

# Module 6

# **Contemporary Information System and E-Business Culture**

#### Introduction

In this module you move on to consider the difference between the traditional marketplace where business is conducted and the new electronic marketplace, frequently referred to as the marketspace or virtual market. The first embarks with some conceptual definitions in regard to markets and the extent to which these operate in a global or local environment. "Market" in this context refers to the environment where exchanges of transactions take place and not just the exchange of business goods. A number of social, cultural, political and economic considerations arise out of these.

Businesses entering the marketspace need to identify an appropriate model for the market where they want to operate and be able to evaluate the current stage of growth in that market. In section two we describe different market models for effective competition. To gain a good understanding of these concepts, you will consider the case of Seven-Eleven in Japan and relate this to some developments in on-line retailing around the world.

Section three introduces the concepts of value chain analysis. Today's networked organisations, introduced in Module 1, need to adopt more comprehensive approaches to business strategy and relate these specifically to the application of Information and Communication Technology (ICT).

In this module we look specifically at one of these approaches to business transformation and examine the new value chain for e-business. This approach enables an organisation to adopt a strategic focus for all aspects of the business organisation, including information systems and electronic commerce.

In this study module you consider the organisational cultural issues associated with the creation of interorganisational systems (IOS) and global marketplaces. These issues arise as you manage across organisational boundaries, across cultures and across organisational politics within the networked organisation but also across the customer community. In this module, you will look at culture as an agent of change and a driver (but also inhibitor) for globalisation. Culture relates to the whole global environment and encompasses the way things are done, whether governmental, social, political, legal or market-related.



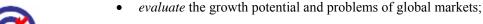
One of the key strategies for effective development of e-business internationally is the creation of a global brand name within the e-community. This requires the organisation to have a real understanding of the marketplace and how they can position themselves, as well as an indepth knowledge of customer relationship management.

At this stage of the course you will also begin to give serious consideration to some of the sociological and organisational issues related to the global e-context. Of particular interest are e-societies and socio-economic change, cross-cultural management, legal and ethical issues and digital divides and policy opportunities.

You begin by examining some of the drivers for globalisation and reviewing some of the likely future developments that may shape business strategies worldwide. One of these issues undoubtedly relates to cross-cultural relationships, and so you briefly review the concept of culture in both the societal and organisational context and explore how this may affect the role and perception of information and communication. This is a vast area studied extensively in sociology; you can only touch on it here enough, we hope, to become interested in following up the topic at leisure through readings recommended in this module.

Later you will look at culture as a change agent and how this can be managed successfully across the networked value alliance. You then move specifically to the stages of building a global community and the creation and implementation of a global branding strategy.

Upon completion of this module you will be able to:



- evaluate cultural implications of global communities and the impact of the IOS and e-business networks;
- *identify* strategies for global community building and global marketing; and
- *develop* an approach to customer relationship management and a plan for e-branding.



**Outcomes** 





**Terminology** 

Buyer's value chains: These are the ultimate source of differentiation,

because it is the product's role in this chain that

determines buyer needs.

Channel value

chains:

These are the delivery mechanism(s) for the firm's products on their way to the end buyer, customer

or consumer.

Supplier value

chains:

These create and deliver the essential inputs to the

firm's own chain.

Value chain analysis: Value chain analysis is used to identify potential

sources of economic advantage. It disaggregates a firm into its major activities in order to understand the behaviour of costs and the existing and potential sources of differentiation. It determines how the firm's own value chain interacts with the value chains of suppliers, customers and competitors. Companies gain competitive

competitors. Companies gain competitive advantage by performing some or all of these activities at lower cost or with greater

differentiation than competitors.

Value system: Michael Porter extends the value chain concept to

what he defines as a value system, "taking account of the fact that an individual firm's value chain is inevitably embedded" in a larger stream of

activities.

Virtual market ecosystem:

An economic community is supported by a foundation of interacting organisations and individuals. Over time they co-evolve their

capabilities and roles, and tend to align themselves with the direction set by one or more central

companies.

