Strategic Development of Business Models
*Implications of the Web 2.0 for Creating Value on Internet “Term Paper”*

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INTRODUCTION

Since the inception of the concept of Web 2.0 in 2005 by Dale Dougherty of O’Reilly Media, we could see how this second generation of the Word Wide Web was marking the evolution of the static HTML Web pages to a more dynamic Web, improving the ability for people to collaborate and share information online, changing in this way the business models of the internet based companies and the way they create value.

One of the objectives of this term paper is to show how this emerging Web 2.0 phenomenon affects the different Internet business models, how could thus significantly disrupt the effectiveness of established ones and how can they adapt to these wave changes.

This document will start with a conceptual background, defining the different Internet business models and describing their main characteristics. Business models could be classified into four categories, called the “4C” typology based on Wirtz.

The main objective of this paper is to explain the different key factors and sub factors of the Web 2.0 phenomenon, proposed by the authors Wirtz, Schilke and Ullrich, influencing the different Internet business models. These factors would help managers to identify key trends for their own Internet business models.

Show the degree of importance of the different factors and sub factors mentioned before, according with the results of the empirical study that the authors performed with 22 managers from Web 2.0 related Internet companies.

Describe the different activities that a company can implement in order embrace the Web 2.0 in its existing Internet business, giving managers a clear guidance on how to adapt them in response to changing technology and users behavior.

Demonstrate the level of relevance of the different Web 2.0 factors for each of the business models types, explaining how each of the individual factors may differ in importance for different sort of Internet businesses, serving also as a tool for benchmarking identifying which factors are missing and which ones could be integrated to the business models of the companies.

Developing and adapting firm’s business model has become a major task for many executives in their effort to cope successfully with technological progress, competitive changes, or governmental and regulatory alterations that’s why this approach presented could be a very useful tool for not only for Internet based companies but for all kind of companies in general.
1. CONCEPTUAL BACKGROUND

1.1. The 4C Internet business model typology

Strategy has been the primary building block of competitiveness over the past three decades, but in the future, the quest for sustainable advantage may well begin with the business model (Harvard Business Review, 2011).

While the convergence of information and communication technologies in the 1990s resulted in a short-lived fascination with business models, forces such as deregulation, technological change, globalization, and sustainability have rekindled interest in the concept today (Harvard Business Review, 2011).

Since 2006, the IBM Institute for Business Value’s biannual Global CEO Study has reported that senior executives across industries regard developing innovative business models as a major priority. A 2009 follow-up study reveals that seven out of 10 companies are engaging in business-model innovation, and an incredible 98% are modifying their business models to some extent. Business model innovation is undoubtedly here to stay (Harvard Business Review, 2011).

Management writer Joan Magretta defined a business model as “the story that explains how an enterprise works,” harking back to Peter Drucker, who described it as the answer to the questions: Who is your customer, what does the customer value, and how do you deliver value at an appropriate cost?

Internet business models could be classified if four basic types of prototypical Internet Business models, or “4C” based on Wirtz: Content, Commerce, Context and Connection. Covering the vast majority of classical business activities on Internet Markets (Wirtz, Schilke, Ullrich, 2010).

Most of the Internet firms employ hybrid systems of the different business models that mean that they use an integrated version of two or more (Wirtz, Schilke, Ullrich, 2010).

The definition, characteristics and examples of each of the business models typologies are described in the Figure 1.

- **Content-oriented**: They are focus on the collection, selection, compliance and distribution, and/or presentation of online content.
- **Commerce-oriented**: Business focus primarily on the initiation, negotiation, payment and delivery aspect of trade transactions using online media.
- **Context-oriented**: Structure information already existing in Internet.
- **Connection-oriented**: Provide network infrastructure that enable user’s participation in online networks, either on a physical interconnection’ level.
1.2. What is the Web 2.0?

The bursting of the dot-com bubble in the fall of 2001 marked a turning point for the web. Many people concluded that the web was overhyped, when in fact bubbles and consequent shakeouts appear to be a common feature of all technological revolutions (Reilly, 2008).

The concept of "Web 2.0" began with a conference brainstorming session between O'Reilly and MediaLive International. Dale Dougherty, web pioneer and O'Reilly VP, noted that far from having "crashed", the web was more important than ever, with exciting new applications and sites popping up with surprising regularity (Reilly, 2008).
What's more, the companies that had survived the collapse seemed to have some things in common. Could it be that the dot-com collapse marked some kind of turning point for the web (Figure 2).

In the year and a half since, the term "Web 2.0" has clearly taken hold, with more than 9.5 million citations in Google. But there's still a huge amount of disagreement about just what Web 2.0 means, with some people decrying it as a meaningless marketing buzzword, and others accepting it as the new conventional wisdom (Reilly, 2008).

