CHAPTER

# Chapter 8

# BUSINESS MODELS AND STRATEGIC PLANNING FOR NE [MODULE 3: STRATEGY AND ORGANIZATIONAL DESIGN FOR NEOS]

## UNDERSTANDING MODELING AND PLANNING ISSUES FOR NEOS

What are the possible business models that managers can use to design an NE initiative? What resources does the firm own with each model and how can this be exploited for competitive advantage? What planning models are applicable to traditional businesses as they migrate to NE?

## LEARNING OBJECTIVES FOR THIS CHAPTER

c ***CASE STUDY 1-1***

LONELY PLANNET.COM

## 1INTRODUCTION

This chapter will discuss how managers should create a business model for their NE initiative. Each atomic business model calls for a separate analysis of resources and the combination of models is another important consideration. Finally, strategic planning requires consideration of a host of other issues, such as revenue models, marketing models, financing models, and implementation or project planning. These issues will all be discussed.

## 2. THE CONCEPT OF A "BUSINESS MODEL"

The phrase "business model" has been bandied about for the last five years by consultants, practitioners and academics as a substitute for the concepts of "strategy," "strategic planning," just plain "plans," "architectures," and "blueprints." It grew into prominence with the Internet and e-Commerce era and may be connected with some of its distinctive features.

While many people use the term as a synonym for such older concepts as "strategic planning," we can and should ask whether there is there anything new about "business model" as a concept. If there is, then it makes sense to develop the concept more fully and use it where apropriate.

A recent use of "business model" should be sufficient to see what is new. Mahadevan (2000) proposes that for consultants, practitioners and academics, the term seems to refer to a "unique" aspect of the way business is conducted. He differentiates these "unique" ways by value stream for business partners, buyers, revenues, and logistics. One way these "unique" models play out is with descriptors that allow one to see the ways in which the "model" being proposed will differ from traditional "bricks and mortar" operations and how it will make money.

Over the last half decade, business models have been used heavily by entrepreneurs to propose their ideas to venture capitalists (VCs), and in this sense, they are also fairly extensive expressions of ideas. Complete business models include at least the elements noted in Table 8.1.

| | Component |
|---|---|
| 1 | Mission, and other strategic statements |
| 2 | Diagrammatic or schematic view of relationship with stakeholders |
| 4 | Revenue model |
| 5 | Projected financial statements |
| 6 | Marketing model |
| 7 | Investment decisions for partners, complementors, and supplementors (Chapter 10) |
| 8 | Implementation plan and timetable (strategic planning) |
| 9 | Exit Strategy |

**Figure 1.1**

**Table 8.1 Components of a Fully Articulated Business Model**

The mission and other strategic statements are the high level positions that are part of a strategy. They give the organization direction, but lack the details of a planning document. Diagrammatic views of the enterprise are meant to show how the firm relates to the primary stakeholders. In other chapters in this book, we argue that there are many more stakeholders of the firm in a NEO than in a traditional firm. These diagrams are intended to present a holistic view of the various stakeholders, including customers, suppliers, partners and even competitors. They represent flows of goods, information, and money.

Submodels include the revenue model, which basically states how the firm anticipates deriving income from the venture. An important part of the business model, as far as VCs are concerned, are prospects for profitability. The firm's projected financial statements relating specifically to the NE initiative are another part of this argument. In that NEOs tend to take on relatively high proportions of partners in their projects, making the investment decision for bringing in outsiders is also critical. This decision is so important that we have dedicated an entire chapter (10) to this topic.

Marketing models include the methods that the firm will use to attract and retain customers. It could include a prototype of the Web site, and other features that are unique to this business model. Once details for marketing the concept are articulated, a full-blown implementation plan can be worked out. A schedule of when the Web site will be built, when it will be inaugurated, and so forth are all items in the plan. In Porter's work,[1] marketing is viewed as a downstream activity, and in this book we are also discussing it as a set of deployment issues in Chapter 11.

[1] Porter, 1985.

Many start-up business models include prospects for IPOing or selling the firm or moving it to a new level. The equivalent of such plans for an SME or large firm would be a section on future developments.

### 2.1 Models, Strategies, Strategic Planning

For our purposes of this book, the concept of a business model will incorporate strategies and strategic planning. The concepts apply both to initiatives inside large firms or start-ups. Initiatives for start-ups are typically called entrepreneurship while those inside a firm are called "intrapreneurship." The business model for GE's latest B2B NE initiative, for example, might have all of the elements listed above, including the goal of the initiative, its financial impacts, and a schematic of how it affects stakeholders and the firm's ownership of resources. GE managers who are proposing the initiative have internal processes that would lead to approval or rejection of the new business model that may not be an exact replica of the standard components of a business model listed above in Table 8.1, but top managers will expect the answers to the kind of questions wrestled with in each of these areas before launching the initiative.

A start-up firm or a small firm would also have a business model for their first foray into 'Net'-enablement. This business model might be more extensive that the one used by an established, old-line firm that has well established investment decision procedures because they would need to raise capital from the outside. The added risk of not knowing the players should mean that VCs and even angel investors[2] will demand a higher burden of proof.

A business model, thus, is a management tool for making decisions. The firm will make a considerable investment in NE projects, and a procedure with reasoned set pieces will make the process more systematic and, hopefully, less risky.

## 3. TYPES OF BUSINESS MODEL

Weill and Vitale (2001) articulate eight types of business models that they believe are "atomic." Their scientific work is the best evidence we have to date of the types of business models that managers can combine into full-blown NE strategies. These models lie at the heart of our new understanding of NEOs and what will make them successful.

What do they mean by "atomic"? Just as atoms build into molecules, and molecules into more complex physical entities in the real world, business models are argued to be composed of essential, underlying elements. Just as water is composed of hydrogen and oxygen, and as $H_2O$, in a two-to-one ratio of the former to the latter, most businesses will end up being complex combinations of atomic models. One or more atoms could make up the bulk of the molecule, but it would not be accurate to describe the firm's business as if it were composed of a single atom.

[2]"Angel" investors are private parties who invest in a firm's e-Commerce efforts. These private investors are usually not incorporated, as are VCs.

The eight models and short descriptions are shown in Table 8.2 below. After previewing the nature of each and the resources they command, we will discuss each one in detail, with examples.

| | Model Type | Description |
|---|---|---|
| 1 | Content Provider | Provides content (e.g., information, digital products & services via intermediaries) |
| 2 | Direct-to-Consumer | Provides goods or services directly to customer often surpassing traditional channel players |
| 3 | Full Service Provider | Provider Provides a full range of services in one domain (e.g., financial, health care) directly & via complementors attempting to own the primary customer relationship |
| 4 | Intermediary | Brings together buyers & sellers by concentrating information (e.g., search engines, auctions) |
| 5 | Shared Infrastructure | Brings together multiple competitors to cooperate by sharing common IT infrastructure |
| 6 | Value Net Integrator | Coordinates value net (or value chain) activities by gathering, synthesizing, & distributing info |
| 7 | Virtual Community | Facilitates & creates loyalty to an online community of people with a common interest enabling interaction and service provision [N.B. & cross- & up-selling] |
| 8 | Single Point of Contact | Provides a firm-wide single point of contact consolidating all services provided by a large, multi-business organization (by customer events) |

**Figure 2.2**

**Table 8.2 Types of NE Business Models (Based on Weill and Vitale, 2000)**

## 4. MODEL RESOURCES AND SCHEMATIC EXPRESSIONS OF THE MODELS

The resource-based theory of the firm argues that a firm competes more effectively if it commandeers and exploits resources that are key to competitive advantage in its industry. The world of NEOs is not special in this regard, and it is essential that managers understand resources relevant to NE and why the business model(s) they choose to pursue will have certain limitations and certain advantages conferred by theses choices.