The ecosystems evolve through four distinct stages: (a) Birth, (b) Expansion, (c) Authority and (d) Death. At each of these stages the ecosystem faces different leadership, cooperative and competitive challenges. This ecosystem can be viewed as the all-embracing electronic market culture within which the e-business maintains

equilibrium.



# The marketplace and the virtual marketspace

#### Global and local markets

It is often claimed that the major advantage of using the Internet for business is expansion into the global marketplace, where businesses get access to customers globally and customers get access to suppliers globally. This is not as simple as it might seem, however.

A customer in Sri Lanka or Indonesia buying fresh fruit or green groceries over the Web from an online supermarket would not expect to wait for them to be delivered from the U.S. The fact that Greengrocer.com or Homegrocer.com is accessible by global customers does not automatically mean that they have entered a global marketplace.

Similarly, if you want to buy software over the Web, you want to ensure that the instructions for use and help are in a language you understand, and so you would not buy from a German software supplier if you cannot speak German. Such considerations apart, global information networks do offer worldwide, large-scale and low-cost access to e-business with the following consequences:

- Whole new markets are opening up at low cost, enabling access to small as well as large organisations with the effect that the advantage of large size is diminished.
- New competitors from the global market have now entered local markets, increasing competitive threats.

Serving global markets involves many complex business decisions, including the cost of international customer service and warranties. Sellers need assurances that buyers can pay and buyers need assurances that sellers can deliver.

Timmers (2000) highlights some of the approaches developed to exploit this marketplace:

- **Global product-market**: The technical domain, for example, or the software market for the professional user where it is often possible to promote, sell, and support the product through an English-only website.
- Global supply chain: The use of globally standardised interfacing to link in suppliers or customers globally, integrating the Web with new forms of application-to-application data exchange, such as XML/EDI or BSR-Beacon. For example, RosettaNet seeks to demonstrate the feasibility of supply chains open to many partners. While marvelling at the achievement of such standards, one must remain aware that an equal or greater political, cultural and legal achievement is the liberalisation which global trade requires in all sorts of other procedures.

The way to this achievement is likely to be strewn with difficulties.



- Multiple language support: A costly approach that can only be adopted by major players or where limited translation is required (ATM machines for bank transactions are a good example of limited support for standardised transactions).
- Franchising: Split the presentation of the product (front end) from other parts of the business, such as the logistics or catalogues (back end) and apply franchising to the front end. This is the approach of the Amazon Associates programme and Tradezone. Citiusnet France licenses its concept to Citius companies in other countries such as Citius Belgium.
- Internet presence to complement physical global presence: Use this as a complementary support such as Dell or Compaq apply. (We will return to Dell as a specific example at the end of this module.)

In contrast to the globalisation trend, we increasingly see companies with greatly enhanced local presence. A local presence, and therefore physical nearness, will significantly reduce shipping and customs costs and increase confidence in the fulfilment of a deal in the virtual world. eBay, for example, has a local presence in both the U.K. and Canada. This local approach may well be the more sustainable in the longer-term development of the Internet marketplace. In many ways it resembles the "clicks and bricks" approach where we see well-established companies entering the marketspace on their home ground. They are already fully familiar with the business but use the Web to provide an added-value service or to extend their customer base either locally or globally.

The Internet can be used as an information and marketing tool such that the customer is better prepared for the acquisition, purchasing and delivery of the product or service. The retail chain Mitsukoshi in Japan is using this approach. Its extremely dense network of convenience stores, open 24 hours per day, doubles as a delivery and pick-up point for any retail goods ordered at the Internet site http://www.mitsukoshi.co.jp. According to a Mitsukoshi representative, there is a convenience store within a few hundred metres of most Japanese people.

The Internet possesses a combination of features that make it radically different from any other sales channel: ubiquitous and global presence, multimedia and immediate interactivity, digitisation and integration. Yet the same business issues come together when developing an effective strategy to exploit and deliver new services to customers.

All the benefits listed in the table below are the standard business objectives underpinning effective business strategy, yet none of these can be achieved via the WWW without added risk and new threats. Evaluating these risks is the core of an e-business strategy.



