AN E-STRATEGY FOR ONLINE E-BUSINESS

Cain Evans

Both new E-business start-ups and current businesses that are investigating the possibility of migrating to an E-business system need to have an E-strategy. However, the potential E-business needs to decide on whether it will be focused on business processes or whether it will force action on the real business needs to sustain long-term longevity. To stay competitive today, businesses must realize that the customer is becoming more and more important. Hence the market has developed into a customer-driven market, with businesses becoming customer-centric, if they are not already, and not purely business-centric as in the past. This article investigates and develops a comprehensive E-strategy to enable a review of an E-business's needs. Issues that are addressed here will have an impact on how businesses achieve their desired goals. By following guidelines outlined in this article, which highlight both critical success factors and potential problems, an E-business will be able to evaluate whether it is ready to move forward and commit wholeheartedly to the new channel of business.

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*W*ITH THE EVER-INCREASING NEED for efficiency in a business and with the shift from business-centricity toward customer-centricity, it is important to first review all of the business's internal functions to determine where processes or structure can be improved. Conducting such a review will uncover certain shortcomings within the business functions. One key application for improving efficiency would be to harmonize internal business functions. However, this component requires integration into the E-business strategy.

It is important that a potential E-business focuses on developing a comprehensive E-strategy to enable the business to fulfill its future expectations. Before an E-business can achieve any great impact on the rich new markets that are continuing to emerge day by day, it is necessary for the business to develop its internal functions and then to integrate these aligned functions with the developing yet profitable E-markets to achieve market dominance.

Business vision is vitally necessary for developing an E-business strategy because the structure and the components of this strategy determine where the business is today and where the business will be in the future.

In this article on E-business strategy, a framework has been developed to help businesses fully appreciate these factors and learn how to view centricity in the new E-markets. With the information in this article, businesses can enhance their approach to E-strategy and gain the most from analyzing the requirements and the outcomes. The article assumes that businesses are looking to move from the traditional bricks and mortar structure to a more open, efficient, and profitable E-business venture.

OVERVIEW OF E-BUSINESS

Background

E-commerce enables companies to become more efficient and indeed flexible in their internal operations, enabling businesses to work more closely with their suppliers and, of course, to be more responsive to the needs and expectations of their customers.

According to a Forrester report, the volume of trade on the Internet is projected to reach $1.3 trillion in 2003. However, trade on the Internet, commonly known as E-commerce, is actually only a part of the change in how businesses are using and benefiting from the Internet.

Furthermore, as well as conducting E-commerce, and potentially just as revolutionary, organizations are deploying their basic business operations online, where the efficiency is far greater than following the traditional modus operandi. This shift in practice, aligning basic business operations online, is called E-business.

Businesses from every industry type are moving their business from the office to online operations; i.e., businesses are moving their applications onto the Web in different ways, including the use of intranets and extranets. Some examples of business operations that companies have deployed as E-business applications are:

❑ CRM (customer support — eCRM)
❑ Order processing
❑ Procurement (eSCM — electronic supply chain management)
❑ Travel booking (airlines and travel agencies)
❑ Financial trading
❑ ERP (enterprise resource planning)
❑ eBRM (electronic business relationship management)

Each of these applications has one component in common and that is a Web interface and, of course, the network communication infrastructure. Each application becomes an online system to perform actions in a proper sequence and to correctly deliver information to the right people at the right time. Customers and partners, not to mention employees, interact with automated business processes everyday, which can increase the speed of response time, improve productivity, and reduce an organization's overhead.

However, for an organization to shift its focus from operating as a traditional business type to an E-business, the E-business must define its practices and procedures as business processes that can be monitored, analyzed, and controlled. Nevertheless, where an application is already in place, a business process has already been defined and understood.

For applications, the first step in shifting the focus to an E-business is defining the business process, identifying the players and the information they need to do their jobs, and establishing the rules under which they work to accomplish the task.

Becoming an E-business is important if a business is looking to compete with other businesses in its industry or markets. However, the reality is not that a business deploys applications all at once go but rather in stages with the most critical first and the least critical at a later date.

The 21st century offers many new avenues of operation for businesses. The methods now being used to perform transactions between businesses and customers are more widespread, an important step in the development of business over recent decades. So why all of a sudden is trading over a network the "in thing"? We will refer to trading over a network as E-commerce, which has been branded as the business term for trading electronically — business to business (B2B) or business to consumer (B2C) or business to government (B2G).

Electronic commerce is a means of enabling and supporting changes in businesses on a global scale. Global scale refers to businesses that offer services or products in regions around the world. E-commerce enables companies to become more efficient and indeed flexible in their internal operations, enabling businesses to work more closely with their suppliers and, of course, to be more responsive to the needs and expectations of their customers.

E-commerce enables businesses to select the best suppliers regardless of their geographical location and to sell their products in a global market. E-commerce is a technology that is a development from a technological point of view as well as a business point of view and that will be here to stay for a considerable time if not permanently.

However, businesses that choose to regard E-commerce as an "add-on" to their existing methods for carrying out business will gain only a limited benefit from this technology. Nevertheless, it will be argued within this article that those businesses that benefit from E-commerce will be those that are willing to change their organization and business processes to fully exploit the opportunities available through the medium of E-commerce.

