

The Main Management Processes in the Elaboration of E-business Strategies

Information Technology and Management

This article's main concern is to context the current market share scenery of the organizations in face of the information technology. The author tries to demonstrate the main points that organizations should considerate in the elaboration of e-business strategies to minimize and to avoid possible problems in their implantation.

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1. *Initial Panorama*

Change. This is the world order of the moment. The process of transformations is something irreversible. Considering this fact, the current organizations need to adopt a flexible posture as well as agile and internally applicable methods in the structure as a whole from the strategic level to the operational level, and also external through alliances with partners, in this case, the vendors, and being mainly faithful to their customers.

The information technology is one of the generating factors of present changes and one of the rules, as tools that should be adopted by organizations, of several degrees, that intend to have in their capacities, something competitive so that they can maintain and increase their market share and, mainly, survive in this current global scenery.

In this new economy, the use of Internet - the largest communication media of the world - with commercial purposes, is a start up form for the business. The e-commerce is something that grows gradually, with clear presence in organizations, in the most sections of the economy that use to think globally and to act locally, through their respective sites in Internet.

E-commerce means the development of commercial activity and transactions through an electronic way, considering several activities as:

- Commercialization of goods and services through an electronic way;
- On-line distribution of digital content;
- Financial transactions and of stock exchange through an electronic way;
- Processes and operations of public character.

Besides those activities, the e-commerce plays aspects of commercial support, as: search systems, the formal negotiation through an electronic way, the on-line (or not) payment, and the distribution of the goods and offered services.

The universe of electronic business is being enlarged and reformulated daily due to the access speed and of information change considering the progress of the digital technologies in organizations or in residences.

In a research recently accomplished by the Forrester Research Institute, the world net of computers moved about 80 billion dollars in sales in the year of 1998, passing for 170 billion dollars in 1999, 390 billion projected for the year 2000, with expectations to arrive at 3,2 trillion dollars in 2003.

In percentage, that represents 0,1% of the world sales in 1998, passing for 0,3% in 1999, 0,6% projected for the year of 2000, 1,5% for 2001, 3% for 2002 and 4,7% of the world sales for 2003, according to the graph 1.

See Graph 1

The esteemed tendency for the E-business market of the Forrester Research Institute is modest, because, according to the Gartner Group Institute, until the year of 2004 that market will represent 6,9% of the global economy, what means 7,3 trillion dollars. If those estimates are correct, the organizations that don't stick to those new technologies and processes won't resist for a long time in its current market segment with its current administrative practices.

It is noticed, then, that embarks in this digital market is, without a doubt, tempting, turning themselves comprehensible investments in E-business. However, the conception of how it is complex is what varies, which requires a previous diagnosis of the situation and of the organization's processes looking for use this technology, because the traditional companies are not capable of using the e-commerce, since the processes that sustain it are different from those practiced. That is, the enterprise structure needs to be evaluated according to its automation degree, to proceed with the implantation of those new technologies, that are not compatible with the processes and existent cultures in organizations.

2. The Main Management Processes in E-business

This new technological and management structure needs, for its efficiency and effectiveness, consider ten fundamental processes for the elaboration of a e-business strategy. They are business plan, infrastructure, human potentials, integration, outsourcing, development of the application, management of the system, safety, costs and marketing strategy.

Such previously mentioned points have their particularities and different importances, but joined to a system called e-business. The understanding of those practices seeks to provide, to the executives of Information Technology (IT) the reduction of the problems faced in the elaboration and in the implamation of an e-business strategy.

However, the e-business strategies vary among the companies, as a study accomplished by the Informationweek-USA* aims, which demonstrates the different structures of electronic business that the companies are adopting to be in Internet, as it is verified in the graph 2.

See Graph 2

According to a study accomplished by The Yankee Group, institute of researches specialized in telecommunications, in November of 1999, the three largest problems of Internet, pointed by more than 30% of the interviewed executives of the Information Technology are: lack of safety, low reliability and unexpected acting. In smaller scale, 18% of the interviewed group believe that the lack of readiness is also a great challenge to be won by the world net of computers. And the shortage of financial resources, of telecommunications infrastructure and the lack of the user's acceptance are smaller barriers, according to more than 25% of the professionals.

However, the Informationweek Brasil Magazine, when accomplishing a research with 88 IT executives, highlights the main difficulties found in the implamtion of an e-business project in Brazilian corporations, as it is observed in the graph 3.

See Graph 3

Considering those problematic facts in the information technology area, it is described in this article the ten fundamental processes for the elaboration of an e-business strategy, as follows:

2.1. Business Plan

The business plan details the general managerial concept behind a planned business. It supplies an exact summary of the economic circumstances, of the specified goals and of the necessary resources. The business plan forces managers to contemplate systematically about their ideas until the last consequences, it identifies knowledge gaps, it demands decisions and supports the enunciation of a well-structured and focused strategy.

