

THE COMPETITIVE BUSINESS MODELS IN E-COMMERCE

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Abstract

Business models basically represent the way in which a company conducts its business activity and incorporates all the elements involved in such a manner so that it can function properly. It is of utmost importance to comprehend the business configuration because the way in which a company functions and acts from the economic point of view has repercussions throughout the market and can be easily observed by looking at its quantification modality through the revenue stream. Flexibility represents one of the most important features a company should possess within the current economic environment which is somehow turbulent. This feature is usually the differentiator between companies in being first on the market, thus allowing to easily seize higher market shares or even to create new markets – blue oceans. The manner in which a company economically responds or reacts to change is not linked only to employees, turnover, connections (networks, good relationships to various entities, and so on) but to the business model itself. Given all these, E-commerce represents one of the business models which amplify the competitiveness of a company.

The purpose of our work is to enhance the importance of the business models in E-commerce within the current business environment and the advantage it gives to companies in terms of competitiveness to some companies which do not embrace such a connection between the traditional business models and E-commerce. Our research is based on an analysis of the literature.

Keywords: *business, tradition, modernity, reality, virtual, network, commerce*

JEL classification: M10

Introduction

Together with the revolution within informatics and the emergence of the electronic communicational networks based on the high technology and an extremely important information technology, people's way of life, the relational area, the economy, the information (as a removed lack of determination) and even the cognition have changed radically. It is an extremely large leap - from walking to the speed of light and, moreover, from the speed of light, to the speed of information. Every human being on Earth in possession of a computer or a smartphone can join a network and benefit from all the advantages created by the network and its extraordinary strength, quality, communications, and images. How could companies, businesses and trade not take advantage of the competitive and secured network, a wonder of the twentieth century?

Basically, the network effect has changed the world and it is about to bring new radical coordinates in building a new culture – the cognitive culture, the culture of knowledge – together with its patrimony of values, which will be the foundation and the cultural infrastructure of a new type of civilization - the cognitive culture, the culture of knowledge. It is the civilization that is specific to the global era and, ab initio, to the effort of building the main pillars of this type of civilization. What is more, the nervous system and especially, the neuronal system, of this type of civilisation is represented by the network.

Nowadays and especially in the future, everything that exists, from education to business, from scientific research to the discovery of exoplanets, and so on depends on the network and is connected to it. Any type of business belonging to this era in which humanity is active, is a business based on networks, a business connected to the network and,

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therefore, to a type of commerce where the virtual and the reality overlap within the performance area. And such performance is primarily a result of knowledge.

Business in the era of knowledge - even if it does not radically change its essence – is radically changing its supports, configuration, philosophy, physiognomy and even its typology. It will obviously still have a resistance structure to define its purpose and objective, a construct and a *modus vivendi*. The system of relationship, the way of interacting, the behaviour within society, life and especially market will be entirely changed within this *modus vivendi*.

1. E-commerce and the knowledge-based economy

E-commerce is defined by most researchers and practitioners as a complex of activities of buying and selling information and cognition, and, as we dare say, products and services, via a computer network, according to Riggins' and Hyeun's opinions formulated in 1998. But this definition is neither simple, nor complete and it is obviously insufficient. It must also include the possibility of carrying out transactions throughout digital media, as Nicolas Bergeron explains (Bergeron, N., 2001), quoting Bloch, Pigneur and Segev, 1996 and the specific activities of network management and specific internal activities.

E-commerce entails, *inter alia*, the fulfilment of two essential conditions: the existence and use of an electronic trading system; obtaining a competitive advantage. According to some authors (for example, Applegate 1996, quoted by Nicolas Bergeron) (Bergeron, N., 2001) there are three types of e-commerce systems:

- systems that interact directly with consumers (B2C “Business to Consumer” namely retail E-commerce or E-commerce in detail (CID));
- intrabusiness systems (B2E “Business to Employee”), E-commerce within the enterprise;
- E-commerce systems between businesses (B2B “Business to Business”).