**Figure 2. Internet based company's transition from Web 1.0 to web 2.0.**

<table>
<thead>
<tr>
<th>Web 1.0</th>
<th>Web 2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>DoubleClick</td>
<td>Google AdSense</td>
</tr>
<tr>
<td>Ofoto</td>
<td>Flickr</td>
</tr>
<tr>
<td>Akamai</td>
<td>BitTorrent</td>
</tr>
<tr>
<td>mp3.com</td>
<td>Napster</td>
</tr>
<tr>
<td>Britannica Online</td>
<td>Wikipedia</td>
</tr>
<tr>
<td>personal websites</td>
<td>blogging</td>
</tr>
<tr>
<td>evite</td>
<td>upcoming.org and EVDB</td>
</tr>
<tr>
<td>domain name speculation</td>
<td>search engine optimization</td>
</tr>
<tr>
<td>page views</td>
<td>cost per click</td>
</tr>
<tr>
<td>screen scraping</td>
<td>web services</td>
</tr>
<tr>
<td>publishing</td>
<td>participation</td>
</tr>
<tr>
<td>content management systems</td>
<td>wikis</td>
</tr>
<tr>
<td>directories (taxonomy)</td>
<td>tagging (&quot;folksonomy&quot;)</td>
</tr>
<tr>
<td>stickiness</td>
<td>syndication</td>
</tr>
</tbody>
</table>

*Source: Reilly, 2008*
2. Which are the key factors and sub factors of the Web 2.0 phenomenon?

The authors proposed four broad key factor fundamental to the Web 2.0 phenomenon: social networking, interaction orientation, personalization/customization and user-added-value; influencing the different Internet business models. These factors would help managers to identify key trends for their own Internet business models (Wirtz, Schilke, Ullrich, 2010).

Inside the four broad factor actors, they also identify some key sub-factors, which are mentioned in the figure 3.

*Figure 3. Key factors and sub-factors to the Web 2.0 phenomenon.*
An explanation of the different key factors and sub-factors is given in the figure 4.

Figure 4. Key factors and sub-factors definitions and characteristics.

Source: Wirtz, Schilke, Ullrich, 2010

The authors make an analysis of two business cases of two important Internet based companies, the case of Myspace and Wikipedia, to show how the key factors are reflected in those companies.

We can see in the Table 1, a summary of the results of this analysis of both companies and the key factors that make these tow companies strong Web 2.0 players.
<table>
<thead>
<tr>
<th>Business Case</th>
<th>The Case of My Space</th>
<th>The Case of Wikipedia</th>
</tr>
</thead>
</table>
| **Company Description** | • It is one the most frequently visited online communities online.  
• First business mode intended to offer free Internet data storage.  
• Then it was modified to meet users need of personal web sites and social networking. | • It is the largest and most popular general reference work on the Internet. |
| **Factors Involved in the Success of Web 2.0** | | |
| **Interaction Orientation** | • It is focused on user-to-user interaction | • Voluntary, cooperative value generation.  
• Users edit and generate content.  
• Specific core of long-standing members control and reedit created content if it is necessary. |
| **Customization/Personalization** | • Members can design their web presence according to their personal preferences. | • Register members can modify and change their account settings.  
• Huge amount of social trust given to the information by the web users. |
| **Social Networking** | • Users are invited to connect with friends, relatives, etc. | User–generated content is the starting point for the activities of Wikipedia. |
| **User-added Value** | • Every additional individual profile contribute through indirect revenue  
• User-generated creativity, new music, video and content. | |
| **Conclusion** | • It utilizes all aspects of the Web 2.0.  
• It is very successful Web 2.0 player.  
• It is developing constantly its business model with respect customers needs. | • It utilizes all aspects of the Web 2.0.  
• Place users at their heart of their activities.  
• User-generated content is the most critical resource. |

*Source: Wirtz, Schilke, Ullrich, 2010*
3. Which are the most important factors and sub-factors?

The authors performed an interview with 22 managers from Web 2.0 related Internet companies, to verify the relevance of the four factors and to find out the degree of importance. They asked the managers to evaluate the factors with a scale from 1 (very unimportant) to 7 (very important) (Wirtz, Schilke, Ullrich, 2010).

According with the results of the empirical study (Figure 5), the most important value was social networking (5.7), then interaction orientation (5.6), user-added value (5.08) and customization/personalization (5.02). The scores were very similar between each other not finding substantial differences.

Figure 5. Ranks of Web 2.0 factors and sub-factors

Source: Wirtz, Schilke, Ullrich, 2010
4. Which activities can the existing Internet businesses implement to embrace the Web 2.0?

