Web Business Models: characteristics and examples

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SUMMARY

The introduction of Web has indisputably transformed the traditional business modeling. This essay gives initially some definitions of what a business model is and how it can be implemented on the Web. Many efforts for the categorization of Web business models have been done until nowadays, from which we have chosen the most comprehensive. Nine different types of Web business models are described in detail, provided also with specific examples found on the Web. Though not a definite taxonomy, it gives an overview of what kind of business models are used on the Web. Every model has strengths and weaknesses, concluding that the sole use of a Web business model is not always ideal. A combination of existing business models on the Web or even the adoption of new models are key factors for a great success.

KEYWORDS: business model, web business model, taxonomy of business models, examples of web business models

INTRODUCTION

The World Wide Web was introduced as an unbusinesslike collection of links to documents for various universities and other organizations. Nowadays, the Web is a highly interactive medium for consuming content and conducting business. This is the era of Web 2.0, where not only the technologies provide a richer user experience and make use of information in unique ways, but also there are social interactions and a variety of business models.

This essay is an attempt to give an overview of the business models observable on the Web and the underlying issues associated with these models. In the first section we give descriptions of what is actually a business model and how it is implemented in the case of Web. The second section includes a comprehensive and cogent taxonomy of Web business models, according to Rappa [10], where we present nine types of business models on the Web, their characteristics and some examples related to the Web.

BUSINESS MODELS AND THE WEB

The term business model is frequently used today, but there is still no single dominant definition. In fact, it is given many definitions. Some of these definitions different a lot, others are complementary, while others may be equal in meaning but seen by a different scope [9]. Linder and Cantrell [5] define a business model as "the organization's core logic for creating value", while Magretta [6] views it simply as "a story that explains how an enterprise works". The most often cited definition of business model is given by Timmers [14], who states that "it is an architecture for the product, service and information flows, including a description of the various business actors and their roles; and a description of the potential benefits for the various acts; and description of the sources of revenues". Moreover, Osterwalder and Pigneur [8] propose "a business model is nothing else than a description of the value a company offers to one or several segments of customers and the architecture of the firm and its network of partners for creating, marketing and delivering this value and relationship capital, in order to generate profitable and sustainable revenues streams".

The most important issue about a business model is the value chain, which is a mechanism for creating not only economic value, but also usable value, involving social, psychological etc. parts. The architecture for business models is composed by the value chain elements and methods for integrating information into the value chain. The elements of the value chain are divided in primary and supporting. The former include inbound and outbound logistics, operations, marketing and sales, and service. The latter refer to technology development, procurement, human resource management and corporate infrastructure [11].

What about business models on the Web? Does the Web change traditional business models? The answer is yes. If we consider the new capabilities of the Web and its related technologies, it is obvious that new emerging business models appear, the Web business models. Osterwalder and Pigneur [8] give a definition of an e-business model by presenting a schema (*Figure 1*), in their attempt to create an e-business model ontology for modeling e-business. This schema consists of four major elements. The first element is the product innovation, which covers all aspects related to the offering of a firm. The second element, infrastructure management, describes the value system configuration needed in order to deliver the firms' offering and to establish and maintain a customer relationship. The third element, customer relationship, describes the way a firm goes to

market and gets in touch with its customers. The last element is the financial aspects, which, taken into account the revenue model and the cost of structure of the firm, defines the profit or loss of the firm.



Figure 1: Definition of an e-business model [8]

TAXONOMIES OF WEB BUSINESS MODELS

A lot of discussion and research has been done in order to classify the business models found on the Web. Paul Timmers [14] was the first who proposed a taxonomy of eleven types of Web business models. Afterwards, Paul Bambury [1] suggested two main categories of business models on the Web, one that is native to the Web (six models) and one that is transplanted (eight models) from traditional business. Moreover, Michael Rappa [10] proposed nine types of business models observable on the Web, while Tapscott et. al [13] defined five categories. Vitale and Weill [16] distinguished eight categories of business models on the Web, and furthermore Thomas Eisemann [2] concluded that there are eight categories of Web business models. These taxonomies are presented in *Table 1* [15].

