LIVING NETWORKS

ANNIVERSARY EDITION

LEADING YOUR COMPANY, CUSTOMERS, AND PARTNERS IN THE HYPERCONNECTED ECONOMY

ROSS DAWSON

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in the Hyper-Connected Economy

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What Business Leaders Say About *Living Networks*

"I'm not sure that even Ross Dawson realizes how radical—and how likely—his vision of the future is. Ideas that spread win, and organizations that spawn them will be in charge."
- Seth Godin, author, *Unleashing the Ideavirus*, the #1 selling e-book in history

"Dawson is exactly right—pervasive networking profoundly changes the business models and strategies required for success. *Living Networks* provides invaluable insights for decision makers wanting to prosper in an increasingly complex and demanding business environment."
- Don Tapscott, author, *Wikinomics*

"Ross Dawson argues persuasively that leading economies are driven by the flow of information and ideas. The ideas in his own book can position any individual or company at the center of that flow. It's a fast read, fun and full of examples."
- Thomas H. Davenport, Professor and Director of Research, Babson College, and author, *Competing on Analytics*

"*Living Networks* is a fast-paced tour of today's business frontier. Rich with examples drawn from a myriad of settings, every page forces the reader to ask "How can I use that?" Beware! This book will make you think!"
- David Maister, author, *Managing the Professional Service Firm*

"This is the most accessible introduction to the role of networks and networking I have yet seen. Ross Dawson speaks from his own experience in a language which will make it clear to managers what steps to take next. Networking with own staff, customers and professional peers is here to stay."
- Napier Collyns, co-founder, Global Business Network

"This is one of the most exciting books I've read in several years. Ross Dawson deftly examines the evolution of networks, organizations and strategy. He has more than succeeded in his intent, which is to produce a practical business book that shows business people how to leverage networks."
- Melissie Rumizen, author, *The Complete Idiot's Guide to Knowledge Management*

"The author has demonstrated that the success of his first book was no mere flash in the pan. His book is the one I would choose as a guide to understanding and action for the practical business person."
- Bill Godfrey, Editor, Change Management Monitor

About *Living Networks*: Anniversary Edition

Living Networks is being relaunched in its Anniversary Edition five years after its original publication by Financial Times/ Prentice Hall in November 2002, to revisit the foundations of our networked age.

Free chapter downloads of *Living Networks*:
www.livingnetworksbook.com

Ross Dawson's *Trends in the Living Networks* blog:
www.rossdawsonblog.com

About Ross Dawson

Ross Dawson is globally recognized as a leading authority on business strategy. He is CEO of international consulting firm Advanced Human Technologies, and Chairman of Future Exploration Network, a global strategy and events company. Ross is author of the Amazon.com bestseller *Developing Knowledge-Based Client Relationships*, and over 100 articles and white papers. Strong demand for Ross's expertise has seen him deliver keynote speeches on six continents and consult to leading organizations worldwide such as Ernst & Young, Microsoft, Macquarie Bank, Morgan Stanley, News Corporation, and Procter & Gamble. Ross's frequent media appearances include CNN, Bloomberg TV, SkyNews, ABC TV, Washington Post and many others.

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CHAPTER 3
The New Organization

Leadership Across Blurring Boundaries

The boundaries between organizations are blurring as technology reduces the costs of transactions. It is becoming essential for companies to work closely with their customers, suppliers, and partners, however this involves very real risks. In this world leadership is required to take whole industries and supply chains into new ways of working based on transparency, collaboration, and sharing value. Those that embrace the networks and lead the way forward will reap the greatest rewards.

At 6:53pm on November 9, 1989, an official of the East German government stated in a press conference that a new policy had been instituted to allow its citizens to travel to the West. Within minutes mobs formed outside the Berlin Wall. Before long the first bold few scrambled over the Wall unscathed, unlike the 61 people shot dead trying to escape during its grim 28-year history, while others grabbed hammers and anything else they could find to begin destruction of the hated barrier to freedom. An artificial, rigid, and guarded boundary dividing a country and millions of families had succumbed to the fluidity of the times. The same sense of rigidity and boundaries were also evident in the Eastern Germany economy. The East Berlin post office, before the fall, incorporated not just a restaurant and kindergarten for its employees, but also an auto repair shop and fishery.[1] The difficulties in getting anything done meant that managers put boundaries around their organizations and tried to do everything possible inside them, resulting in immense duplication within the economy.

In the West too, it's not so long now since an organization's boundaries were crystal clear. The organization was where the organization man went to work a steady job and get a regular salary. It bought raw materials, made things from them, and then sold the final product to consumers. The salespeople did their rounds, took orders, and tidy rows of delivery trucks streamed out from the warehouses to deliver the products. It was totally clear what was inside and outside the organization, and if you dealt with a company you were almost certainly either a buyer of their products or selling something to them in a straightforward relationship. The world has changed dramatically since then. Blurred relationships and ambiguity are the order of the day.