EXHIBIT 1 Level of Preparedness of E-Business Globally
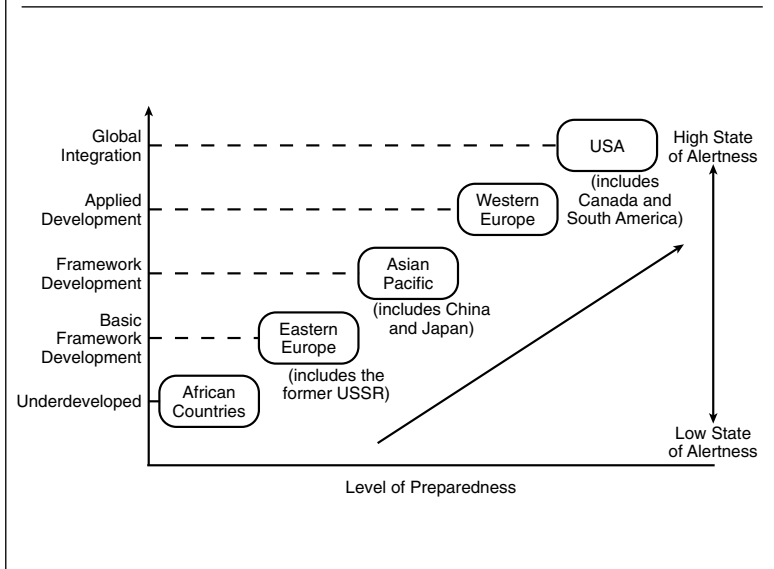
Objectives

The primary focus of this article is to provide a generic framework that can be applied or adapted to the needs of businesses that are in the process of migrating their operations to an E-Business integrated system. The article:

❑ Provides a review of E-business globally
❑ Develops an E-business cycle model
❑ Addresses the centricity issue by providing an E-customer centricity model
❑ Addresses how E-businesses can achieve best practice by fully integrating all of their processes so they can evolve towards an E-enterprise
❑ Initiates an E-strategy for technology to include development environments, tools, E-commerce applications, and network protocols
❑ Assesses the potential business impact of going online to carry out internal functions and the severity of the impact to each function

Introduction

The 1980s saw the widespread emergence of the mobile phone, which has revolutionized local and global communications more than anything since the telephone's invention over a century ago by Alexander Bell. It is clear that the current explosion of online E-Business has created numerous opportunities for companies to become global whether they are multinationals or local entrepreneurs. Both have the resource to become global and more com-

petitive by taking advantage of the technology that is available to them. The purpose of the Internet is no longer to socialize as suggested by films such as *You've Got Mail,* but to serve as a very serious resource that every type of enterprise can and needs to take advantage of.

The Internet is an omnipresent resource that can be accessed by any organization that possesses a basic computer system and a means of communicating with the outside world. E-commerce cannot be used on an ad hoc basis; E-commerce is a method or channel that an E-business can use to encompass advertising, buying, selling, distributing, informing, and delivering both goods and services to local and global customers and markets.

Although the United States has been the driving force behind the growth in Internet commerce since its early inception, there is still greater potential for exploitation of digital transactions and business process improvements. With growth globally expected to reach $1.2 trillion in 2002 according to Forrester, the exponential growth of the United States cannot monopolize Internet commerce, even though it is at the forefront of Internet commerce and E-business. The rest of the world, trailing by comparison as indicated in Exhibit 1, has not fully developed their collective government approach, legal frameworks, knowledge workers, and country and regional infrastructures to achieve the same dominance as the United States. Nevertheless, Great Britain, Germany, Sweden, France, and Denmark over the last two years have instigated initial frameworks that are available to businesses to attain control over the use and abuse of Internet commerce transactions.

In particular, Great Britain has implemented many measures to reduce the concerns that businesses currently have regarding security of transactions and infrastructure as well as to develop initiatives to combat the lack of knowledge workers to support the country's vision. Great Britain has introduced the Electronics Communications Bill (first quarter, 2000), which is divided into four main areas: cryptographic service providers (CSPs), electronic commerce data storage, investigations into protected electronic data, and telecommunications usage.

The CSPs are intended to provide trust by creating "certification" of a Web site. The U.K. government has opted for self-regulation to provide a suitable "kitemark," standard, such as the U.K. Consumers Association.

Businesses are looking to move from the traditional bricks and mortar structure to a more open, efficient, and profitable E-business venture.

The second part of the bill deals with the issues of electronic signatures being admissible in court. Current technology provides electronic signatures, which can seal an e-mail or other electronic document so that the recipient can both check that the document has not been tampered with and see exactly where the mail has come from.

The third part of the bill covers protected electronic data and deals with policing and security of information related to national security as well as to business security. The purpose is to have thorough access to any electronic "keys," encryption and decryption systems, necessary to apprehend either abuse or criminal activity over the Internet.

However, as depicted in Exhibit 1, there has developed a five-tier development cycle for the growth of E-business and Internet commerce over the last few years. This development cycle relates to the stages at which each group of countries have focused on Internet commerce, as highlighted by IDC and Forrester Research.

However, this focus, or refocus, on the needs of Internet Commerce is currently developing at a slower rate than elsewhere in the developed world. Although, the Asia Pacific region is receiving considerable investment by overseas companies that are looking to compete and develop markets such as Yahoo.com in China, and Microsoft and Oracle in all of Asia, this investment will continue to develop for the next three years at the same pace, according to Forrester, including the recent influx of venture capitalists (VCs) in

Asia. Nevertheless, the region has achieved some milestones such as achieving $20.8M in revenue in 1998, more than double the previous year, according to IDC, 2000.

INFONET AND E-BUSINESS
The following definition is given to highlight the difficulty of defining an E-business.

An E-business is the electronic integration of all operations within a business that link with customers, suppliers, partners, and employees. In addition to these components the definition also includes marketing, order entry, lead identification, stock tracking, order fulfillment, distribution, and sales support.

E-Business InfoNet
An E-business InfoNet (information network) provides uniformity in terms of connectivity of infrastructure for companies to electronically connect with both internal and external operations. An E-business InfoNet can make the transition from a traditional company to an integrated business containing means to perform tasks more efficiently and effectively giving the company competitive advantage in the E-market. The E-business InfoNet not only supports business processes (e.g., marketing, order entry, and stock tracking) but can make the process more efficient (e.g, Amazon.com and Dell.com).

