

INTENTIONS VALUE NETWORK

A Business Model of the Information Age

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Key words: Electronic business, business model, customer process, intentions value network

Abstract: By using the Web, service companies gain direct access to consumers world-wide, and consumers gain direct access to service companies world-wide. Simplifying distribution and communication of services, aggregators emerge as an innovative layer of business models. While traditional service industries are focused on products and economies of scale, aggregators focus on customer processes. In this paper, business models in a "Intentions Value Network" are analyzed, and pioneering intentions value networks are described.

1. INTRODUCTION

Information technology (IT) innovations influence and often transform each area, be it businesses or private households, they come into contact with. Although this is no new aspect of IT, the extent of the changes is revolutionizing both, the way we do business and the way we live. The first point becomes obvious when looking at the impacts standardized software packages like SAP R/3 have on companies and their organizational structure. Moreover, IT enables completely new business models, e.g. ThirdAge (cf. www.thirdage.com) which caters to a virtual community of elders by bundling specific products and services, or Quicken (cf. www.quicken.com) which offers advice and a broad range of products in the field of financial services. The changes in the daily life of private households are even more dramatic. Although consumer's intentions are driven by life events, they had always to be "translated" into discrete products and services. Virtual community orientated aggregator platforms like iVillage, ThirdAge, or Quicken bundle products and services independently from production processes and even independent from traditional industry structures. We now have to think in networks rather than in product and service ranges. This again leads to two effects: First of all, value-added networks get divided into a product-oriented part, which is more or less traditionally structured, and a customer process-oriented part which must be completely redesigned according to the new trends of e-business. Secondly, we face a change of the interaction between consumers and companies and,

driven by the developing potential of IT, to new ways of doing business.

The goal of this paper is to analyze the impact of IT potentials on value-added networks and the organizational innovation related to it, respectively. Thus, the paper starts with a discussion of the economical and cultural changes which have been happening over the past few years due to these specific IT potentials. Furthermore, the differentiation of value-added networks into a product-oriented part and a customer process-oriented part as well as the resulting redesign necessity of service companies according to consumer processes are explained. The second part of the paper deals with the vision of intention value networks and examines early examples that can already be found on the Web. Finally, trends will be deducted from the results of our analysis.

2. CUSTOMER ORIENTATION AND CONSUMER POWER

The economic and cultural changes which we want to analyze in this paper were triggered by two major effects or developments, respectively. First of all, IT innovations like common access to the internet and easy-to-use interfaces enabled the forming of a very broad network community which integrates not only businesses, but also end consumers. The second effect was the increasing deregulation of specific markets which led to an instantaneous globalization of these markets, breaking up an existing local or regional market power. By using the Web as

an efficient distribution and communication channel, companies now have a worldwide market place, but also worldwide competition. By getting information on every product, consumers can take advantage of a worldwide marketplace with a very high degree of transparency.

2.1 Business Architecture of the Industrial Age

The traditional business model of the past and even still today is product-oriented. “Business architecture of the industrial age” means that a product is “pushed” into mainly physical distribution / communication channels and that each consumer “gathers” the products he or she needs from different vendors using various distribution / communication channels. To satisfy their often complex needs, consumers have to act as integrators, i.e. they have to create solutions from discrete products and services by themselves. E.g., the life event “buying a home” requires consumers to bundle information products, banking products, and insurance products and trigger a large number of different business transactions by themselves. Thus they also have to establish and maintain contact to several product and service suppliers. Moreover, different components of a solution can often be found in different business units of the same supplier which leads to multiple contacts within the same company. Market transparency is avoided by trying to isolate products and consumers within proprietary “product stores”, thereby achieving a customer lock-in by creating switching costs (cf. Shapiro, C., Varian, H., 1999). Since production oriented structures are driven by economies of scale, suppliers tend towards monolithic structures. If present at all, outsourcers and networking play a minor role.

2.2 New Ways of Customer Centricity

In the business architecture of the industrial age, customer-centricity means the orientation towards a “median”, undifferentiated consumer rather than focussing on the individual. In the past and often today sales channels are filled and thus defined by companies according to the push principle. But this is already changing: by using the Web, consumers get more power by integral accessibility of products, services, and information. Consumers realize increasing awareness of higher market transparency and begin to independently decide which distribu-

tion / communication channels he or she uses and which products and services suit the solution he or she seeks most. The solution now becomes available in fewer steps and with even less effort, because the integration through the network is relatively easy. The consumer can now use the pull-principle to obtain a product, a service or an entire solution. Moreover, the costs of changing a supplier are very low in comparison to the situation before. Thus, we can say that the market becomes customer-driven.

