Chapter 1

Transforming Your Business Network

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Recently, we have been conducting research into an emerging business phenomenon that we are referring to as *business network transformation* (BNT). We believe that BNT is a descriptive framework that can help executives to focus on the dynamics of business networks in their markets. At minimum, these dynamics constitute environmental forces that must be taken into account by every company, regardless of size or industry position. For more powerful companies, they also represent a source of leverage that can be used for competitive advantage. Finally, for leading companies that are willing to pursue high-risk, high-reward strategies for growth, they represent untapped sources of innovation and competitive performance that can shift the balance of power in an industry under change.

Setting the Context

Three major trends in business dynamics today are setting the context for a new focus on business network transformation.

1. The dominant thread of the BNT concept is driven by globalization. This leads immediately to commoditization, providing

better prices for consumers in developed economies, and laying the foundation for selling back into developing economies once their level of affluence rises. Commoditization, however, threatens established business models and profit margins and thus creates a Darwinian forcing-function for differentiation in order to escape from the lowering price trend of the marketplace. Differentiation, in turn, implies specialization, which involves leaving certain tasks to other companies while focusing resources on tasks which lead to differentiation. Hence the rising relevance of business networks under the relentless pressure on each participant to differentiate in a global economy.

2. Networks serve to help both on the context and the core[1] sides of the equation. On the *context* side, they enable outsourcing of work that brings no differentiation. However, much of this work is mission-critical, and the need to insure the outsourcer against quality or performance failures is paramount. Unfortunately, in the past few decades since service-level agreements (SLAs) were first implemented, they have not always kept pace with the demands of the client company's business. Sometimes this has been because the client company commissioned mission-critical services from the lowest bidder, or because they simply handed off a broken process for someone else to fix without an agreed set of expectations regarding what the process or service levels would need to look like, or because the SLAs have been insufficiently thought-out or automated. Hence the need today for SLAs based on meaningful performance criteria, and the real-time systems that can monitor, alert, and escalate failures to enable both sides of the relationship to respond as needed before things have worsened beyond repair.

3. Networks also serve to enable and amplify *core*, or differentiating, processes. Here innovation is achieved in collaboration with others in the network, putting new stresses on communication systems to cut through the cycle time of developing next-generation offerings. Networks must transform in order to enable a new level of intimacy, sharing data that previously was kept private.

We shall describe the different types of networks and the corresponding strategies for leveraging the resources of each company's business network.

Given the speed with which these distributed processes need to operate and the visibility into partners' operations that is needed, BNT cannot be successfully managed without robust IT capabilities throughout the network. On the IT side we see a companion set of new dynamics. The era of building out the great systems of record to enable global commerce is largely over. We can now do business at a global scale, but somewhat stiffly and awkwardly. The goal now is to become more nimble and adaptive.

Inter-enterprise processes are the new focus. Internal productivity is still a concern, but the real opaque zones where productivity can be sacrificed is *between* companies rather than inside them. Hence the need for a suitable response from IT with suitable platforms, composite applications, real-time operational analytics, and the like.

This is leading to a new systems design paradigm. Instead of beginning by designing the database, and then the transaction flows in and out, and then the reporting requirements, these systems begin with "reporting in real time"—the on-demand information and transaction processing requirements of the key person at the moment of truth (with a customer, in a design dialog, on a manufacturing line, about to approve or deny credit). And instead of asking that person to jump through hoops for the system, we are asking the system to jump through hoops for that person. In IT terms, this can only be done in a modern systems environment where SOA-enabled facilities can be readily reassembled to meet an increasing diversity of immediate needs. (See Chapter 10 for Andrew McAfee's discussion of IT enablement of BNT.)

Now let's take a look at the transformational impacts we are seeing. First, we'll look at how business networks are transforming us, then we'll assess how we are able to transform business networks to our advantage by playing a game we call *strategy chess*.

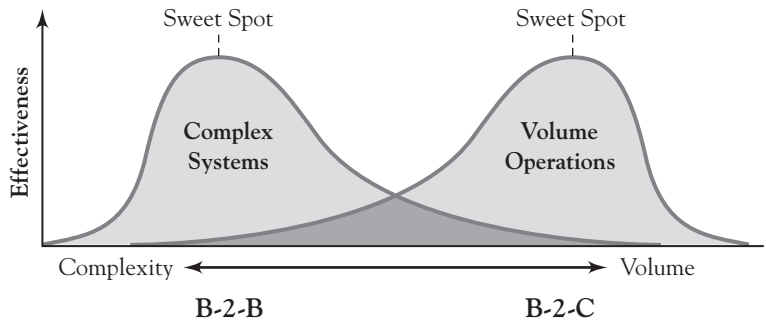
Business Network Dynamics

We have found that there are two types of networks corresponding with the two types of business architectures that have evolved as truly scalable: the complex systems model, whose sweet spot is large-ticket items sold to businesses and governments, and the volume operations model, whose sweet spot is goods and services sold to consumers (see Figure 1.1).