Benefits of the Internet Marketplace			
For the business, reduces—	<ul><li>O costs of transactions</li><li>O time to market</li><li>O amount of investments</li></ul>		
For the customer, reduces—	• costs • intrusiveness of branding (global branding achieved without media saturation)		
For the business, increases—	•• new access to existing markets •• access to new markets		
For the customer, improves—	• choice • service • quality		

Table 6.1: Benefits of the Internet Marketplace

Globalisation has an impact far beyond the growth of individual organisations. Already there is evidence that the economies of countries in which companies use the Internet for business will grow far more rapidly than those who do not. A country lacking an online commercial life suffers a competitive disadvantage which, over the long term, will affect its economy negatively.

True expansion into these new markets will require more than just creating a website. It will require the development of an effective technological infrastructure available to all market consumers. Another development requirement promising even more long-term advantage is the evolution of an e-culture whereby online dealings become an accepted way of life. Shopping, learning, chatting on the Internet will represent just another channel for conducting one's daily affairs.

The organisation which decides to become a major player in this market needs to develop a specific market and technology focus to place itself as a winner in the new virtual market space. Driven by such phenomena as the World Wide Web, mass customisation, compressed product life cycles, new distribution channels and new forms of integrated organisations, the most fundamental elements of doing business are changing and a totally new business environment is emerging. This environment is characterised by rapid exchange of information within a virtual network of customers and suppliers working together to create value-added processes. This virtual market space (Figure 6.1) brings with it new forms of IT-enabled intermediation, virtual supply chains, increasing knowledge intensity and information-based business architecture strategies. This new business paradigm is one where core business processes may need to be rethought and redesigned, where new organisational forms and inter-organisational forms may need to be



developed and where the emphasis will be on collaboration rather than competition within the virtual market.

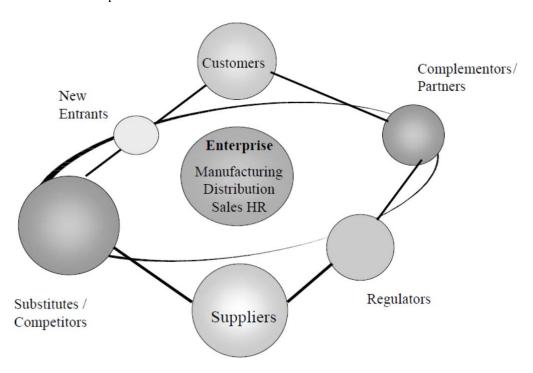


Figure 6.1 Virtual Market space (Burn and Hackney, 2000)

In the transition from physical marketplaces to a virtual market space there are three main characteristics which differentiate transactions in these environments, as shown in Table 6.2.

Characteristics	Marketplace	Marketspace
Content	Products/Goods	Information
Context	Physical interaction	On-line interaction
Infrastructure	Shops, malls, warehouses	Electronic networks

**Table 6.2:** Marketplace v. Marketspace (after Rayport and Sviokla, 1994)

In the traditional marketplace, businesses attempt to develop strategies integrating these three focal characteristics. However, in the market space all three can be disaggregated to create new ways of adding value and lowering costs, forging new alliances with competitors, customers and suppliers and evolving new businesses. These strategies will be constantly subject to change as the business interacts with the dynamic marketspace which continues to evolve around them.



## Virtual markets ecosystems

Moore (1997) suggests that businesses are not just members of certain industries but parts of an ecology that incorporates different industries. The driving force is not pure competition but co-evolution. The term co-evolution originated in biology. It refers to successive changes among two or more ecologically interdependent but unique species such that their evolutionary trajectories become intertwined over time. As these species adapt to their environment, they also adapt to one another. The result is an ecosystem of partially interdependent species that adapt together. This interdependence is often symbiotic (each species helps the other), but it can also be commensalist (one species uses the other). Competitive interdependence can emerge as well: one species may drive out the other, or both species may evolve into distinct, non-competitive niches. Interdependence can change, too, such as when external factors like the climate or geology shift.

The virtual market ecosystem is seen as an economic community supported by a foundation of interacting organisations and individuals. Over time they co-evolve their capabilities and roles, and tend to align themselves with the direction set by one or more central companies.