All three types of e-commerce (B2C, B2E and B2B) interact with each other and generate a new *modus vivendi* of commerce and, connected to it, of the business. However, each has its peculiarities and its specific mechanisms.

For example, each of the three types of e-commerce uses a specific network or has a specific node to use complex and very complex networks, so that the area of influence and interest for buyers will expand as much as possible, namely until the limit where it can generate dysfunctions, perturbations or saturation, sales will grow and, together with them, the profit. All this would lead toward gaining a competitive advantage.

Retail e-commerce (B2C) directly targets the consumers, regardless of who they are, how and where they are. Thus, the B2C e-commerce system uses all the electronic networks, but especially the Internet, the networks of enterprises, and those from the neighbourhoods, media networks, permanent and temporal networks, network products, cultural networks, private networks and any other type of network that may amplify the information flow and generate the need for knowledge and communication, the need for information and obviously the need for consumption.

E-commerce within the enterprise (B2E), understood as intrabusiness between the members of the enterprise, the company, and the organization of any kind, benefits from *the intranet*. This type of network - generally well secured - ensures, on the one hand, the performance and functioning of the company, as well as its areas and departments and, on the other hand, the process of generating of a new organizational culture and a new cognition, both based on a network. Therefore, a cognitive heritage will be developed within the enterprise (company, organization, university, etc.) and it comprises databases, ways of interrelation etc. At the same time, a business progresses within the company, meaning that every member of the organization will be buying products from this company and from some of its compartments (objects, services, knowledge, assistance, services etc.) and will be selling

work, intelligence, innovation, creation, etc. to the company in return. And this will be achieved primarily through the existing network which will facilitate and enhance the level of information and cognition. However, we won't dwell on these issues which constitute one of the most interesting and complex areas of generating organizational culture, intellectual capital and performance management.

E-commerce between enterprises, companies, organizations etc. (B2B) represents one of the most consistent and most important areas of a business, as it permanently configures, determines and upgrades an intra-organizational framework structure having the role of pressure, voltage, strain and relaxation regulator in the process of generating, configuring, running and optimizing a business. This type of commerce – which is very important especially in the movement of the means of production and cognition - is a special one and this is the reason why it generates, on the network support, a special business with a decisive role within the other businesses on network support - and not only – carried out by enterprises and generally by each unit where a human activity is carried on.

The three types of e-commerce systems may be represented as follows (figure no. 1):