The aforesaid taxonomies share some common features. Similarities, for example, can be found between Timmers' E-shop Model, Bambury's Mail-Order Model, Rappa's Merchant Model, Tapscott's Aggregation Model and Eisenmann's Online Retailers Model. On the other hand, they differ a lot due to the differences in author's viewpoints, but also due to the fact that the nature of the Web is not yet well understood. Timmers' classification, for example, is based on degree of innovation and functional integration, whereas Bambury is influenced by his philosophical view of the Web's free flow of information.

Classifying business models on the Web is a difficult procedure, although the work done by the aforesaid people is significant. The proposed taxonomies are not meant to be exhaustive or definite. A firm may either choose to implement one model or combine several different models as parts of its overall business strategy on the Web. Many Web-based businesses incorporate several of the models into their structure in order to minimize the potential weaknesses and threats to the models, and maximize their potential revenue.

In order to study a taxonomy of Web business models, we chose Rappa's classification, which is a comprehensive and cogent taxonomy. The next subsections describe Rappa's categories of Web business models, presenting specific examples of how these models are implemented on the Web.

The Brokerage Model

This model is based on brokers who act as intermediaries between buyers and sellers. Rappa [10] states that "brokers are market-makers: they bring buyers and sellers together to facilitate transactions". A broker makes its money by charging a fee for each transaction it enables. The fee can be covered by the buyer, but usually the seller is responsible for the fee and may include it in the selling price. Brokers are present in business-to-business (B2B), business-to-consumer (B2C) and consumer-to-consumer (C2C) markets. Brokerage models can take the following forms:

<u>Marketplace Exchange</u>

It is a model for B2B markets, providing transaction processes for the market trading. An example of this model is ChemConnect [22] which helps customers to optimize their purchasing and sales processing for chemicals, plastics and related products, by bringing together market information, industry expertise, e-commerce solutions and an active network of trading partners.

Author of taxonomy	Number of models	Classification schemes of Web business models
Timmers (1998)	11	E-shop, E-auction, E-mall, E-procurement, Third Party Marketplace, Virtual Communities, Value Chain Integrators, Collaboration Platforms, Value Chain Service Providers, Information Brokerage, Trust Services
Bambury (1998)	14	Transplanted Real-World Business Models:Mail-Order, Advertising Based, Subscription, Free Trial, TheDirect Marketing Model, The Real Estate Model, IncentiveScheme, Business to BusinessNative Web Business Models:Freeware Model, Library Model, Information Barter, AccessProvision, Web Site Hosting & Other Web Services, DigitalProducts & The Digital Delivery Model
Rappa (2000)	9	Brokerage, Advertising, Infomediary, Merchant, Manufacturer, Affiliate, Virtual Community, Subscription, Utility
Tapscott et al. (2000)	5	Agora, Aggregation, Value Chain, Alliance, Distributive Networks
Vitale / Weill (2001)	8	Content Provider, Direct to Consumer, Full Service Provider, Intermediary, Shared Infrastructure, Value Net Integrator, Virtual Community, Whole of Enterprise / Government
Eisenmann (2002)	8	Online Retailers, Online Portals, Internet Access Providers, Online Content Providers, Application Service Providers, Online Brokers, Online Market Makers, Networked Utility Providers

Table 1: Taxonomies of Web business models [15]

• Buy / Sell Fulfillment

This case involves customer orders to buy or sell a product or service, in terms of price and delivery. For example, CarsDirect [21] is a multi-brand online car buying service, which offers to buyers the choice of researching a variety of vehicles, comparing their features and making a purchasing decision.

- <u>Demand Collection System</u> In this model, a buyer makes a bid for a specified good or service and the broker fulfils his request. Priceline.com [37] is a characteristic example of this model, as it is an online travel service providing its customers packages including airline tickets, hotel rooms, rental cars etc, where a buyer can bid for his favorite package.
- <u>Auction Broker</u>

This is the case where buyers and sellers are brought together for auctions. The broker charges the seller a fee according to the value of the transaction. The seller takes the highest bid from buyers, above a minimum price. An example of this category is eBay [25] which acts as an auction broker between buyers and sellers.

<u>Transaction Broker</u>

This model provides a third-party payment mechanism between buyers and sellers who want to settle a transaction. For example, PayPal [36], which is an eBay company, is a safe and easy payment mechanism for buyers in order to pay online for a good in any way they prefer (credit cards, bank accounts, accounts balances).