Dell.com in particular has taken advantage of Internet commerce by integrating B2B E-commerce into its business process. Dell's main advantage over its competitors is its development of Premier Page program. The

EXHIBIT 2 E-Business InfoNet
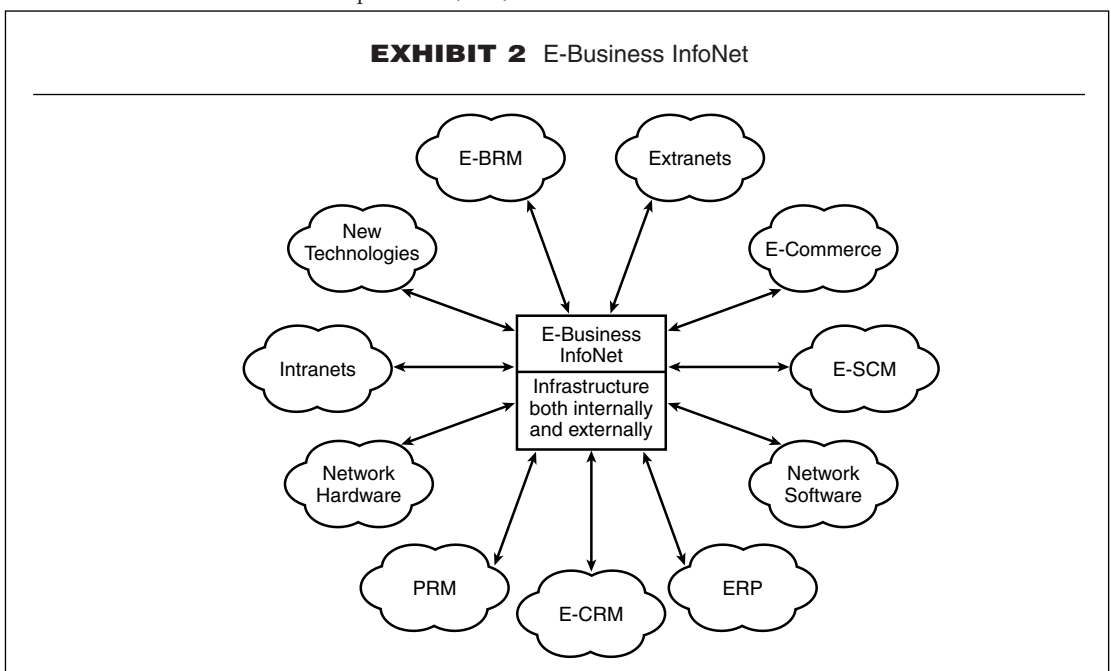
E-commerce is a technology that is a development from a technological point of view as well as a business point of view.

Premier Page system, which serves more than 5,000 U.S. companies, enables each customer to purchase, configure, and track delivery status, hence improving business process efficiency, cost reduction, and error reduction of purchases.

E-Business InfoNet Model

Exhibit 2 provides an example of the issues surrounding E-business InfoNet. An E-business InfoNet consists of components such as software, hardware, intranets, extranets, E-commerce applications and networking infrastructure.

Physical and Organic Components of an E-Business InfoNet

These days the complexities of controlling and disseminating information can be cumbersome at the best of times, but what is of importance is the application of information and how to connect to it from different points.

Physical components are:

❑ Network hardware (e.g., hubs, routers, LAN switches, and WAN switches)
❑ New technologies (e.g., WAP, PWAN, Infrred, and optical networks)
❑ Intranets and extranets

Organic components are:

❑ Network software (e.g., NOS)
❑ E-commerce applications (e.g., IBM Net Payments)
❑ eCRM (electronic customer relationship management)
❑ eBRM (electronic business relationship management)
❑ eSCM (electronic supply chain management)
❑ ERP (Enterprise Resource Planning)

Importance of E-Business InfoNet

One of the most important factors for most organizations will be the overall cost of implementing, running, and maintaining an E-business InfoNet. To ensure that the E-business continues to be efficient, the focus needs to be on its E-business InfoNet as this core component of the organization is the backbone of all electronic operations. Further, it is important also because its customers, suppliers, and partners will judge the E-business on the availability of the InfoNet. InfoNet downtime can be expensive in terms of lost sales and loss of competitive advantage. A typical example is Britannica.com, which lost customers due to poor infrastructure and forward thinking as

well as a lack of anticipation of needs of the InfoNet services.

There is also an important aspect to an InfoNet — its scalability. An E-business InfoNet needs to be highly scalable, and the InfoNet should be designed so that an extension can be applied as the E-business grows in size. The E-business InfoNet needs to be easily manageable, with a minimum of time, effort, and cost involved. Although this model is only a paradigm for an E-business InfoNet, it does provide a sound basis for development into a business processing system.

E-STRATEGY FOR E-BUSINESS

E-Strategy: The Focus

To plan is to foresee a future event over the horizon that will be brought into full view at the right time. However, it is quite common for businesses to lack a tactical and strategic plan when deciding on what to do next, whether it is in the short term, medium term, or long term. Exhibit 3 illustrates the finer elements of each of the components of the E-Strategy shown in Exhibit 4.

The term *vision* encompasses many factors such as ideology, intuitiveness, knowledge, foresight, and an open mind with a view to perceiving what may lie ahead. E-business vision is not exactly the same as an E-business mission statement, which is a more traditional method of seeing business in the future. E-businesses need to visualize the future from a strategic vantage point, as at the moment there are very few guides to aid E-businesses in developing frameworks and strategies and there seems to be a lack of formal boundaries to base future E-business around.

E-business has evolved, from a technological point, similar to traditional business, but with this evolution, the components are much more difficult to implement without a concrete framework and strategy.