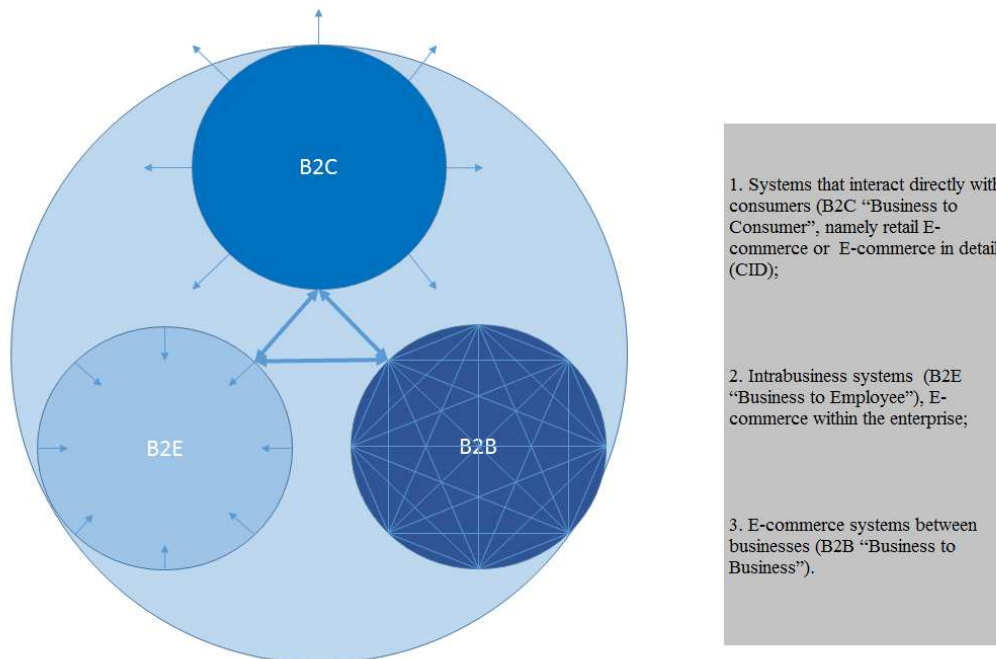


Figure no. 1 Typology of E-commerce systems and the interactions between them

2. Business on support networks, networks as business carriers

The era of electronics, networks and real-time information has generated upgrades for the business and its entire support. This radical mutation generated huge facilities, but also a lot of other issues concerning philosophy, physiognomy, structure, infrastructure and business security. Everything has changed. Almost nothing is as before. Keep in mind that even in the business field the principle that Seneca formed more than 2,000 years ago applies: Live life as if you lived for show. In fact, nowadays, a business, however confidential it may be, can survive only if it is for show; and this is called transparency.

2.1. Remodelling the business model. Flexibility and fluidity

Through electronic business model we understand a way to devise and run a business using the electronic means at its disposal (if necessary, purchasing them), so that the company (enterprise, company, joint stock company, etc.) generates profit. The model is therefore a

framework, a methodology, an algorithm, a project, a *modus cognoscendi*, in which the value systems, including the organizational ones - meaning organizational culture - , heritage, its own databases and the network's databases, the human potential, generate a model on which strategic, operational and tactical planning is performed, meaning a concept that is put into practice and, depending on its impact and on other factors regarding the market, is corrected, optimized and modernized so as to obtain, on the one hand a competitive advantage, which is linked to all impact factors, especially to the quality of human potential and, on the other hand, profit.

2.2. Real virtualization and virtual vectorization

Using the computer networks, information networks, media etc. in designing and conducting a business depends, on the one hand, on the real virtualization and, on the other hand, on the virtual vectorization and even on the virtual reification.

Of course, some ways of planning, deployment and delivering a business through networking, media and advertising are not new. They have always existed and are part of the very concept of business. But the computer and the network brought this process to a level of connection, interconnection, interdependence and efficiency that has never been achieved in the history of mankind.

Before proceeding to a detailed presentation of the business models in e-commerce, we believe we should enlarge upon the business configuration in the new framework opened by electronics and cybernetics in any kind of commerce. (Figure no. 2)