Table 8.3 previews the types of business models and the resources owned by each.

| | Model Type | Relationship | Data | Transaction |
|---|---|---|---|---|
| 1 | Content Provider | | | |
| 2 | Direct-to-Consumer | X | X | X |
| 3 | Full Service Provider | X | X | X |
| 4 | Intermediary | X | X | |
| 5 | Shared Infrastructure | | X | X |
| 6 | Value Net Integrator | | X | |
| 7 | Virtual Community | X | X | |
| 8 | Single Point of Contact | X | X | X |

**Figure 3.3**

**Table 8.3 Ownership of Resources by NE Business Models (Based on Weill and Vitale, 2000)**

What exactly are the three resources highlighted here? Figure 8.1 gives quick definitions of each of these. The relationship with the customer, whether a consumer or business customer, is perhaps the most important long term resource. A good relationship with a customer converts to loyalty and sustained revenues over the years. In this spirit, many firms sacrifice short term profits for longer term advantages like market share. They may also operate at a loss while they are building a customer base. This is one reason why amazon.com survived for so long in spite of years of losses.

As argued in the last chapter, proprietary data is one of the most valuable resources a firm can own. When the capability to use this data to deepen the relationship with the customer is developed, a firm can create a sustainable competitive advantage for itself.[3] Data about the customer would be the complete record of transactions, sales support communications, customer responses to firm queries or questionnaires, credit reports, and demographics the firm has either gathered itself or purchased from a marketing database service.

Ownership of the transaction can be determined by who the customer thinks they are conducting business transactions with, electronically speaking. If the customer attachs a particular URL that does not belong to the firm, then the transaction belongs to someone else. If a customer only knows how to get to a retailer through the Z-Shops at amazon.com, then amazon owns the transaction. The exchange of data may even be with the retailer and not amazon, but the point of contact defines the ownership of the transaction. Weill and Vitale (2000) attribute the transaction to the firm that receives transaction fees, which is relevant in certain industries like online brokers.

The transaction itself is the least important resource. It can even be separated from the relationship, and from the data, with little loss. Another firm could handle the transaction

[3]Straub and Klein, 2001.

processing for the firm, for instance, while branding the interaction as if it were occurring directly with itself. Logistics handled by UPS, for example, could be branded for the individual retailer, so that the customer would believe that they were interacting directly with the firm. In this case, the firm would own the transaction and not UPS, even if UPS were actually handling the Web inquiry.

In the physical world, ownership of the transaction is most often tightly coupled with the data generated by that transaction and the relationship with the customer. The only time this does not occur is when there is an intermediary, such as a wholesaler or retailer. Compaq does not know who is purchasing their computers because this is proprietary data controlled by intermediary firms like CompUSA or Best Buy. 'Net'-enablement allows firms to establish direct links to their customer base and bypass intermediaries. If they can do this, they can gain ownership of more resources.

**The business model you choose will allow you to own:**

1. **The relationship with the customer (that is, the sense of the customer that you are the brand; alternatively, it is a revenue-producing relationship with the complementor)**
2. **The data (that is, proprietary knowledge of the activity of one's customers)**
3. **The transaction (the perception of the customer that you are the point of contact)**

***The more of these you own, the better***

**Figure 8.1 Resources Implicit in NE Business Models**

Schematics allow managers to configure their business models in such a way as to maximize effectiveness. They are also helpful tools in understanding the model and in convincing others about the investment potential. The symbols that will be used in the schematics is shown below as Figure 8.2.

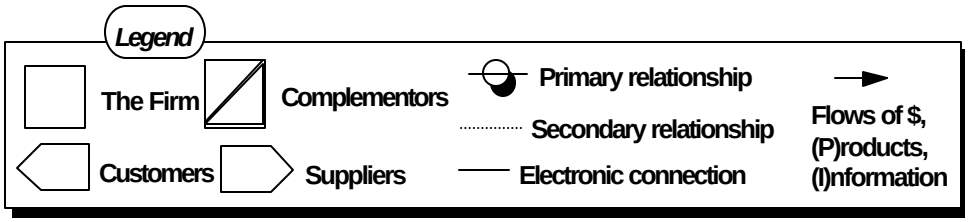


**Figure 8.2 Legend for Interpreting Business Model Schematics**

As the legend indicates, the firm itself will be represented within a rectangle or square. Other firms that are seen by customers as enhancing the firm's products are known as complementors, and these are shown with a diagonal line drawn through a rectangle or square. Customers are in a rhomboid with a two-sided pyramidal facing left, and suppliers are represented with the reverse image of this, that is, with the two-sided pyramidal facing right. Flows of money, products and information are shown by the money symbol $ or the capital letters "P" or "I" on the lines with the arrows. These lines will be solid or dotted, depending on the nature of the relationship. Primary relationships will have a shadowed circle placed on the line while secondary (non-electronic) relationships will be dotted lines. Solid line also convey the sense that the relationship is electronic or 'Net'-enabled.

## 4.1 Content Provider

Content providers were one of the earliest users of the Web. Major TV networks like CNN (CNN.com), publishers like Ziff-Davis (Ziff-Davis.com), and newspapers like the Wall Street Journal (wsj.com) used the Web to induce subscribers to cross-over to some of their other services. Some of them like the Wall Street Journal Interactive provide partial access through the public Web site and subscriber access through their Extranet, which is, of course, password-protected.

The basic schematic for this model is shown as Figure 8.1. All schematics in this book will use Weill and Vitale formats, although our models may be simplified at times for expository purposes.

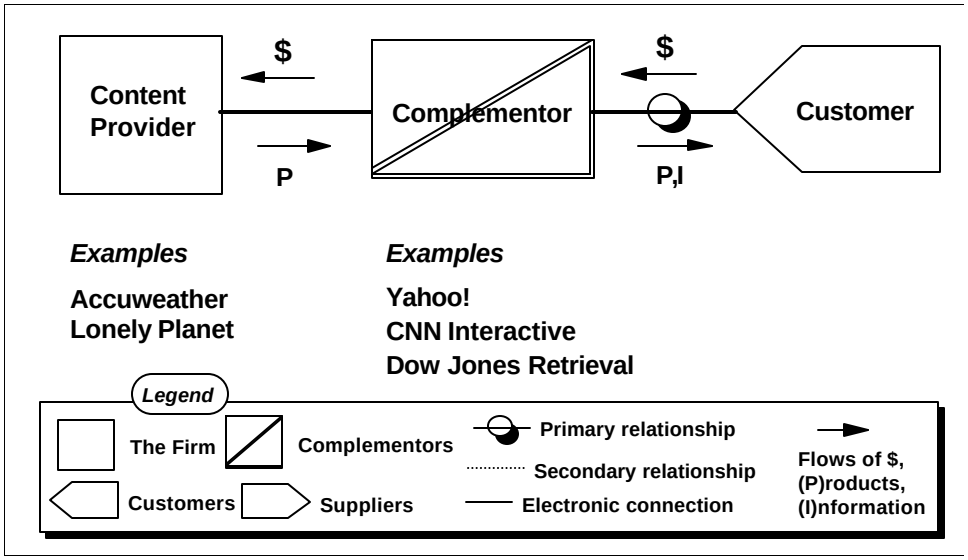


**Figure 8.3 Type 1: Content Provider Schematic**

When the firm is a content provider in NE space, it typically has a relationship with a complementor who in turn, has a relationship with the customer. Accuweather or Mapquest, for example, work with CNN and Yahoo to provide content for CNN and Yahoo customers. The business model for the complementor or may be a number of atomic models. That will be dealt with in time. The point here is that content provision does not allow a firm to connect directly with the ultimate customer.

