# Profitability on the Web:

## **Business Models and Revenue Streams**

Thomas P. Novak and Donna L. Hoffman

eLab, Owen Graduate School of Management, Vanderbilt University

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### Introduction

What does it take to be a success on the Internet? What makes for a profitable Web site? Understanding the issues involved in achieving profitability on the Web is turning out to be elusive, even as the Internet Economy is becoming a more potent force both domestically and globally.

While overall growth cannot be disputed, what does this mean for individual firms? That is, are firms making money? Contrary to common wisdom, there is such a thing as a profitable Web venture. But can we summarize what it takes to be profitable?

There are a variety of metrics firms use to gauge the success of their Web sites- margins, market cap, price:sales multiples, revenue growth, stock returns - but different measures give different results. It turns out that it's hard to say who's making money because there are lots of ways to look at this but no obvious way to get a clear story. It seems confusing and the results are not completely consistent.

So, we realized that we had to go beyond what people have done so far and take a deeper look. We need a framework. We've developed a way to think about things that is different from how people have been talking about business models and profitability so far.

One problem is that the Web possesses unique characteristics that distinguish it in important ways from traditional commercial media. Because the Web presents a fundamentally different environment for consumers and marketers compared to conventional media, relying on old paradigms may limit the manager's ability to effectively capitalize on the power of the Web.

Based on over seven years of scholarly research and work with e-commerce companies that we have been conducting at the Vanderbilt eLab that we founded in 1993 to study the Internet opportunity, we have developed a framework for understanding the creation of successful Web-based business models that takes advantage of the distinctive features of the Internet in unique and sustainable ways.

### What is "Customer Centricity"?

As a general process, customer centricity starts with the customer and their needs. After the needs are well understood, the industry develops *backwards*, first concerning itself with the delivery of customer satisfactions. Next, the industry moves back further to creating products and services that meet these satisfactions on the part of the customer. The customer generally is indifferent to how these goods are services are created, instead they are concerned only about the degree to which they meet needs. Finally, the industry

moves back still further to finding the raw materials necessary for making its products. On the Web, these raw materials take the form of customer information, gathered and "mined" on an ongoing basis.

Customerism is *not* a technology-driven process. To quote Frederick Webster in a 1998 volume of *Journal of Interactive Marketing*,

"Customers, their needs, interests, habits, and priorities are often left out of the equation as observers get carried away with the potential of the latest communications, networking, and interactive software and hardware capabilities."

This is a common mistake, and indicates that the firm is not focusing enough on the relationship with the customer. To properly focus, firms must be *customer centric*:

Customer centricity is maximizing the understanding of our customers within a time frame and a context – short of long duration – to achieve business objectives and maximize customer value.

The best companies we have studied, have completely re-oriented their business processes, technology, and strategy formulation in order to become customer-centric. In this paper, we provide a framework for understanding business models in a customer-centric context.

#### **Outline**

Chapter 2 analyzes the unique characteristics of the Web that provide the e-Business setting. These characteristics provide powerful consequences for the firm.

Chapter 3 reviews generation of customer and firm value. It answers the question: Given the unique characteristics of the Web, how are companies generating revenue? Each revenue value proposition is backed up by examples that may be investigated further by the reader. Some of the examples are well known, but many are not.

Chapter 4 discusses business model integration. The chapter develops our fundamental thesis – that success online comes from a combination of two factors –value to the customer, and value to the firm. After identifying the two classes of value propositions generated by the Web, we discuss how to analyze different business models that combine the value proposition for customers and for the firm. The business model integration framework is a powerful organizing method both to understand where your firm is at the present time, but also to develop strategies for the future. We believe that it is very close to representing the full set of alternatives in the e-Business space. In addition, it can be used for auxiliary purposes, such as categorization and assessment of vendor offerings as well as development of optimal e-Business investment paths (although the latter will not be covered in detail).

Chapter 5 shows how to understand your strategic options and implement our framework. The chapter presents the Value Proposition Matrix as the key tool. The value proposition matrix is used first to locate the current offerings of the firm then make rational decisions about what customer value-propositions to offer into the market place, and what technologies are best utilized in order to deploy them. This is designed to help the firm determine what steps to make and how to make decisions about their evolving e-Business strategy.

