

# The Challenges Ahead

## Chapter 14

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## Organizing Principles

- These principles are areas enterprises need to focus on to succeed in an e-economy.
  - ◆ The Learning Organization
  - ◆ Processes Rather than Functions
  - ◆ Communities Rather than Groups
  - ◆ Virtual Rather than Physical
  - ◆ Self-Organizing Rather than Designed
  - ◆ Adaptable Rather than Stable
  - ◆ Distributed Rather than Centralized

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## Outline

- Introduction
- Organizing Principles
  - ◆ The Learning Organization
  - ◆ Processes Rather Than Functions
  - ◆ Communities Rather Than Groups
  - ◆ Virtual Rather Than Physical
  - ◆ Self-Organizing Rather Than Designed
  - ◆ Adaptable Rather Than Stable
  - ◆ Distributed Rather Than Centralized
- Understanding A Networked World
  - ◆ The Internet Mindset
  - ◆ Where's the Value in a Network?
  - ◆ The Rules of Networks
- Moving Forward
  - ◆ Understanding Users
  - ◆ Increasing Executives' Understanding of IT

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## The Learning Organization

- Most organizations live only 40 years because they have learning disabilities, such as moving forward but looking backward, fixating on events rather than slowly changing processes, and using non-optimal teamwork.

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## The Learning Organization

- Organizations that can learn faster than their competitors will survive – the only sustainable advantage.
- To become a learning organization, an enterprise must master five basic learning disciplines.
  - ◆ Personal Mastery
  - ◆ Mental Models
  - ◆ Shared Vision
  - ◆ Team Learning
  - ◆ Systems Thinking

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## The Learning Organization Personal Mastery

- People reach a special level of proficiency when they live creatively.
- This personal mastery forms the spiritual foundation for the learning organization, so organizations need to foster these aspirations.

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## The Learning Organization Mental Models

- People's mental models are the deeply ingrained assumptions, generalizations, and images that influence how they see the world and what actions they take.
- Organizations can accelerate their organizational learning by spurring executives to surface their assumptions and test them for relevancy.

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## The Learning Organization Shared Vision

- A shared vision is an organization's view of its purpose.
- It provides the common identity by which its employees and others view it.
- A shared vision is vital to a learning organization because it provides the rudder for the learning process.

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## The Learning Organization

### Team Learning

- When teams learn, they produce extraordinary results.
- One of the major tools for team learning is “dialog,” where people essentially think together.

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## The Learning Organization

### Systems Thinking

- To understand systems, people need to understand the underlying patterns by contemplating its whole, not its parts.
- Systems thinking is a conceptual framework for making complete patterns clearer.

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## Processes Rather than Functions

- Current organizational problems are process issues.
- They center around how specialized tasks fit together.
- Simple jobs require management and complex processes to get work done; when companies try to simplify these complex processes, they find that simplification can only be done by creating complex jobs.
- Working and managing become part of everyone’s job in a process-centered structure.
- Process centering also turns people into professionals rather than workers; they work on teams rather than individually to complete a process, not just perform a task.

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[Read Case Example P.571-573](#)

## Communities Rather than Groups

- Communities form of their own volition; groups are formed by design.
- Communities of Practice (CoPs) are the critical building blocks of a knowledge-based company because people (not processes) do the work, and work is about learning, and both are social webs of participation.

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[Read Case Example P.574](#)

## Virtual Rather than Physical

- A virtual organization does not exist in one place or one time.
- It exists whenever and wherever the participants happen to be.
- As organizations expand globally but need to do so by adapting to local conditions, virtual organizations have emerged inside them.

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[Read Case Example P.575](#)

## Self-Organizing Rather than Designed

- Nature provides a good model for future organizations; organizations must deal with complexity, share information and knowledge, and cope with continuous and discontinuous change. In seeming chaos, we can get order for free.
- As with natural phenomena, enterprises will do much better if they are self-organizing or emergent, rather than designed.
- Examples include a light-bulb experiment, computer-generated bats that flock, and a large audience that learns to control a plane on an airplane flight simulator.

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[Read Case Example P.577](#)

## Self-Organizing Rather than Designed

- The Self-Organizing Point-of-View
  - ◆ Self-organizing systems create their own structure, patterns of behavior, and processes to accomplish the work.
  - ◆ As conditions change, the people change the process.
  - ◆ The only way to create truly complex systems may be to use biology's logic of self-governance, self-replication, partial learning, and some self-repair.