The revenue model for content providers is simply the fees it charges the complementor, as shown in Figure 8.3. Whereas the content being provided is all digital, and in this sense is data at least, Weill and Vitale (2000) conceive of this as the content provider's product. Information, for Weill and Vitale, is what might accompany the direct product and serve as value-added to the main product (as in the case of the complementor-customer relationship). When a client is willing to pay for content, then what they are paying for is product.

Content providers are not in a strong competitive position. Since they have no direct connection with the ultimate customer, they do not own the relationship, the transaction, or the data. Unless their content is unique, the complementor can drive costs down by playing one content provider off against another. On the surface, mangers need to be extremely suspicious of content provision as a revenue source. Most firms provide a great deal of content on their Web site for customers, but this is an enhancement of the general offering and not the offering itself. Table 8.4 highlights the resources owned by the content provider.

| Resource | Ownership Considerations |
|---|---|
| Relationship | Content providers tend not to own the relationship with the customer. They provide information to complementors, who resell their services to customers, for subscriptions, as in the Wall Street Journal Interactive. Please note that they may sometimes share the customer relationship with the customer if they brand their content, as in the case of Lonely Planet's branded content on Yahoo. |
| Data | Rarely do content providers have direct access to customer data, but a strategic partnership could realize this potentiality |
| Transaction | Customers perceive that they are dealing with CNN Interactive. Even if the content is branded, customers know which Web site they are working with. |

**Figure 4.4**

**Table 8.4 Content Provider Resources**

## 4.2 Direct-to-Consumer

Many people think of the direct-to-consumer model as being the quintessence of e-Commerce. In many ways, this is true. This model allows a firm to interact electronically with customers. Firms like Dell have become immensely profitable over the last decade or so using this model.

Direct-to-consumer models pose some problems like channel conflicts for firms, which will be discussed later in the e-Marketing chapter. For the moment, it is enough to note that in this model business exchange costs are extremely low for the firm as well as for the consumer. Search costs are low for the consumer as it is not difficult to compare pricing between Web sites or even visit sites like Epinions.com where comparisons also include reviews. For the firm, this model eliminates the physical costs of retail stores or even, in certain cases, warehousing costs.

Figure 8.4 shows the schematic for this model. Customers visit the Web page of the firm and browse its offerings. Whether the transaction is carried out completely online or not, the Web site can be said to be the origin of the sale, or the means by which customer preferences can be amassed. It is easy to see that even if a customer does not purchase, the customer's navigation through the site could be instructive. With its virtually infinite capacity for capturing information, 'Net'-enablement permits a firm to create a strong electronic and symbolic connection with the customer. The movement of digital products (P) across the network, as in the case of e*Trade, can be accompanied by value-added information (I). e*Trade offers information for investors about stock trends, which, incidentally, it purchases from a content provider.

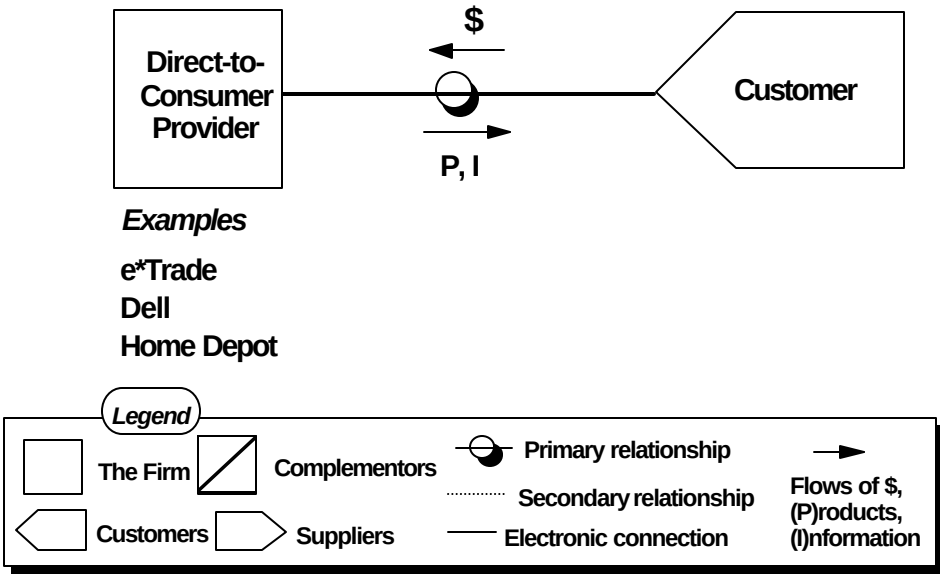


**Figure 8.4 Type 2: Direct-to-Consumer Schematic**

Dell is an a example of a firm that is firmly committed to the direct model. From the very beginning, the firm pushed a new way of selling computers. The electronic value chain is fully implemented at Dell, and has been for a long while. Technical questions and trouble-shooting (after sales support) are handled on the Web site as well as ordering and payment. Online tracking of shipments is another capability. Dell pioneered this concept among computer manufacturers and achieved an initial competitive advantage from these basic services.

Table 8.5 enumerates the resources owned in this model. It is one of the strongest models in that the firm owns and controls all three of these key resources. A firm like amazon.com

| Resource | Ownership Considerations |
|---|---|
| Relationship | Direct-to-consumer models own the relationship as they are the firm of record for all services and good dispensed to the customer. |
| Data | This model also owns the behavioral data related to the customer purchases and after sales interactions. |
| Transaction | Customers perceive that they are dealing with Dell or e*Trade. Even if the hosting of the transaction is outsourced, the URL of note is that of the firm. This is a very powerful model for e-Commerce, with respect to resources. |

**Figure 5.5**

**Table 8.5 Direct-to-Consumer Resources**

### 4.3 Full-Service Provider

This model has not completely emerged in the marketplace yet, although there are definite signs that it will continue to develop. It is characterized by going beyond the firm's own offerings to include those of a host of partners. In the interest of completely serving the needs of its customers, it may, in fact, carry the products of its competitors. In the example in Figure 8.6, we theorize what the business model of Fidelity.com, the Mutual Funds financial firm, would look like if it worked with complementors like Schwab to sell stocks and with insurance carriers like Aetna to sell insurance. These firms would pay a commission for leads and sales, but might, conceivably, carry out the transaction themselves. Could Fidelity also forge a partnership with another major mutual fund firm like Vanguard? A full-service provider of financial services would also have to consider offering banking to its clients. The concept of full service is to deal with as many needs of a customer as possible in one important area of their lives.