### How the Web generates value

We develop a few case examples of how the Web provides a completely different experience, and new opportunities for generating value. The question is: "what can we do on the Web that we really couldn't do before?" or "Can we do this without the Web?" This may be a matter of degree, rather than absolute. This is one way to probe the idea of what's new here.

Many of these are a matter of degree, some of these may have been done before, but the Web allows them to be done on a much greater scale.

There are many current eCommerce ventures that were simply not practical before the The Web enables brand new forms of business that were simply not practical or possible before...

- digital downloads - MP3.com
- new pricing models - Mercata, Priceline
- auctions - eBay
- instant messaging - AOL buddy lists
- M-commerce - Palm VII
- peer-to-peer programs - Napster, Gnutella
- personal broadcasting - webcams, personal homepages, Zing (photo sharing)
- transclusive advertising - affiliate programs

Web. The most exciting opportunities with the potential for huge payoffs involve developing brand new forms of business that enable things that were impossible or inconceivable before.

- ▶ Auctions that let geographically remote participants bid on items and participate in communities based on affinity for categories,
- ▶ digital downloads music, books, other types of information
- ▶ instant chat ability to communicate in real time with buddies
- ▶ Peer-to-peer programs like Gnutella, Napster [soon to be extended to other types of information technology applications]
- ▶ Web cams for personal broadcasting

These technologies expand the market for goods and services, for example buying stuff online from far away. Opportunities arise because companies can offer consumers control, choice, and value in all stages of the purchase process. These new business strategies take advantage of the Internet as a many-to-many interactive medium that emphasizes communication and community.

The most compelling approaches we can find are those causing the most pain, wracking traditional ways of doing things, disrupting traditional distribution channels, creating new channels: eBay, Napster, AOL's buddy lists, online auto sales, online liquor sales are all examples of this.

The phenomenal projected revenue growth for Web-based businesses is in a remarkable medium that didn't exist in any meaningful way as recently as 7 years ago. This indicated now the new medium of the Web is very different from anything providing business opportunities in the past.

There are several unique characteristics of the Web as a medium that make it sufficiently different from conventional media that current marketing paradigms and research approaches may not directly apply to some business problems. For example:

- The many-to-many communication model reverses the traditional one-to-many broadcasting paradigm. Any user can be an information provider.
- Consumers interact with both people and computers. Human interaction is not just with other people, but also with intelligent agents.
- Consumer competence issues of access and skill are an important consideration. Several companies have been forced to train customers to use its B:B site, it was so poorly designed.
- The Web allows unprecedented level of choice in an environment that approaches full information. How do customers make decisions in this environment?
- Control balance of power shifts toward the consumer, bring in issues of online privacy and security.

### Figure: Attributes of the Web and customer consequences

#### **FUNDAMENTAL** CUSTOMER ATTRIBUTES **CHARACTERISTICS** CONSEQUENCES Decentralized. Range of content is Customer can more anything that can be easily compare prices distributed network of computers - "network digitized (audio, video, and product offerings. of networks." text, etc.). Lower search costs. • Lack of physical • Open structure -Memory can be information can be constraints on content. augmented. accessed by any user. • Information is more Search can be aided. Any user can be a easily accessed and Decision-making can be provider. readily available. aided. • Medium can be • Web is constantly Can satisfy information accessed anytime, changing. needs. anywhere. Digital copies are • Very large number of • Digital information. essentially free. alternatives to consider. Hypermedia Unbundled form from Information overload. environment. information. Can be hard to find

- Nonlinear presentation and access.
- Action is required of user.
- Many-to-many communication model.
- Asynchronous or synchronous communication.
- Machine-interactivity required.
- Person-interactivity is mediated.
- No limits on how much content there can be.
- Information immediately accessible
- Content can be easily modified.
- Communications are persistent and enduring over time.
- Addressable.
- Logging of all behavioral responses.
- Behavioral responses are not necessarily linked to identity.
- Extendable to interface with external sources originally outside the Web.

- Environment approaches full information
- Erases geographic distance between buyer and seller.
- Source of information is often unknown.
- Greater scalability compared to the physical world.
- Medium can be used for multiple and diverse communication purposes.
- Software agents can be developed to process content.
- Virtual communities form naturally as customers self-segment.
- Word-of-mouth role is magnified.

