

17 Business Networking - Summary and Outlook

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17.1 Bottom Line of Business Networking

17.1.1 Improving Business Efficiency and Creating New Opportunities

This book has described Business Networking as one of the seven trends companies have to address in order to remain competitive (cf. Chap. 2.3). Its relevance is growing and many brick-and-mortar companies are investing substantially in Business Networking (or eBusiness) projects. Established companies, such as Bayer, Deutsche Post, DaimlerChrysler or Deutsche Telekom are being transformed: new organizational units are being formed for eBusiness, traditional channels for procurement, marketing and sales redesigned, and new 'eCompanies' (co-) founded (e.g. Covisint by DaimlerChrysler, CheMatch by Bayer or emaro by Deutsche Bank and SAP). The goals behind these developments are twofold:

- *Increased process efficiencies.* Business Networking is an efficient strategy for improving the interaction with customers and suppliers. A large number of the eMarkets (e.g. e2open, Covisint, Globalnetexchange, Chemconnect) have been founded in order to reduce the costs of the procurement process by using a common standard. IBM provides an illustration of the cost-saving potential: although increased electronic sales brought savings of USD 1 billion in 1999, this only corresponds to 17% of IBM's total turnover. In comparison, Dell handles 50% of its turnover via the Net [cf. Sager 2000]. Another example of the cost-saving potential is the EC solution at ETA SA (cf. Chap. 6) which achieved a tenfold reduction in handling costs.
- *New business opportunities.* Business Networking can support companies in developing innovative business models and new opportunities in the market. This mainly refers to new intermediaries, such as Amazon, Dell, MarketSite.net or the Ariba network (cf. Chaps. 3 and 4.2). An example described in more detail was the supply chain integration center that Riverwood is planning to develop from their VMI solution (cf. Chap. 5.7) or the procurement service offered by Deutsche Telekom (cf. Chap. 14.2).

These two areas differ in nature. Efficiency improvements tend to be the result of inside-out action. The implementation of an EDI system was logical after an internal process optimization project, and the electronic procurement marketplaces are logical once a certain number of organizations have decided to pool their procurement volume. However, new business opportunities tend to materialize largely as a result of outside-in action. The Internet has given birth to a large number of companies that discovered a specific customer need and then established internal operations to meet that need. This is a phenomenon that also explains why back-end integration is often found to be lacking in young Internet companies. Achieving a trade-off between both approaches – quick time-to-market on the one

hand and providing a convincing, stable and efficient solution on the other – represents one of the core challenges.

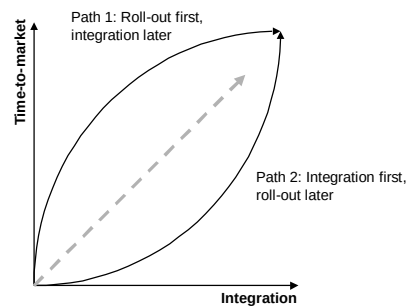


Figure 17-1: Development Strategies for Business Networking Solutions

17.1.2 Goals of Business Networking

Throughout this book it was our aim to show that Business Networking goes beyond a simple EC or SCM strategy and beyond the technological implementation of some Internet system. Three aspects are summarized below:

- *Business Networking supports business goals.* Process improvements and new business opportunities have direct impact on a company's strategy and future competitiveness. Assessing networkability and developing Business Networking strategies is a top management task that cannot be delegated to line management, the IT department, or a consultant.
- *Business Networking integrates strategies.* The popular strategies of EC, SCM, and CRM are all addressing inter-business relationships (cf. Chap. 4). Business Networking provides an integrated picture of these strategies and recognizes, for example, that each EC solution also requires an SCM solution. Thus, Business Networking overcomes the isolated view of individual strategies and helps in extending existing solutions (e.g. an EC solution with a CRM component).
- *Business Networking aims for successful implementations.* The success factors identified in this book (cf. Chaps. 6 and 13) are mostly organizational (e.g. homogenized master data, alignment with marketing strategy) and political (e.g. creating win-win situations) in nature. They show that Business Networking is a technology-enabled, but not a technological concept. Applying the levels of business engineering, i.e. strategy, process and systems, to Business Networking (cf. Chap. 3.5.1) ensures the alignment of technological, or-

ganizational and technological factors. This approach has been pursued in the methodological considerations in Chapters 14, 15 and 16.

All three aspects shape the nature of Business Networking. Evidently, they are not all new, and certain elements have already been available for some time. The strength of Business Networking is that it presents a logically consistent overall framework for developing inter-business relationships which includes these aspects.