Elements of E-Business Vision

There are four elements in a successful E-business vision:

1. Keeping abreast of advancement in technology
2. Defining the current scope of business
3. Defining the long-term strategy
4. Communicating this business vision internally and externally to all.
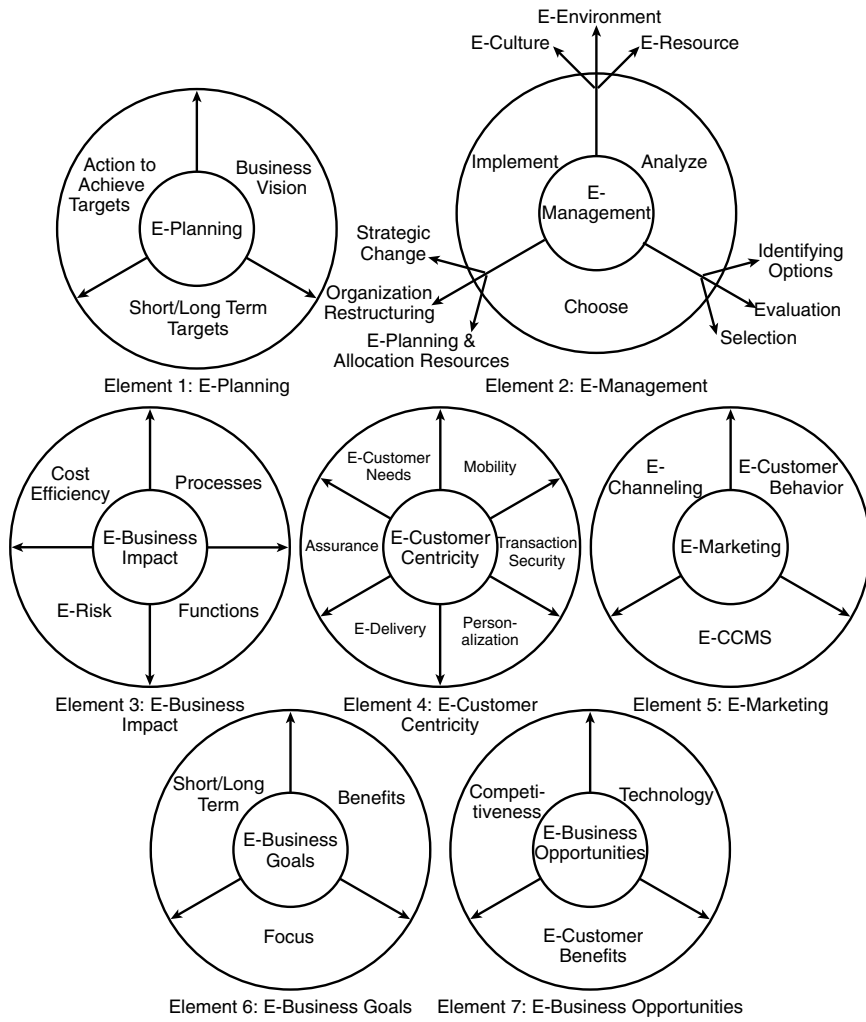
EXHIBIT 3 Elements of the E-Strategy

Element 1: E-Planning

- E-Planning
  - Action to Achieve Targets
  - Business Vision
  - Short/Long Term Targets

Element 2: E-Management

- E-Management
  - E-Environment
  - E-Culture
  - E-Resource
  - Implement
  - Analyze
  - Choose
  - Strategic Change
  - Organization Restructuring
  - E-Planning & Allocation Resources
  - Identifying Options
  - Evaluation
  - Selection

Element 3: E-Business Impact

- E-Business Impact
  - Cost Efficiency
  - Processes
  - E-Risk
  - Functions

Element 4: E-Customer Centricity

- E-Customer Centricity
  - E-Customer Needs
  - Mobility
  - Assurance
  - Transaction Security
  - E-Delivery
  - Personalization

Element 5: E-Marketing

- E-Marketing
  - E-Channeling
  - E-Customer Behavior
  - E-CCMS

Element 6: E-Business Goals

- E-Business Goals
  - Short/Long Term
  - Benefits
  - Focus

Element 7: E-Business Opportunities

- E-Business Opportunities
  - Competitiveness
  - Technology
  - E-Customer Benefits

EXHIBIT 4 An E-Strategy for E-Business Success

- E-Strategy
  - E-Marketing
  - E-Life Cycle
  - E-Business Goals
  - E-Customer Centricity
  - E-Planning
  - E-Business Impact
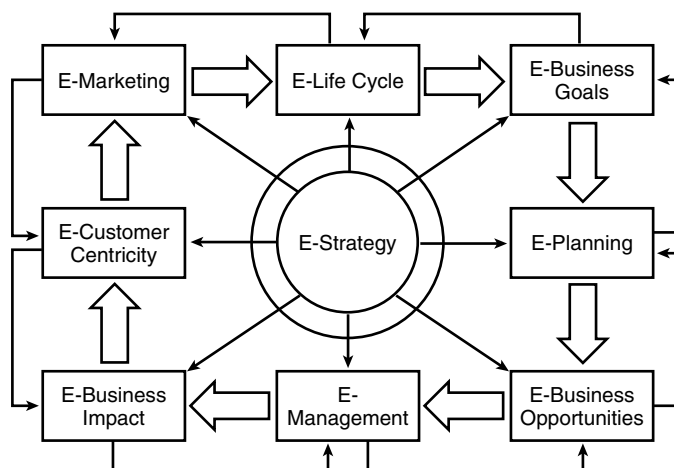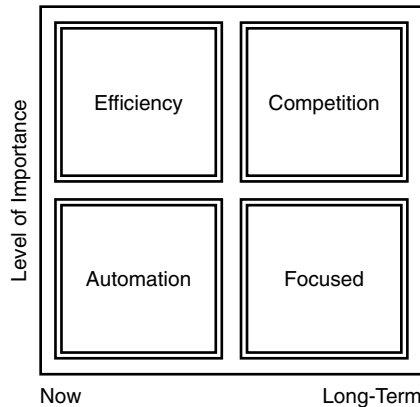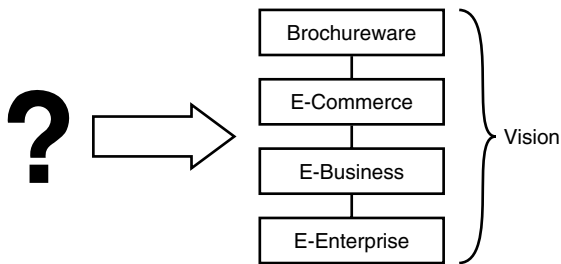 - E-Management
  - E-Business Opportunities