During its elaboration, alternatives approaches emerge successively and are appraised, and obstacles are identified. With that clear analysis of the situation, the business plan becomes an invaluable tool to overcome problems.

When the organization sets up the e-business project, it should trace a plane according to its business focus, added with the strategies of sales, public-objective definition, as well as the macro and micro analyses of the environment.

The conception and the understanding of the decision variables (what, where, when, who, how, how much) according to the organization's mission and the vision are fundamental, as well as the definition of the investment value and the one of the financial return that are financial administration's postulates. Considering this last one, to have a wider notion of its importance, a research accomplished by the InformationWeek Brazil Magazine, based in 140 IT executives, highlights how the developed business in Internet represent in percentage today to the revenue of its companies (in the graph 4) and for the next two years (in the graph 5).

See Graph 4 and 5

After making a comparison between graphs 4 and 5, previously presented, the growth of the percentile of the companies revenue is analyzed corresponding to the e-business investments. As it is demonstrated in the table 1.

See Table 1

It is noticed that for the next two years, more than 41,0% of the companies will have their electronic business representing more than 10,0% of the revenue. This evidences investments in e-business strategies from the companies in a larger proportion, turning this market more and more attractiveness for implamtationers of e-business solutions.

2.2 Infrastructure

There are many ways to begin an electronic business, one of them is to define the necessary technologies to guarantee the constant readiness of the WEB services, as well as a good answer time of the equipments, during the access picks. Behind the WEB platform, it's possible the existence of servers with purposes of production, of firewall, of development and of

tests, executing and operational system according to the strategy, besides database and cryptographies. The implantation of Intelligence Business and Datawarehouse systems are ways to personalize the attendance services to the customers. Talking about structure, it's important to consider the scalability, that is, it's important to have a system that is capable of making updatings and improvements at the hardware units

2.3 Human potentials

The human potentials requested in an e-business strategy should have, at least, computer science and communication networks notions, as Internet. However, the most important is not to be a technology specialist but to possess some trainings as leadership, to have an enterprising spirit, creativity and agility. Another important caution is to place executives controlling specific areas, as finance, technology, marketing and sales units. For a specific project of business to business (B2B), for example, it is essential that the team learns, as fast as possible, the new sales strategy of the products in Internet for start up the project. Training investments, training courses and wages can be another interesting strategies even to hold professionals in the organization as to maintain the enterprise's quality level, that is, it means the capability of the organizations to retain and to draw talent professionals.

2.4 Integration

Organizations are always searching in the technology the integration of their management systems. In this context, the ideal hypothesis of an e-business strategy would be even a business to business (B2B) operation as a business to consumer (B2C) operation, being these systems addressed to a central database that would be interlinked to other organizations` computerized systems, as: ERP solutions (Enterprise Resource Planning), supply chain (chain of supplies), CRM (Customer Relations Management), datawarehouse and business intelligence systems, among others. This hypothesis is one of the most modern models of integration and dream of ten to each ten IT executives, according to the InformationWeek Brazil Magazine.

2.5 Outsourcing

There are, basically, three forms of outsourcing a business-to-business operation. The first one is to hire a supplier, called ASPs (Application Services Providers) that can give the whole infrastructure and support for the applications that are runned in the environment. Another outsourcing front is ITO (Information Technology Outsourcing of the IT area) that supplies the infrastructure for the business. And the third one would be BPO (Business Process Outsourcing or outsourcing of the business processes) that supplies solution for some processes of the company as purchases or customers attendance. Finally, the outsourcing in an e-business strategy should be centralized in the activities that are not essentially linked to the organization's business, that is, in its main activity. In this way, a research of the InformationWeek-USA considered that there are three main reasons that take a company to outsource its e-business area (check in the graph 6).

See Graph 6

2.6 Development of the application

That point is essential to do an interlink with the external environment. There are options. The first one is to develop a private WEB application that will be exactly as the organization imagined, but it can cost a long time and money. Another option is to integrate market products to allow the relationship of its business with other companies. The third option, more common in the process of an e-business strategy is a mixed one between the two previous options. Thus, despite the mark or model, it is easy to find tools and knowledge that are fundamental to accelerate an e-business project. So, selecting partners in the market should be the first given step.

2.7 Management of the system

The management of a pro-active environment is the one that indicates a possible mistake and allows a preventive solution. The first step is to address the environment. In the planning phase, an useful life should be specified for the hardware, at the same day of the purchase. For avoiding unpleasant surprises, it's done a load and depreciation simulation, before placing the site in the air.

The attendance of the system is efficient for the detection of possible mistakes in the e-business environment, but it is still a high cost solution.