• <u>Distributor</u>

In this case, buyers are given a catalogue of a large number of product manufacturers. The broker facilitates business transactions between franchised distributors and their trading partners. NextDirect [34] implements this model acting as a reseller of computer products, covering over 1000 manufacturers.

• <u>Search Agent</u>

The broker in this model is a software agent or "robot" which searches out the price and availability for a good or service specified by the buyer. For example, RoboShopper [40] is an online agent of shopping sites, providing its customers the facility to find the best prices without surfing to every online store.

<u>Virtual Marketplace</u>

In this model the broker is a hosting service of online merchants that charges setup, monthly listing and perhaps some transaction fees. It may also provide automated transaction and relationship marketing services. The most characteristic example of this model is Amazon [18], a portal to the world's largest bazaar marketplace.

The brokerage model has many advantages. Firstly, it provides a centralized point for transactions between buyers and sellers, allowing for the comparison of goods and service providers. Secondly, the broker is accounted as a trusted third party which increases both sides' confidence about conducting online transactions. Moreover, both sides are given a common interface for their transactions, providing the opportunity to cross international boundaries. In the case of Paypal, for example, the transactions are supported by a common payment mechanism. On the other hand, the main weakness of the brokerage model is that the broker is responsible for any transaction, but not for its completion. Furthermore, the centralized nature of this model imposes difficulty to the broker when he must perform a large amount of concurrent transactions [7].

The Advertising Model

The advertising model is an extension of the traditional broadcasting model. The broadcaster of the model is a web site which provides content and services mixed with advertising messages. The advertising message can be a banner ad, a sidebar ad, a pop up or pop under ad, an interactive ad or an emulating traditional TV ad. Accounting for ads, two measures have emerged, the CPC (cost per click) and the CPI (cost per impression), which allow ads to be sold in bulk quantity and displayed on various websites via intermediary agents. Rappa [10] classifies the following types of advertising models:

• Portal

This model, in its general form, is a gateway to information provided by different services. A portal can be personalized, allowing customization of the interface and content to the user. For example, Yahoo [44] offers a variety of services, such as Yahoo! Mail for e-mail manipulation, Yahoo! Maps for online mapping, Yahoo! Video for video sharing etc. Another example of this model is Google [28], offering G-mail for e-mail manipulation, Google Earth for online mapping etc.

• <u>Classifieds</u>

It goes for a common web based replacement for the classical newspaper classifieds. In some cases it is free of fees, in others there is a pay per listing. AllClassifieds [17] implements this model by allowing to browse, change or place ads (free or with a cost).

User Registration

This model involves common interest sites that are free to access, but require user registration. Registration allows sites to track user surfing habits, which can provide demographic data and generate valuable data for targeted advertising campaigns.

Query-Based Paid Placement

The query-based paid placement is a model that offers higher ranked link positioning or advertising according to the terms users query on search engines. Companies that utilize this model hold auctions where the advertisers submit a bid for the advertising space and the ads are accepted based on the amount. These companies tend to be websites that are frequently viewed by users, such as search engines (Yahoo [44], Google [28]).

<u>Contextual Advertising / Behavioural Marketing</u>

In this model free software is developed and distributed online, providing some small services (i.e. desktop weather, time correction). Afterwards, as the user surfs the Web, this software delivers advertising links or pop-ups. This model contains two main parts, the contextual based on the content of the websites viewed by users, and the behavioural based on users' overall website viewing behavior.

• <u>Content-Targeted Advertising</u> This model enhances the precision of search advertising to the rest of the Web. For example, Google [28] can identify the meaning of a webpage and automatically provide relevant ads when a user visits this page.

• Intromercials

In the Intromercials model ads are placed at the entry page of a website, before a user reaches the intended content. NineMsn [35], which acts as a website of both Nine Network and MSN, utilizes this model.

• <u>Ultramercials</u>

This model incorporates interaction and feedback in ads appeared while a user enters a website, by changing the focus of the site to the ad itself.