The ecosystems evolve through four distinct stages:

- 1. Birth
- 2. Expansion
- 3. Authority
- 4. Death

And at each of these stages the ecosystem faces different leadership, cooperative and competitive challenges. This ecosystem can be viewed as the all-embracing electronic market culture within which the e-business maintains equilibrium.

EcoSystem Stage	Leadership Cooperative Challenges Challenges		Competitive Challenges
Birth	Maximise customer delivered value *		
Expansion	Attract critical mass of buyers	Work with * suppliers and partners	Ensure market standard approach
Authority	Lead co-evolution *	Provide compelling vision for the future	Maintain strong bargaining power
Renewal or death	Innovate or perish	Work with * innovators	Develop and maintain high barriers

Table 6.2 e-Market Ecosystem. (after Moore, 1997)

In Table 6.2 a possible evolution path for an e-business strategy is shown for an e-business as \*. The e-business initially focuses on gaining new



customers. As the business expands, its managers realise that they need to extend alliances with suppliers and so set up a number of different alliances throughout their value chain. This requires more rigorous management of different communication channels, reflecting different degrees of dependency and reciprocity. At this stage the e-business may decide to impose more control over the alliance in order to lead a coevolution to a market alliance.

Simultaneously, other e-businesses have been formed as the market has matured, and at stage four the e-business faces a choice. The option chosen may result in a completely new virtual form (with the same or different players in the virtual market) and the recommencement of the evolutionary cycle.

This view is supported by Eisenhardt and Galunic (2000), who point out that the new roles of collaboration in e-business are actually counterintuitive and that collaboration does not naturally lead to synergy.

Where synergies are achieved the managers have mastered the corporate strategic process of co-evolving. These managers routinely change the web of collaborative links among businesses. Everything from information exchanges to shared assets to multi-business strategies. The result is a shifting web of relationships that exploits fresh opportunities for synergies and drops deteriorating ones.

	Traditional Collaboration in the Marketplace	Co-evolution in the Marketspace	
Form of collaboration	Frozen links among static businesses	Shifting webs among evolving businesses	
Objectives	Efficiency and economies of scale	Growth, agility, and economies of scope	
Internal dynamics	Collaborate	Collaborate and compete	
Focus	Content of collaboration	Content and number of collaborative links	
Corporate role	Drive collaboration	Set collaborative content	
Business role	Execute collaboration	Drive/execute collaboration	
Incentive	Varied	Self-interest, based on individual business block performance	
Business metrics	Performance against budget, preceding year, or sister- business performance	Performance against competitors in growth, share and profits	

**Table 6.3** Traditional Collaboration versus Co-evolution (after Eisenhardt and Galunic, 2000)

We will return to this approach to strategy again, but it is introduced here to emphasise that this new marketspace is not one where collaboration is the only name of the game. It is very much one of co-opetition, and a fairly cutthroat environment for the unprepared player. (A term coined by Novell founder Ray Noorda, co-opetition was originally used of a



business cooperating with its competitor. The term has been elaborated to mean business strategies preferring win/win over win/lose outcomes.)

#### Models of virtual markets

This ecosystems approach can be applied to different market models such as the four models of virtual market environments identified by Ticoll et al (1998) in their examination of e-business communities. They suggest that such markets differentiate along two primary dimensions: economic control and value integration (figure 6.2).

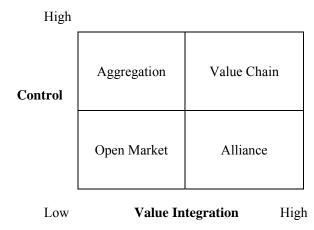


Figure 6.2 Four Models of Virtual Market

The open market model is basically a business-to-consumer model without any single player in overall control, although different players and market alliances can drive events at different times. The aggregation model normally has one business in control, positioning itself between suppliers and producers. Value chains have a similarly hierarchical model but maximise value integration through operational effectiveness, whereas alliances retain that high value integration but rely on shared visions, standards and business practices to provide a full-solution environment without any single company exercising overall control.

Another classification relates the control variable to the emphasis on efficiency versus flexibility and innovation and how this emphasis reflects a stable or dynamic market. In many virtual market environments, these differences can be seen to mark stages in an ebusiness's maturity, each stage demanding different approaches to strategy and different approaches to process management.