EXHIBIT 5   The Window Model — Long Term

EXHIBIT 6   E-Life-Cycle Model

Short-Term and Long-Term Targets

An E-business in the immediate future i.e., the short term, needs to assess its approach from all angles. In the short-term the importance lies in: acquiring the right technology at the right time; acquiring knowledge workers who can understand both the complexities of the technology as well as business needs; being able to understand the new emerging E-markets; evaluating possible competitors; providing goods and services at the right price; and most importantly — being focused. The Window Model (see Exhibit 5) highlights the needs of the business over a long-term period.

However, in the long term, goals will need to be clearly defined and categorized. The E-Business will need to converge many new technologies. Those that are around today and those that will be available in the near future need to be adapted to ensure that the business is more efficient and automated and that existing systems and processes are migrated to the new business system.

Also, for an E-business to continue to be more competitive and lasting and weather resistant to economic downturns, the E-business needs to have an E-strategy framework in place. The second part of the Window Model highlights the focus on long-term business drivers.

Fundamental strategic questions are:

❑ Where are we now? What is our situation?
❑ Where do we want to go?
  – Businesses we want to be in and market positions we want to stake out
  – Buyer needs and groups we want to serve
  – Outcomes we want to achieve
❑ How will we get there?

E-Business Cycle

In an ever-changing world nothing has the power to withhold change whether the change is due to internal restructuring of businesses or advancement in technology. It is of importance to any business no matter what the type and size of the company. There is a fundamental principle at stake — that principle embodies many factors that are in a constant flux. In essence, the fundamental principle of all businesses, especially now with the advent of E-trading, is ultimately to make a profit and achieve a higher level return on investment ROI in a business venture. Exhibit 6 illustrates the E-life cycle of a business in the new global E-world.

The E-cycle shows the stages that a typical E-business may go through. The introduction period may include developing an E-site, commonly known as a brochureware site, that only offers information on products and services but has no apparent business use except to publicize a business's product. An E-commerce site, on the other hand, has developed some restructuring to enhance its capabilities to include online payments and the ability to complete transaction of sales online. E-business, however, has developed around the processes where the majority of its operations are automated. Supply chain management (SCM), customer relationship management (CRM), and enterprise resource planning (ERP) are just a few of the operations that would become fully automated and integrated within the business systems. An E-enterprise is a businesswide implementation of automation: financial, distribution, enterprise reporting, manufacturing, payroll, human resources, service management, electronic commerce, and Internet self-service are all a part of the E-enterprise experience.

EXHIBIT 7 Impact on an E-Business

Function / Process	Major Impact	Minor Impact
Marketing	Yes	
Sales	Yes	
Supply chain management	Yes	
Pre-sales		Yes
Sub-contracts		Yes
Online transactions	Yes	
Product services	Yes	
Product development		Yes
Transport / Logistics	Yes	
Procurement	Yes	
Accounting	Yes	
Human resource management		Yes

Why migrate to E-business?

❑ To create a convenient buying experience
❑ To increase revenues through E-business channeling
❑ To reduce internal costs
❑ To develop customer loyalty through personalization of services

E-business challenges for the millennium are:

❑ Understanding user needs
❑ Integrating technology
❑ Defining project scope
❑ Providing security for transactions
❑ System complexity

E-Business Impact

Transferring to a completely new form of business does have its drawbacks. An E-business needs to assess the potential impact on its business processes internally as well as externally. Areas that will be affected are shown in Exhibit 7.

E-Risk

The level of risk for a newly developed E-business is really dependent on the level of involvement in this new technology. Within the organization there has to be a control mechanism that enables each function to both perform and take a degree of risk which invariably can amount to millions of dollars. But E-risk contains new forms of risk such as:

❑ How long will the new wave of business take before we can see a return?
❑ How will setting up an E-business integrated system benefit our business?
❑ Can we trust "outsiders" to secure all of our online transactions?
❑ Do we have the right software and hardware to become competitive and enjoy an advantage over other businesses in our field?
❑ Are there any legal recourses for protecting our site and products over the network?
❑ What are our future infrastructure needs when our E-business becomes a major player in the E-market?

E-Customer Centricity

Although the traditional methods for attaining a rich customer base have been well documented and studied for many years, they do not, under the current environment, provide the full E-needs of a customer. In contrast, E-business has the potential to reach a wider range of customers from every walk of life. However, it is important for an E-business to ensure that its E-commerce facilities (1) inform, (2) attract potential customers, (3) are easy to use, and (4) improve the customer experience online. To make the customer