The fundamental strength of the advertising model is that anyone can access every part of the market place with the same effort. This means that the advertising model is a relatively straightforward way for a business to generate revenue. Another important advantage of the advertising model is the tracking of users' surfing habits, achieved by demanding in some cases user registration. This fact can, as mentioned before, create value data for targeted advertising campaigns. On the other hand, there is a democratic deficit in this model, due to the fact that advertisers have the control of choosing who can or not advertise. Moreover, the dominant weakness of the advertising model is users' annoyance by any kind of ads. It is worth to mention that there are businesses that offer software which blocks many forms of web advertising [7].

The Infomediary Model

This model is based on the information extracted from users' browsing habits. This information is collected, stored and then sold to companies in order to reinforce their marketing techniques. In the infomediary model, the traded goods and services are usually hardware and ISP services. The proposed types of this model are the following one:

<u>Advertising Networks</u>

This model involves the creation of a network of client sites. Every client site gets banner ads, enabling the advertisers to deploy large coordinated marketing campaigns. These networks collect data about users and can be analyzed in order to improve campaign effectiveness. For example, Google AdSense [29] offers to website publishers the opportunity to display targeted Google ads on their websites, therefore letting Google search their websites' users.

- <u>Audience Measurement Services</u>
- This is the case where agencies conduct online market research to collect and utilize audience information.
- Incentive Marketing

The incentive marketing model involves the creation of schemes that can provide incentives to customers, such as redeemable points, coupons or cash, for making purchases from affiliate companies. For example, RewardsCentral [39] is a customer loyalty program where a user is prompted to read emails, click links and shop online, in order to earn points, which furthermore can be redeemed for cash.

<u>Metamediary</u>

In this model buyers and sellers are brought together to conduct transactions, where buyers are provided with helpful and comprehensive information and services for their purchases. The key point in the transaction is that both sides are not involved in the actual exchange of goods or services. An example of this model is Edmunds [26], a metamediary in the automobile metamarket.

The infomediary model enables research to sociological information, therefore helping understand market trends. It is a model that can benefit both sides of a transaction, as it acts like a two-way filter. Customers can be shown ads only of their interest, while advertisers can target interested market demographics. Another advantage of the infomediary model is the trust it inspires on customers by protecting their personal data and information and avoiding mass advertising. On the other hand, trust is something hard to gain, but very easy to lose. Furthermore, the massive data collection approach of the model puts customer's privacy in risk. The infomediary model owes his poor reputation to the fact that customers sell their personal data and information for almost no return [7].

The Merchant Model

The merchant model involves the selling of goods and services by wholesalers and retailers over the Web. In this case, sales are based either on list prices or auctions. It is one of the primary business models found on the Web and is classified to the following types:

<u>Virtual Merchant</u>

A virtual merchant is an "e-retailer" or a business that sells its goods and services solely over the Web. For example, Amazon [18] is a retail merchant operating solely on the Web.

<u>Catalogue Merchant</u>

A catalogue merchant provides a web-based product catalogue from which customers make orders. The orders in this model are made through phone, fax, mail or a combination of online and offline interactions. Lands' End [32], for example, is a global direct merchant of clothing, soft luggage and home products, which are sold through catalog mailings.

<u>Click and Mortar</u>

In this model merchants not only display their catalogues online, but also sustain a web storefront. Barnes and Noble [20] is an example of a click-and-mortar store, providing catalogues of books, toys and games, gift cards, home products etc.

Bit Vendor

A bit vendor is a merchant that sells only digital products and services, and conducts both sales and distribution over the Web. A characteristic example of this model is iTunes of Apple [19], which sells online music, videos and television shows.

The merchant model is a simple purchasing system that gains customers' trust. It is also a very well established offline model, making it easy to translate it to e-commerce. Another main strength of this model is

the lower costs of buying products through online store rather than a physical one. Weaknesses, though, are also found in this model. The most common is the case where there is no physical interaction between transaction parties, making it easier for a frauds man to forge identities online. Moreover, a critical issue is how reliable are the third parties involved in the deliveries of products to customers, once they leave the store [7].