- information.
- Customer information has value.
- Facilitates trial.
- Greater availability of hard to find products.
- Lower prices (free at the limit)
- Anonymity is possible.
- Customer has more control.
- Customer has more power.
- Convenient
- Can be entertaining.
- Novelty ("because you can")
- Customer may seamlessly alternate between experiential and goal-directed behavior.
- Customer must have competence to use Web.

A variety of concrete attributes (column one above) define the Web as a medium. Some of these attributes are based in the open nature of the Web, where any user can be a provider, at any time. Others derive from the nature of the information – which is hypermedia and digital. Still other attributes deal with the nature of communication and interactivity that is possible, while others deal with the nature of content and the way customer use of this content can be identified and tracked.

Although these fundamental characteristics and basic elements/properties define the Web as a computer-mediated environment, other attributes are higher-order attributes (column two above) that follow directly from combinations of the fundamental characteristics. Taken together, these attributes create both opportunities as well as potential problems

for managers and their customers in online environments.

These attributes characterize the Web –the extent that they make the Web different or distinguish it from other media is largely a matter of degree.

### **Customer consequences**

Directly as a result of the attributes, there are a series of consequences of the Web for customers. These apply in both B-C and B-B situations. Some of the most important customer consequences center around the degree to which the Web enhances the way a customer can search for information and make decisions. There are both positive and negative aspects to this. The Web also expands customer possibilities, facilitating trial, and creating greater availability. The balance of power between firm and customer shifts, with the customer achieving greater control. The Web, much more so than traditional media environments, allows customers to alternate between experiential (non-directed, "fun") behavior and goal-directed ("work") behavior. Online commerce must take account of both.

### Firm consequences

These attributes of the Web, and the new forms of power that they give to the customer have significant consequences for the firm. From the firm's perspective, many new ways of conducting business are possible on the Web. There are economies and efficiencies of scale, of production, of distribution and of reaching customers. It is now possible know much more about your customers than you ever did before. As distance shrinks, new markets and new competitors open up. Customer word-of-mouth, due to the balance of power shift, can become a trickier issue online. The role of brand name becomes even more important on line, as trust issues take center stage.

For many firms, however, the greatest consequence of the Web for their business is that business models are seen as a challenge.

## Getting customer value and firm value

Providing value to your customers is the essence of customer centricity – without it, you can not do business. The question is: "What customer benefits do you provide that create value for your customers?"

There are a large variety of ways to provide customer value, and not all of them will make sense in every situation. For example, provisioning these services also should provide a matching revenue stream for your organization. We recommend brainstorming on each of these value propositions within the context of your own business to determine its potential applicability.

### Figure: Value models for customer centricity

Brokerage (buy/sell fulfillment; market exchange; vertical; buyer aggregator; distributor; virtual mall; metamediary; auction broker; reverse auction; classifieds.)

Content (generalized portal; personalized portal; specialized portal; magazine)

Search (search agent; directory; pricebot)

Incentive (free model; attention marketing)

Freeware

Communication

Control

Outsourcing (ISP; Hosting; ASP; Logistics outsourcing)

Entertainment (gaming; engagement marketing)

Transaction (virtual merchant; catalog merchant; bargain discounter; surf & turf; direct sales; bit vendor)

**Affiliate** 

Community (voluntary contributor model; knowledge networks)

### **Brokerage**

Brokerage models are "market-makers" that bring buyers and sellers together and that facilitate transactions. While primary thought of as B2B, they can also be B2C or C2C. A natural revenue stream for this model is collection of a transaction fee, but other revenue sources such as advertising, subscription or sponsorship are possible.

### Examples:

- 1 **VerticalNet** owns and operates 57 vertical marketplaces that unite buyers and sellers from around the world by catering to individuals with similar professional interests (energy, healthcare, food service, etc.)
- 2 **PaperExchange.com** is an online marketplace for the pulp and paper industry. Traditional marketing and procurement methods are inefficient, costly, and time consuming for both buyers and sellers. Customers can employ a posting process to buy or sell. As a result, buyers are able to get direct access to broader supply sources, reduced procurement costs, and intermediary transaction costs and markups. Sellers get direct access to broader markets, reduced transaction and selling costs, improved operating efficiencies, and reduced working capital costs through better inventory and receivables management. The services provides a "Trading Floor" that lists an enormous variety of pulp and paper products in all major grades, enabling you to search instantaneously and thereby save time. The global market reach of PaperExchange.com is 80 countries, access to a worldwide pool of suppliers, buyers, converters, and end-users. It has strategic alliances and listing agreements with Staples, Impresse.com, International Paper, Asia Pulp and Paper, Noosh and Bowater.
- 3 Air Products has joined **Elemica**, a premier global e-marketplace for contract buying and selling of chemicals. It offers an integrated, end-to-end system that enables buyers and sellers to streamline their business processes for contract sales-improving negotiation, contract management, order fulfillment, and payment. The logistics planning features enable the customer to reduce transportation costs, improve delivery, and provide online tracking and tracing of shipments. Connectivity and catalog listings allow sellers to increase their market reach, and give buyers a broader selection.