Take a look at Convergys, the world's largest operator of outsourced call centers. Some outsourcing initiatives, like fleet management or running corporate cafeterias, simply take functions that are peripheral to a company's mission, and place them in the hands of outsiders. In the case of call centers, it's a completely different ball game. For many firms, the only direct contact they have with their end-customers is through call centers. Don't they feel they are losing control and valuable information if they outsource customer contact? The deep integration and alignment of processes between Convergys and its clients means that they can often get even better information flows than if they run customer contact internally.

Sometimes Convergys' clients—which include AT&T, Compaq, Microsoft, Sony and other corporate leaders—outsource all of their call centers, but more often they already run their own call centers, and choose outsourcing to cope with growth and expansion. In this case—just as when a single firm runs multiple call centers—the key issue is utterly seamless consistency across the operations. When a customer calls Sony's 1-800 number, she should get exactly the same experience whether it's routed to a Sony call

center, or one of the Convergys call centers that service Sony. To achieve this, Convergys and its clients create almost perfect mirror images of their technologies, processes, training, and work environment. Almost every Convergys call center employee works on a single client account, immersed every day in that company's products and issues, some even work at the client's premises, and understandably they can sometimes feel a greater affiliation to the client than the company that pays their wages.

In order not only to make itself transparent but to actually enhance the free flow of information from the end-customers back to its clients, Convergys uses a variety of technologies and processes. Many firms are attracted to Convergys because it provides detailed recording and reporting systems. A company may run its own call center, but unless it has the right systems, processes, and culture in place, management may still not learn much about its clients. In addition to monitoring calls on call center visits or remotely as they choose, clients are encouraged to run focus groups with the Convergys agents that answer their customers' calls. After all, these are the people who have the richest, most detailed interaction with their customers. One Convergys client invites the call center staff to man its booths at industry fairs, so they can get and share different perspectives on their customers. These feedback channels can flow into all sorts of problem-solving and product development processes. One large European sports drink manufacturer redesigned its distinctive bottles on the basis of customer feedback reaped through Convergys.

Convergys creates value together with its clients, with their joint processes so deeply integrated that it's next to impossible to say where one company ends and the next begins. Information flows richly on myriad levels between the firms, as it has to, since otherwise Convergys' clients would be working in a vacuum, totally isolated from their customer community. The whole economy is shifting to one built entirely on these rich flows of information across as well as within firms, in which success is based largely on how well you can integrate your operations with others.

The boundaries are blurring

In 1932 a young Englishman used a scholarship to sail over the Atlantic and study American industry. The mild-mannered 22-year old gave a lecture on his findings, and a few years later published a paper titled "The Nature of the Firm". Worldly recognition sometimes comes slowly, but in 1991 Ronald Coase was awarded the Nobel prize for economics, and his work is now proving invaluable in understanding the tectonic shifts in today's economy. Coase pointed out that any transaction incurs a variety of costs. Among other costs, we have to search for a supplier, compare between competitors, negotiate a deal, monitor the quality of supplies, and seek redress if our chosen supplier is not performing.[2]

Any organization will seek to minimize these costs. One obvious way is to implement centralized purchasing. If every individual staff member who required pencils, business cards, a chair, or any of the other paraphernalia of day-to-day business went out to search for, compare, and negotiate with suppliers, the total cost in time and effort would be immense. On the other hand a centralized purchasing function is itself a cost, essentially being a bureaucracy for organizing external transactions. Coase proposed that a firm exists whenever the costs of maintaining that bureaucracy is lower than the transaction costs. If transactions cost nothing, there is no need for any bureaucracy, or arguably for any firm of more than one person.

Perhaps the single best way of understanding the impact of technology on the economy today is that it has dramatically reduced transactions costs. The Internet allows cheap and easy information search, and the ability to compare prices, functions, and quality globally. The vast growth in outsourcing over the last decade is due to the far greater ease and reduced costs for firms to locate business functions outside the organization's boundaries.

Now that workflow—comprised primarily of the movement of messages and documents—is becoming almost entirely digital, it is increasingly irrelevant where work is performed. It matters little whether a colleague in a business process is located in the same company and building, or working in another company on the other side of the planet. Technology is making the boundaries invisible.

Creating the new organization

Corporate Executive Board is a membership organization. Rather a curious one. Over 1700 corporations pay an annual fee of $30,000 to be members of the Washington D.C.-based firm. Their membership fee gives them access to reports and conferences on specific industry issues and common management challenges, such as employee retention and minimizing regulatory costs. The first interesting feature is that almost all of the content for the reports and briefings comes from the members themselves. Corporate Executive Board specifically positions itself to draw out the solutions that member firms have successfully developed for themselves, and make them available to other members, frequently their competitors.