The Manufacturer (or Direct) Model

In the manufacturer model the manufacturer reaches directly the customer, without intermediaries. This procedure leads to compression of the distributed channel. This model can provide greater efficiency, better customer service and a greater understanding of customers' needs [31]. Rappa [10] claims the following four types of this model:

- <u>Purchase</u>
 - This is the case where a customer buys a product, acquiring full ownership rights.
- Lease
- In this model the customer rents a product by paying a weekly or monthly fee.
- License
 - This model is similar to the lease model, but here the customer gains only operational right to a product.
- <u>Brand Integrated Content</u> In this case the manufacturer creates content in order to gain product placement.

A perfect example of the manufacturer model is Dell [24]. Dell is a computer manufacturing company which creates its products specifically for its customer when the customer orders them. These products are designed in a way that fulfills customer's exact demands. It also provides its customer almost unlimited access and resources to create any kind of product they prefer.

A business that utilizes the direct model can offer to its customers significantly low prices for the products. A fundamental strength of this model, also, is the product customization it provides in a much greater degree than traditional retail models. The manufacturer model improves customer relations by providing quick responses and feedback to their orders, and increasing its accuracy in forecasting customers' demands. Low margin, lack of innovation and maintenance of multiple supplier communication channels are the main disadvantages of the model [7].

The Affiliate Model

This model is based on the idea of affiliation. Namely, partners (either individuals or small businesses) become affiliated in financial terms, providing purchase opportunities from every place the customer can surf. If an affiliate does not generate sales, the merchant of the click-through process receives a "no cost" message. Three categories of this model have been classified by Rappa [10].

- Banner Exchange
 - This is the case where a network of affiliated partners exchange banner placement.
- <u>Pay-per-click</u>

In this model, a website pays its affiliates for users' click-through.

• <u>Revenue Sharing</u>

When a user click-through leads to a purchase of a sale, the revenue is shared (by means of percent-of-sale) among the affiliates.

Amazon [18] utilizes the affiliate model by enabling affiliates to place banner or text links on their websites. When a user clicks from the affiliate's website through to Amazon and buys a product, the affiliate receives a commission. Amazon's Associates program has signed up over 900,000 websites linking to Amazon products and earn between 2.5 and 15% in referral fees for product sales through these links [4].

The most significant strength of the affiliate model is the notion of association. The affiliate model can generate revenues with little effort, once links between the affiliates are established. A critical issue in this model is the number of involved affiliates. As this number increases, the model becomes even more effective (network effect [12]). A problem that can appear in the affiliate model is the involvement of unwanted affiliates, which can degrade a company's brand.

The Community Model

The community model is a model based on user loyalty. Its revenues derive from voluntary contributions, sales of goods and services, contextual advertising and subscriptions for premium services. Four types of this model have been proposed by Rappa [10]:

Open Source

This model includes the development of source code that can be available to the public. Anyone can access and modify the code under the theory that "everyone can't be wrong". For example, RedHat [38] operates

on a professional open source business model, producing open source code available for any further adaptation and improvement.

Open Content

This model is similar to the previous model, but here the available product is not necessarily a code, instead it can be any kind of information. The most common example of this model is Wikipedia [43], where anyone can offer, create and edit any kind of information.

- <u>Public Broadcasting</u>
 This is the case where individuals donate content that is broadcasted to their community in order to keep the community alive.
- Social Networking Services

In this model individuals are enabled by websites to interact and connect to other individuals, friends or even strangers, for the purpose of social interaction. Facebook [27], for example, uses this model in order to bring together a variety of users, familiar or not among them, creating a social network.

The community model is a new model in the area of business modeling. Its main advantage is the ability to construct social groups and networks. When a community reaches a critical membership, it enables its members to sustain its content and let business focus on other parts of the community. Whereas, the main weakness of this model is the hard effort required for creating initial unique content, in order to attract individuals in terms of participation [7].

The Subscription Model

The subscription model allows users to subscribe to a service, charged by a fee that is paid annually, monthly or seasonally. Some websites offer users either free or premium content. Free content is available for anyone who uses the website, whereas premium content is used or viewed only by those who have subscripted to the website [31]. This model is divided also in four types:

<u>Content Services</u>

In this model users subscribe to a service for a fee, in order to view text, audio or video content. Netflix [33], for example, is an online movie rental service, where subscribers gain access to a variety of movies.

