Abstract

The objective of this research was to identify how a specific methodology of strategy formulation for the Internet addresses the Business Model concept. We see the Business Model concept as a basis for understanding and exploiting the value creation potential generated by the Internet technological platform (ITP). The main possibilities that the ITP offers organizations are related to the reduction of transaction and coordination costs, which facilitates the forming of strategic networks. In order to take advantage of the ITP, one should seek complementarity between the traditional activities of the organization and those based on the new platform, together with an in-depth revision of processes, searching for steps that may be optimized through the ITP. To understand and exploit the value creation potential, it is convenient to adopt the Business Model concept, analyzed from the point of view of each of the organization’s stakeholders. The Business Model as a unit of analysis integrates the different perspectives on value creation that can be found in the theory. The model suggests that the ITP value creation potential depends on four interdependent dimensions: novelty, lock-in, complementarities and efficiency. The case study of the Web Presence Strategy Formulation methodology, by AgenciaClick, an Internet development company in Brazil, describes how this methodology addresses the strategic concepts and analytical methods identified. The business model approach could cover some of the methodology’s gaps.

1 Introduction

The dissemination of the Internet and its related technologies represents a paradigm shift for organizations, enabling deep changes in their structures and processes (see, for example, Brynjolfsson, 2000). Although there is a consensus as to the relevance of the new information and telecommunication technologies for organizations, there is still plenty of discussion (for example, Porter, 2001 and Tapscott, 2001) on how organizations can take advantage of those technologies in order to gain competitive advantages.
Plenty of authors (Tapscott, 2001, Applegate, 2001, Amit and Zott, 2001, among others) believe that the understanding and exploitation of the value creation potential brought by the ITP require the incorporation of new strategic approaches and methods of analysis into the strategy formulation processes.

From a review of those authors’ propositions, one can identify strategic approaches and methods of analysis that are not fully covered by the strategy formulation or strategic alignment processes analyzed. That means there are gaps in those processes. In this paper we adopt the Business Model concept (see figure 1) as our framework, as proposed by Amit and Zott (2001). From that we derive strategic approaches and analytical methods that should cover the gaps identified.

![Figure 1: Research Framework: Sources Of Value Creation And The Business Model (Adapted From Amit And Zott, 2001).](image)

We then analyze how this framework could be used in the business environment, and whether or not it is consistent with the approaches currently employed by organizations when defining their action plan on the ITP. In order to accomplish this, we chose the Case Study as our research strategy. The case analysis showed that the framework was not only consistent with the strategic approaches and analytical methods actually used by the organization studied, but that it would also complement and enrich those approaches and methods.

2 Methodology

The case of AgenciaClick is a good example of how organizations plan their actions on the ITP. AgenciaClick is a solutions developer that integrates and delivers a complete solution on the ITP for its clients, including institutional websites, e-commerce, content portals, intranets and online advertising. In other words, any kind of relationship through the ITP between a company and any of its stakeholders. The AgenciaClick client base includes C&A, Multibras (Whirlpool), Caixa Economica Federal (state-owned bank) and Globo.com (owned by Globo, one of Brazil’s largest media conglomerates).
One of the services offered by AgenciaClick is the Web Presence Strategy Formulation (WPSF). It consists of providing consulting support to clients that wish to generate or improve an action plan for leveraging the organization’s strategy on the ITP.

In this paper, the WPSF, as a representative of a limited universe of formal methodologies for Internet presence strategy formulation, is analyzed in the light of the parameters found in the relevant literature, more specifically, in the Business Model concept. The main objective of the research was to identify the methodology’s response to the strategic approaches and methods of analysis required in order to understand and exploit the value creation potential offered by the ITP. It is important to emphasize that our intention is not to analyze the final outcome generated by the methodology, but the process itself, as a set of activities, methods and instruments.

The procedure adopted was the case study (Yin, 1994). The method is appropriate since the objective is to develop hypotheses and proposals for future investigation. Furthermore, the focus is on the examination of contemporary events, which cannot be manipulated. The WPSF is a relevant case for three main reasons: 1. It is a formal, structured methodology that contains descriptive documents and scripts, as well as examples of its implementation; 2. AgenciaClick has used the WPSF in large companies, in various industries (such as media, retail, food & beverage, public services), over a period of at least two years; and 3. AgenciaClick specializes in the ITP and therefore the WPSF was designed specifically for this platform.