A second intriguing feature: this membership organization that is based on firms sharing their strategic resources is a public company. In the 2001 fiscal year it earned over $16 million on revenues of $103 million, and *Business Week* placed it in fifth spot on its list of Hot Growth companies. At a time when big-name consultants were smarting from clients tightening their budgets, it was profiting from exactly the same trend. In addition, the vast global membership network it has grown—including firms such as IBM, General Electric, and Alcoa—means that it would be enormously difficult

for another firm to break into its market and compete with the same business model. What's intriguing about Corporate Executive Board's model is that the value is largely contributed—and then bought back—by the firm's customers. And external investors share in the value created.

In today's world of blurring boundaries and increasing ambiguity, organizations are nothing more than vehicles for creating and appropriating value. In a capitalist world, shareholders own the legal entity called the company. The managers of the company apply its financial and other resources—in combination with other organizations—to create value that end-customers are prepared to pay for. They also must negotiate terms of engagement with other companies so that they can extract a fair share of the value created by the firms working together. The key difference in thinking from previous conceptions of the organization is that value is created by the network, not by the organization. The art of management is now about positioning the firm to extract value from its participation in a broad economic network.

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Corporate Executive Board provides a fine illustration of this. Arguably the member organizations provide the bulk of the value, at least in terms of the inputs. Yet the firm has carved out an economic niche in which it brings together a network, and plays a central role in having that network create substantial value for participants, by synthesizing and communicating ideas so they can be applied effectively. As such, the shareholders in this amorphous entity profit not only from how it creates value for its clients and partners, but even more from how it has positioned itself to extract value from a network encompassing over 1700 major firms. We will explore the fine art of strategic positioning in more detail in Chapter 7.

The idea of the core competence of the firm dates back to 1990—hardly new stuff.[3] What is new is the extraordinary fineness of resolution with which managers can decide what is and isn't core to the company, and implement that. As you saw in Chapter 2, emerging technologies are giving rise to the modular organization. We used to be able to think of a company as a set of business processes. Now that processes exist primarily as information flows, they are often distributed across a number of companies. A company may contribute just one part or module within an overall business process. Some of the issues in implementing the modular organization will be covered in Chapter 9.

In this world in which value is increasingly created across organizational boundaries, by working closely with customers, suppliers, and partners, you no longer have a choice. You must integrate your processes with other

companies. You have to share valuable information with your customers, partners, and sometimes even competitors. It is essential to collaborate outside the organization in every aspect of your business, from product development through to marketing. Those who try to keep their companies as self-sufficient islands will see them waste away, simply unable to compete effectively. Consulting firm The Yankee Group estimates that in the next five years companies can save $223 billion through digital collaboration.[4] But that is just the beginning. Even greater benefits are available to those who transform how their companies work and collaborate in the new connected world.

Boldly showing the way forward

Just because it's essential for companies to work in new ways, doesn't mean that it's easy. A whole new set of challenges arise for the companies that take on the challenge of working closely with their customers and partners in the hyper-connected economy. There are four key risks that increase substantially in a world of collaboration and integration.

• **Information loss.** In 1999, online exchange Priceline.com discussed a marketing alliance with Internet travel agent Expedia, disclosing information about its business model in the process. After talks broke down, Expedia started offering very similar services to Priceline.com, sparking a suit from Priceline.com which Expedia eventually settled by agreeing to pay royalties.[5] Working closely with others means that valuable information and intellectual property can be exposed.

• **Systems security.** Security is near the top of the priority list for every CIO. It's not quite as hard to protect your systems if you can isolate them entirely. But that's not an option. Companies have to closely connect and integrate their systems with their customers and partners to be competitive, making the job of protecting them a lot harder. We will examine this issue in Chapter 4.

• **Reputation.** Any company that was proudly associated with the dynamic, innovative company that was Enron suddenly found its own name besmirched when the house of cards collapsed. Your corporate reputation can be impacted—both positively and negatively—by the fortunes of your business partners.

• **Ability to extract value**. When you work closely with other firms to create value, it's not always obvious how to share the rewards. This ambiguity can create opportunities for those that hold the balance of power in relationships, or that help create new approaches to collaboration, but some firms may find themselves with a lesser share of the fruits than they feel they deserve.

This daunting set of risks is enough to make most executives quail. However those that shrink back into their shell to avoid the risks of engaging in the networked economy will soon enough find that this is riskier still.

The reality is that virtually every company is in the same situation, understanding the necessity of shifting into new ways of working, but hesitant in the face of these risks and challenges. This provides an immense opportunity for those companies that are willing and able to demonstrate leadership to their customers and partners, to show how to implement new kinds of relationships based on transparency, collaboration, and sharing value. Things don't happen by themselves. If business is to benefit from connectivity, some will have to boldly show the way forward for everyone. What defines the new business environment is that companies no longer have control over much of what matters. This requires a shift from management to leadership. A manager is someone who makes decisions within a defined sphere of control. A leader influences and creates beyond what he or she can directly control. Today, you must be a leader across a domain that often extends far beyond the borders of your company. In order for your company to succeed, the whole value network within which you work must succeed as well. Unless you provide the leadership for that to happen, you become the subject of industry forces rather than creating them. Industries will inevitably shift dramatically as the network economy comes to life, and those that will take best advantage of those changes are those that lead them.