EXHIBIT 8 E-Customer Centricity Model
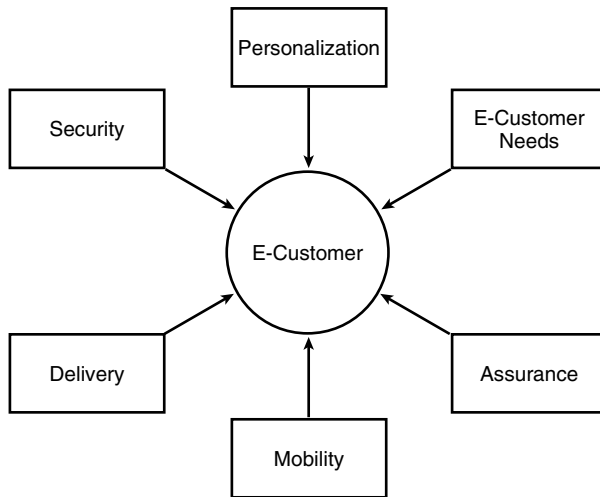
EXHIBIT 9 E-Customer Web Centricity
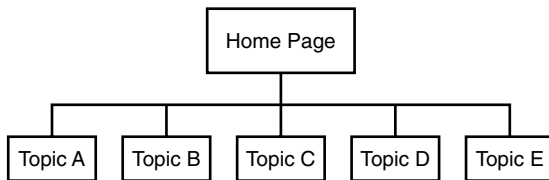
experience more meaningful, the E-business needs to make its presence more immediate and personal to all those who use their site to purchase goods from its E-business (see Exhibit 8).

An E-business, to ensure competitiveness and enjoy an added advantage over its competitors, needs to provide a personal I.D. and password to the E-customer that would need to be unique to enable E-tracking of goods purchased as well as E-customer behavior. The purpose of using such a technique is to focus on the E-customer as an individual and provide a particular solution if required. Exhibit 9 illustrates an example of personalizing a site for a particular group of E-customers.

Improved Competitiveness and Quality of Service

Implementing an effective E-strategy will improve competitiveness by creating closer links with customers either locally or globally. This positive approach to improving the business services and quality of its products will, in the long run, become its trademark in the new and emerging global E-markets.

E-Clock

The E-business is always open for business, as depicted by the British sitcom "Open All Hours" with its catchphrase "are you being served...." Since the E-business is essentially based on bits and bytes, there are no sleeping patterns that must be adhered to. The E-business is essentially open 24 hours a day, 7 days a week, 365 days a year without having to take a day off.
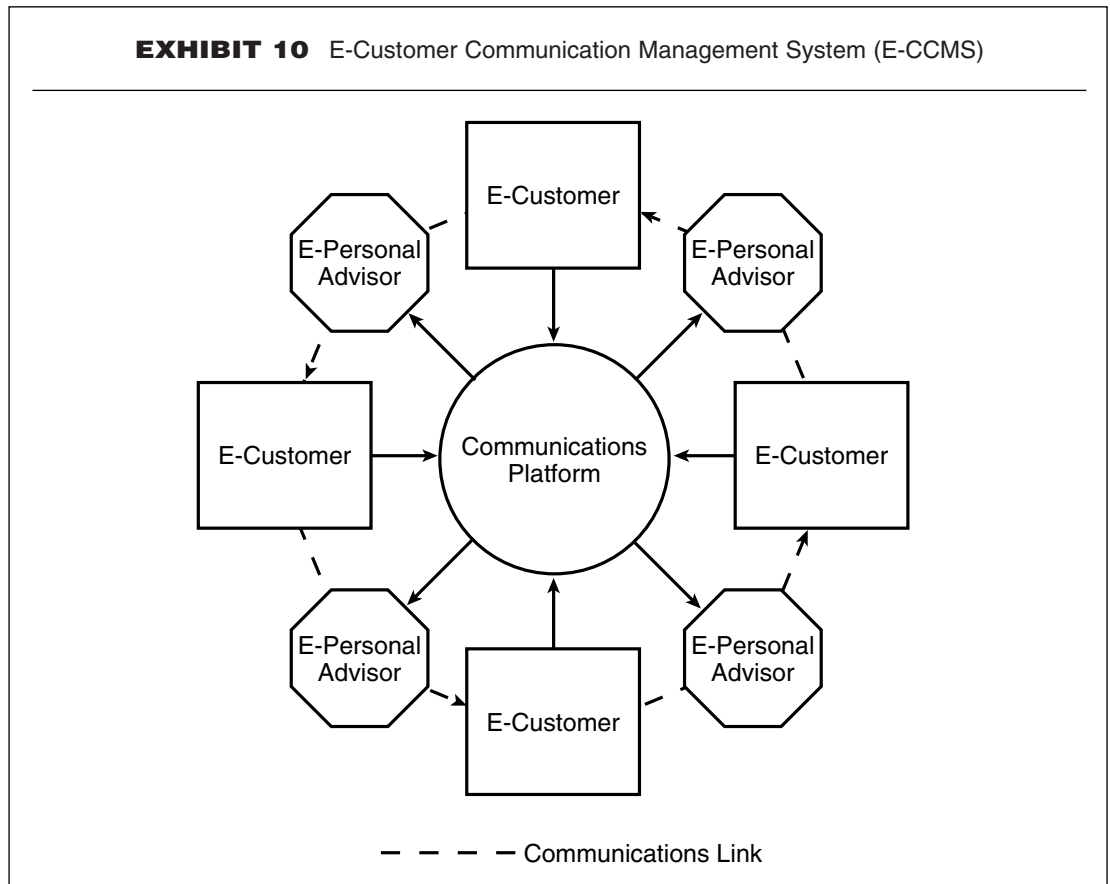
Focusing on E-Customer Needs

One of the main purposes of E-trade and E-business is to improve the efficiency and relationship between the business and the customer, whoever the customer is. One of the primary focuses, if not *the* focal point, is to compute and track the number of visits and the usage of an E-business site. This involves tracking the number of visitations; the amount of sales per day, week, or month; the E-buying trends of the E-business customers; and preferences. When these factors have been encapsulated, the result is the behavior of the E-customer.