There are certain recommended activities and tools from the authors that a company can implement in order to adapt existing business models to the different Web 2.0 factors and changes that this new phenomena is bringing (Wirtz, Schilke, Ullrich, 2010).

We can see in the table 1 the different activities that a company can incorporate in order to implement the different factor to their business models. They can use this tool to analyze which activities are already performing and which are missing (Wirtz, Schilke, Ullrich, 2010).

Table 2. Activities for embracing the web 2.0 in existing Internet businesses

<table>
<thead>
<tr>
<th>Factor</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social networking</td>
<td>• Build your own social networking — e.g. by creating blogs, forums and chats for your website</td>
</tr>
<tr>
<td></td>
<td>• Check and comment on postings on networks (e.g., review platforms)</td>
</tr>
<tr>
<td></td>
<td>• Present your company on relevant social networking platforms</td>
</tr>
<tr>
<td>Interaction orientation</td>
<td>• Be highly responsive and available 24 hours</td>
</tr>
<tr>
<td></td>
<td>• Provide users a reward for interaction (social status, prizes, rebates)</td>
</tr>
<tr>
<td></td>
<td>• Encourage positive and negative feedback</td>
</tr>
<tr>
<td>User-added value</td>
<td>• Integrate the following tools on your website: user reviews, user-generated information (wikis), media uploads (videos etc.)</td>
</tr>
<tr>
<td></td>
<td>• Offer incentives</td>
</tr>
<tr>
<td></td>
<td>• Use metadata that tracks clicks, recommendations, behavior etc.</td>
</tr>
<tr>
<td>Customization/personalization</td>
<td>• Make good use of available user information as a base for customization efforts (e.g., build track profiles based on customer history)</td>
</tr>
<tr>
<td></td>
<td>• Focus on making customization/personalization easy to use</td>
</tr>
</tbody>
</table>

*Source: Wirtz, Schilke, Ullrich, 2010*
5. Which is the degree of importance of the different factor for each of the different business models “4C”?

The four Web 2.0 factors have different levels of relevance according to the sorts of Internet business models (Table 2). The authors made a link between the empiric study they made and further differentiate based on conceptual considerations and real-life cases (Wirtz, Schilke, Ullrich, 2010).

For the content business model type, all the four Web 2.0 play an important role either with high or very high relevance. Content platforms should consider implementing social networking tools (such as blogs and chats) that enable users to discuss site content online, which can serve as value complements to the core offering.

In the commerce business model, the ability of a firm to orient its value generation and distribution process to interact successfully with its customers will be of very high importance, so as to differentiate the firm from its competitors.

Context oriented business primarily stand to benefit from embracing the Web 2.0 social networking and customization/personalization factors. Seems like the following steps will be to implement social networking activities to combine them with a strong personalization.

For the connection business model, the relevance of social networking is a key aspect for delivering value. Connections firms have to migrate from primarily one-to-one Internet communication services to a ‘many-to-many’ communications tools such as chats and forums.

Table 3. Relevance of the Web 2.0 factors for individual business model types

<table>
<thead>
<tr>
<th>Web 2.0 Factor</th>
<th>Social networking</th>
<th>Interaction orientation</th>
<th>User-added value</th>
<th>Customization/personalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business model</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content</td>
<td>++</td>
<td>+</td>
<td>++</td>
<td>+</td>
</tr>
<tr>
<td>Commerce</td>
<td>-</td>
<td>++</td>
<td>o</td>
<td>+</td>
</tr>
<tr>
<td>Context</td>
<td>+</td>
<td>-</td>
<td>o</td>
<td>+</td>
</tr>
<tr>
<td>Connection</td>
<td>++</td>
<td>+</td>
<td>o</td>
<td>+</td>
</tr>
</tbody>
</table>

++: very high relevance; +: high relevance; or medium relevance; -: low relevance.

Source: Wirtz, Schilke, Ullrich, 2010

6. CONCLUSION
There is too much ambiguity around the Web 2.0 phenomena; this study that these authors made was the first study with the purpose of identifying the key figures that are behind this new movement, that is changing the business models of the internet based business and also show us how can business in general can integrate these characteristics of the Web 2.0 to their business models.

We could also see the impact of the different Web 2.0 trends and characteristics on different types of Internet business models. Which could help Internet firm manager assess the relevance of each factor for their owns firms and ensure they can initiate the actions required for making their business model Web 2.0 capable.

The identification of these key figures helps to illustrate the Web 2.0 characteristics and also highlight some of the factors behind the success of these prosperous players, enabling other firms to adopt some of their features.

We can confirm with the business case analysis of Wikipedia and MySpace the relevance of the four key factors and some of the sub factors, supporting the theory of the authors regarding the relevance and presence of these factors in the Web 2.0 phenomena.