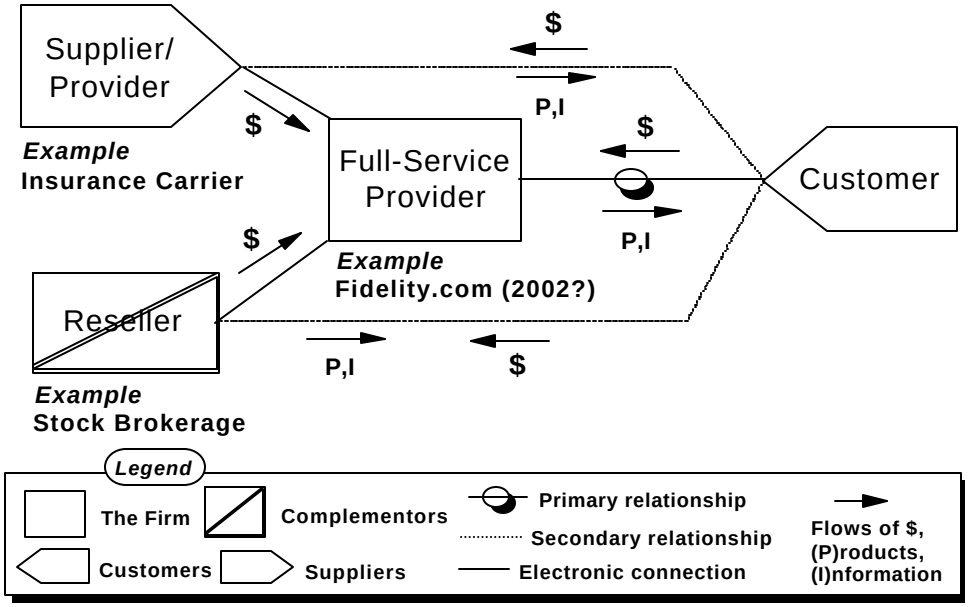


**Figure 8.6 Full-Service Provider Schematic**

The danger of this model is that customers will forsake the firm and make a direct connection with the reseller, complementor, supplier, or competitor in subsequent transactions. The entire point of a full-service provider is that they supply brands other than their own. Therefore, customers know exactly whose products or services they are buying. The full-service model owns the data resource and the transaction, but it is possible that the data, in particular, may have to be shared. The more that these resources are owned or appropriated by others, the more likely it is that the firm can lose the primary relationship as well.

Table 8.6 lists the assets of this model. It is as strong in the data and transaction resources as the direct-to-consumer model, but suffers from the relationship drawback mentioned above.

| Resource | Ownership Considerations |
|---|---|
| Relationship | Full-Service providers own the primary relationship with the customer, although nothing prohibits the customer from interacting directly with a supplier or a reseller. There are few examples of mature firms in this category, but Prudential's Advisor and Bank One's Wingspan are close. Fidelity would be a likely possibility for initiating this model in its full-blown form. |
| Data | They also own the data, and share with suppliers or resellers only to the extent that there are mutual benefits accruing from the partnerships. |
| Transaction | Customers perceive that they are dealing with the full-service provider. Even if the content is branded, customers know which Web site they are working with. |

**Figure 6.6**

**Table 8.6 Full-Services Provider Resources**

## 4.4 Intermediary

Intermediaries are similar to full-service providers in that their Web site forms the primary relationship with the customer. With the intermediary business model, the actual transaction is carried out by suppliers or complementors in the way Weill and Vitale conceive of it. This business model is common in traditional physical systems as well in cyber systems, as in travel agents or real estate brokers, although physical intermediaries sometimes maintain the direct relationship with the customer. In the NE world, this would be a direct-to-consumer model, where the wholesaler or manufacturer is the supplier.

Intermediaries, or cybermediaries as they are sometimes called, make the proper introduction between the buyer and seller, and the seller-supplier or complementor actually carries out the transaction. eBay.com is a good example of an auction Web site that fulfills this role. The online travel agents, Expedia.com and Travelocity.com, are other examples. In Figure 8.4, the Jango search engine associated with Excite is an example of a pure play intermediary that connects buyers and sellers. It shares a primary relationship with the customer with Excite. Selling of goods takes place through the supplier and a commission of some sort is paid to the intermediary for the service.

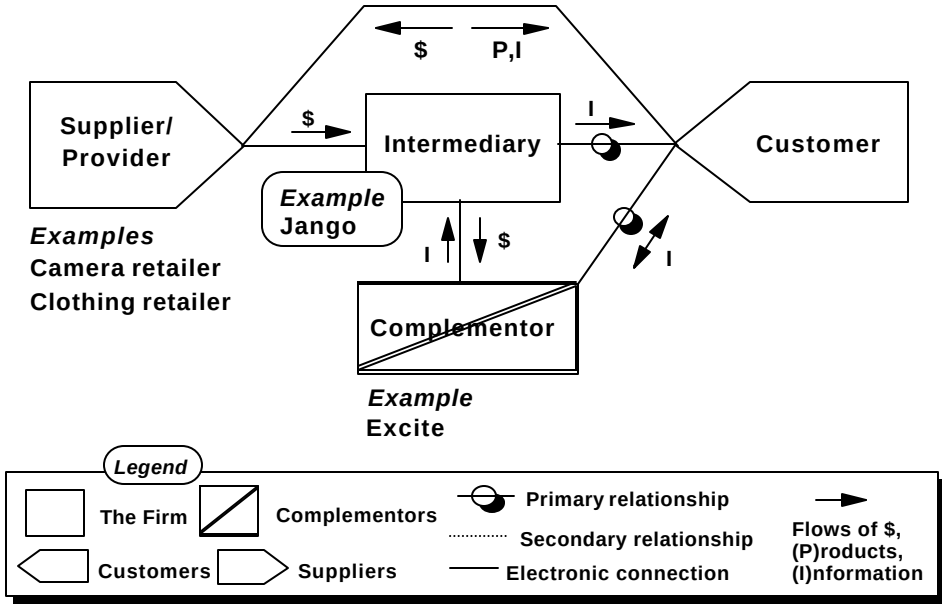


**Figure 8.5 Intermediary Schematic**

What are the resources owned by the intermediary business model? The schematic in Table 8.7 shows that this model owns the relationship, but has limited access to data and no ownership of the transaction. On the face of it, the most important relationship belongs to the intermediary and, in the case of the Jango search engine, knowledge of the customer evaluation process (i.e., what search terms they use, what results they get, and which vendor they choose). The lack of ownership of the transaction itself is not that critical, as we have discussed. Intermediaries should be prospering. Is this the case or not? We will investigate the profitability of the models later in this book, but, for the moment, we can say that the jury is still out on the overall successfulness of this model. There are some sterling examples of success like eBay, but the B2B auction sites have not always enjoyed such success.

| Resource | Ownership Considerations |
|---|---|
| Relationship | Intermediaries are the primary contact point with the customers, so they own the relationship. Secondarily, they refer customers to suppliers or complementors, who do not own the relationship with the customer. |
| Data | In fact, intermediaries can learn a great deal about customer comparison shopping behavior, but they may or may not have access to the customer purchasing behavior data. That may be retained by the supplier. |

**Figure 7.7**

| Resource | Ownership Considerations |
|---|---|
| Transaction | The supplier conducts the transaction at their site, and the customer is well aware of this since they are hyperlinked to another site. |

**Figure 7.7**

**Table 8.7 Intermediary Resources**

Cybermediaries represent an organizational design that is unique to the Web. They did not exist before the rapid diffusion of the Internet. They have a high degree of virtuality in their designs and they are exemplars of substituting information for physical processes in their business exchanges. This model is so important that it calls for a chapter in its own right, duly following this chapter. If it can become clear why intermediaries succeed or fail, this information will benefit managers in other settings. They are, in a way, the clearest case of a pure NEO, and can show the way for all other firms in this arena.