2.3 Orientation towards Life Events and Intentions

Consumers are looking for ways to manage basic needs and achieve basic objectives in a simplified way (cf. Friedman, J.P., Langlinais, C., 1999). As an example, “travelling” today often means that travel products (e.g. flight, accommodation), banking products (e.g. foreign currency), health products (e.g. vaccination), insurance products (e.g. baggage insurance), and information products (e.g. travel guide) have to be purchased from different suppliers. This situation is illustrated by figure 1. More complex objectives like planning for a secure retirement, moving to a new community, or starting a new career require even more products and services to be integrated. Such complex life objectives have been designated as “consumer intentions” (cf. Friedman, J.P., Langlinais, C., 1999). Based on the business architecture of the information age, consumers need extensive planning and coordination across many areas to satisfy their intentions.

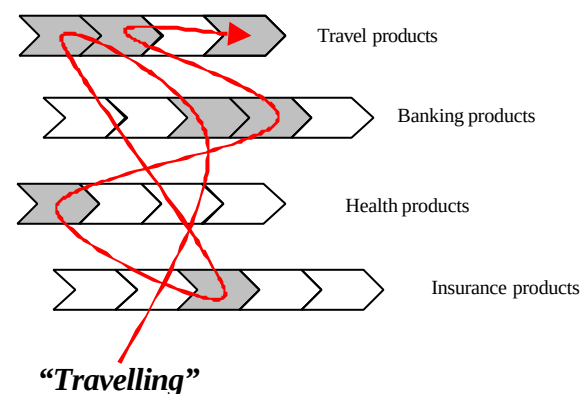


Figure 1: Intention “Travelling” vs. Travel Related Products and Services (based on Langlinais, T., deLeon, A., 1999, 53)

Since deregulation and globalization induce not only more choice, but also more complexity in consumer’s buying decisions, discrete products and

services lose their traditional importance. When buying is more and more driven to create a holistic solution to a problem or to entirely satisfy an intention, companies which want to succeed have to simplify consumer's processes, i.e. by integrating products and services for focussed customer segments.

2.4 Two perspectives of the customer process

The first step of becoming a network compatible "company of the information age" is the redefinition of the consumer from two different point of views:

The customer process *from the consumer's point of view* is based on a multi product mix which defines itself according to the specific life event or intention that triggers the buying process. At the beginning of the buying process, the consumer does not always know the individual products which constitute the final product offered. Furthermore, this product does normally not have a company-related brand so that customer loyalty is difficult to establish and the customer lock-in process must be redesigned (cf. Shapiro, C., Varian H., 1999, p. 103-171). The problems we face for branding an intention-triggered product can be compared to the difficulties which occur when establishing a brand for a "traditional" service product. A physical product, e.g. a specific car, "transports" a brand and thus is recognized by the consumer due to its potential characteristics. A consulting company establishes a brand which is closely tied to its name, rather than its products. In this case the branding process is much more difficult, because the product cannot be directly recognized by the consumer. The product is defined by a good measure of imagination and suggestive power of the advertising campaign (cf. Hamilton, Joan O'C., 1999, p. 44-45). The same is true for an intention-triggered product: From the consumer's point of view, the lock-in is achieved by a product mix, which satisfies the intention in the best possible way, i.e. the most important characteristics of the product are its quality and degree of individuality. First experiences of Web based aggregators show that "true choice" and "objective advice" become more important constituents of customer loyalty than factors that can be attributed to isolated products. The customer process, which results from the above discussed points, can be defined as follows:

- Identification of an intention
- Search for an aggregator which offers not only appropriate solutions, but also "true choice" and "objective advice"

- Selection of a distribution / communication channel and an appropriate solution
- Payment and "consumption"

The customer process *from the companies' point of view* must be defined according to the above described process. As a consequence, the following process steps result:

- Identification and selection of communities / consumer segments
- Anticipation of intentions
- Selection of "best of breed" solution components
- "Assembly" of solutions which contribute to the satisfaction of one or more intentions
- Support of all appropriate distribution / communication channels
- Obtaining and keeping a competitive position in the network

If a company is part of an intention value network, it contributes to the final solutions by providing components rather than being the last element of the supply chain. Thus, several changes and effects result:

The consumer is no longer a "holistic" marketing object, but is segmented according to his or her intentions. The company must nevertheless know the intentions and the possible solutions in order to be able to produce the "right" product or service component. Customer relationship management in this context means that the service integrator as direct interface to the consumer has to individually care for him or her. As long as the product was the link to a "faceless" mass of median consumers, it could be manipulated according to more or less fuzzy results of empiric research. Today, the connection is directly established with the consumer and the care must be "applied" according to his wishes. That means that the product has to be individually customized for a specific consumer. Otherwise, since the switching costs are very low, the consumer can easily move on to another integrator.