Leadership in a collaborative world

Walk into the office of a senior technology executive, and there's a good chance he or she will be sitting on an Aeron executive chair, a sleek and comfortable expression of power. Furniture manufacturer Herman Miller has built itself a solid place in the network economy, through both its range of creative designs that appeal to the full spectrum of establishment figures, funky entrepreneurs, and home office workers, and the way it connects digitally with its customers and suppliers.

In 1995 Herman Miller launched a new line of furniture called SQA, for "simple, quick, affordable," intent on reducing the time taken to manufacture and deliver a customer order from months to ultimately just one week. It realized that to achieve this it needed to revamp its entire sales and manufacturing process. Sales representatives were provided with a laptop application that allowed them to sit with their customers to design and specify complete office systems on the spot. Customers were delighted to participate in the streamlined process and get faster delivery. But to make the whole system work, the firm's suppliers also needed to get more timely and accurate information, as the materials required to construct the

furniture were only shipped to the manufacturer once an order was placed. Herman Miller is now able to provide its suppliers with access to real-time information from its systems. Orders, invoices, engineering data, delivery schedules, and lead times, are all displayed on one screen. Suppliers save time and money in their operations, and Herman Miller has lifted on-time fulfilment from 75% to over 95% despite the vastly accelerated deliveries.[6]

Herman Miller began by making sure it understood not only the information requirements of its partners, but also their technological capacities. It designed an easy-to-use system accessible on the web rather than requiring more sophisticated technology, shifted internal processes to make the information on the systems reflect the latest updates available within the firm, and provided training for its suppliers to use the system effectively. Herman Miller acted as a true leader in changing the ways of working of an entire collaborative business network, providing benefits to itself, its customers, and its suppliers.

Digital connectivity and the ability to share information with partners is not new, but technologies like the Internet and XML have made it vastly easier. EDI (Electronic Data Interchange) from the late 1970s promised to allow corporations to link digitally and collaborate effectively with their major suppliers and clients. Despite the many potential benefits, the impact has been limited. The heart of the problem was that every implementation of EDI was specific to the two organizations being linked, requiring a large and expensive one-off project to integrate their systems, and thus limiting its application to large corporations. Herman Miller had tried earlier to implement EDI with its suppliers, but as they were mainly smaller firms they lacked the expertise and resources to adopt the systems.[7]

Connectivity alone doesn't transform business. Firms and industries must agree on information standards in order to integrate their systems, apply new technologies to implement collaborative processes, and work together closely to run supply chains more efficiently.

Implementing information standards

In early 1998 Charles Hoffman, a CPA with a small accounting firm based in Washington state, began to look at the possibilities of using XML for financial reporting. He convinced the American Institute of Certified Public Accountants (AICPA) and his own firm to fund further studies, with a committee formed soon after by interested companies, including all five of the largest global accounting firms, and several computer companies, notably Microsoft. The result was XBRL (eXtensible Business Reporting Language), which provides a global, agreed format to present companies' financial reports. This standard enables organizations to easily consolidate information from many divisions, get extremely timely management

information, and report to regulatory authorities and shareholders. What's more, analysts can far more easily sift through comparative financial information to identify investment opportunities, and external auditors can integrate their processes with those of their clients.

The interests of the financial reporting community are highly aligned. It's in everyone's interest to have common standards adopted, simply because that's the only way that major efficiencies can be gained. Each of the key participants have their own motivations for getting involved and demonstrating leadership.

Bank of America has embarked on an ambitious and broad-ranging initiative to promote XBRL. The bank needs to perform credit analysis of the financial reports of all of the companies to which it lends, so it has begun a pilot to get its national client base of 20,000 companies with revenues between $10 million and $500 million to adopt XBRL. This will streamline the loan approval process for all parties, and if it means better information on its clients for the bank, could ultimately result in lower lending rates. Initially Bank of America will accept standard electronic data forms from its clients, that can be converted internally for use in its credit systems. It is hoping the initiative will demonstrate to its clients the benefits of using XBRL, so they adopt it in their own systems. Bank of America ultimately intends to roll out the program to over 100,000 commercial clients.[8]

Morgan Stanley, Reuters, and Microsoft were among the first companies to present their financial reports using XBRL. Each will benefit in different ways from the standard being broadly adopted, and they are promoting the cause by providing a lead to others. In the government domain, the Australian Prudential Regulatory Authority was the first regulatory body in the world to adopt XBRL, announcing that it will use the standard to collect data from 11,000 financial institutions, saving substantial costs for these companies and itself. Each of these leaders is helping to take the entire business community forward.