## 4.5 Shared Infrastructure

Shared infrastructures involve entities (or members) sharing a site for their mutual benefit. All members participate in the transactions conducted through the site, but may or may not have an equity position in the shared infrastructure firm itself. Shared infrastructures can be for the benefit of member suppliers or member customers. We can look at the supplier schematic, depicted as Figure 8.5a, first.

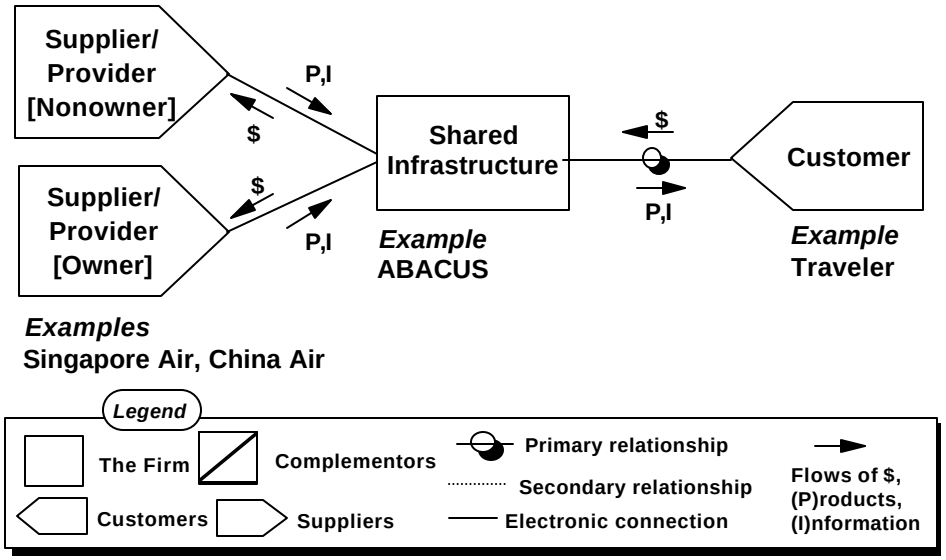


**Figure 8.5a Shared Infrastructure Schematic for Supplier-Members**

In the schematic, ABACUS is the supplier-member shared infrastructure that provides its members access to the traveling public through its Web site. The advantage to the traveling

public is that they get comparison routing and pricing information from the shared infrastructure that would not be available at a single airline site, like Delta.com. Orbitz.com is an example of another airline shared infrastructure atomic model.

This model clearly benefits the customer, but does it help the supplier-members? The idea behind the model is that many Web customers are already savvy about using the Web for comparison shopping and the firm cannot pretend that this competitive reality is not affecting customer buying decisions. Not to play in this game is even more dangerous than playing in it, in short. The cost of the shared infrastructure is shared among members, and owner-members also have the advantages conferred by their equity positions. Nevertheless, this subtype has some obvious drawbacks.

The opposite variation of this model is the supplier-member model. Figure 8.5b shows the relevant schematic.

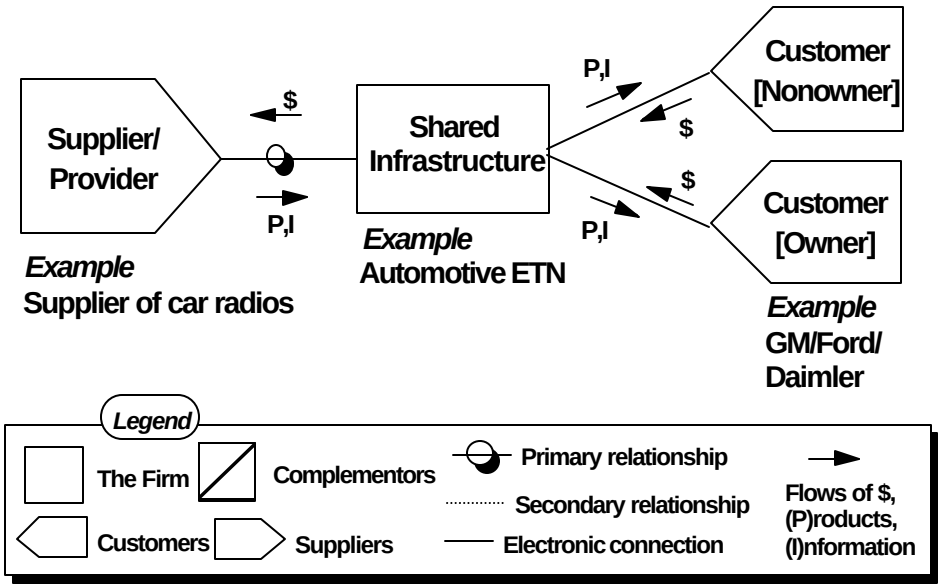


**Figure 8.5b Shared Infrastructure Schematic for Customer-Members**

In this subtype, the customers band together to ensure supplies and drive down supplier prices. In Porter's classic model, this should reduce the bargaining power of the supplier by allowing customers to form a larger scale buying unit. Covisint, the electronic trading network (ETN) formed by the large automakers GM, Ford and DaimlerChrysler, draws in suppliers of all varieties to offer their wares.[4] They expect revenues of $300B within a relatively short time, which shows the potential power of this model for certain ventures.

[4]Kestelyn, 2001

This is a very complex model from the standpoint of ownership, as seen in Table 8.7. Owners negotiate amongst themselves as to sharing of data and the extent to which and when the relationship with individual owners or non-owners is revealed to the customer/supplier. The concept of sharing of the infrastructure is to create a single cyber-market in order to create benefits for the owners. But the needs of the non-owner members have also to be considered or the cyber-market will be perceived as too narrow and of lesser value.

To make the cyber-market attractive to suppliers or customers, depending on which model variant we are talking about, non-owners need to join. If they perceive themselves as being at too much of a disadvantage by not being owners of the infrastructure, they will not join. So a balance needs to be set. Owners derive immediate benefits from the infrastructure in their sales relationship and in the data that is being amassed. A high level view of how competitors are using the trading network could be valuable for firm strategy, and, for this reason, this data may not be available to the owners. On the other hand, non-owners may feel they have little choice but to join in spite of this competitive disadvantage.

| Resource | Ownership Considerations |
|---|---|
| Relationship | The shared infrastructure models have several advantages, but owning the relationship is not one of them. In fact, from the standpoint of an individual owner firm, it is advantageous that the buying or selling party identifies with them rather than with the infrastructure. Were it otherwise, this model would not work. |
| Data | The owners of the shared infrastructure own data relating to their own activities. The shared infrastructure owner firm may or may not give access to its data to non-owners. These can be negotiable terms for membership. |
| Transaction | In ABACUS, a traveller eventually knows that it is Singapore Airlines that the ticket is being purchased from, for instance, but the transaction is most often handled by the shared infrastructure entity. Owning the transaction has little benefit since the relationship is with the supplier, in the final analysis. Neither owner not non-owner really care who owns the transaction as long as the data is shared. |

**Figure 8.8**

**Table 8.7 Shared Infrastructure Resources**

An analogous circumstance occurred in the early days of the Apollo (United Airlines) and Sabre (American Airlines) customer reservation systems. Non-owners joined because these systems had critical mass in placements with travel agents. The infrastructure favored owners in many ways, however, and non-owners were at a disadvantage for years until the playing field was leveled by the US court system.