#### Content

Getting useful content is a second value model for the Internet and e-Business. The value derives from the extent to which the content meets customer information needs. News sites, online magazines, product information and review sites, and so on, are all content sites.

### Examples:

1 – **About.com** is an outstanding example of a content site. In recent MediaMetrix rankings, the about.com network ranked number seven in overall Web traffic, with nearly 20 million unique visitors this past August. About.com relies on specialized human "guides" to organize and maintain a vast array of information areas. There are nearly a hundred areas within the Health topic alone, and Health is one of 40 main topic areas.

#### Search

Searching for information is one of the most important services to provide consumers on the Web. The early portals like Yahoo at their base are companies made from helping locate information. The search category also includes recommender systems [since this also helps customers locate products or information that otherwise they would not been able to find].

### Examples:

- 1 **Google.com** This provider alone claims to index over a billion Web pages a prime source of customer value is customer search. Google is one of the few remaining examples of a pure search engine most have evolved into portals. Its revenue model is based on advertising.
- 2 **Active Buyers Guide** helps customers search for products that meet their needs in over 100 product categories. It uses a proprietary decision engine to present product features to customers and perform on-the-fly preference analysis to predict ideal products. Its revenue model is based on selling customer data. This is possible since the company aggregates the constant flow of data from the individual preference profiles into a real-time corporate market research service. Manufacturers' subscriptions to the company's research reports can vary based on the industry being covered, but annual rates in some categories can range up to \$50,000 a year, according to company sources. Active Research provides the recommendation service to each of its partners on an outsourced basis, allowing each site to promote the buying guides under its own brand names. Active Research keeps a tally on all shopping guides filled out by consumers. The company acts as an "infomediary," brokering the information that flows between consumers and manufacturers.
- 3 **RoboShopper** adopts a simpler approach, providing a single interface that allows shoppers to easily compare products across multiple storefronts without leaving the RoboShopper environment. Its revenue model is based on collecting revenues through a combination of advertising and commissions on sales linked through the shopping bot.
- 4 **ING Bank** uses a recommender system www.quickquote.com to provide recommendations for various insurance and mortgage products. Country Mutual Insurance Company uses recommendors with a vision of using a series of calculator engines and risk advisors, for retirement, wedding planners, life insurance, etc.
- 5 **Bradford Bingley** (United Kingdom) provides a list of products, and information about the products and then people make choice. The regulatory stipulations prohibiting giving of financial advice are accommodated with a "product wizard" that enables the customer to state their requirements and then receive a load of suggestions.

#### Incentive

There is a variety of incentive schemes on the Internet. These give to customers the option of accumulating "points" or other incentives that can be useful later. By rationing out the "points", it is possible to mold the behavior of the customer. For example, it is possible to provide referrals to other companies that also accept the "points". In many respects, these incentives act like an unofficial currency in that they have a specific value attached to them.