In Chapter 2 you saw how every industry has its own XML-based initiatives to enable easy information sharing and system integration between companies. This only ever happens because of a few leaders. They help to create benefits for everyone in the network, but their leadership also keeps them at the forefront of the resulting opportunities. Later in this chapter we will look at how Ingram Micro drove the birth of RosettaNet, a consortium that is developing information and process standards for the computer manufacturing industry.

Creating collaborative processes

In early 2000, at the height of the B2B frenzy, the top three US automakers—Ford, Chrysler-Daimler, and General Motors—announced the launch their own industry exchange, Covisint. Its initial conception—in line with thinking at the time—was primarily as a procurement gateway that would increase efficiencies, and enable the auto manufacturers to get more competitive pricing for their supplies.

The reality has been that Covisint has struggled.[9] The main problem with the B2B movement was that it in essence tried to reduce supplier relationships to information flows of product data and prices. Covisint—and most of the other B2B exchanges that are still alive today—have by now realized that a large and increasing proportion of the value of supplier relationships stems from close collaboration. You want to get closer to, not further from, your best suppliers. Now one of Covisint's most important components is its Virtual Project Workspace, that allows automakers to work with their suppliers on product design.

Auto design is a highly collaborative effort, and suppliers are swiftly taking increasing responsibility. While automakers still drive the design process, it depends on what the component suppliers can provide, the impact of design specifications on cost, the way in which components from different suppliers will fit together, and many other variables. Being able to exchange and modify engineering diagrams and documents as well as discuss issues in real-time changes the design process to one that is shared between the manufacturers and their suppliers. General Motors, by using these kinds of collaborative systems, has reduced car development time from 42 months to less than 18 months.[10]

Perhaps the greatest focus in information technology today is building more effective tools for collaboration. Lockheed Martin, to fulfil its $200 billion Joint Strike Fighter contract for the US Defense Deparment, is working with 80 suppliers, and using 90 different software tools to link them all seamlessly together. The technologies allow the 40,000 or so researchers, designers, and engineers that are working together on the project to act as a single, tightly-integrated organization.[11]

As you saw in Chapter 2, peer-to-peer technologies are about directly connecting computers to computers and people to people. There are no central servers, no intermediaries, and no boundaries. When you connect with others it's utterly irrelevant whether you sit next to each other within the same company, work in different companies, or are located on opposite sides of the globe. The concept of a sequential "chain" of information flow falls to pieces—there's no reason why any two people cannot connect directly. If a supplier to a food manufacturer wants to forecast demand better, it can easily communicate directly with the retailers who sell the manufacturer's products.

Pharmaceutical development is a great example of large numbers of researchers spread around the world needing to collaborate closely. GlaxoSmithKline, one of the world's largest pharmaceutical companies, is using peer-to-peer technologies to link both its researchers and its external collaborators that are working on drug development projects.[12] This illustrates the type of ad-hoc collaboration that is so suited to peer-to-peer approaches. Form groups with whoever you want, define the rules of how you'll work together and who you'll invite to join, share information as it's available, and bounce ideas around in real-time. Tools that scientists from the past would have given their right arms for are now at work speeding the development of new life-enhancing drugs.

These kinds of technologies can help distributed teams to work seamlessly. However in order to make these tools valuable, it's also necessary to implement new processes. Companies need to redesign how they work within collaborative processes, and implement the necessary new steps and skills. In addition, it is essential to develop the attitudes and culture of collaborative work through the company, as we'll discuss later in this chapter.

From linear chains to living networks

I challenge you to find a person who has never bought or used a Procter & Gamble product. The search could take you far from the beaten track, as the corporation's wares reach almost 5 billion consumers in 140 countries. One of the single most important issues for the consumer goods giant is the efficient distribution of $40 billion worth of products annually through an immensely complex global supply chain.

The essence of managing supply chains is a very simple dynamic. How do you reduce inventory (since that costs money to keep) while at the same time ensuring your products are always on the shelves to buy (since you lose sales and goodwill if they aren't)? Until recently one of the key issues in supply chain management has been trying to get other participants to hold inventory, with the relative power of companies along the supply chain, from manufacturers through distributors to retailers, largely determining the allocation of inventory and costs between them. Two drivers are now shifting the whole nature of the business.

The first driver is the ease with which detailed information can be gathered internally and transferred between companies. Visibility is everything. The more information that all players in a supply chain have about demand, manufacturing, shipments, and everything else that makes the flow of products to end-customers transparent, the better they can manage their operations. The current state of information technology now makes it possible in theory to make the entire supply chain visible to all. The reality

is that this is very difficult to implement, because it's far more an issue of processes and people than the relatively straightforward technology component. In addition, having the technology to share information does not mean that it happens. Trust remains a major limiting factor that we will explore in detail in Chapter 4.