How did this happen? The results of a search for flights on certain dates at certain times gave preferential display (initial or opening positions) to flights of the owner airline. Primacy theory in psychology says that initial stimuli are better received than later stimuli

and the truth of this theory played out in this case in the form of higher sales for the owner airlines.

Moreover, owning the transaction is not nearly as important as the data generated by that transaction, and this too is subject to negotiation in shared infrastructure models.

### 4.6 Value Net Integrator

Value 'Net' integrators (VNIs) take advantage of their central position on the Internet between suppliers, complementors, and ultimate customers. With the suppliers, they coordinate ordering and stocking of goods and services for their complementors, who in turn deal mostly with the ultimate consumer or business customer. Value Net Integrators may exchange information with the ultimate customers, but this is solely for the purpose of better coordination of capacity and stocking. They are a true "cyber" business, who, like cybermediaries, did not exist before the coming of modern networks. In a sense, they are a pure "management" function since physical actions is being handled by the complementors and suppliers. Some people have referred to this model as "outsourcing with attitude," and there is a great deal of truth in this humorous characterization.

Figure 8.6 shows the schematic for the basic model. It might be easiest to understand if we follow it through with the 7-11 example. 7-11 franchise stores in Japan are convenience stores that are highly specialized within local markets. They tend to be small operations and most lack computer sophistication. Without outside help, their capability to order just in time and to avoid the expense of large inventories and stock-outs is limited, therefore. The firm that is the 7-11 Japan net integrator, however, has the economies of scale that allow it to manage the specialized needs of individual stores. The Internet connects all parties and the coordinating systems at the net integrator's places orders, queries ultimate customers for forecasts, etc. Money flows from the complementors to the net integrator, and from the net integrator to the suppliers. But the net integrator never touches physical products.

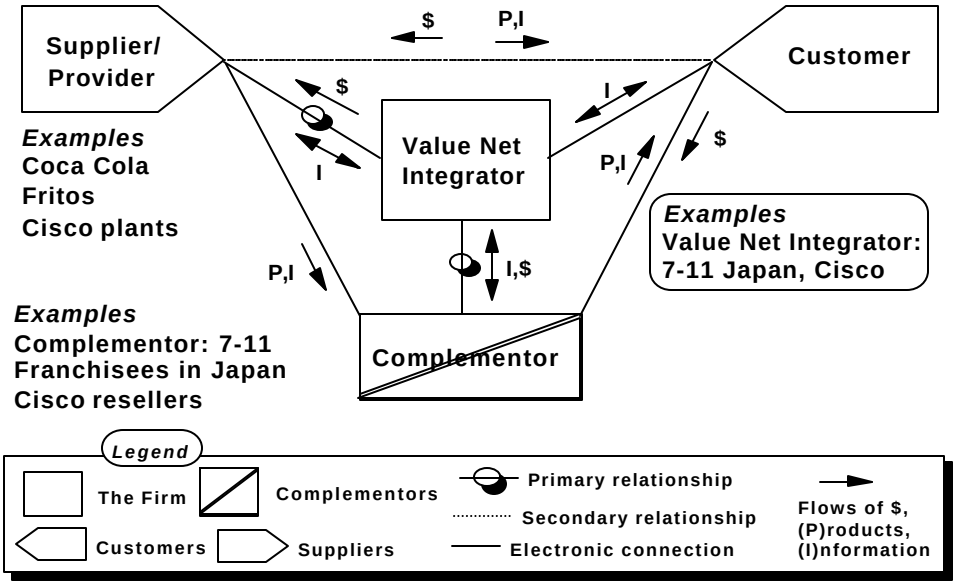


**Figure 8.6 Value Net Integrator Schematic**

What are the resources owned in this model? VNIs own the relationship with the complementors, who are, in effect, the single type of customer of the VNI. The relationship with the ultimate customer, either consumers or commercial customers, is handled by the complementor although the VNI shares information with these parties. Complementors use their data sparingly, trusting the VNI to manipulate it for their use. It is in the interest of the VNI to do this well since it leads to profitability of the complementor and continued use of the services of the VNI. Because the VNI can batch large orders, they have economies of order and can negotiate good prices from the suppliers. This serves the interests of the supplier, since they have to deal with only one, professionally-run VNI, and the complementors who do not usually have the expertise to manage the supply chain this effectively. The transaction is likewise owned by the VNI.

| Resource | Ownership Considerations |
|---|---|
| Relationship | Value Net Integrators (VNIs) are cybermediaries with few physical assets. They coordinate the flow of goods and, hence, own the relationship with the complementors (who pay for the integration), but not the relationship with the ultimate customer. |
| Data | VNIs specialize in managing information, including data about the customer purchasing behaviors, and supplier and complementor capabilities. This is their core competency. They own the data. |

**Figure 9.9**

| Resource | Ownership Considerations |
|---|---|
| Transaction | The transaction with the complementor is owned by the VNI, who shares the information with the complementor and the ultimate customer. The VNI's customer perceives the transaction to be with the VNI. The ultimate customer perceived the transaction to be with the complementor. |

**Figure 9.9**

**Table 8.8 Value Net Integrator Resources**

## 4.7 Virtual Community

Virtual communities capitalize on the interests of a group of Internet users, as shown in Figure 8.7. The community forms or is formed around a topic, like fishing or traveling. In the case of the examples listed, suppliers or providers financially support the virtual community either for commissions, referral fees, or because they are an appendage of the business itself.

It is difficult to see how virtual communities could be a large revenue generator in their own right. They own the relationship with the customer (see Table 8.9), but one of the reasons the customer visits the site is to participate freely and for no charge in the community. Were a subscription to be levied, the number of users would likely drop precipitously.

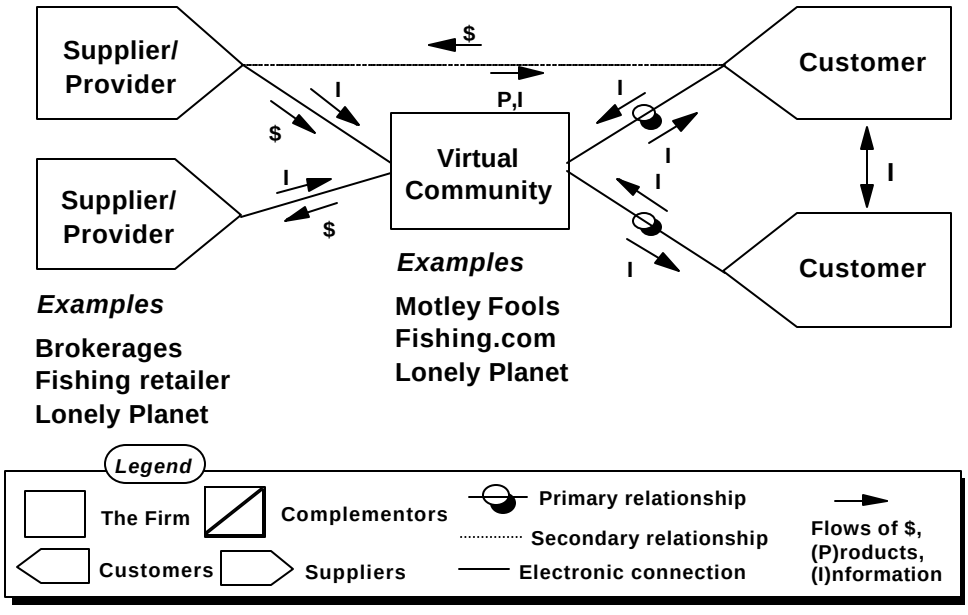


**Figure 8.7 Virtual Community Schematic**

Within the community itself, the navigation patterns of the users can be captured by the virtual community. For privacy reasons, community members often do not approve of entities selling data about their activities.[5] This limits the extent to which virtual communities can resell this data. As long as the data is used to advance the interests of the community members, this data can be exploited.