Whereas the complex systems enterprise is designed around serving the needs of the target customer, since they are the scarce ingredient in the system, the volume operations enterprise does not focus on its customers, because they are not the scarce ingredient in this system. Instead it focuses on the enablers of scalability, the levers that allow it to serve high-volume markets.

Of the two models, the complex systems approach is optimal for getting a new market or a new category of offer off the ground. Typically targeting deep-pocketed corporate and public sector customers first, it leverages a collaborative network to develop next-generation offerings that address expensive, hard-to-solve problems. As these solutions begin to standardize, the complex systems model incorporates more and more volume operations components to reduce costs, lower prices, and open up the market to

Figure 1.1 Two Types of Business Enterprises: Complex Systems vs. Volume Operations



more and more customers. There is a period where the two models operate in harmony, with enough complexity still in the system to pay the complex systems price and enough repeatability to enable a volume operations player to sell in volume.

Eventually, however, the solution becomes so standardized that it commoditizes, and the market will no longer pay the complex systems overhead. Instead "good enough" becomes good enough, and the volume operations model takes over. The complex systems players can delay the transition, but at some point they must capitulate and move on to create the "next next" generation of offering, starting the cycle all over again.

The biggest challenge that collaborative networks made up of complex systems players have is actually letting go of businesses that have been workhorses for them for years, and in the process abandoning or at least reframing the relationships that enabled them. By contrast, the biggest challenge the coordinated networks made up of volume operations players have is stepping up to the next generation of "not quite ready for prime time" offerings where the demands of service and support are at their highest but the volumes are not there yet.

Strategy and the Stronger Hand

Large corporations often field businesses from both sides of this model. Consider HP, with its consumer PC and printer businesses, and its enterprise server and outsourcing offers. Consider Motorola with both network infrastructure and handsets. Or consider pharmaceutical and semiconductor companies that use complex systems for sales and marketing to win prescriptions or a design-in, but then fulfill orders through a volume operations backend that distributes pills or chips through distributors. And both models can "cheat" into the other's space. Thus high–net worth private banking and custom designed homes are complex systems businesses sold to consumers, and component

manufacturing and call centers are volume operations businesses sold to businesses.

But all that said, for the most part, complex systems businesses succeed by selling million-dollar deals to thousands of corporations whereas volume operations businesses succeed by selling sub-$100 offers to tens of millions of consumers; the two are run under very different guidelines with very different best practices. Over time most corporations gravitate toward one or the other of these two models, and that in turn influences the type of business network it teams up with.

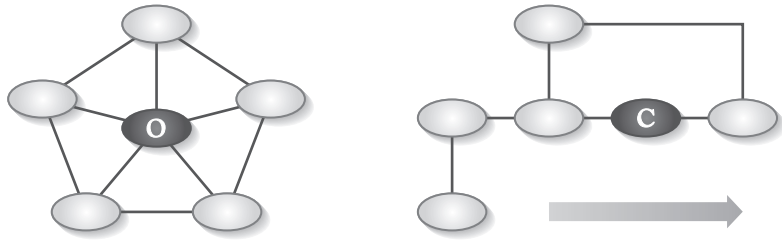
The Two Types of Business Network: Collaborative and Coordinated

Business networks evolve into two distinct models, each optimized for a different end goal, as shown in Figure 1.2.

The *collaborative network* has a peer-to-peer structure in which each member of the network has direct access to every other member. It is optimized for tackling high complexity problems through highly interactive relationships, operating essentially as a virtual project team. The making of a contemporary movie provides a good case in point, as does the management of a merger or acquisition, the development of a new drug, a new computer system, or a next-generation aircraft. Often in these networks a single company will take the lead in orchestrating the network to achieve the particular end goal in view; this role is not permanent, the company's power being circumstantial due to a privileged relationship with a customer, a key resource, or a critical body of domain expertise.