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[Read Case Example P.578-580](#)

## Adaptable Rather than Stable

- Future successful organizations will be structured to naturally support volatility and continual surprises
  - ◆ Today's organizations are structured to maintain stability; change is minimised
    - ◆ Change costs a lot
    - ◆ Firms built for stability are not adaptable
- IT is causing the world to become more connected
  - ◆ Connectivity increases volatility
  - ◆ To keep pace companies will need to adapt more quickly
  - ◆ The only way to achieve adaptability is through distributed intelligence and action
  - ◆ Thus organizational models will be built around networks and will be designed to evolve

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[Read Case Example P.581-582](#)

## Distributed Rather than Centralized

- Future organizational models will be distributed
- Two views:
  - ◆ Distributed Capitalism
  - ◆ Market-Based Organizations

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## Distributed Rather than Centralized Distributed Capitalism

- Firms believe they create value by their production of goods and services.
- Commercial purpose of organizations is changing, hence structures will change
- Managerial capitalism will not really satisfy today's consumers due to the huge gap between consumer desires and the goods and services for sale
- Will possibly lead to federations

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## Distributed Rather than Centralized Market-based Organizations

- Markets will become a major organizing tenet – inside and outside enterprises.
- Cost of communications has influenced the structure of organizations
  - ◆ High = centralize
  - ◆ Reducing (like now) = more decentralized
- Organizations will structure more like democracies or markets
- Job of management will move from command and control to coordination and cultivation

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## Understanding a Networked World

- Our networked world has different characteristics from the non-networked world many people are used to living in.

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## The Internet Mindset

- The Internet wreaks havoc with businesses that do not understand and embrace the mindset of the global online world. The four components of this mindset are:
  - ◆ Communication is personal, not mass market
  - ◆ Customer contact is interactive, not broadcast
  - ◆ Customer service time frame is theirs, not yours
  - ◆ The culture is bottom-up, not top-down.

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## The Internet Mindset

- Communication is personal, not mass market
  - ◆ Communication is ‘up close and personal’, not top-down mass marketing
  - ◆ Message to traditional marketing departments is “Your ad copy is boring”
  - ◆ Some corporate Web pages are stuck in the traditional advertising model, ‘duplicating’ the ‘printed page’
    - ◆ They are using the wrong mindset: Mass market rather than personal
  - ◆ Others get it ‘right’ and give people a way to create their ‘own’ pages e.g. My-Yahoo, My-CNN etc.

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## The Internet Mindset

- Customer Contact is Interactive, Not Broadcast
  - ◆ The single most important point of view to take toward the Internet is to view it as interactive, not broadcast:
    - ◆ Incoming, not outgoing
  - ◆ In essence, the Internet is a customer’s window to companies
  - ◆ It is substantially different from TV because customers can initiate communications with a firm rather than merely react to their ads
  - ◆ Customer-initiated dialog supported by the Internet significantly challenges marketing departments, customer support groups and fulfillment folks

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## The Internet Mindset

- The customer time frame is theirs, not yours
  - ◆ Customers are closer than most companies have ever experienced
  - ◆ Being put on hold increasingly irks
    - ◆ Today’s consumers are busy with little patience with waiting
    - ◆ As with TV remote controls, customers who do not get immediate satisfaction will switch to the competition with a point and click
  - ◆ Assess any proposed Internet business solution:
    - ◆ Will our firm’s internet strategy truly help our customers communicate with us?

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## The Internet Mindset

- The culture is bottom-up, not top-down
  - ◆ The Internet is not the expert's world where the few impart their knowledge to the many
  - ◆ The message is clear for IS departments:
    - ◆ IS cannot work in the top-down broadcast mode, "I'm IS and I'm the expert, so here's your solution customer"
    - ◆ More than ever, IS must get input from its customers to determine the services they want, when they want them and where they want them
  - ◆ Hearing directly from customers is both a goldmine and a massive challenge, especially to those with a broadcast mindset

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## Where's the Value in a Network?

- To leverage the Internet, it helps to understand where value is created. When computers are not networked, each one needs to provide both front-end and back-end intelligence.
- Introduce a network and these two forms of intelligence can be decoupled, and better optimized.
  - ◆ The back-end intelligence (to store and process data) is best when centralized, made robust, is stable, is standardized, and can be housed in a core-shared infrastructure.
  - ◆ The front-end intelligence (for interacting with the user), is most useful when it can be dispersed to a myriad of devices that can be small, mobile, customized, and specialized.

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## Where's the Value in a Network?

- Networks allow value in four places, leading to four new kinds of businesses:
  - ◆ At the core and periphery
  - ◆ In common infrastructures
  - ◆ In modules
  - ◆ From orchestration

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## Where's the Value in a Network?