The second driver of change is the vastly increasing complexity of product distribution. The term "supply chain" evokes images of products or their components moving along a series of links until they reach the end-consumer. This dated model may still apply in parts of some industries, but the majority of the economy now functions very differently. The phrase "value network" is far more relevant to business today, reflecting both that the creation of economic value consists of far more than shuffling products around, and that this value is brought together by complex networks, and not a series of links in a chain. Moving from linear chains to complex multi-player networks creates real challenges. Each participant makes decisions and acts on the basis of the information it has available, and what it sees as its own best interest. So far, so good. The problem is that if each individual network member acts in what it believes is an optimal fashion, these behaviors combined across these massively complex networks will usually result in lower profitability for the network taken as a whole, and indeed for most if not all participants.

In many ways, these richly connected value networks themselves can be considered to be alive—the complexity of their interactions is leading to unpredictable behaviors. The linear models that have been used for decades to help plan supplies are falling flat on their faces. So, how can firms within a value network work effectively in this world? As a very first step this requires some way of sharing information across the entire network. This information needs to be applied so that all companies benefit, for example by reducing total inventory for the network as a whole, and sharing the resulting benefits between participants. These objectives are by no means easy to achieve, yet there are immense potential rewards. Industry leadership is essential.

So what has Procter & Gamble done to address these vital issues in its supply chain? One of its key projects has been to work with some of its major retailers such Wal-Mart, Target, and Tesco to implement Collaborative Planning, Forecasting, and Replenishment (CPFR), an inter-industry standards initiative to enable transparency and collaboration in the supply chain. If Procter & Gamble, together with its partners, can improve the information flows that allow effective forecasting and stock replenishment, this will in turn reduce inventory and increase retail availability. The first step was to work with its partners to map the current processes and flow of information and goods, before developing a joint plan to enhance effective collaboration. Even the early stages of the pilots yielded

10-20% improvements in replenishment time, representing substantial savings for all participants.[13]

Procter & Gamble believed that it was a doing a good job at implementing existing supply-chain management techniques, but wanted to try new things to see if it could improve further. So it chartered BiosGroup, a joint venture between Cap Gemini Ernst & Young and Nobel Prize winner Stuart Kaufmann, to apply complexity science to optimizing its supply network. BiosGroup developed a series of agent-based studies, which use models of the behavior of the many elements of the supply chain, and examine what happens when key variables or policies are changed. One of the studies looked at Procter & Gamble's policy of trying to wait until trucks were fully loaded before sending them to their clients. The models suggested that sending partially full trucks and pallets would reduce safety stock levels, and field experiments confirmed the results, providing immediate efficiency gains.

BiosGroup is also developing supply network software in conjunction with enterprise software vendor SAP. This allows multiple players in a supply network to gain a far better view of forthcoming deliveries. SAP software already has a feature "available to promise", that can be used to allow clients to see both what is currently in stock, and expected to be available. If clients can also see how that stock depends in turn on that company's suppliers, and gain insight into their production situations, they are able to make far better management decisions. Getting both the systems and the cooperation to share information within a supply chain can result in far greater efficiencies for all participants.

Embracing the networks

Ingram Micro is one of the largest computer product distributors worldwide. It has consistently played a leadership role in its industry, first by founding the Global Technology Distribution Council, which brought together 14 of the largest firms in the business, with a combined revenue of almost $100 billion, and then driving the formation and development of RosettaNet, the standards body for the computer manufacturing industry.

In the mid-1990s Ingram found that it—along with its major customers, suppliers, and competitors—was suffering from high and escalating costs due to massive inefficiencies in the industry. Less than one third of computer parts had the same product code across all distributors—the rest needed to be ordered in different ways depending on who you bought them from. Lack of detailed information on products resulted in frequent and costly returns. Distributors had to work with different system interfaces for every supplier and client they worked with. As a result, up to half of the resources of resellers were absorbed by their back-office operations, much of it consisting of learning the different interfaces and procedures

for each partner with which they dealt.[14] In addition, Ingram was manually adding 120,000 new products to its databases annually, soaking up significant resources that each of its competitors duplicated.

Ingram responded to these problems by implementing an extranet that connected thousands of suppliers and resellers to its information systems, but it quickly realized that this was inadequate. In order to get the cost savings and process improvements it sought, an industry-wide initiative was needed. To get it off the ground, Ingram first had to build a consensus among both the manufacturers and other distributors that this kind of industry collaboration was worthwhile and merited a significant investment of time and resources. Together with a few other key industry participants, it worked on defining the planned scope of RosettaNet, and convened the first board meeting in early 1998. The only two full-time executives at RosettaNet for the first two years were both loaned from Ingram.[15]

While Ingram provided the initial push to establish RosettaNet, it is now an industry initiative, and because it must progress by consensus among the participants, the pace necessarily becomes slower than if it were driven by a single company. Ingram still plays a leadership role within RosettaNet, which is positive in helping move the initiative forward, but must be balanced with allowing other members to feel a full sense of participation and ownership. Despite the major distributors being fierce competitors in the marketplace, they have all been very open, reports Michael Terrell, senior vice-president of Ingram Micro Logistics and a former RosettaNet board member. Hamilton—another major technology distributor—shared freely with other RosettaNet members the detailed results of an extensive study on return on investment, showing fabulous paybacks.

