance and the value of its securities will suffer."

Knowingly, customer perspectives, internal perspectives focused on key internal management processes, and innovation and learning are the complementary dimensions to the financial perspective of looking at businesses' performance (Kaplan and Norton, 1992). One can observe clearly that the current culture and the management system of a firm, that are highly behavior and attitude sensitive, may intervene positively or negatively on the adoption of new ways to do business. This is what determines the success or failure of adopting e-commerce practices within the e-business direction.

#### Conclusion

Lebanese managers in a selected sample of firms of the service sector are not aware of the existence of a gap in their organizations. According to Ado Mikdashi (1999), only 62.5% of the managers claim that they assess their firm's management system gap. 45% declare to have a system to detect internal deviations. 35% admit that their firm is satisfied when current standards are met. Other managers, who are aware that a gap exists, fail to acknowledge its magnitude and importance. In fact, 57.5% of managers take it for granted that the primary cause of low performance is lack of job knowledge and the way to perform it.

Now, to implement electronic commerce, three common phases are identified (Internet: Bryant, 1999). These phases are:

- Replacing the manual and paper-based operations with electronic alternatives.
- Rethinking and simplifying the information flows.
- Using the information flows in new and dynamic ways.

What these phases lead to is the extensive review of the current business model in its most interconnected details. That is, the application of a comprehensive performance measurement technique like for example, either HPT (based on gap analysis) or the Balanced Scorecard Model (based on an integrative outlook of the financial role with other complementary roles as discussed earlier).

According to Giannisis (2000), e-business processes are the set of business strategies, internal activities, and corporate practices that an individual company must undertake to participate in e-Commerce. Furthermore, an e-business is one which is implementing fundamentally reworked business processes internally and externally to take advantage of information to compete in the digital market-space. Again, here we observe the stress on the business management process that incorporates a firm's practices towards its constituencies and their preparation to meet the dynamic changes best represented by the change of demographics in the socio-economic environment of the business. To deliver customer delight through e-commerce necessitates a healthy organizational environment to the employees supported by an enabling technology.

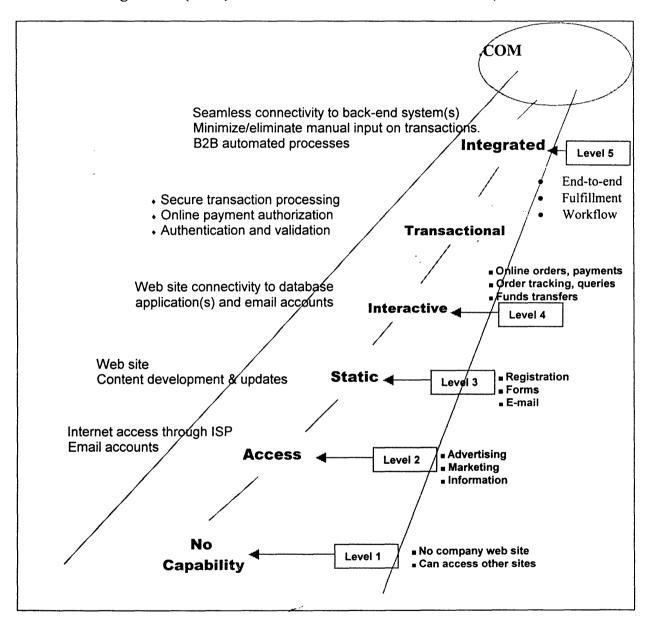
Finally, Bryant (1999) recommends managers in their intent to establish e-commerce "not to begin by looking for, or trying to sell, management on a new business model. If there is a problem with the existing business model, they must fix it. They should not try to create a new business plan and e-commerce strategy at the same time. They have to know what the existing value propositions are and stick to them." The advice, here, is not for Lebanese managers only but is generic. Applying an internal audit of the strengths and weaknesses is a very useful exercise to do a reality check and determine how the current core competencies match the opportunities that the Web is offering small as medium businesses.

Most Lebanese firms are found in the "Access and the Static" phases of the model proposed by Giannisis (2000). See Exhibit 4. However, although few Lebanese firms are trying to jump to phase 4 "Interactive", the efforts are still on the initiation stage, since the Lebanese customer still needs education and orientation on the security matters that form the first concern to do e-business transactions.

Lebanese managers, represented by a conveniently selected sample of managers from the service industry, reflect lots of wishful thinking rather than real understanding of the concepts of management necessary to compete in the realm of the Twenty-first Century. Their preparation to manage e-business still needs a major revision of their current business models to assess how they can adopt the necessary tools and requirements to conduct e-business and at the same time being in a competitive position to excel.

The priority in this case is not the adoption of the technology more than it is the management and preparation of their human resources. That necessitates the values practiced by a learning organization namely, what Peter Senge has proposed earlier.

Exhibit 4. e-Business Roadmap (Demetria Giannisis, President & CEO Chicago Manufacturing Center (MEP) – e-commerce Small Business Summit, 6/22/2000.



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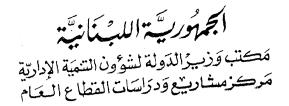
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