### Examples:

- 1 **Beenz.com** creates customer value through an integrated loyalty program that is coordinated across 300 different Websites. Customers can earn Beenz when they shop at stores such as Barnesandnoble.com or MP3.com – and even better, they can spend beenz at the 300 partner sites. The idea behind beenz.com was to create a globally acceptable alternative to money that would influence and reward online consumer behavior. Beenz.com seeks to differentiate itself from its competitors Netcentives and Cybergold by emphasizing the (i) "fun factor" associated with its brand name, (ii) the simplicity of the concept and (iii) the ubiquity of the beenz concept (beenz eliminate such problems as exchange rates and inflation). While its competitors have concentrated on the US market, beenz has launched in the UK and has already succeeded in attracting a significant number of foreign advertisers. Beenz can be earned and redeemed by virtually any participating site worldwide. Consumers earn beenz for performing "ordinary" online activities such as visiting a Web site, interacting with online businesses, shopping and simply accessing the Internet through their ISP. Consumers can spend their beenz at participating Web sites of their choice for a variety of products and services. As the beenz economy expands, the choice of rewards that consumers can enjoy with the beenz currency will also expand. Beenz.com currently has about 160,000 members. beenz.com has a simple revenue model. It sells beenz to advertisers for 1¢ each and buys them back from consumers for less. The resulting spread is its profit. Advertisers receive free marketing support from beenz.com in return for agreeing to minimum purchases of \$10,000 of beenz.
- 2 ePrize.com. This organization incentivizes specific user behavior by offering visitors a chance to win exotic prizes from your site.
- 3 **Greenpoints.com**. From S&H, the company that brought you Dinah Shore and Greenstamps. Now available in cyberspace!
- 4 **Mypoints.com** Another service that provides points that can be used later after they are accumulated.
- 5 **Webmiles.com** Given the consumer the ability to add frequent flyer miles for visitors to a site.

#### Freeware

Very similar is the freeware value model – where customers get "something for nothing". The strategy is that after the customer gets a free good, then there are abundant opportunities for subsequent revenue streams. Customers can take advantage of many free goods this way.

### Examples:

- 1 —**BlueMountain** consistently ranks in the top 50 of high-traffic Web sties. It offers free online greeting cards. To a casual surfer, it still has the look of a friendly family Web page, with no visible commercial presence. But ad banners are indeed being sold -- they just don't show up until after a card has been sent. Blue Mountain takes advantage of the Web's unique potential for targeting ads. Because cards tell a lot about the sender's state of mind, a visitor who chooses a mushy Valentine may see an ad for flowers and candy, while one who sends a sympathy card will see something different.
- 2 –Free Web store hosting and shopping carts can be yours with **Freemerchant.com**, **Bigstep.com**, and **eCongo**. You don't need to be a Web design guru either. All three services have simple site-building tools for designing and publishing pages. And you can do it all in about half an hour. Keep in mind, however, that while these services let you build an online store, post a catalog of products, calculate shipping fees, and accept online payments for free, you'll pay extra to process credit card orders in real time. These companies receive their revenue from advertising (users must display ads on their Web sites, Freemerchant targets these so they fit with your site) and value-added services.

#### **Communications**

Communication is an important source of customer value. Communication – originally email – is the major reason people go onto the Internet in the first place. Some companies have taken advantage of this need and moved into the space with products.

#### Examples:

- 1 An example of a physical product is the **Kritter** USB Webcam. It meets the needs of many customers to communicate.
- 2 **Net2phone**. This Internet-based product currently allows free computer-to-phone phone calls within the US using a headset plugged into one's PC, and low-priced international calls from PC to phone. Its revenue model is based on pay-per-call; licenses technology to investor AT&T.

#### **Control**

The Web inherently increases customer control. It also creates problems involving customer privacy, objectionable content, and proprietary content, for which increased control is a source of customer value.

### Examples:

- 1 **–Anonymizer** uses a subscription revenue model to allow a user to disguise their Web visits and identity.
- 2 **Cybersitter** and **N2H2** are commercial products which restrict objectionable incoming content.
- 3 **CopyrightAgent** is a new approach to collecting micropayments for copyrighted material particularly MP3 files of songs distributed by Napster and Gnutella.
- 4 Country Mutual Insurance Company: The company operates on the core principle of customer choice, allowing the customer to choose between using the Web, live advisors, or a call center for access. The company provides a similar experience across all of the channels in terms of recommendations and outputs for the customer.

### Outsourcing

A further source of value is outsourcing. In this model, the on-line firm provides a variety of services through the Internet. Home office applications using the ASP model, for example, can be provided for enterprise systems. The .NET program of Microsoft, including its recent purchase of Great Plains software, a premier provider of Internet-based ERP applications, indicates a strong trend in this direction. Other types of outsourcing arrangements use a Web-delivery mechanism for customer configuration of goods and services.