Establishing standards for data formats and processes is certainly resulting in substantial cost savings for everyone in the technology supply chain, however at the same time it dramatically changes industry dynamics. The distributors are essentially "middlemen," so making the flow of information far easier can jeopardize their traditional role, creating the possibility of manufacturers selling directly to end-customers. The advent of Dell's direct-to-customer business model has been just one of the major shifts in the industry. In addition to its work on RosettaNet, Ingram is now endeavoring to shape the future of technology distribution, and its role within it.

Ingram regularly brings together product manufacturers and other key industry players in structured conferences to discuss the industry as a whole, Ingram's current initiatives, and the changing role of the distributor. It knows it won't be able to survive indefinitely by continuing to provide the same services, so it engages the manufacturers in open and honest conversations about the value created by different participants in the supply chain, what new business models are emerging, and their relative roles in

these. Part of these initiatives is in effect education for its partners that are seeking their own path through a rapidly-changing world, and part is sparking the conversations out of which the new shape of the industry will emerge. Ingram's approach is to be proactive in initiating industry change rather than having to respond to it.

You have seen that the economy is all about connecting and integrating with others. It is not simply a question of linking more closely with customers and suppliers just when it is necessary, but of shifting to a new mode of embracing the networks, of participating fully by actively integrating with other firms. Those who lead within their networks will create value for all participants, but for themselves more than others. Ingram's top management has understood this, and by positioning the firm as an industry leader they are maximizing shareholder value in a challenging environment, at the same time as having a broader economic impact. There are four key steps that companies must take to embrace the networks and play a true industry leadership role, as shown in Table 3-1.

PROVIDING INDUSTRY LEADERSHIP

1. Lead your industry towards information standards
2. Enable information flows
3. Establish policies on information sharing
4. Build a culture of transparency

Table 3-1: Action steps to providing industry leadership

1. Lead your industry towards information standards

Ingram Micro's realization that it needed to establish an industry-wide initiative to address the problems it was facing is reflected in almost every industry. As you saw in Chapter 2, companies must distinguish between where they want standards, and where they want to compete. In almost every case it's a no-brainer to seek to make it easier for information to flow within your industry. The industry as a whole will be more efficient and profitable (unless you let clients take all the benefits). Whoever leads initiatives to standardize information exchange and processes has the chance to shape them, understand them better, and quickly exploit emerging opportunities in the new industry configuration. This means firms can create advantage for themselves even as the playing field becomes more level.

Whoever leads initiatives to standardize information exchange and processes has the chance to shape them, understand them better, and quickly exploit emerging opportunities in the new industry configuration.

Trying to build consensus in an industry group including fierce competitors can be a slow and painful task. The first step is to establish who will benefit in what ways, and convince them of the opportunity. Clients and suppliers may often benefit as much or more than direct industry participants, so their support can help to drive the process. You need to examine not only where costs can be saved, but what the potential impact on industry structure might be. The case for establishing an industry initiative needs to be built, and critical mass gained through the participation of leading players by marketshare or reputation.

Any standards body must be seen as independent, and working in all members' interests. However there is the constant danger of getting bogged down in technicalities and minor disagreements, and someone has to continually reinforce the vision of what's possible. RosettaNet has progressed considerably more slowly than initially envisaged. The immense complexities of the $1 trillion industry, as well as the reluctance of some members to be fully open, have made progress sometimes painstaking, despite real successes such as a broadly implemented standardized order management process. The potential cost savings of between 2% and 10% of each company's revenue make the initiative enormously worthwhile, but to make that happen will require vigorous ongoing support from key participants.[16]

2. Enable information flows

Engaging fully in the network economy is based on the ability to allow information to flow where it needs. This is largely a technology issue, but at the same time often requires process changes in the organization. Extranets can provide external partners with access to a full range of information about their relationship, however this requires not only linking the relevant internal systems to web publishing software, but also ensuring that the information is kept up-to-date. For example many professional services firms provide clients with websites so they can track current billings. This only works if timesheets are completed and posted regularly. Getting lawyers and consultants to shift from monthly reporting on their time usage to daily or even weekly can be a major challenge. However it may be worthwhile, both in providing better service to clients, as well as in streamlining processes. Often, developing better information systems in order to service clients better results in significantly improved information for internal management purposes.

Collaborative technologies, including online workspaces such as eRoom and peer-to-peer systems like Groove, can streamline an immense range of work taking place within and across organizations. Implementing these systems and getting staff familiar with them will allow them to be applied whenever they prove useful. Establishing effective systems security is critical; this will be discussed in more detail in Chapter 4.