Customers from the companies' point of view can be divided into three groups:

1. End consumers which buy and combine products and services without using an integrator
2. End consumers which buy solutions, i.e. which use a service integrator
3. Service integrators

Since, in the presence of service integrators, a direct contact to end consumers becomes increasingly difficult for producing companies, differentiation as

far as competitors are concerned must be created by other means. This can, for example, be done by banner advertising on the respective Web site, targeting particularly customers in groups one and three. A prerequisite for being able to do this is that the company stays in the network. Thus, on the one hand, the company has to keep a direct contact to the service integrator and create a lock-in position with it. On the other hand, and this must be the main ambition, the entire organization must be orientated towards keeping the position in the new business architecture of the information age, which is developed in the next chapter.

Another important point of the multi product mix is that it is constituted by products of different companies. Therefore we need a reliable standard for enabling the intermediaries (service integrators, cf. Hagel, J., Singer, M., 1999) to assemble the final solution. Service integrators must be able to integrate product and service components by using a generic method in order to achieve a maximum degree of individuality. Generic products can be integrated by using product catalogues (cf. Schmid, Selz, Sing, 1997) which serve as product pool for creating individual solutions.

3. VISION OF A NEW BUSINESS ARCHITECTURE

While the business architecture of the industrial age relied on a more or less local integration of partners by company- or alliance-specific platforms, the complexity of distribution / communication relationships in the e-economy can only be reduced by developing a standardized platform which is used by

each member of the network. In analogy to respective devices in computers, such a platform is designated “Business Bus” (cf. Österle, H., 1999). Nevertheless, a standardized platform does not reduce the variety and multitude of products, services, and information which are offered within the network. Its economic value is to reduce transaction costs by providing standards for exchange of information and services not only on a technical layer, but also on business-related layers like application architecture, process architecture, or even business architecture.

Hence, there is a prevailing need for integrators, which reduce complexity by aggregating products, services and information according to the consumer’s intentions. Such intermediaries represent a new role model in the business architecture: they do not only complement existing role models like “manufacturer” and “consumer”, but also induce a separation of the value-added network into a product-oriented part and a customer process-oriented part. As a consequence, we have two new elements in this business model which must be defined as well as designed: First of all, the standardized platform and secondly, the additional role and position of the service integrator.

A “business architecture of the information age” (cf. Figure 2) is realized when value-added networks are divided into a production-oriented portion (“service providers”) and a consumer process-oriented portion (“service integrators”) and when all agents communicate using a common technical as well as organizational infrastructure. In addition, when compared to the business architecture of the industrial age, a significant decrease of exclusive product / service manufacturers (i.e. more outsourcers and shared services) and the integration of public services become apparent.

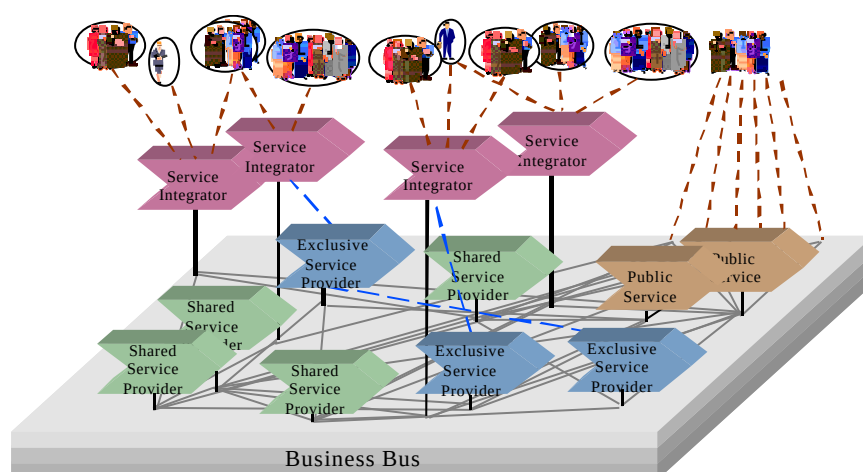


Figure 2: Business Architecture of the Information Age

3.1 Examples of Intentions Value Networks

Pioneering Intentions Values Networks can already be found:

- ThirdAge.com “presents the best the Web has to offer for active older adults. ThirdAge.com offers rich advice and helpful information on topics critical to the ThirdAge community, such as retirement housing and estate management - areas typically ignored or glossed over by traditional media.” (<http://www.thirdage.com>) By integrating medical, insurance, banking, relocation, and investment services and by partnering with various merchants, ThirdAge.com tries to satisfy the intentions “achieve financial security”, “maintain a healthy lifestyle”, “find appropriate housing”, “expand personal horizons”, and “explore the world”.
- Quicken’s insurance market claims to help customers in making better, more informed decisions (<http://www.insuremarket.com/event/>). By integrating products from Allstate, MetLife, Prudential, State Farm, Transamerica, Travelers, Zurich, etc. and by providing lots of independent information and support tools, life events

like “buying a car”, “getting married”, “buying a home”, “becoming a parent”, “leaving a job”, “getting divorced”, and “retiring” are covered.