The developing relationship with the E-customer needs to be addressed to improve the effectiveness of the online experience. E-CRM is a new breed of tools that help E-businesses provide a better approach in dealing with customer relationships. Some of these elements include: (a) E-ordering online; (b) E-customer discount; (c) E-phone/E-fax transactions; (d) E-conferencing, logging calls, organizing accounts, developing a contact database, reporting, monitoring traffic, and e-mail. Exhibit 10 illustrates this E-business concept.

To Be an E-Market Leader

Most, if not all, businesses, that engage in E-business want to be the E-market leader in their field, but wanting this means updating and introducing new ideas and concepts. These E-concepts are applied to E-trading over the Internet. Each E-business needs to differentiate itself from the others to achieve a percentage of the E-Market. E-businesses need to not only sell their product but, more important, to become more efficient than the traditional form of business.

The level of efficiency the new E-business must attain needs to consider fundamental areas including the type of culture that is necessary to ensure competitiveness and the cultural needs of its knowledge workers, who will become indispensable. CRM is fast

EXHIBIT 10   E-Customer Communication Management System (E-CCMS)

E-Customer

E-Personal Advisor

E-Personal Advisor

E-Customer

Communications Platform

E-Customer

E-Personal Advisor

E-Personal Advisor

E-Customer

– – – – Communications Link

becoming an invaluable tool and asset in reducing inefficiencies within CSM, in improving SCM for closer cooperation between suppliers, and most importantly, in providing knowledge that the E-business needs to implement to achieve this goal. If, and only if, an E-business can implement a new approach to business today does it have a good opportunity to improve its presence in the future.

Improving E-Customer Behavior

Businesses that are in the process of implementing an E-strategy need to address how this change will improve the customer relationship. Traditionally, customers look for quality in a product and indeed a service, the value of the service, range of products an E-business has, information available to the E-customer on both products and services, and in the E-world of bits and bytes, trust between the E-business and its customers. For all intents and purposes, E-customers want to use the best channel for purchasing what they want; E-Businesses need to organize how they will achieve a successful E-channel.

E-Channelling
The traditional method of distributing goods is physical such as post, expensive trailers, shipments to other parts of the world, and so on. Now, businesses no longer need to rely on these methods of transporting goods. E-business can use the added opportunity to deliver goods through a new and more efficient channel, and that is the Internet (see Exhibit 11).

EXHIBIT 11   E-Delivery of Online Requests

| Request | Process | Delivery | Receiver |
| Online | OLTP | Network System | Node/PC |
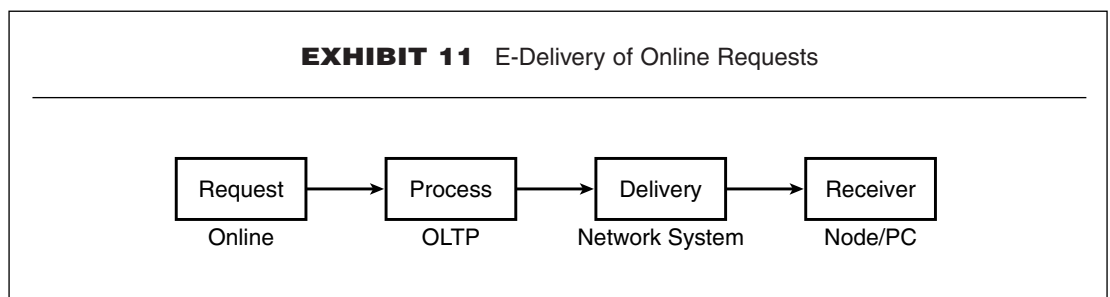
MOVING E-BUSINESS FORWARD

The E-Bandwagon

The surge of E-business over the last two years is not dissimilar to the Australian gold rush several hundred years ago. However, the analogy stops here. As we have noticed, businesses of all shapes and sizes have scrambled for dominance in the E-world, no matter the type of enterprise being established. Nevertheless, businesses are now becoming conscious of the fact that creating an informative Web site is not sufficient to fulfill the need for a successful E-business.

The challenge is to create an E-business that is both efficient in its delivery and integrated into the business system. However, many newly formed E-businesses have failed in their endeavors because they attempted to apply traditional concepts to an abstract scenario and their business goals were not:

❑ Thoroughly investigated
❑ Analyzed for internal restructuring that would be needed
❑ Appointed a high level strategic plan and team
❑ Based on sufficient market analysis

These are some of the difficulties that have caused problems for a newly formed E-business. Now it is time for all businesses to realize what the limitations are and to organize a successful E-strategy that is maintainable and workable both within the organizational structure and with external partnerships.

Goals of E-Business

With any new approach to creating opportunities, the potential E-business needs to ask itself questions to ensure that its business takes full advantage of what is available in the E-world. The goals to be defined include: (a) the portion of the business that E-commerce will represent in 12 months, 18 months, and beyond; (b) the volume the new E-business expects over the next 12, 18, 24 months; (c) the level of ROI the business expects; and (d) the cost savings the E-business can expect through its use of new technology.

In addition to these basic questions, the E-business will also need to address the following issues to maximize the full potential of both the electronic scene and its internal performance to further enhance the customer experience.

❑ Know your competitors

❑ Create an E-competitor-centric strategy
❑ Create a real-time inventory system for business products
❑ Formulate a business focus
❑ Handle customer expectations
❑ Standardize technology policies company-wide

Specific benefits for an E-Business are:

❑ Reduced advertising costs
❑ Improved market intelligence and strategic planning
❑ Niche market opportunities
❑ Equal access to E-markets
❑ Access to new E-markets
❑ Improved communication flow internally as well as externally

E-Business E-Barriers

An E-business needs to be dynamic, that is, able to adapt to emerging markets no matter where they may be in the global marketplace. Traditional commerce and E-commerce in reality do not differ in their practices, i.e., buying and selling goods or services. There are a number of implications of E-commerce that an E-business should note.