| Resource | Ownership Considerations |
|---|---|
| Relationship | Virtual communities are most often free services that aggregate information for customers, but they may also serve as an appendage for a business, as in the case of Lonely Planet, amazon, MetLife, and so forth. The primary relationship in the model is between customers and the virtual community. |
| Data | Data about customer interests resides with the virtual community. This could be a source of information for making the site more valuable to the customer. |
| Transaction | There are no transactions to speak of with this model. Organizations use virtual communities as value-added differentiators. They receive money indirectly, through their other sales channels, but not through this firm. |

**Figure 10.10**

**Table 8.9 Virtual Community Resources**

## 4.8 Single Point of Contact[6]

Single point of contact (termed "Whole of Enterprise" in Weill and Vitale, 2001) is a model that gives entry to an entire cornucopia of offerings or services. The Victoria government is one of the few examples of this model although the US government is attempting the same thing (firstgov.gov). The concept is that users come to the site with a need or question. The single point of contact acts to direct them to the business (or agency) units that can solve their problems.

Almost every large firm in the world has a Web site whose domain name reflects the corporate identity. Whereas many of these have menu bars and other icons to try to redirect the inquirer to relevant divisions of the company, it is not immediately obvious to a user which of these can deal with their problem. On the General Electric site, for example, the menu bars give one access to the company's structure, business and personal financing options, and solutions for home and business (see Figure 8.8). It might not be clear to a consumer where they should go among these menu choices if they have a problem with a product.

[5] eToys.com sold its customer data when they went out of business and there was a universal outcry about their in cyberspace. Firms need to be sure that they will not degrade the entire commercial environment by such acts, even if there are no legal proscriptions against so doing.

[6] Weill and Vitale (2001) call this atomic model "Whole of Enterprise." Since a number of their examples are governments, we are focusing on a different feature of the model in the term "Single Point of Contact." This term can apply equally well to private and public sector organizations.

Single point of contact models are not oriented toward the firm, but toward the user. What drives the relationship is the firm's ability, through this single Web site, to solve the user's problem. If the need is for after sales support, then a "problem analysis" engine could help the user discover where in the organization a particular problem could be solved.

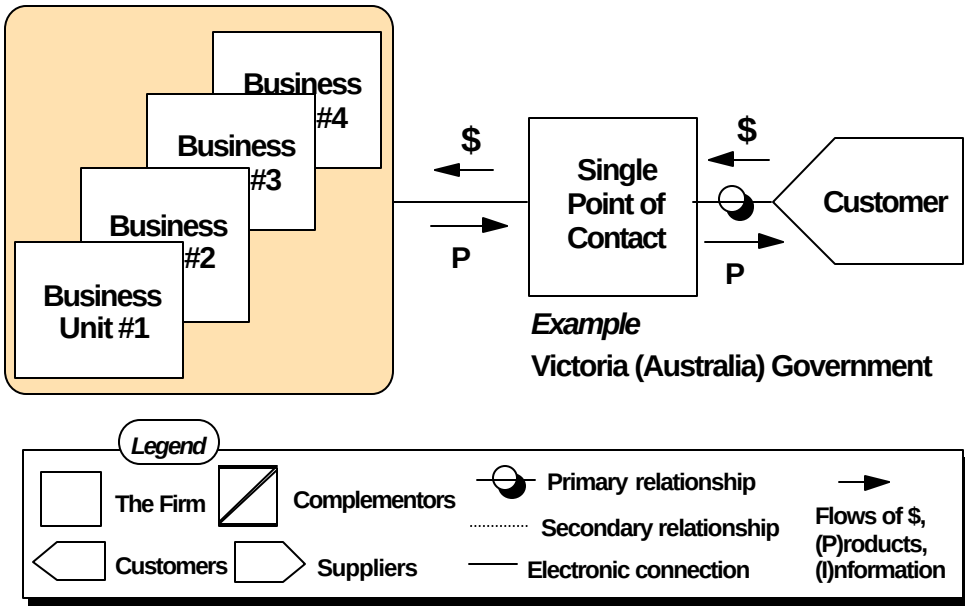


**Figure 8.8 Single Point of Contact Schematic**

As seen in Table 8.10, this model owns all the resources, unless the site is set up so that some transactions are handled through secondary sources. As an organizational principle for complex firms, it makes a great deal of sense. If a potential customer cannot figure out where to go on the site to purchase or seek remedy, then the firm's image will suffer and that customer may be a lost customer.

| Resource | Ownership Considerations |
|---|---|
| Relationship | Single point of contact shares some of the characteristics of the direct-to-consumer model. It owns the relationship, since that is, in fact, the entire idea behind the model. Customers should not have to seek beyond the single point of contact to have their needs met. There are few mature examples of this model. |
| Data | Naturally, data is owned by the single point of contact, who attempt to answer questions and direct customers to the products and services they seek. |

**Figure 11.11**

| Resource | Ownership Considerations |
|---|---|
| Transaction | Customers perceive that they are transacting with the single point of contact, and that the Web site is their access point. |

**Figure 11.11**

**Table 8.10 Single Point of Contact Resources**

## 5. HYBRID MODELS

Few companies exemplify pure forms of the atomic business models. Most, as in the microscopic world, combine atoms into molecules. A direct-to-consumer model for Delta Airlines (Delta.com) will be introduced in the next chapter, but it is readily apparent that Delta is also driving business through its ownership of Orbitz.com. The latter shared infrastructure model complements the direct-to-consumer model while creating no channel conflict in the process. Channel conflict will be dealt with in Chapter 11, Deploying NESs into e-Markets, but for the moment, it is important to note that the real world is rarely as simple as academic models would have it.

Weill and Vitale (2001) are sensitive to the viability of hybrids in the e-Business space and cite Lonely Planet as an example. Figure 8.9 shows the business model for this popular travel book company headquartered in Melbourne, Australia.