- beyoo.com integrates a huge number of travel services (e.g. airline travel, car rental, hotel accommodation) into a portal that gives not only access to a professional selection of services, but also complements “products” by information / advice and community support for business and leisure travellers.
- A broad range of products and services are also integrated with additional information by homeportfolio.com and Microsoft’s Home Advisor (for home improvement), autobytel.com and carpoint.com (for purchasing / trading cars), Yahoo Small Business, or Parents Place at iVillage (see last section for URLs).

Many companies, although not ready for partnering with vendors of complementing services or even competitors in a Intentions Value Network, already present their services around life events: E.g., UK’s First Direct presents solutions for “enjoying success”, “travelling”, “separating”, “improving your home”, “having a family”, “buying a home”, “retiring”, “getting married”, “changing jobs”, “buying a car”, and “changing banks” which, of course, include own banking products.

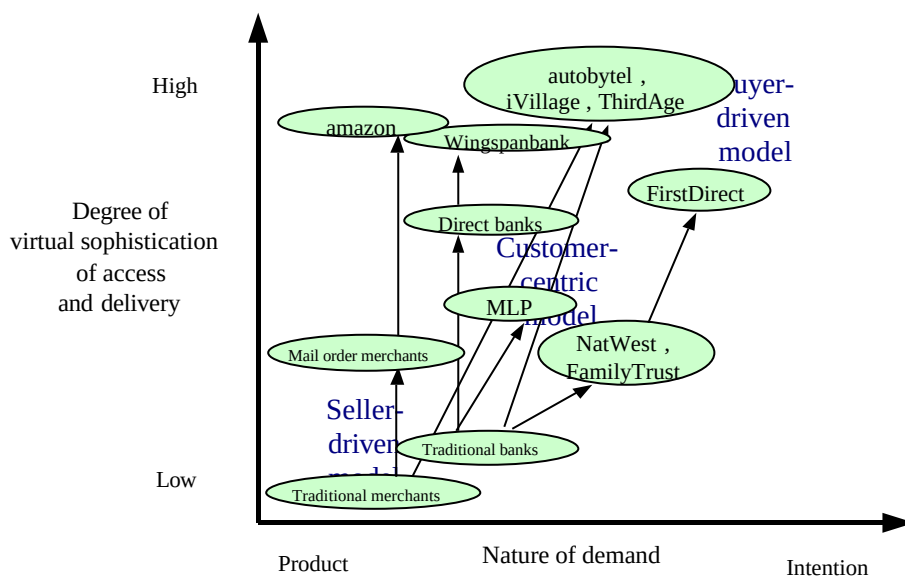


Figure 3. Evolution of Business Models (based on the classification in Friedman, J.P., Langlinais, C., 1999)

3.2 A Taxonomy of Business Models

While seller-driven business models of the industrial age are built around products, many service companies have already implemented customer-

centric business models, i.e. they are clustering products around solutions. Based on the discussion in section 2, Intentions Value Networks can be interpreted as buyer-driven business models. Figure 3 shows a grouping of business models according to

the degree of virtualization and the nature of demand, respectively (cf. Langlinais, T., deLeon, A., 1999, 51). While “traditional” e-commerce often just virtualizes access to traditional products or delivery of traditional products (e.g. mail order merchants or Internet merchants compared to traditional merchants, direct banks or Internet banks compared to traditional banks), Intention Value Networks meet broader consumer objectives.

4. DISCUSSION AND OUTLOOK

Although exaggerated expectations for online commerce and novel business models went bust with the recent re-valuation in share markets, many “old economy” service companies restructure their “product” program according to communities and customer intentions. Whether communities like “new families”, “relocating consumers”, “Gen-Xers”, “time-strapped people”, “Third-agers”, or “new to countries” (cf. Langlinais, T., deLeon, A., 1999, 67) can be addressed and tracked appropriately, will be most important for business success or failure. In particular in the field of financial services, many recent mergers & acquisitions can be attributed to combining complementary product portfolios to target the attractive consumer intention “providing for elder years”.

It is, however, not clear whether the integrator role in the business architecture of the information age can support a successful business model alone, or whether it has to be complemented by providing additional, specific services. As a consequence, ongoing research in the context of consumer-oriented business models is focussing on the following problems:

- Classification mechanisms and reference models for value-added networks
- Methods for matching organizational competencies with appropriate roles in a value-added network
- Classification mechanisms and reference models for customer processes / intentions
- Methods for defining an optimal degree of standardization that allows an open exchange of services in a value-added network but still allows to identify sub-networks that support sustainable business models.

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WEB SITES

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