#### Examples:

1 – The **iPrint.com** Print Shop is Internet-based, which means that the iPrint.com service can take advantage of the phenomenal growth of the Internet to reach virtually every home and business in the coming years. Desire is to be the easiest electronic creation and ordering environment for the commercial printing of all popular printed items. This is done by using the power of the Internet and highly specialized software to provide outstanding prices and customer service. Consumers can create personalized professional printed products. Small businesses obtain greater selection of promotional products than they can get at local print shops *and* they can be ordered in lesser quantities than the amounts required at local print shops. For example, with iPrint.com small businesses can order quantities as low as 10 pads of customizable Post-it® Notes, and the minimum number of postcards is only 250.

2 – ServiceLane.com offers a complete solution for outsourcing customer service.

#### Entertainment

Entertainment is a further source of customer value, and has been growing in value, particular on-line gambling. Although many of these sites are exploratory in nature, the basic model could be applied to provision of many types of services. For example, the "personality test" type of site model could be used to provide medical diagnosis.

### Example:

- 1 **Sportingbet.com** (United Kingdom), provides a wide variety of sports information.
- 2 eMode is a different type of entertainment side, supported by advertising revenue, that draws visitors by providing dozens of unique "personality tests."

#### **Transaction**

Transactions are an obvious value source for the customer, who receives value first from being able to make a transaction with companies that would normally not be accessible, and second from the special bundling that comes from "theme stores" [that can be thought of special places that have assembled a special set of available transactions for the customer].

### Example:

**Retromodern.com** is an Atlanta-based furniture and design store – one of a large number of such stores which uses its Web presence to expand its market size and scope. It sells an interesting set of furniture and home supplies that are pre-selected around a theme that is similar to art deco.

#### **Affiliate**

The affiliate model provides value to small Web sites that seek to be advertiser supported, yet lack the traffic clout to generate any advertiser interest. In the affiliate model, Web sites self select themselves to participate in "affiliate programs" of transaction sites such as amazon.com or cdnow.com. The affiliates place links or ads on their sites, and are awarded a referral fee if a customer clicks on their link and purchases goods at the transaction site. This is a pay-per-performance revenue model – if an affiliate does not generate sales, there is no cost to the merchant. A potential problem that may limit the future diffusion of the model are the recent awarding of a patent to Amazon.com for this model – despite the fact that Cdnow developed and implemented

this model before amazon.com was even launched.

### Examples:

- 1 <u>Amazon.com</u> One of the "originators" of affiliate programs with Amazon.com's huge base of customers and superb brand, joining this affiliate program should be a closed-book issue!
- 2 <u>Art.com</u> Have you ever bought a print or piece of art? Most people have, and with a 10% commission through Art.com you can take advantage of this commonly bought item. Art.com makes Web revenues a reality for Website owners.
- 3 <u>PayTrust</u> Bring your Website's traffic to the future of bill payment with PayTrust. With at least \$20 per sign-up, PayTrust can help any Webmaster pay their own bills.
- 4 <u>barnesandnoble.com</u> Company offers commissions on everything from books to software to music. With popular, frequently bought items, their Affiliate.net support site, and a world-class brand, Webmasters are guaranteed to profit through this program.
- 5 <u>American Express</u> During their fall promotion your Website can earn up to \$55 for promoting their cards a great program for all Webmasters!

### Community

Community is another source of customer value. In this model, customers (or others) are able to take advantage of the connectivity of the Internet to find like-minded persons.

### Example:

1 – **Epinions.com** is a clean, elegant, and fast-loading site that collects consumer-written opinions about hundreds and thousands of products. Well-written opinions filter up to the top of a category list, depending on how well they are rated by site visitors and Epinion users. This encourages people to write well-meaning and useful reviews of products that they own, places they have traveled, or books they have read. Also, Epinions pays you a nominal fee (one to three cents) for every time one of your reviews is read. The concept isn't necessarily unique, since Amazon has been posting customer-written reviews for years, but the quality of Amazon's reader reviews have been appalling at best, and sometimes ridiculously juvenile. Epinions has put into practice a system that filters out the lame and boring reviews and favors the positive and well-written ones. This is exactly what the consumer wants and has been clamoring for since the Web became commonly accepted amongst consumers. There's something to be said for providing a clear path to good information without the overhead of paying professional writers. The Epinions revenue model is based on hoping to make money by partnering with large e-commerce stores and directing the review traffic to the stores who can do fulfillment. What's really great about this is that the consumer can choose which e-commerce store they want to buy from. If reading a good review of Stephen King's new book "Hearts in Atlantis"

convinces you to buy it, you have your choice of whether to buy it at Amazon.com, Borders.com, BarnesandNoble.com, or any of the other e-commerce stores that make deals with Epinions.