The *coordinated network* has a back-to-front structure that it inherits from an earlier instantiation of this model as a value chain[2]. The difference between the two is that a value chain is truly linear, one's "customer" being the company to the right in the chain, whereas in a coordinated network all companies focus on

Figure 1.2 Two Types of Business Networks



Collaborative Networks

- High complexity
- Relationship oriented
- Outgrowth of *project teams*
- Organized around an *orchestrator*
- Focus: expertise, innovation, and market development

Cisco, Boeing, Goldman Sachs

Coordinated Networks

- High Volume
- Transaction oriented
- Outgrowth of *value chains*
- Organized around a *concentrator*
- Focus: efficiency, speed, and adaptability

Nokia, Nike, Charles Schwab

the end customer, and the network supports multiple routes, jumps, and leaps as an offering moves from raw materials to fully delivered offer.

Coordinated networks specialize in high-volume transactional offers where economies of scale provide competitive advantage. The retail demand and supply chain provides a familiar example, as do online media sites, airlines, discount brokerages, mobile digital services, casinos and theme parks, and consumer electronics contract manufacturing. Often in these networks a single company gains sufficient power over the rest of the chain to dictate terms, whether as a key brand provider or a large retail customer owner. In these situations the rest of the network is driven to achieve increasing efficiency, speed, and adaptability, but gains an asymmetrically low share of the returns for so doing.

Networks and Your Stronger Hand

The net of all this is that complex systems enterprises feel more at home in collaborative networks while volume operations enterprises align more with coordinated networks. Conversely, they are challenged when they must interface with a network of the opposite type. This is highly material because each model needs the other to perform services that it cannot perform for itself, as Figure 1.3 illustrates.

Business Networks in Their Sweet Spots

In the past two years, we conducted over 40 interviews with C-level executives in companies in a dozen or more different industries.

Collaborative networks tend to have their biggest impact when complex systems companies come together to develop a new market and/or solve a high-value problem. Their peer-to-peer structure brings together the best thinking available, typically including participation from early adopting customers who help co-design the offer. Architecture is a critical concern because the problems are so complex each firm only solves a piece of the whole and must have a clear line of sight into how their piece integrates into the overall system. (See Chapter 5 for N. Venkatraman's discussion of architecture in product leadership.) Downstream, a well-designed stable architecture means that modules can be reused even when other parts of the system are being reengineered and can plug in provided they conform to the established interface standards. Over time, such architectures allow collaborative networks to stabilize around vertical markets where they can repurpose past work, spending more time customizing existing systems than inventing whole new custom systems from scratch. Consider, for example, the ongoing relationships among the companies that make up corporate computing, enterprise software, enterprise hardware, and systems integrators—or the investment bankers, buy-side fund managers, and sell-side fund managers that make up the capital markets.

Figure 1.3 Business Networks in Their Sweet Spots: What We Learned from 40+ Interviews

Collaborative Networks	Coordinated Networks

• **Target next-generation green-field market opportunities to:**
  • Develop new markets
  • Exploit high-value umbrellas
• **Drive standards and interfaces to:**
  • Enable modular development in parallel with downstream systems integration
  • Increase reuse for productivity
• **Pursue market-specific solutions to:**
  • Increase customer value, reduce market risk
  • Decrease complexity, reduce integration risk
• **Struggle to:**
  • Accept commoditization and move on
  • Entrust to partners non-core processes that are mission-critical
	• **Target low end of mature complex systems markets to:**
	  • Enter new markets
	  • Exploit high-price umbrellas
	• **Drive commoditization to:**
	  • Lower base prices to drive down overall cost of offer
	  • Grow volume operations to scale
	• **Pursue mass customization to:**
	  • Recapture margin
	  • Retain low-cost efficiencies
	• **Struggle to:**
	  • Collaborate to enter new markets
	  • Get downstream visibility in existing networks

Collaborative networks struggle to accept commoditization and move on. This is where we often see the "creative destruction" described by Joseph Schumpeter[3] in the early part of the last century, where volume operations companies take over the bulk of the market, and complex systems consolidate in a slow growth huddle at the very top of the pyramid. These networks also struggle with the challenge of outsourcing mission-critical processes that are no longer core to their competitive differentiation. This requires a level of volume operations discipline and standardization that goes against their customizing ways, and they often use their buying

power to demand custom services that in the end do not serve either their or their customers' real interests.

Coordinated networks leverage the "ice-breaker" function of the complex systems model to enter new markets and exploit the high-price "umbrellas" in place. They drive commoditization to achieve price elasticity effects that expand the market and lower costs per unit. This in turn drives up the volume, which enables the model to repeat the cycle, driving more and more growth as the market moves "down the pyramid." This same commoditization, however, erodes even their own margins eventually, forcing these networks to specialize (hence the rise of the network model to replace the vertically integrated corporation) and also to mass-customize (creating segment-specific value without abandoning the mass production cost benefits).