2.8 Safety

In the most e-business operations, mainly in the business to consumer area, the safety is still an obstacle. Except for the banks and few virtual stores – which have extreme concern with that item - the other structures don't care about it. It's important to highlight that the safety is different for the user that buys through Internet and for those who make business among companies. In the B2B relationship it is easier to treat the subject, because the company knows its consumer and has a defined public.

The data safety in the business to consumer system is not efficient. An efficient alternative would be to acquire a well-configured and evaluated firewall system for a specialized consulting. Another tactics would be to share information with the Webmaster of the organization, responsible for the E-business, with the purpose of activating the process speed through new products of the market, cryptography, safety connection and access by password using. Such mechanisms means larger integrity to the data.

A research of the Internet Security Systems - ISS highlights how the investments in technology information safety is incipient in Brazil, and the great majority of the Brazilian companies (66%) invest less than 5% of the technology area budget in safety, which is demonstrated in the graph 7.

See Graph 7

2.9 Costs

In the case of business-to-business systems, the infrastructure costs in hardware, software and services are intense. But, most of the expenses in the business to consumer systems goes to the marketing area. Because, in this case, it is more important to understand which is the essence

of the business and who is the customer to be assisted. When the organizations invest in an e-business strategy, they need to understand that, besides the gradual reduction of costs, revealed in the financial planning with its products, they should also look for more and more agility and safer resources in the negotiations with others.

2.10 Marketing Strategy

In a marketing planning, the production of advertising campaigns for the business to consumer sites is completely different of doing marketing campaign for an operation of B2B, because this last one is about partners and vendors, and the first one works direct with the final user, that, if it is not very well specified, it can generate high investments in advertisings, sometimes unnecessary.

In this management process it is verified the need of determining which is the desired image to the target population, through the mark element or through the special resources, considering strategies addressed to the product, the price, the distribution and the communication.

The ten-presented processes were independently demonstrated. However, they are subsystems of an e-business strategy. The approached practices are not unique and they don't possess a rigid sequence of execution and it's possible to incorporate others according to each organization's need, in order to reach the objectives specified in the manager's strategies.

3 Final Considerations

The investigation of elaboration processes of an e-business strategy leads to the need of giving more attention to its complexity, as well as to check out the continuous evolution of the information technologies, so that organizations can stay in their respective markets. Thus, according to the report emitted by Gartner Group, in 1999, 75% of the e-business projects will fail because of a poor planning and a non-realistic expectation about the new technologies. A lot of companies that implement an e-business strategy don't understand the new technologies behind that concept. However, such companies are so dazzled with those technologies that they use planning strategies again and surpassed business.

It's important to highlight that e-business is a way to reach the ends, and not the opposite, as well as the adoption of the strategy that doesn't substitute the good management of projects and processes in organization.

Finally, the understanding of the ten management processes for the elaboration of an e-business strategy is a form of obtaining competitive advantage, if this is joined to the talent and the involved people's talent and creativity.

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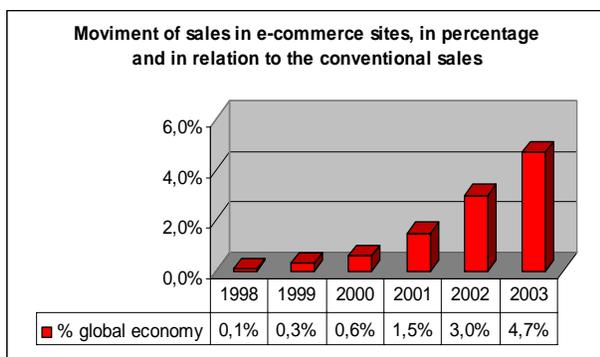
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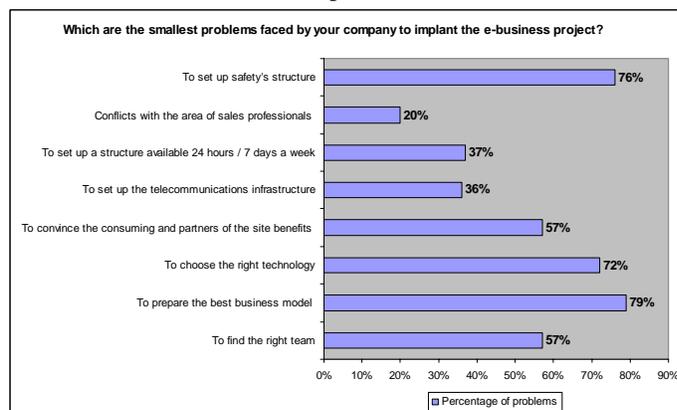
5 Graphs and Tables