- Core and Periphery Services
  - ◆ Value moves to the ends.
  - ◆ Value is in the core (leadership and strategy handled by top management) and the periphery (customer-facing employees making decisions and taking actions) – or in the IT infrastructure and end devices.

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## Where's the Value in a Network?

- Common Infrastructures
  - ◆ Elements of any infrastructure (an organization, a system, a business process)
  - ◆ That were distributed are being pulled together and operated as a utility.

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## Where's the Value in a Network?

- Modules
  - ◆ Software, devices, organizational capabilities, and business processes are being divided into self-standing modules so that they can quickly and easily connect to form a value chain for responding to circumstances.

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## Where's the Value in a Network?

- Orchestrating Modules
  - ◆ When modules are abundant, there's value in being able to bring them together.

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## The Rules of Networks

- A connected world has three distinguishing characteristics:
  - ◆ It is global
  - ◆ It favors soft things (software, information, ideas, and relationships) over hard things (trucks, steel, and cement)
  - ◆ It is intensely interlinked.

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## The Rules of Networks

- Aim for Relationship Tech – Networks embody an amazing phenomenon:
  - ◆ Connecting more devices to a network exponentially increases the value of the network for everyone on it because so many new possible connections are created.
  - ◆ The network age is about amplifying relationships.
  - ◆ Thus companies aim for technologies that amplify relationships, such as recommender systems.

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## The Rules of Networks

- Follow the Free
  - ◆ In the network economy, the most valuable goods and services are those that are most abundant because they increase the value of every other one.
  - ◆ If they become cheaper as they become more plentiful, then the most valuable items are ubiquitous and free.
  - ◆ The fastest way to make something ubiquitous is to make it free.
  - ◆ This strategy of the network economy is the anathema of the strategy of the industrial age where scarcity was of the highest value.

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## The Rules of Networks

- Feed the Web First
  - ◆ In the Industrial age, loyalty to one's enterprise was important. In the network age, it is more important to be on the right network or network platform.
  - ◆ Choosing the right platform makes an enterprise "in" or "out," so choice becomes important.
  - ◆ Once the choice is made, it is important for the company to "feed" that choice to ensure it grows on the right network that prospers.
  - ◆ In the network economy, a company's success depends more on the standards it chooses than it did in the past.

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## Moving Forward

- Moving forward is about people who need to lead us into this new business world and the people who will be led.
  - ◆ Understanding Users
  - ◆ Increasing Executives' Understanding of IT
  - ◆ Educating IS about the Business

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## Understanding Users

- Individuals, work groups, departments, even business units have different levels of eagerness concerning any new technology.
- If the IS department and other business leaders are truly going to help them use a new technology, they need to understand user comfort levels.

## Understanding Users

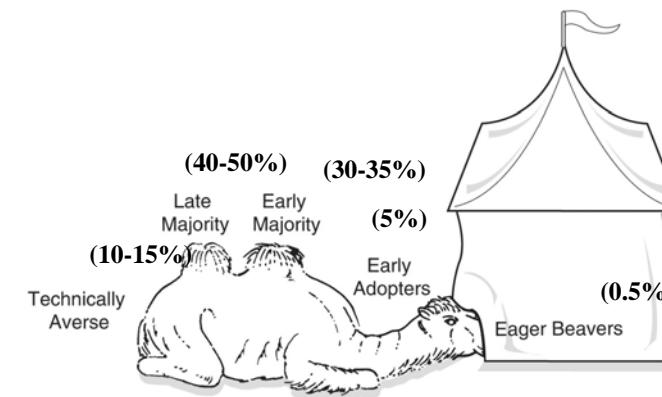


FIGURE 14-1 The Technology Camel

Source: Elizabeth Ghaffari and Barbara McNurlin, "The Technology Camel," unpublished paper, 1998.

## Understanding Users

- Eager Beavers: The Innovators and Pioneers
  - ◆ The smallest group is the noisiest: the zealots. The recommended approach to eager beavers is to support them with some funding and to learn from them.
  - ◆ **Approach:** *support them with some funding and learn from them*

## Understanding Users

- Early Adopters: The First Consumers
  - ◆ In the early Internet days, companies could barely constrain early adopters of Internet technology.
  - ◆ They were the disciples, not too far behind the innovators.
  - ◆ Enterprises can miss a market by ignoring these folks, but they do need to be managed.
  - ◆ **Approach:** *Need to be managed. They need IS's help and encouragement but should not be allowed to overwhelm*