Two types of documentation were used in the case study: a formal statement of the methodology, describing its stages and activities, as well as the scripts and models of resulting documents; and documents that were actually delivered to real clients.

3 Theory

3.1 Strategic Approaches

The prescriptive theories of strategy (as Mintzberg and Quinn, 1996 define them) present strategy formulation methodology as a composition of three basic stages: diagnosis (internal and external), current and target situation analyses, and plan generation (Andrews, 1996; Ansoff, 1988).

There are many possible theoretical approaches to the problem of strategy formulation, such as Value Chain Analysis (for example, Porter, 1980, 1985, and 1986); Resource Based Theory, which includes the Dynamic Capabilities Theory (for example, Barney, 1991; Langlois and Foss, 1999; Nelson, 1997; Teece et al., 1997; Hamel and Prahalad, 1994); Strategic Networks (for example, Gulati, et al., 2000; Lorenzoni and Lippamini, 1999; Häcki and Lighton, 2001; Prahalad and Ramaswamy, 2000); and the theories on the Firm’s Boundary Choice (Malone et al., 1987; Pindyck and Rubinfeld, 1995; Milgrom and Roberts, 1992; D’aveni and Ravenscraft, 1994), including Transaction Costs Economics (for example, Coase, 1937; Klein et al. 1978; Williamson, 1975, 1985).

Some authors (such as Sannes, 1994 and Earl, 1993) have studied the relationship between information and communication technologies (ICT) and organizational strategy. According to Hackney et al. (2000), the prescriptive approaches to this matter have been proposed in order to promote the alignment of ICT and Information Systems (IS) with the business strategy. These approaches (for example, Andreu, 1992) have the objective of
identifying the applications that support the business and at the same time drive investments in ICT.

3.2 The Internet Platform

Applegate (2001) points out certain differences between traditional technologies and those supported by the Internet. The Internet provides new capabilities that were not available before, such as open standards, shared ownership of the network, modular and flexible software and infrastructure and lower cost of development.

The Internet-based technologies make up the Internet Platform (ITP), which offers an infrastructure for transactions and information exchanges between people and companies. According to Albertin (2000), the following components are part of this infrastructure: e-commerce, customer relationship management, supply chain management, knowledge management and business intelligence.

Amit and Zott (2001) summarize the main characteristics of business transactions conducted through the ITP, such as high connectivity, importance of informational goods, high reach (number of people and products reachable quickly and at low cost) and richness of the information (depth and detail of the information that can be accumulated, offered and exchanged by the market participants), support for the establishment of virtual communities, ease of extension of the range of products to include complementary products, and possibility of customization (adaptation initiated by the consumer) and personalization (adaptation initiated by the business). According to the authors, these characteristics, when considered as a whole, have a deep impact on how value creating transactions are structured and conducted.

3.3 The Value Creation Potential Offered By The Internet Platform

According to Transaction Cost Economics (Coase, 1937; Klein, Crawford and Alchian, 1978; Williamson, 1975, 1985), the choice of an organization’s format depends on the costs of the transactions between the buyer and the supplier. Those are called “transaction costs”. Whether a product is made by a firm (hierarchy) or is bought from an outside supplier (market) depends on the associated transaction costs. In other words, the degree of vertical integration of a firm would be a function of the transaction costs with the market versus the coordination costs within the firm.

Some authors, such as Amit and Zott (2001), Tapscott (2001), and Malone et al. (1987), believe that one of the main effects of carrying out transactions through the ITP is cutting transaction costs. Together with lowering the direct costs of economic transactions, doing business through the Internet may also lower some indirect costs, such as adverse selection, moral hazard and switching costs.

However, that reduction may not necessarily mean a movement towards the market. Some work (Dias, 2001; Murray, 1999; White, 2000) shows that the ITP can bring major improvements to the efficiency of hierarchical structures, through corporate portals, for example. The main functions of these portals are knowledge management, decision support and cooperative processing, offered to all the organization’s employees from a single access point and concerning any information necessary to conduct the business.

If the ITP allows movements towards both markets and hierarchies, it is reasonable to state that this set of tools enables organizations to develop a higher degree of integration,
internally and externally. The higher degree of integration may take the form of a strategic network, as described by Gulati, et al. (2000), among other authors.