2 – **Participate.com** allows customers to band together around discussion on a particular product or company.

#### Revenue models for the firm

The Web also makes possible a variety of revenue models for the firm. These range from direct commissions on sales of goods and services, to other types of less direct models for collecting fees. We can expect that further types of revenue models will be available in the future as innovation continues in this sector.

Figure: Revenue models for the firm

Transaction fees	The firm collects a fee for each transaction that is conducted through its e-Business infrastructure
Hosting fees	Collection of fees for hosting others' applications and transactions on its e-Business infrastructure. (ASP model)
Referral Fees	The e-Business site provides customers with information regarding products and services on other sites. When the customer goes there and conducts business, the referred to business pays a fee to the referring business.
Subscription fees	Regular payments for access to information or services provided into the marketplace.
License fees	Collection of fees for e-Business processes to which the company has rights. Amazon.com's "1-Click Ordering" system is such a system. It has been licensed to several companies.
Pay-per-view	Charge a fee for each access to information.
Pay-per-performance	Fee is collected if the consumer completes a transactions (but <i>only</i> if a transaction is completed).
Micropayment	Collection of very small transactions fees, but in high volumes.

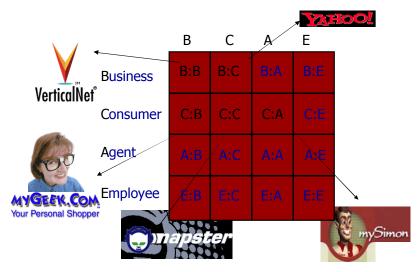
Advertising	Allowing the firm's e-Business infrastructure to serve as an advertising platform for other companies.
Sponsorships	Receive fees for sponsoring others' e-Business sites through your own infrastructure.
Ransom Model	Provide some information free, then charge for completion or further access to the information.  Examples: Stephen King provides a chapter free, then charges if you wish to read the whole book or subsequent chapters.
Margin on sale of goods/services	Most common model. Selling goods and services through the Internet and collecting a margin on it.
Sale of customer data	Collection of customer data, then selling it to others.  Note: This practice is illegal in Europe, but quite common in North America.
Offline customer response	The Web is used to entice customers, then subsequent profitable transactions are done off-line, through a brick-and-mortar infrastructure.
Efficiency & effectiveness gains	Transactions efficiencies are improved (less errors; higher rates for information; greater volumes at same cost)
Value-added services (Linux model)	Fees are collected on new services that are provided for "free" goods and services offered on the Internet.
Virtual real-estate	The company develops a presence in cyber-space, then is able to leverage this "real estate" by selling it to, or renting it to others.

## **Business Model Integration**

### Types of customer models

The accepted and most commonly used segmentation of customer models is business-to-business (B:B) and business-to-consumer (B:C), but there are other models that can be identified as well. Examples are consumer-to-agent (C:A) and business-to-employee (B:E). Note: The "Agent" refers to artificial agents used by consumers for automated shopping and price comparisons.

**Figure: Customer models** 



It is possible to locate examples of customer-centric firms operating in most of the customer segments.

- **B:B** VerticalNet owns and operates 57 vertical marketplaces that unite buyers and sellers from around the world by catering to individuals with similar professional interests (energy, healthcare, food service, etc.)
- **B:C** Yahoo 52 million unique visitors a month can't be wrong.
- C:C Napster ultimate C:C application
- **C:B** myGeek.com invites you to "shop like a genius." One of the players in the "name your own price" game.
- C:A mySimon find products and compare prices across a large variety of online storefronts

### Additional methods of segmentation

Although the B:B, B:C type segmentation is the most accepted segmentation schema used in e-Business, some firms may have in place other segmentation schemes that either are better suited to their particular marketplace, or that have such a historical weight in their firm that they can not be ignored. There is nothing in this approach that prevents the development of alternative segmentations. *Segmentation theory* is the approach used to define the optimum segmentations for a market.