Coordinated networks struggle mightily when they must collaborate to develop a new market. The problem here is that the *concentrator,* who has been driving the market to achieve the efficiencies and scale of the past, lacks the goodwill to get the other players in the network to work together with them. All the "win/win" models needed to reward such collaboration have been designed out of the system, the concentrator having beaten down everyone to feed its coffers. (See Chapter 9 for Jeffrey Dyer's discussion on building trust in networks.) Even getting sell-through information from a retailer can become a real challenge as partners fear that any profit opportunity will be snatched away as soon as it is revealed.

Business Network Transformation

So much for the dynamics of business networks. They are hardly new. What we should take away from the previous discussion is that there is plenty of opportunity for miscommunication between the two types of networks, as in a "men are from Mars, women are from Venus" scenario, as well as strategy mistakes that grow out of trying to apply the principles of one type of network to the operations of the other.

Now let us turn to what happens when these networks transform, either under the influence of technology change, deregulation, globalization, or, as is sometimes the case, through the strategic intervention of a single, well-placed enterprise.

When we talk about business network transformation, there are two senses in which we can use the verb *transform*. One focuses more on business network transformation as an evolution in the economic landscape, a change we did not initiate (passively) but must factor into our strategic thinking going forward. The other focuses on the strategic opportunities that may arise out of proactively transforming (actively) the business network of which we are a part. This latter is heady stuff indeed, particularly when combined with platform innovation to create a highly differentiated, highly sustainable form of competitive advantage.

For some time now business networks have been transforming in multiple sectors of the economy. Examples of collaborative networks undergoing structural change include:

- **Pharmaceuticals:** Under the impact of new science, higher drug development costs, and political backlash against the high price of drugs.
- **Financial Services:** Under the impact of disintermediating electronic exchanges, commoditizing trading margins, complex financial instruments, and globalization.
- **Software:** Under the impact of cloud computing, open source development, services-oriented architectures, and new business models.
- **Consulting Services:** Under the impact of globalization; the rise of India; low-cost, high-speed communications networks; and collaboration-enabling technologies.
- **Electronic Equipment:** Under the impact of the same forces, organizing around the rise of China.

Examples of coordinated networks undergoing transformation include:

- **Advertising:** Under the impact of digital media, Internet-enabled ad networks, personal video recorders, and the Web.
- **Consumer Electronics:** Under the impact of technology convergence, wireless networks, digital media, and disruptive changes in distribution.
- **Media and Entertainment:** Under the impact of digital content, digital rights management, mobile video, MP3 music players, and user-created content.
- **Telecommunications:** Under the impact of wireless Internet, broadband convergence, quadruple-play business models, and ad-supported services.
- **Airlines:** Under the impact of discount business models, self-service travel booking, and rising fuel costs.

When business networks in your sector are transforming, you must adjust your strategy accordingly. To do so, you must first take stock of the changes under way. A "Who-What-Where-When-Why-How" model works just fine for this (see Figure 1.4). The key is to detach yourself from your parochial interests while you are building the model so that you can see clearly both the threats and the opportunities before you.

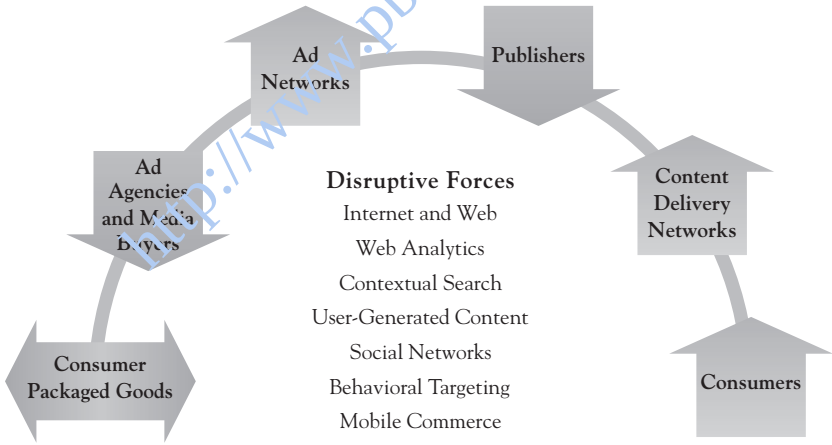
The Example of Digital Media and Consumer Advertising

In Figure 1.5 you can get a sense of the dynamics currently impacting a number of different participants in the digital media and consumer advertising industries.