The understanding of the possibilities brought by the ITP to organizations leads to the conclusion that, in order to gain competitive advantage through this platform, one must think about it not only as a set of tools, but as a possibility of improving the way of doing business, or even of changing the business itself. The literature points out two important issues one should address in order to take advantage of the ITP:

- The quest for complementarity between the traditional activities of the organization and those based on the new platform (Porter, 2001).
- An in-depth revision of processes, searching for weaknesses, or critical points, that might be optimized via the Internet. That can sometimes imply in part of the organization’s activities being established at or shared with a different company (Tapscott, 2001; Hagel III and Singer, 2000). This statement implicitly includes the possibility of strategic networks and it leads one to think about the business model of a company as a competence integrator, focusing on the value proposition to the client and on innovation.

3.4 The Business Model Concept As A Framework For Analysis

Tapscott (2001) states that the strategists need new tools, including strategic concepts and analytical methods, in order to understand and exploit the value creation potential (specially the business networks) of the ITP. That vision is shared by Amit and Zott (2001), who believe that the multitude of value drivers suggested in the literature raise the issue of precisely which sources of value are of particular importance in e-business, and whether unique value drivers can be identified in the context of e-business.

Once the scope and the boundaries of an organization become less clear, as a consequence of higher interdependence, Amit and Zott (2001) propose that strategic analysis should go beyond the traditional idea of the organization as the unit of analysis. They suggest that the emergence of virtual markets reveals new forms of innovation (which they call business model innovations) that call for a shift in strategic thinking towards more integrative, dynamic, adaptive and entrepreneurial strategies. Those authors propose a model that intends to:

- Adopt the perspective of value creation (regardless of whether it is the firm, the customer, or any other participant in the transaction who appropriates that value), and not firm boundaries, regarding the strategy issue;
- Classify the possibilities offered by the ITP in four interrelated dimensions (Novelty, Complementarity, Lock-in and Efficiency);
- Combine and complement various visions about value creation in one unit of analysis, the business model (see table 1).
Table 1: Theories On Value Creation And The Business Model Perspective

<table>
<thead>
<tr>
<th>Theory</th>
<th>Unit of Analysis</th>
<th>Source of Value</th>
<th>Business Model Perspective</th>
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<tbody>
<tr>
<td>Theory of Economic Development</td>
<td>The firm, specifically the entrepreneur</td>
<td>Innovation in products and processes</td>
<td>Innovation may involve new exchange mechanisms and unique transaction methods. Also, innovation is not the only source of value.</td>
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<td>(e.g., Schumpeter, 1934)</td>
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<tr>
<td>Value Chain Analysis</td>
<td>Firm</td>
<td>Differentiation along each step of the value chain, through activities resulting in products and services that lower buyers’ costs or improve their performance</td>
<td>Concentrates on processes that enable transactions. A business model does not follow the flow of a product from creation to sale, but describes the steps that are performed in order to complete transactions.</td>
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<tr>
<td>(e.g., Porter, 1985)</td>
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<tr>
<td>Resource-based view</td>
<td>The firm’s resources and capabilities</td>
<td>The services rendered by the firm’s unique bundle of resources and capabilities</td>
<td>The business model perspective takes into consideration the ways in which resources can be valuable.</td>
</tr>
<tr>
<td>(e.g., Barney, 1991)</td>
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<tr>
<td>Strategic Network Theory</td>
<td>Network</td>
<td>The configuration of the network in terms of density and centrality, as well as its size and the heterogeneity of its ties have an impact on value creation.</td>
<td>The business model perspective views inter-company cooperative arrangements as necessary elements for the firm’s ability to enable profitable transactions</td>
</tr>
<tr>
<td>(e.g., Gulati, et al., 2000)</td>
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<tr>
<td>Transaction Costs Economics</td>
<td>Transaction</td>
<td>Identifies transaction efficiency as a major source of value, as enhanced efficiency reduces costs.</td>
<td>In addition to efficiency enhancements there are additional factors that contribute to value creation (novelty, lock-in of customers, and complementarities)</td>
</tr>
<tr>
<td>(e.g., Williamson, 1975)</td>
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Adapted from Amit and Zott, 2001

The expression “business model” has been widely used, especially in nonacademic literature, without any rigor as to its definition and often being confused with “revenue model”. In this article we adopt the definition of Amit and Zott (2001, p.511): “A business model depicts the content, structure, and governance of transactions designed so as to create value through the exploitation of business opportunities”.