### Integration of models

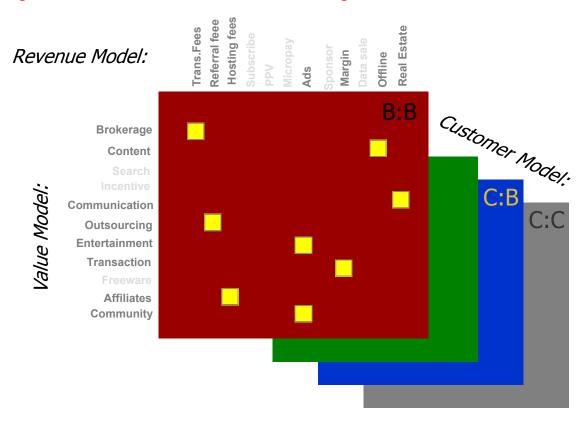
The integration of business models involves combining customer models, value models, and revenue models. Since each different type of customer model (segmentation) can support a variety of revenue and customer value models, it is possible to develop multiple streams within each of these models – we call this "business model integration".

Integration is a key factor to success and includes multiple value models, multiple revenue opportunities, along with built-in mechanisms for directing traffic to the site and keeping it coming back again and again.

In the figure, each square represents a different customer model. For each customer model, we can have various combinations of value models and revenue models. Note: since our approach assumes that a transaction is *not* viable unless it also brings revenue to the firm, there is a large set of transactions that of necessity fall outside this criteria, and thus have no place on the matrix. The figure shows a large number of possible combinations for the B:B space, although this same type of analysis can be done for *each* of the different customer models.

Some of these combinations make more sense than others, and investigation may reveal that some of the transactions are "null sets" – however that analysis needs to be done on a company-by-company basis. Firms need to be creative in combining value and revenue models in innovative ways.

Figure: Value, revenue and customer model integration



### **Implementation**

Our framework is useful for helping the organization understand its strengths and weaknesses, and for developing alternative scenarios that might be considered for further development of strategy.

### Strategy formulation example: eBay

The business model integration framework can be used to examine firm strategy. This is done through the following steps:

- 1 **Segmentation** Agree upon the type of segmentation approach most appropriate to your market.
- 2 **Transactions** Examine the current operations between your firm and its customers. What type of transactions are supported? For each of the transactions, characterize the principal value proposition to the customers and the corresponding revenue value-added for the firm.
- 3 **Plot results** Plot each of the transactions you support into the business model integration matrix.
- 4 **Identify expansion strategy** Examine possible next steps that can be taken to expand the "transactions footprint" of the firm. Any new service should satisfy the two value propositions, e.g. both customer and firm value.
- 5 **Options analysis** For each new option considered, draw up an estimation of the difficulty, cost, possible implications for infrastructure.

For illustration purposes, a similar analysis is provided for eBay. See Figure.

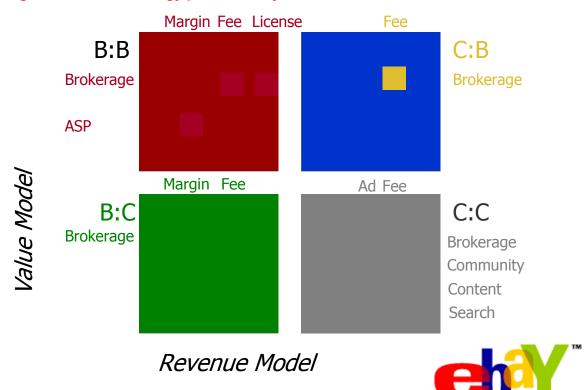


Figure: Potential strategy path for eBay

- 1 eBay began in the C:C space, using the brokerage value model and collecting transaction fees in consumer to consumer auctions. Rapid user growth created community, content and search value streams, which in turn created the critical mass for substantial advertising revenue.
- 2 B:B followed. eBay offers the Small Business Exchange, In addition, there is nothing that would prevent eBay from licensing its technology in the B:B space, for industry-specific auctions.
- 3 eBay could potentially expand into the B:C space, providing firms the option of auctioning merchandise directly to consumers using the eBay infrastructure.
- 4 And finally, while this would be the greatest stretch for eBay, it could choose to move into the C:B space, allowing consumers to "name their own price" for merchandise and services.

An integrated business model will create greater value and revenue opportunities for eBay.