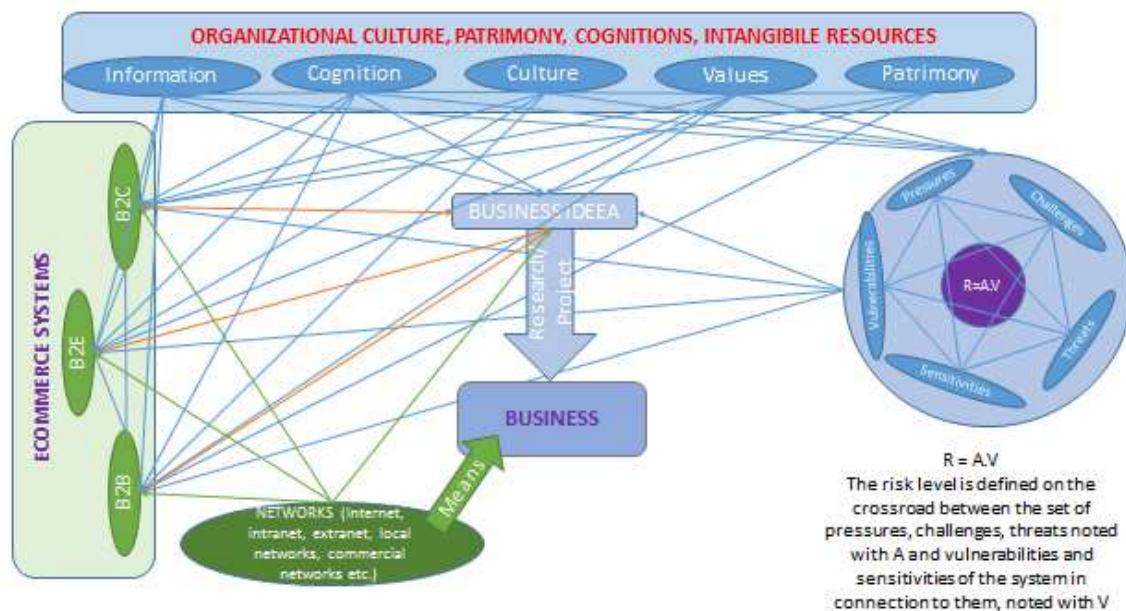


Figure no. 2 Business determinations within the e-commerce systems configuration

The determinations of a business in terms of the three systems of electronic commerce (which we have in mind) are relevant. First of all, they influence the concept of business and, linked to this, the idea of business. When conceiving a business, the idea that generates and sustains the whole effort is from the very beginning conditioned in a complex way. The already existing and tested e-commerce systems offer not only an appreciative background

and experience in the field, but also supports for analysis, rational algorithms, models, calculations, databases.

There is also a certain way, a certain model of virtualizing the reality, for instance the construction of virtual models, starting from the real ones that provide the efficient implementation of an analysis model before its implementation and initiating the process of drawing up a draft and transposing it into a business.

However simple the business we want to deal with, today we must take into account some essential elements and concrete circumstances radically changed from those of, say, a decade ago. Any entrepreneur should know that there are rich documents, databases, networks, expertise factors, preconceived projects that can be used to better understand the mechanism of designing a business in terms of electronic trade, etc.

Just before triggering the planning and progress process of a business, the entrepreneur has to make a website, collect information, to use the existing data in the cyberspace for a thorough analysis and even develop a forecasting within a certain horizon of waiting.

Afterwards he can initiate a dialogue with some specialists, a debate, a way to probe the level of responsiveness, prospective customers, partners, employees, etc. The model he will later develop or use (if already developed) is very important in order to understand the competitive advantages, the specific performance of commercial activity in cyberspace and the entire mechanism of functioning of commercial activities in the existing circumstances at the beginning of the XXIst century. Existing networks greatly facilitate the communication and burn some steps in running a business. But, at the same time they increase the issue related to business security, competitive environment, speed of action or reaction in achieving the tactical surprise (e.g. the appearance by surprise of a product able to shock and to bring a tactical advantage in the market), as well as the strategic surprise when the respective business desires a more distant horizon through the use of new policies and instruments, with the objective to target production lines, geoeconomic areas, geopolitical areas, etc.

We emphasize, also using some data from prof. Jean-Marc Frayret's courses, in July 2002, at the Consortium FOR@C summer school, some of the main models of e-business (Frayret, J-M, 2002).

There are several categories of electronic business, among which are the following:

- the models based on courtesy (placement of offers to buy or sell, meetings between producers and consumers, between sellers and buyers, performance of mutual services, etc.); the purpose of these models is to bring onto the market all interested parties, to offer kindness, mutual understanding, confidence, curiosity, politeness and to create an optimistic frame, extremely favourable to running any business; among these models: „Buy/Sell Fulfilment” (offers to buy or sell in an “n” line system (Frayret, J-M, 2002), and rendering of prices): „Market Exchange” (a model applied in B2B systems, within the selling- buying relations between the enterprises); „Demand Collection System” (a model entitled "name-your-price", initiated by Priceline, according to which a buyer within his market research makes an offer to buy and a courteous agent seeks to solve it) etc.