3.5 Strategic Approaches And Analytical Methods

To carry out the case study, we assumed that, in order to understand and exploit the value creation potential brought by the ITP, the following strategic approaches (i.e., the premises for designing an organization’ strategy) are necessary:

- Focus on value creation;
- Use of the Business Model (which depicts the content, governance and structures of transactions) as the unit of analysis;
- Analysis of the four value drivers of the ITP (Novelty, Lock-in, Complementarity and Efficiency); and
- Adoption of the perspective of the organization’s stakeholders.
From the strategic approaches adopted, it follows that the analytical methods (which are the actual instruments used to design the organization’s strategy) should:

1. Identify, in the organization for which the web presence strategy is being formulated, the way in which participants in a transaction make that transaction possible. That means to analyze the content, structure and governance of transactions (analysis of the current business model of the organization);

2. Identify how value is created in the process of the transaction. That means checking whether there is an opportunity for creating value with the support of the ITP (analysis of the current value creation process);

3. Propose a new business model (describing the content, structure and governance of the transactions) capable of exploiting value creation potential via the ITP (with regard to efficiency, complementarities, lock-in and novelty).

Along with these three conditions, the analytical methods must also take into consideration the relationships of organizations with each one of their stakeholders. For example, the development of a closer relationship with clients certainly has an impact on the content and governance of the business model (Prahalad and Ramaswamy, 2000).

4. **Case Study**

The case study focused on analyzing how the strategic approaches and analytical methods described above were taken into account by the WPSF. The following steps were taken:

1. Identifying the WPSF approach to Business Model Identification. Does the WPSF contain instruments to analyze the content, structure and governance of the transactions of the organization with each of its stakeholders?

2. Identifying the WPSF approach to Value Creation Identification. Does the WPSF contain instruments to check whether there are opportunities for value creation supported by the ITP?

3. Identifying the WPSF approach to the Exploitation of Value Creation Potential. Does the WPSF contain instruments that support the proposition of a business model that exploits the value creation potential of the ITP (regarding efficiency, complementarities, lock-in and novelty) for each of the organization’s stakeholders?

4.1 **The Web Presence Strategy Formulation (WPSF)**

AgenciaClick’s work is based on a methodological framework that should guide all of the company’s processes, from planning to implementation, and every activity involved in carrying out a project supported by the ITP (Dias, 2002).

A part of this framework is the Presence Development Methodology, which is divided into five phases: Strategy Formulation (the WPSF), Design, Construction, Launch and Evolution.
The main objective of the WPSF is to generate an action plan that uses the ITP to leverage the client’s business strategy (see table 2). After the WPSF, other processes take place, such as the setting-up of a virtual store or a corporate portal. The WPSF occurs in three stages: Diagnosis, Analysis and Delivery.

### Table 2: The Stages And Activities Of The WPSF

<table>
<thead>
<tr>
<th>Stage</th>
<th>Activities</th>
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| 1. Diagnosis| 1. Presentation  
               | 2. Mapping processes and information flows  
               | 3. Mapping current web presence  
               | 4. Benchmarking  
               | 5. Study of the environment |
| 2. Analysis | 1. Consolidation  
               | 2. Theoretical reference application  
               | 3. Presence architecture elaboration  
               | 4. Scope matrix preparation |
| 3. Delivery | 1. Prioritization  
               | 2. Approval  
               | 3. Final Report |

#### 4.2 Business Model Identification

The Business Model Identification consists of mapping the main processes through which a certain organization and its stakeholders make transactions possible.

The WPSF allows the identification of the organization’s business model in the following ways:

- Asking the company’s upper management directly. During the activity called “Presentation”, information on the organization’s main products and services is collected, as well as critical factors in the business and the current and target situations (in which direction the organization intends to evolve). It is thus possible to recognize how the company generates value for its client, i.e., the content of the transactions.

- Detailing the organization’s main processes and information flows, as described by line managers. When appropriate, those processes are mapped and documented more rigorously.

- Analyzing reports and surveys about consumers and how they interact with the company’s products and services.

- Understanding the current stage of the company’s online activities by directly observing the actions currently carried out by the organization (such as the websites it keeps) and identifying strengths and weaknesses.
All things considered, it is our understanding that the WPSF contains mechanisms to identify the business model for each one of the stakeholders. Using the described mechanisms, the WPSF identifies the structure of the organization and how this structure relates to internal and external stakeholders, i.e., the main processes and flows of information. Additionally, the company’s environment is analyzed, in order to understand the structure of the industry.