Figure 1.4 Mapping Networks in Transformation: Understanding Threats and Opportunities

Who	Map the network and the major players in it
What	Identify material changes and their impact on negotiations
Where	Locate the epicenter of the transformation
When	Gauge progress by new business process adoption
Why	Deconstruct the new economics in comparison to yours
How	Analyze the new processes and assess your capabilities
	Use these inputs to drive an executive-level strategy discussion

Figure 1.5 Mapping Networks: An Example, Digital Media and Consumer Advertising



The digital media revolution is impacting not only non-digital media but also advertising in ways that are truly transformative. The Consumer Packaged Goods (CPG) companies that buy access to consumers have not changed that much, nor have the consumers themselves relative to the goods that CPG companies sell. But everything in between has changed dramatically.

This map shows the arc that takes a CPG marketing dollar and acquires a consumer impression or response from it. In the new arc, ad agencies and media buyers are being marginalized by Search Engine Marketing and Optimization, and by Ad Networks, both of which extract their power from commoditizing the media buying function. Publishers, on the other hand, are being marginalized by the sheer volume of content on the Web. Even premium titles have trouble holding their audiences in this exploding medium. This, in turn, has caused power to shift to the content delivery networks, for only they can know what content—and thus what marketing—the consumer actually viewed or engaged with. This "metadata" (i.e., data about data, in this case consumer preference data) is becoming the hottest property on the Web. Finally, consumers as a bloc have gained enormous power as all these constituencies are vying for their attention and willing to trade off something in order to gain it.

A map like this is needed by every member in this value chain so that they understand how the business network transformation under way impacts their strategic position in the industry. Standing pat with a red down arrow seems very dangerous indeed, but it is equally concerning to be blessed with a green arrow and then realize you are not doing much to leverage it.

Seven Early Warning Signs that BNT May Be upon You

On many occasions we have been asked by executives what the warning signs are that business network transformation "is happening". To assist CEOs and their management teams in confirming whether or not their organization and/or their business network is

showing signs of significant disruption, we have produced a list of Seven Early Warning Signs, as described in Figure 1.6.

Any two or three of the above symptoms can indicate that your company is in imminent danger—or that you are already being commoditized at a pace faster than you can respond.

Here are some suggestions for what executives should do in order to avoid "being transformed" on someone else's terms. We suggest that management teams consider these steps:

1. Map your network.

   If it leads you to the usual suspects, you need go no further.

   If it leads to power shifts under way, put on your running shoes.

Figure 1.6 Seven Early Warning Signs

- ☐ **Someone's eating our lunch, but we're not sure who**
  - Revenue growth is slowing and margins are getting pinched
- ☐ **New players are entering our space and capturing business with our customers**
  - Their business models are giving them an advantage we cannot match
- ☐ **Even our established trading partners are becoming our competitors**
  - Retailers with their own branded product lines, manufacturers bypassing retailers
- ☐ **We aren't seeing what's happening in our supply chain until too late**
  - SLAs are not providing the visibility they need to—causing slippage with orders
- ☐ **We can't see what's happening downstream in our demand chain**
  - Channel partners closer to end-customers are withholding sell-through data
- ☐ **Business model innovation is becoming a major threat**
  - We are dependent on legacy business models for the bulk of our revenue
- ☐ **Power is migrating to new roles in the business network**
  - Our power is still significant, but the trend is not our friend

☑ **Check the ones that apply to your company**

2. Create your company's BNT strategy.
   - Network power comes in stages.
   - IT strategy should be aligned with network strategy.
3. Identify enabling IT systems for BNT.
   - Standards-based systems of record are the point of entry.
   - Communications and collaboration are the advanced investments.

By now, it should be obvious that business network transformation is not another passing fad, but rather a tectonic shift in the rules that business will be played by in the twenty-first century. In some industries, the shift in dynamics might be occurring so slowly it isn't noticeable yet. In others, the massive quake occurred a few years ago and the survivors are still digging out of the rubble.

Whether your company is competing in a coordinated network for volume operations, a collaborative network for complex systems, or both at the same time, BNT forces are in play all around you.

By adopting a "business network transformation" mindset and following the steps above, executive teams and boards can play "strategy chess" by gaming out the relationships in your network, the disruptive or transformational dynamics that are impacting it, and how your company's role needs to adjust going forward.

At this point, we will pause the strategic discussion of BNT to allow you to explore the various angles of BNT in the remaining chapters of the book. You will see how BNT manifests itself in the different operational areas of your company, how leading firms have successfully used BNT to leverage the capabilities of their partners, suppliers, and customers, and how IT enables BNT. In Chapter 11, we will pick up again on BNT's strategic implications as firms travel through the evolutionary journey towards a fully mature BNT strategy. Once you have seen how companies execute BNT in its various forms throughout the remaining chapters of this book, the final chapter will show you how companies evolve through a certain set of phases as they embrace BNT into more areas of their business.