## Understanding Users

### ■ Early Majority: The First Big Wave

- ◆ Willing to use technology but need some help to make it happen
- ◆ Not the self-sufficient pioneers or risk takers
- ◆ Tend to be in relatively important positions
- ◆ Make or break introduction of new technology
- ◆ **Approach:** *Need to understand how they view the company, customers and competition; then help them choose a strategy to expand their familiarity with, say, the wireless Internet*

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## Understanding Users

### ■ Late Majority: The Technology Skeptics

- ◆ Not afraid of technology, but they do have serious concerns about risks and costs
- ◆ Concerned about wasting time and money
- ◆ **Approach:** *IS management needs to be prepared to address risks and costs as they are to address technology opportunities. Need to show an appreciation of bottom-line money concerns and answer security questions at a level that late majority people can appreciate.*

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## Understanding Users

### ■ Technically Averse: “Not on My Time You Don’t”

- ◆ These people, departments, and companies resist technology.
- ◆ In many cases, their concerns about loss of privacy, security, control, and possible exposure to competition override any perceivable benefits of new technologies.
- ◆ **Approach:** *IS first needs to understand their concerns and address their justifiable business fears before any thought of using a new technology for business purposes can be entertained.*

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## Increasing Executives’ Understanding of IT

### ■ Leadership of IT is no longer a technical challenge; it is a challenge for all business managers.

### ■ CIO need to ensure that the business managers

- ◆ Stay abreast of the changes and new uses of IT
- ◆ Comfortable with IT
- ◆ Understand its impact and potential value to the business.

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## Increasing Executives' Understanding of IT

- The dot-com boom and bust
  - ◆ Had a damaging effect on collective opinions about IT because many executives and venture capitalists believe the money they spent creating Websites and funding new e-businesses was wasted.
  - ◆ New channels to the customer did not pay off.
  - ◆ Many now de-emphasize the importance of e-commerce at the very time when early promise is being realized in many industries and sectors.
  - ◆ There is an e-commerce boom taking place right now, even though the hype is gone.
  - ◆ CIO need to be concerned with the potential gap between what their fellow business executives believe is important about IT versus what they really need to know to effectively guide the use of IT.

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## Increasing Executives' Understanding of IT

- Executives' Leadership Roles
  - ◆ These roles include:
    - ◆ Setting the tone of the enterprise toward technology
    - ◆ Envisioning how IT can serve business strategy
    - ◆ Governing as well as leading, using IT to promote business change
    - ◆ Assessing costs and benefits.

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## Increasing Executives' Understanding of IT

- Current, Longstanding, and Upcoming IT Issues
  - ◆ The impact of new regulations is a current issue, with a potentially huge impact.
  - ◆ Project management is another topic of current interest.
  - ◆ Measuring the value of IT is a continuing topic of interest, as is change management and organization and control of the IS organization.
  - ◆ Cross-organizational e-processes are areas on the verge of breaking through, as is obtaining services via the Web.

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## Increasing Executives' Understanding of IT

- Means for Executive Learning
  - ◆ These include:
    - ◆ Learning by doing
    - ◆ Learning by governing
    - ◆ Learning via educational programs.

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Read Case Example P.600-601

## Educating IS About the Business

- Once CIO believes that IS staff need to learn about the business because IT is accepted when IS staff use the language of the business and talk to users as business partners about what IT does.
- There are several approaches to learning about the business.
  - ◆ Train in the Business
  - ◆ Move into the Business
  - ◆ Lead with the Business
  - ◆ Attend Business Programs

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Read Case Example P.600-601

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## Educating IS About the Business

- Train In the Business
  - ◆ Staff can spend their training time in a user department, for a day or a week, rather than at a technical training seminar.
  - ◆ In fact, they often found this to be the most valuable training, and they often make valuable contributions in a short time.

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## Educating IS About the Business

- Move into the Business
  - ◆ There are always openings in the business, and usually the managers are pleased to get someone from IS who already knows about the business and have a broad view of the business from working on many different projects because they understand how departments interface.
  - ◆ So one CIO encouraged her direct reports to move into the business because there was then no need for a middleman to interface with that department, for one thing.

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## Educating IS About the Business

- Lead With the Business
  - ◆ IT projects should be led by a business person, with IS support, because that person will take a business perspective rather than a technical perspective.
  - ◆ No business projects should be IT-led, even when IS comes up with the idea.

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# Educating IS About the Business

## ■ *Attend Business Programs*

- ◆ CIO in small-cap and mid-cap enterprises, especially, need more education in “business-speak”.
- ◆ One way to begin that education is to attend a business-led seminar for them, like SIM’s Strategic Business Leaders Program.
- ◆ Making the switch from technology-speak to business-speak can be difficult because technical people are most comfortable talking about technology.
- ◆ But that’s not what business people want to hear.