- advertising models (these models are now the most popular and in a way the safest, as they provide a customized interface of the buyer);

- models based on using info-media;

- models based on negotiation;

- manufactured models (a direct relation with the buyer by using a web page to which he has direct access, which increase the effectiveness and improve customer service);

- affiliation models (offering on site accessible opportunities for the customer who browses the Internet and can affiliate; it's about a model displaying the performance for visitors);

- models based on subscription, subscription models

- community models (displaying for visitors advertising campaigns, using info-media or special portals; they can record revenues also due to their registration rights or their rights to use certain services);

- utilitarian models (paying invoices online and other services - electricity, water supply, telephone etc.).

To each of these models are associated numerous business models that ensure high load of the networks and increase the business performance online due to flexibility, opportunity, relations in real time, effective participation in generating useful and even beneficial relationships between producer and consumer and of other facilities that could be generated and supported only by the network. The networks will never be too loaded or surprised by unexpected events. They will always be operational and very powerful.

The use of the network in this relatively new concept, which is called electronic commerce, is undeniably neither easy nor risk-free. Dangers and threats that have emerged with the operationalization of electronic trade systems typology are numerous and quite difficult to counteract, but the network has the flexibility and power required to ensure a proper security environment.

One way to increase business efficiency in electronic commerce is to ensure systems and procedures, in symmetry with the spread of cybernetics, reify the abstract, materialize the virtual and save cyber values, generating a cyber-culture, which is an essential component of the cognitive culture and of the civilization of cognition.

3. Conclusions

1. The electronic commerce is an effect and a construct of the knowledge era, more precisely of the stage of cybernetic relationships and activities in human society. The process is necessary and natural, thus generating a new culture – the culture of cognition – and, based on it, a new civilization, which is necessary and specific to the stage of globalization – the civilization of knowledge.

2. Throughout this process, the abstraction, virtualization, the ‘cybernetization’ of the real and the reification of the abstract will all occur, this symbiosis generating a new type of behaviour in human society and a new horizon of waiting in human activity, characterized mainly by the contact of extremes and opposites harmonization. This, however, does not entail that within the human society opposites will either be harmonised or destroyed, or that belligerency will be excluded. It simply proves the fact that man will be able to better understand his evolution and expectations, on all ontological, gnoseological and logical levels of his existence.

3. In this framework the electronic commerce will occur as well, specifically, the use of the network and of the network effect in designing, planning and development of a business and of its market support which is the trade. This trade which is based on the network and on the concept of virtualization of reality, is not entirely a new one, but just an upgraded version, where we can use high-tech products and IT, that is, the ultra-performance means and the network for a high-performance leap into the future. The fact that we are a consumer society encourages and even requires this leap, but does not provide the means necessary to make it secure, rapidly shape it after cyber requirements and to generate the appropriate performance.

4. The new requirements of competitiveness imposed by e-commerce, the high tech revolution and IT, are to be found mainly in the reconfiguration of the main nucleus of economy and social life, in a society based on market economy which is represented by business. Today, a business is not merely an idea that turns into an activity which brings profit, but it is a construct based on cognition and on network, meant to generate added value, to be high-performance and to provide competitive advantage.

5. For this reason, the development of this concept requires to further the process of elaboration of certain business models in a competitive regime in a cyber-context, so that the performance will be enabled.

6. The business model, imposed by the new type of society – a society based on knowledge, an epistemic society – consists in a set of parameters, indicators, theoretical and experimental constructions meant to use all opportunities in order to generate strong, flexible, adaptive, interoperable capacities and capabilities, with a powerful feed-back as well as the capacity to explore both the waiting horizons of the distant future and of the uncertain economic, social and cognitive proximity confused by the unprecedented dynamics of hybrid challenges.

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