<u>Person-to-Person Networking Services</u>

This case involves social services for the distribution of user-submitted information. For example, Classmates [23] is an online networking service that enables users to locate and interact with acquaintances from college, high school, work and the military.

<u>Trust Services</u>

This model stands for services where their members follow a precise code of conduct, paying a subscription fee. An example of trust service is Truste [42], where individuals and organizations are enabled to establish trusting relationships taking into account personal identities.

Internet Service Providers

This model allows subscribers to connect to a network, such as the Internet.

The subscription model is an attractive model for customers, because they pre-buy content and use it any time they prefer. Another advantage of this model is the ability of the provider to regulate the flow of services to the customers and moderate services' usage. The major drawback of this model is the issue of value for money. To explain this issue, consider a subscriber using a service for only a few hours per month, while another subscriber uses the service for much more hours in the same month. Each subscriber is charged the same price, therefore the first customer gets disappointed and in many cases abandons the subscription [7].

The Utility Model

The utility model is a "pay as you go" approach, based on metering usage of services. The metered services of this model are counted for actual usage rates. Rappa [10] distinguishes two types of the utility model:

<u>Metered Usage</u>

This model measures and charges the users according to the actual usage of a service. An example of this model is the case of IBM [30] Global Services, where customers tap into information technology resources, paying for them in such a way as paying for electricity or water.

<u>Metered Subscriptions</u>

In this case, subscribers purchase access to content in metered portions. For example, Slashdot [41], which is one of the largest information technology news sites on the Web, allows the users to subscribe and access one thousands web pages, free of advertisements, for a five dollar fee.

The main advantage of this model is its pricing methodology which allows the matching between service revenues and service expenses. The utility model is also an attractive model for potential customers, as they do

not get involved in the infrastructure building which is actually taken over by a third party utility provider. Compatibility, data and storage, available bandwidth, reliability of service and lowering costs are issues that can reduce the efficiency of the utility model [7].

CONCLUSIONS

A great effort in classifying the business models found on the Web has been done so far. In this essay we described in detail the proposal of Rappa [10], by presenting the characteristics of each proposed type of model and giving examples on the Web for a better understanding. We need to consider that it is hard to find a successful business utilizing a single business model. The key factor for a great success, instead, is to combine some models in order to interact with different groups (suppliers, partners, customers), gain the strengths of every combined model and deal with models' weaknesses.

For example, Amazon does not utilize a single business model. Instead, it offers a combination of the brokerage model, the advertising model, the merchant model, the affiliate model and the utility model [3]. Amazon is positioned as a value adding intermediary between suppliers, distributors, publishers and customers. It can also act as a virtual merchant in the business-to-customer side. Moreover, it can provide purchase opportunities wherever buyers may be surfing, through affiliates.

The proposed taxonomies of Web business models, as mentioned in the first section, are not exhaustive or definite. New business models, in the future, may arise in order to overcome existing problems and cover issues not taken into account so far.