17.1.3 Changing Face of Business Networking Systems

One of the objects of this book was to develop a model that addresses the major developments in Business Networking and elaborates logic building blocks for networked companies. We are aware of the fact that this can only be a snapshot of one particular development path. Although other technological or management trends may be just looming on the horizon, we have found substantial evidence of this path. The main drivers in Business Networking which we can see at this stage are:

- *Increasing standardization.* Various initiatives have been launched to standardize data (e.g. CXML, RosettaNet, Uddi, Bolero) and processes (e.g. CPFR, OBI) for Business Networking (cf. Chap. 2.3). These standards tend to increase inter-organizational connectivity and reduce the transaction costs involved in Business Networking.
- *Interaction of networking strategies.* A large number of companies have implemented initial Business Networking solutions. These solutions often focus on one particular networking strategy (cf. Chap. 4.3), for instance an EC solution for selling products. In coming years, we expect to see these solutions being enhanced by elements of other networking strategies, such as CRM or SCM, a factor liable to foster a convergence of networking strategies.
- *Increased business volume.* Projections forecast a significant growth in Internet users for the next few years. This implies that businesses will increasingly move onto the Internet. Forrester Research, for instance, believes that business-to-business EC will grow from USD 43 billion in 1998 to USD 2,700 billion in 2004 [Stepanek 2000, EB 26]. However, forecast revenues for Internet-based commerce only give a poor indication of usage or value creation on the Web. Therefore, we rely on the Internet host count which is carried out twice a year. These figures indicate that the number of potential business partners rose from 16 million hosts in July 1996 to 72 million in January 2000 [ISC 2000].
- *1:n develops to n:m.* In view of the growing Internet business volume and the potentials for information-based services, many of the existing Business Net-

working systems will evolve from 1:n to n:m systems with electronic markets becoming a reality in many industries (cf. Chaps. 1.1.2 and 2.2.7). Since critical mass determines the benefit of these systems [cf. Klein 1996], early movers will enjoy a clear advantage.

17.1.4 Model of Business Networking

The Business Networking model reflects the major principles of networked enterprises or Internet businesses. We believe that, regardless of the size and the industrial environment in which a company acts, networked enterprises will be the dominating organizational form in the information age. They build on four building blocks that have been proposed throughout this book:

- *Networked processes.* At the core of every Business Networking solution are the supported business processes (procurement, sales etc.) which stretch across several business partners. Networked processes need to be agreed upon by all partners or, ideally, are standardized within a certain business community (e.g. the chemical industry). In this book we have discussed networking scenarios (cf. Chap. 3.3) and networking strategies (cf. Chap. 4.3).
- *Business bus.* The availability of a standardized infrastructure for Business Networking is a critical necessity. As described in Chapters 2.3.4 and 3.4, the business bus consists mainly of standards, and provides middleware functionality. Important actors that shape the business bus are market-leading vendors (e.g. SAP, Microsoft) and standardization organizations/consortia (e.g. RosettaNet, Uddi, Bolero).
- *Electronic services (eServices).* In the same way as the ethernet bus provides access to services, such as printer or file services, in a local area network (LAN) the business bus will allow connection to eServices. These 'small' standardized services are available on the Internet and will be included in portals and eMarkets. Various eServices have been described in the previous chapters (cf. Chaps. 2.3.5 and 3.4.1).
- *Service integrator.* In the same way that eService providers have appeared as new players in Business Networking, customer-orientation will lead to new intermediaries. These service integrators have also been referred to as 'info-mediaries' [Hagel/Armstrong 1997] and derive their value from supporting the customer process (e.g. Avnet Marshall, cf. Chaps. 2.3.6 and 3.2.3), managing customer information (cf. Chap. 7) and the like.

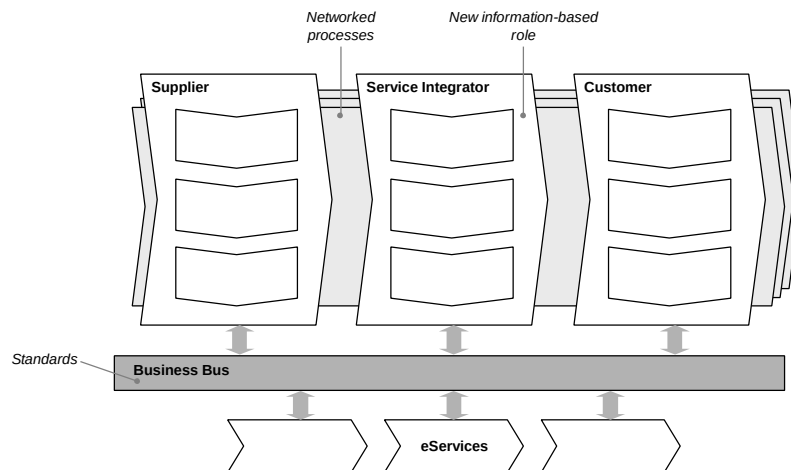


Figure 17-2: Building Blocks of the Business Networking Model

17.2 Next Steps in Business Networking

17.2.1 Advent of Process Portals and eServices

The development towards n:m systems implies that Business Networking solutions have the potential to generate revenues on their own. The most prominent example is already a classic and comes from American Airlines. Initially, their Sabre reservation system was implemented to manage the allocation of seats internally. It was extended step by step to become an eMarket for services in tourism with airline tickets from American being only one product among others. Sabre has been spun off from American Airlines as an independent business which also provides the Travelocity website (cf. Chap. 7.1). Comparable developments are now occurring in many other industries as well. We see two critical aspects which both require a thorough analysis of existing core competencies and the future market position as explained in Chapter 4.2:

- *Positioning as eServices.* Companies have to decide whether their Business Networking solutions have the potential to become eServices in their own right. Being part of the infrastructure offers the opportunity to provide services to a large number of portals and eMarkets (since many eServices are not industry-specific) and to collect fees with every transaction effected via the portal / eMarket.

- *Positioning as process portal.* As discussed in Chapter 2.3.6, there is little doubt that customer loyalty and customer-orientation will determine the success of Business Networking solutions. Today, many solutions are still product and not customer-oriented. We expect to see process portals which integrate multiple eMarkets and other portals depending on specific customer segments. Multi-market and multi-portal management will become an important topic in the years to come.

Portals and eMarkets are the third wave in Business Networking. The linking of distributed ERP solutions was the first phase in Business Networking. It was followed by the second phase which spawned such Business Networking systems as EC or SCM (cf. Chap. 13.2). Internet-based portals and platforms, such as mySAP.com, represent the third phase. The challenge for information management is to come up with solutions for integrating these three worlds. Important aspects are the distribution of master data and the distribution of functionality between the various systems.

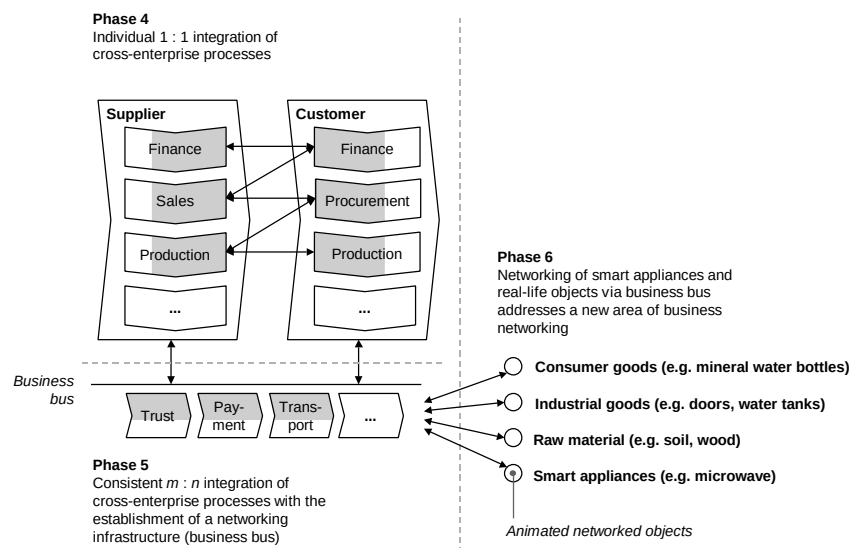


Figure 17-3: Types of Systems in Business Networking¹

¹ See Figure 1-1 in Chapter 1.1.2.

17.2.2 Networking Smart Appliances and Real-Life Assets

The increasing miniaturization of information processing and communication devices has been described as one of the major trends in Chapter 2.3.3. In the future we expect smart appliances to make profound inroads into Business Networking. Smart appliances [cf. Thiesse/Österle 2000] and animated real-life assets, such as consumer goods (e.g. mineral water bottles, textiles), industrial goods (e.g. doors, water tanks) and raw materials (e.g. soil, water) and the like open up new perspectives (see Figure 17-3). These embedded networked processors are very small and simple IT devices. Due to the vast volume produced, their cost is negligible. Elements of such networking between real-life assets have been described by [Kelly 1998] who termed them ‘jelly beans’. He gave some idea of the type and scope of developments that will mark the next 5 to 10 years in Business Networking.

“A tiny chip [jelly bean] plastered inside a water tank on an Australian ranch transmits only the telegraphic 2-bit message of whether the tank is FULL or NOT. A chip attached to the ear of each steer on the same ranch beams out his location in GPS numbers; [...] ‘I’m here, I’m here’ it tells the rancher’s log book.[...] The chip in the gate at the end of the rancher’s road communicates only a single word, reporting when it was last opened: ‘Tuesday’.”
[Kelly 1998, 12]

After networking people via telephone or fax, information systems via EDI or the Internet we started networking processes and organizations. We are now heading towards connecting real-life assets with other real-life assets, people, processes and information systems. And we are thus addressing the next generation of the networked economy by pushing the possibilities and the potentials of networks beyond the confines of today’s imagination.