As you saw in the case of Herman Miller earlier in this chapter, companies must think through all of the realities of establishing information sharing systems and processes. You need to be aware of what types of systems your partners use, and what their capabilities are for implementing new approaches. In most situations you should be prepared to design processes to integrate well with those of your partners. If you try to force others to do business your way, it is less likely to happen, and far less likely to happen effectively. Training both of your own staff and those of your partners is often an important part of enabling external information flows.

3. Establish policies on information sharing

Former Intel chairman Andy Grove loudly proclaims that "only the paranoid survive," yet Intel has always actively shared sensitive information with its favored business partners—it's the only way it could bring products to market ahead of its competitors. While it is absolutely essential to share information in order to participate in the network economy, that's not to say you should publish your client list and product development pipeline on the Internet. The issue is establishing boundaries for what you share with whom, what remains proprietary, and how you attempt to manage the flow of valuable information.

Companies usually implicitly have "most-favored" partners with which they share information more openly. One approach is to formally classify partners—be they clients, suppliers, or others—by the degree of access they are provided to information. Many of the decisions on specific issues will need to be ad-hoc, but providing guidelines on what level of information is available to different groups of partners can be very valuable. Ultimately it comes down to trust, as we will explore further in the next chapter. Do you trust partners to use your information with discretion, and not pass it on to third parties? That trust will depend on many factors, but largely your previous experience with them. The reality is there is often a Mexican stand-off between companies—each waits for the other to disclose valuable information first. Industry leaders will tend to open up first as a gesture of goodwill, having calculated the risks, and will often see trust in the relationship accelerate. Silicon Valley executives joke that they can never go to a meeting with first signing an NDA—a Non-Disclosure Agreement—but it is certainly an important tool in helping contain the flow of sensitive information in both new and existing relationships.

The very fact of establishing information policies, however informally, helps employees to be aware of the issues in sharing information. It is a fine balancing act between opening the firm to engage in the network economy, and protecting its valuable intellectual assets. Boundaries do need to be put in place, however those firms that tend towards more open information flow will have a major competitive advantage. It enables them to become deeply entrenched in creating value with partners, rather than vainly attempting to work alone.

4. Build a culture of transparency

The technology and processes may be in place to share information with clients and partners, but unless the internal culture is one of being willing to share outside the organization, it will never happen. Often this requires a significant shift. Building collaboration within organizations is a challenge many firms are facing. It's even harder outside the organization. As in any culture change initiative, clear, consistent, repeated messages from leadership are essential. Top management needs to say what they expect, behave in line with that, and support those messages with appropriate recognition and rewards. Any new ways of working need to be encouraged through allowing staff to try systems in a non-threatening way, hearing success stories from their peers, and getting internal evangelists to promote new approaches.

Ketchum PR is one the top ten public relations firm worldwide. While it is wholly owned by communications conglomerate Omnicon, its 29 offices worldwide employing 1500 people comprise a mixed bag of wholly owned, minority owned, and exclusive affiliate firms. After implementing an award-winning intranet portal for knowledge sharing and collaboration, Ketchum sought to take the benefits to its clients. Just by selectively opening parts of its intranet to clients, it immediately gave access to collaborative spaces and parts of Ketchum's global knowledge base, customized for the user. Billings and other ongoing project information helped to increase the transparency for clients.

Clearly Ketchum is well ahead of the curve in providing these valuable facilities to its clients. However it found it was encountering the same issue as almost every firm that is implementing technology to provide transparency to its clients: professionals were frequently reluctant to share information and have their work exposed to the client throughout the process. Paul McKeon, Ketchum's chief ebusiness officer during the system's development, describes the issue as letting the client watch how they "make sausage", opening up the kitchen and allowing them to see that the process can be sloppy along the way. Getting professionals to first use the online applications for internal collaboration allowed them to become comfortable with the systems, and discover the benefits for themselves. As they gradually become more familiar with the new ways of working, hear about success stories throughout the global network, and are provided with incentives to participate, Ketchum teams are becoming far more willing to share work-in-progress with clients, get their input, and immerse them far deeper in the entire process of developing campaigns. For example even simple tools that allow executives at Ketchum's client to vote on their preferred names or logos during the development process can make them feel far more involved, and result in better project outcomes, faster.

Vital Connections: Chapter 3

In this chapter, you have seen how digital connectivity is resulting in a massive blurring of organizational boundaries. To be successful in this world, companies must lead their customers and partners into new kinds of relationships, based on transparency, collaboration, and sharing value.

One of the vital success factors for this is trust, which in the hyper-connected economy is actually increasing in importance. Chapter 4 describes how trust is changing, and how to be more effective in developing trusting relationships with your customers and partners. As information overload swamps us all, businesspeople must learn how to earn their customers' and partners' attention.