REFERENCES

- [1] Bambury, P. (1998). A taxonomy of Internet Commerce. First Monday.
- [2] Eisenmann, T. (2002). Internet Business Models: Text and Cases. McGraw-Hill, New York.
- [3] Hitz, M., Sigala, M., Murphy, J. (2006). *Information and Communication Technologies in Tourism 2006*. Springer-Verlag Wien.
- [4] Hoffman, D. and Novak, T.P. (2004). A Conceptual Framework for Considering Web-Based Business Models and Potential Revenue Streams. International Journal of Marketing Education.
- [5] Linder, J.C. and Cantrell, S. (2000). *Changing Business Models: Surveying the Landscape*. Institute for Strategic Change, Accenture.
- [6] Magretta, J. (2002). Why Business Models Matter. Harvard Business Review.
- [7] Matthew, G., Yvonne, N., Gordon, W., Matthew, Z. (2007). *Managing the Digital Enterprise. Business Models on the Web.* Australian National University.
- [8] Osterwalder, A. and Pigneur, Y. (2002). An eBusiness Model Ontology for Modeling eBusiness. Proceedings of the 15th Bled eCommerce Conference.
- [9] Pateli, A. and Giaglis, G. (2003). A Framework for Understanding and Analysing eBusiness Models. Proceedings of the 16th Bled eCommerce Conference.
- [10] Rappa, M.. *Managing the digital enterprise*. <URL: <u>http://digitalenterprise.org/models/models.html</u>>. Accessed 08 May 2010.
- [11] Rayport, J.F. and Jarowski, B.J. (2001). Introduction to e-Commerce. McGraw-Hill, New York.
- [12] Sellens, J.T. (2009). Knowledge, networks and economic activity. Revisiting the network effects in the knowledge economy. Uocpapers, Issue 8, April 2009.
- [13] Tapscott, D., Lowi, A., Ticoll, D. (2000). Digital Capital Harnessing the Power of Business Webs. Harvard Business School Press, Boston.
- [14] Timmers, P. (1998). Business Models for Electronic Markets. Journal of Electronic Markets.
- [15] Wang, C.-P. and Chan, K. (2003). Analyzing the taxonomy of Internet business models using graphs. <URL: <u>http://131.193.153.231/www/issues/issue8_6/wang/index.html</u>>. Accessed 08 May 2010.
- [16] Weill, P. and Vitale, M.R. (2001). *Place to Space: Migrating to eBusiness Models*. Harvard Business School Press, Boston.
- [17] AllClassifieds. <URL: http://www.allclassifieds.com.au/>. Accessed 15 May 2010.
- [18] Amazon. <URL: http://www.amazon.com/>. Accessed 12 May 2010.
- [19] Apple iTunes. <URL: http://www.apple.com/itunes/>. Accessed 22 May 2010.
- [20] Barnes and Noble. <URL: http://www.barnesandnoble.com/>. Accessed 22 May 2010.
- [21] CarsDirect. <URL: http://www.carsdirect.com/>. Accessed 12 May 2010.
- [22] ChemConnect. <URL: http://www.chemconnect.com/>. Accessed 13 May 2010.
- [23] Classmates. <URL: http://www.classmates.com/>. Accessed 06 June 2010.
- [24] Dell. <URL: http://www.dell.com/>. Accessed 23 May 2010.
- [25] eBay. <URL: http://www.ebay.com/>. Accessed 12 May 2010.
- [26] Edmunds. <URL: http://www.edmunds.com/>. Accessed 18 May 2010.
- [27] Facebook. <URL: http://www.facebook.com/>. Accessed 03 June 2010.
- [28] Google. <URL: <u>http://www.google.com/</u>>. Accessed 15 May 2010.
- [29] Google AdSense. <URL: http://www.google.com/adsense/>. Accessed 18 May 2010.

- [30] IBM. <URL: <u>http://www.ibm.com/</u>>. Accessed 09 June 2010.
- [31] Isopedia. Internet Business Models. <URL: <u>http://www.acamedics.com/sites/misworld/isopedia/index.php?title=Internet_Business_Models&printable=</u> <u>yes</u>>. Accessed 09 May 2010.
- [32] Lands' end. <URL: http://www.landsend.com/>. Accessed 22 May 2010.
- [33] Netflix. <URL: http://www.netflix.com/>. Accessed 05 June 2010.
- [34] NextDirect. <URL: http://www.nextdirect.com/>. Accessed 12 May 2010.
- [35] NineMsn. <URL: http://ninemsn.com.au/>. Accessed 15 May 2010.
- [36] PayPal. <URL: https://www.paypal.com/>. Accessed 12 May 2010.
- [37] Priceline.com. <URL: http://www.priceline.com/>. Accessed 12 May 2010.
- [38] RedHat. <URL: <u>http://www.redhat.com/</u>>. Accessed 02 June 2010.
- [39] RewardsCentral. <URL: http://www.rewardscentral.com.au/>. Accessed 18 May 2010.
- [40] RoboShopper. <URL: <u>http://www.roboshopper.com/</u>>. Accessed 12 May 2010.
- [41] Slashdot. <URL: <u>http://slashdot.org/</u>>. Accessed 12 June 2010.
- [42] Truste. <URL: <u>http://www.truste.com/</u>>. Accessed 08 June 2010.
- [43] Wikipedia. <URL: http://www.wikipedia.org/>. Accessed 03 June 2010.
- [44] Yahoo. <URL: http://www.yahoo.com/>. Accessed 15 May 2010.