Graph 1

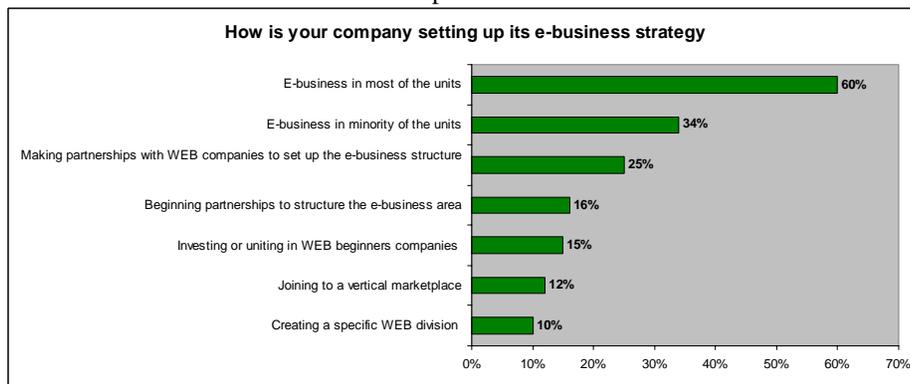


Source: Forrester Research, 2000 - Informationweek magazine (nov.2000)

Graph 2

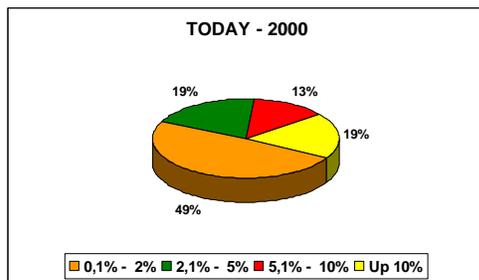


Source: Informationweek Brasil Magazine- jul/2000



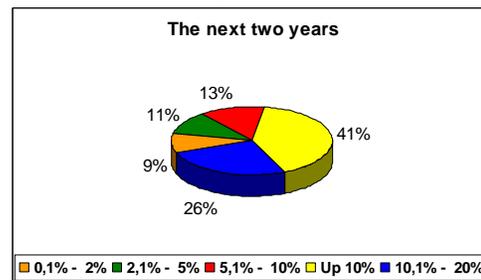
Source: Informationweek Brasil Magazine- mar/2000

Graph 4



Source: Informationweek Brasil Magazine- mar/2000

Graph 5



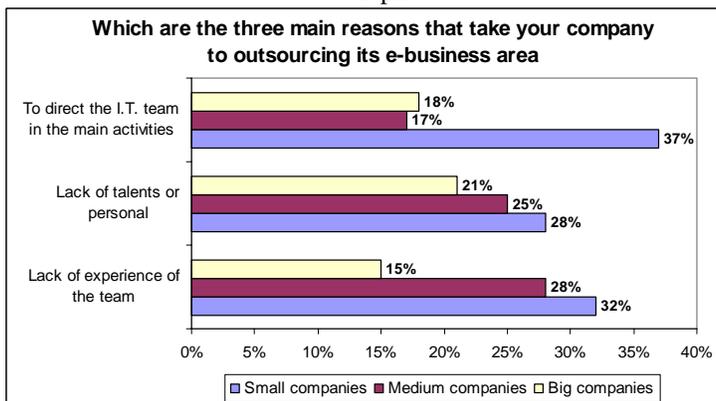
Source: Informationweek Brasil Magazine- mar/2000

Table 1

% Revenue	Today	The next two years	Situation
0,1% - 2,0%	49,0%	9,0%	- 40%
2,1% - 5,0%	19,0%	11,0%	- 8,0%
5,1% - 10,0%	13,0%	13,0%	=
Up 10,0%	19,0%	41,0%	+ 22,0%
10,1% - 20,0%	-----	26,0%	-----

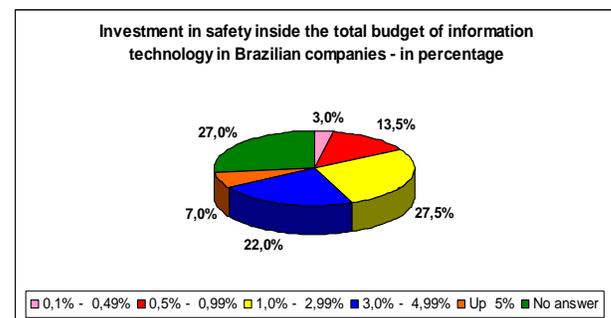
Source: Own elaboration

Graph 6



Source: Informationweek Brasil Magazine-jul/2000

Graph 7



Source: Informationweek Brasil Magazine-ago/2000

* In relation to the studies and researches demonstrated in this article, they were allowed, in its majority, multiple answers and always more than 100 interviewed by subject, considering the 1st semester of 2000.