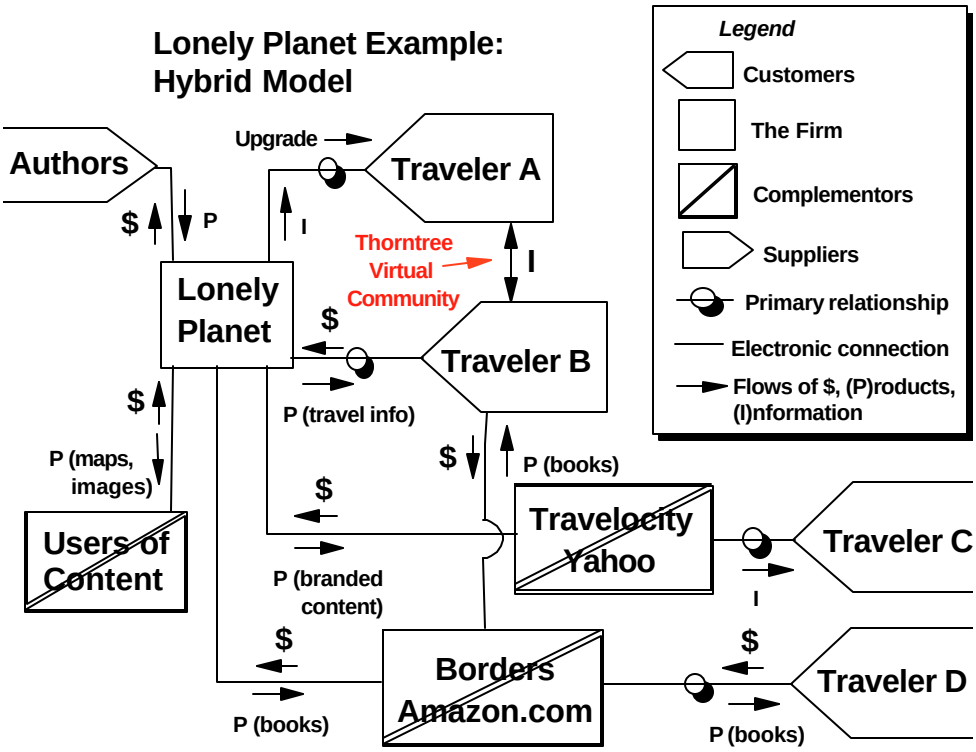


**Figure 8.9 Lonely Planet as a Hybrid (Molecular) Business Model Composed of Many Atomic Models**

Lonely Planet's traditional business is represented at the bottom of Figure 8.9 They have been enormously successful in selling travel aid books through complementors like Barnes & Noble and Borders. The retailer, through its physical stores, acts as an intermediary and resells these books to travelers. Like other traditional intermediaries, booksellers' value-added proposition, as we shall see in the next chapter, is to break bulk by buying in large quantities and passing on these economies of scale savings to consumers and businesses.[7]

When Lonely Planet decided to move into cybermarkets, they faced a serious challenge that their distribution partners, like Borders, would not appreciate their opening up a direct-to-consumer connection to the ultimate customer. Nevertheless, Lonely Planet viewed it as a strategic necessity and began selling directly to travelers, such as Traveler B above.[8] Theirs sales were both original and complete travel books as well as updates, which were not in the same category of competition with their channel partners since it was not really feasible for print book shops to sell printed inserts with updated material.

[7]Westland and Clark, 1999.
[8]Weill and Vitale, 1999.

To slightly mute the channel conflict, some of the content they are selling electronically is through their CitySync.com Web site, which is intended to download to personal digital assistants.

Another form of new sales for Lonely Planet was to offer content through portals like Yahoo. While they also decided to sell content to inflight magazines (content provision shown in left hand side of model), the content they sold to Yahoo was branded. Lonely Planet reasoned that they would be less vulnerable to loss of the asset of the customer relationship if the customer was made aware of the fact that Lonely Planet was the source. So in this particular case, Lonely Planet engages in both branded and unbranded context provision, and is handicapping their vulnerability by gaining some control over the strategic resources.

Lonely Planet also supports a virtual community called Thorntree. This community allows travelers to share information about touring and traveling with each other, and, since Lonely Planet has access to these exchanges, it is not unreasonable to think that there may be a value-add from this. An insightful reading of these exchanges could lead the firm to devise new travel products and services, perhaps. In any case, the virtual community draws users to Lonely Planet's Web site and may induce cross-over sales.

Table 8.11 shows the atomic components for Lonely Planet. It is a truly hybrid model, one that has not resolved all of its channel conflicts, but one where many assets are still owned by the firm.

| | Lonely Planet Atomic Components | Relationship | Data | Transaction |
|---|---|---|---|---|
| 1 | Content Provider | | | |
| 2 | Direct-to-Consumer | X | X | X |
| 7 | Virtual Community | X | X | |

**Figure 12.12**

**Table 8.11 Hybrid Model for Lonely Planet**

Had the firm chosen to only provide content to organizations like Yahoo and to continue selling through physical intermediaries, they would have risked being sidelined by more innovative travel information companies. Short of a bold, even daring move into a model like full service, it is difficult to see another strategic direction they could have taken that was more appropriate. The virtual community could conceivably contribute valuable customer requirements for both the content provision and direct-to-consumer models. Like Dell Computer's transition from selling computers to merchandisers to selling computers to consumers, Lonely Planet may find that there are attractive margins associated with an immediate connection with customers. After all, their writers are already creating content in digital formats, and the overhead of the Web site is trivial compared with the expense of

the physical printing. This would allow Lonely Planet to move more forcefully toward a virtual model over time and to take advantage of increasing returns to scale.

Lonely Planet is branching out into other media, and this is likewise a good experiment with their core competency as creators of specialized travel information. They host syndicated TV programs that feature low cost, behind-the-scenes looks at cultures around the world, in keeping with the theme of their books. It is easy to see how this exposure can help to spiral brand the other products that they sell, such as those through their Web site. We will explore such deployment strategies in the next module of the book.

## 6. BUSINESS MODELS AND ATOMIC MODEL SCHEMATICS

In creating an NE strategic plan for a firm, the business model must be put forth. The derived business model is what will sell or not sell the case to top managers in the case of an intrapreneurial project or to VCs in the case of an entrepreneurial project.

Managers and their assistants can use the concept of atomic models to first determine the firm's core competencies and then build the schematic that represents the direction to be taken by the NE initiative. Most likely, the derived business model will be a hybrid that will combine approaches, hopefully in a synergistic way. If not, then there will need to be a plan to deal with or overcome channel conflict. The revenue model for the initiative is implied in the schematic, but this can be elaborated with information about the potential market, etc.

Projected financial statements for typically 5 years may be the most difficult part of the exercise. Projecting revenues is hard enough in well understood product lines in long time established firms. For new business models implied in an NE initiative, there is a lot of uncertainly about who will buy and how much they will buy. Nevertheless, without this information, there is not a good way to see if the effort will ever become profitable. There are upfront costs associated with building and setting up the systems, of course. In the long run, the marginal cost of adding a customer will be near zero and the profits should be seen in the latter years of the projections. If increasing returns to scale is an accurate description of this initiative, then profits would soar in the next 5 year period, but most business models do not project out this far.

The marketing and implementation plans deal with subjects that we will cover in later chapters. For the moment, it is enough to say that it is likely that both of these areas have been neglected to the great detriment of dot.coms. Systems were built and may have been capable of delivering value, but without customers, they languished. In some cases, the entrepreneurs built a good company, but did not turn it over to professional managers soon enough to convert the start-up into a medium-sized enterprise. The point here is that care and brilliance in the front end could come to no avail if the execution is not up to par. Firms need meticulous management throughout the cycle to be successful.

# 7. SUMMARY

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