Many small and medium-sized enterprises SMEs, and larger corporations are still thinking that E-commerce is linked to their IT function to be used as just another system of work. This is not the case. In reality, E-commerce is a business strategic issue for every type of organization.

One of the effects of E-commerce in an organization is that electronic information on transactions may be collated by any person who is a participant in the transaction. The transaction may be:

❑ Used by vendors to understand client buying patterns
❑ Analyzed or data mined to determine more global patterns of client behavior
❑ Made available to third parties, subject to privacy requirements, for targeted advertising

Furthermore, holistic planning is a strategically important factor as E-businesses are moving in E-markets and across transnational borders (TNB), bypassing the "normal" routes of business. Most of the world has not wholeheartedly implemented E-commerce frameworks so that an E-business can operate, and no guidelines exist for successfully implementing and integrating E-commerce.

Also, to introduce an E-commerce system within an E-business, E-barriers have to be

Those businesses that benefit from E-commerce will be those that are willing to change their organization and business processes to fully exploit the opportunities available through the medium of E-commerce.

borne in mind and are of concern to the business.

Important factors to consider with holistic planning are:

❑ High or uncertain costs of implementation of E-business and lack of proven benefits in industry
❑ Low use of E-business by customers and low use of credit cards
❑ Lack of budget and E-business planning
❑ Lack of standards and systems needed for full integration
❑ Internal control and compliance issues of global business
❑ Potential risks of E-business
❑ Lack of security and privacy and lack of enforceable laws
❑ Legalities of doing business in another country
❑ Different tax laws in different countries
❑ Concerns over intellectual property rights

E-Business Opportunities

Many online businesses have taken full advantage of global presence by aligning themselves with partners that are within their own sphere of business. Exhibit 12 highlights some of the golden opportunities to compete in this ever-increasing competitive world.

Opportunity Technologies

With the ongoing development of an E-strategy, one of the core components is technology. Technology initiatives need to address the method of network communication, type of protocol to be implemented, and whether to implement ATM or ISDN depending on the size of the business. Within the E-strategy, it is also necessary to implement connectivity equipment — server hardware and software, e-mail server, firewall technology to protect information within the organization, transaction processing authority (e.g., Visa and MasterCard), and certifying authority to protect information arriving at the organization. Exhibit 13 is a taxonomy of products and examples of products relating to each category.

CONCLUSION

We have seen an increase in businesses wanting to embark on a journey into the E-world; however, upon arrival they are faced with many difficulties. The primary reason is poor analysis of what is required to sustain identity, and it cannot be viewed as a wait-and-see situation. The success of any E-business depends on whether it has an E-strategy that focuses on two important issues: (1) preparing business processes to become customer-centric and (2) acquiring the right technology at the right time.

Businesses need to address specific issues before even beginning to implement an E-business such as: (a) what is our business vision, (b) what are our expectations, (c) who and where are our customers, and (d) what impact will E-business have on our current business functions and processes.

Only after a thorough analysis of the entire process, i.e., looking inward and then looking outward, can a successful implementation take place. The success entirely depends on senior management's understanding of the needs of the E-business and the reevaluation of the business's internal systems.

Finally a note on E-business process. It is of great importance to the E-business that the systems are defined in a way that enables redefinition, reprogramming, reprocess orientation, and remanagement of internal business systems. The purpose here is to actually acknowledge that the online systems will need

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EXHIBIT 12 New E-Business Opportunities

E-Business Opportunities	E-Customer Benefits
Global presence	Global choice
Improved competitiveness	Improved quality
Mass marketing	Personalization of services
Improved supply chains	Quicker responses to needs
Cost savings	Price reduction

EXHIBIT 13 E-Strategy Techology Taxonomy

Category	Description	Example Technologies
Browsers	Provides Internet browsing	Netscape, Internet Explorer, Copernic
Internet servers	Serves browser requests	IIS, Oracle WebServer, Linux, Apache
HTML editors	Facilitates Web page design and development	Flash V3, GoLive V4, Fireworks V3, Dreamweaver V3, Frontpage 2000, etc….
Site management tools	Manages hyperlinks and site structure	Interleaf Cyberleaf, Frontpage
Analysis tools	Analyze site usage, access logs, and other statistics	Web Promo, Open Market Web Reporter
Internet database connectivity	Access to internal back-end databases	Allaire ColdFusion
Firewall software	Filters traffic between internal networks and the Internet	Checkpoint Firewall-1, Raptor Eagle, IBM NetSP, WebTrends for Firewalls and VPNs V1.2.
HTML converters	Convert word processing documents and other common office tools	MS Internet Assistant for Word, Excel, Powerpoint, etc., Lotus Notes' Domino
Web accounting	Handles accounting transactions in a business system	Account Pro 7.30, Easy Money V2.1, Firm POS v1.0, NTPayMaster V4.00, Quicken. Expensable.98
Web site analyzers	Analyze and log customer access and usage	WebTrends Log Analyser V4.52, WebTrends Professional Suite V3.1,
Information system development	Develop E-Business IS's	Arcplan dynaSight Development & Administration V2.4.0.33, Arcplan dynaSight Server V2.4.0.33, Arcplan Insight Developer V2.4.0.33.
MSOffice plug-in	Added feature for Web	Jiti Builder for Microsoft V1.0.
Fax software	Transmit E-Faxes	Impact Terminal Fax Server V2.54, Impact Fax Broadcast V2.30.
E-commerce software	Automate transactions	IBM Distributed Computing Environment V2.2, IBM Net Commerce Pro V3.2, IBM TXSeries V4.3IBM Payment Server.
SMTP gateways	Transfer e-mail messages	MS Exchange

to change regardless of the size of the impact that the change may create to the E-Business. It will be necessary for the E-Business to adopt a proactive approach to redefining business processes and technology integration so that the E-business keeps itself updated with the global changes that will affect the viability and sustainability of the enterprise. ▲

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