4.3 Identification Of Value Creation Identification

Regarding the identification of value creation, the stakeholder-oriented approach is the main difference of the WPSF. It enables one to understand how value is created in each transaction. The stakeholder-oriented approach means that, instead of analyzing the processes and information flows of each of the organization’s departments, the WPSF analyses all the processes and information flows related to one group of stakeholders, such as the clients, for instance. This reflects a shift in perspective.

In the Diagnosis’ Stage, the WPSF presents instruments for mapping how value is created in transaction processes. They are the same as we have described above (Business Model identification). Not only the current situation (in terms of the business model and value drivers) but also the target situation are identified. Thus, the perception of the organization about its value drivers becomes explicit.

The external diagnosis is carried out through “Benchmarking”, a process whereby the AgenciaClick’s team lists and analyses the best practices in the industry (or in reference industries), and “Study of the Environment”, which should identify successful business models in the industry and how they take advantage of the ITP. The results of these activities highlight the absence of structure in the model of analysis. Examples of those documents (Dias, 2002) clearly reveal that they are mostly descriptive. The WPSF leaves more elaborate analysis to more advanced stages. However, during the data collection process, important information about the value drivers in the industry may be left behind.

The WPSF contains mechanisms for identifying how value is created in each transaction. However, the lack of a structured model of analysis may result in some opportunities for value creation supported by the ITP failing to be considered.

4.4 Exploitation Of The Potential For Value Creation

The identification of the business model and of value creation processes and opportunities should be the basis of a coherent action plan.

After the Diagnosis, all the information collected is analyzed from the perspective of a theoretical reference. There is a concern about the theoretical foundation, as observed in the conceptual models presented as examples (Dias, 2002). However, a different reference is used for each organization.

Although that situation allows better customization of the WPSF to each client, it also highlights dependence on the personal expertise of the consultants. This raises the risk of some opportunities being left behind. The dependence on human resources is characteristic of any methodology. Still, the absence of conceptual references in the WPSF implies that a process guided by it might yield a great disparity of results.
The document that formalizes the main propositions to the client is a conceptual model called “Presence Architecture”. This model should include all contact points and the nature of the relationships established via the ITP with each of the organization’s stakeholders. The strong orientation of the Presence Architecture for the organizations’ stakeholders offers the organization as a whole broader exploitation of the possibilities of the ITP. That allows the WPSF to be targeted at only one of the stakeholders of an organization. For example, the WPSF process may be carried out only with regard to the internal stakeholders of the organization (its employees), and then have as a final result a Corporate Portal action plan.

Furthermore, the stakeholders approach emphasizes the interdependence of the organization’s actions on the ITP. For example, an e-commerce action has an impact on all of the organization’s stakeholders: consumers, employees, suppliers, and partners. Even if the focus of the WPSF is a specific action, it will still guarantee that the resulting strategy takes into consideration all stakeholders involved.

The fact that the WPSF starts with a given business strategy is at the same time a limitation and an advantage. Having a strategy as a starting point enables a better understanding of what the organization believes are its value drivers. However, it limits the potential propositions, given that the business strategy of the organization will hardly be rejected as a result of the WPSF. After all, the purpose of the WPSF is to leverage the business strategy rather than to formulate it. But the WPSF will not necessarily generate only incremental propositions. Although it is bound to a given strategy, the analysis of the opportunities enabled by the ITP may lead to recommendations that, if implemented, should redefine the business.

The WPSF contains instruments that support the proposition of a business model exploiting the value creation potential of the ITP for each of the organization’s stakeholders. However, the lack of a framework, which hinders the identification of the value creation processes, can be an obstacle to the full consideration of opportunities offered by the ITP.

5 Additional Considerations And Recommendations

This paper is based on the premise that there are gaps in the strategy formulation and strategic alignment processes analyzed. These gaps imply that the opportunities offered by the ITP may not be fully identified through those processes. Using the Business Model concept as a framework, we derive strategic approaches and analytical methods that should cover the gaps identified.

The process of WPSF, representing a limited universe of formal methodologies for the formulation of an Internet presence strategy, was then analyzed according to the framework. We checked whether the WPSF incorporates the strategic approaches and analytical methods that allow the understanding and exploitation of possibilities offered by the ITP.

We found that although the WPSF already includes many of those approaches and methods, what it lacks is precisely a stronger theoretical framework. The absence of a unifying model brings inconsistencies to the WPSF, in that it complicates the full consideration of the opportunities offered by the ITP, especially during the Diagnosis and Analysis stages. It might be useful to incorporate a rougher analysis framework to the WPSF. The Business Model concept could be that framework.
References