## Strategies for e-markets

Berryman et al (1998) suggest there are three types of marketplace: those controlled by sellers, those controlled by buyers, and those controlled by neutral third parties.



Seller Controlled	Information-only vendor web sites  Vendor web sites with on-line ordering	Cisco Systems
Buyer controlled	Web site procurement and planning Purchasing agents Purchasing aggregators	Japan Airlines Freemarkets Online TPN Register
Neutral	Industry/product specific search engines Information marts Business malls Auction spaces	eBay Inc.

Table 6.4 Types of Electronic Markets

Marketplaces controlled by sellers are usually set up by a single vendor seeking many buyers. Its aim is to create or retain value and market power in any transaction. Cisco systems (www.cisco.com), for example, enables buyers to configure their own routers, check lead times, prices and order and shipping status, and confer with technical experts. By 1998, 40 per cent of the company's total sales up to USD 3 billion) was generated through this site and Cisco was saving approximately USD 270 million annually in printing expenses, configuration errors and telephone-based technical support.

Buyer-controlled marketplaces are set up by or for one or more buyers with the aim of shifting power and value in the marketplace to the buyer's side. Many involve an intermediary, but some particularly strong buyers have developed marketplaces for themselves. Japan Airlines (www.jal.co.jp) uses its site to find the best suppliers for inflight consumables. Procurement notices for everything from plastic cups to rubbish bags are placed on the site for tender.

Neutral marketspaces are set up by third-party intermediaries to match many buyers to many sellers. eBay Inc. (http://www.ebayinc.com) is considered the world's leading ecommerce company, enabling millions of people to buy, sell and pay online.

Companies wanting to evaluate which model suits them best should answer the following four questions to help them determine an appropriate strategy:

Are there transaction savings or benefits to be realised?

- Cost reduction through greater process efficiency
- Improved reach
- Reduction in prices to buyers

Is an electronic market for our product developing quickly?

- Do we have transaction inefficiencies?
- How sophisticated is the buyer?



• Is the product e-friendly?

Would a neutral intermediary be beneficial?

- Advantage of scale in transaction processing
- Value of the information acquired during buying and selling
- Anonymity

Do we have substantial market share or buying power?

For buyers, the strategic imperative is clear. They have little to lose and much to gain, and should therefore organise a buyer-controlled marketplace as quickly as possible. The dynamics of the virtual marketspace also create clear opportunities for third-party intermediaries who can create value by virtue of their neutrality. Sellers are the most vulnerable participants, because they will increasingly have to compete with other vendors in a transparent environment. The rapid growth of such marketspaces is forcing businesses to choose their strategies now. Electronic business-to-business commerce is not simply a question of automating existing channels and processes. It is a whole new way of doing business.

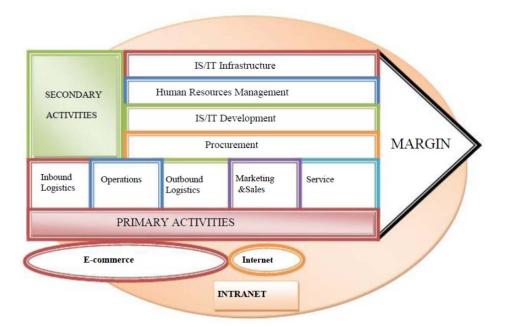
Telecommunications is a two-way street: businesses use the technology to satisfy their customers; customers also use it to define their needs and source their requirements for products and services. This mutuality has led to the development of e-communities. Businesses can collect and analyse vast quantities of customer data and so can define their customer markets in new ways. Customers can also seek out others with like interests to form blocs capable of bargaining collectively (in a sense broader than the familiar labour-market meaning of "collective bargaining"). By tying into such communities, businesses receive feedback on current products and services as well as assistance with new products and services. The current explosion of portal sites reflected the growing importance of such virtual communities. You will examine this in greater depth in the following section.

## The new value chain for e-business

In 1985, Professor Michael Porter of Harvard Business School introduced the concept of the "value chain" in his book Competitive Advantage: Creating and Sustaining Superior Performance.

Since then, this thinking has prompted or underpinned much of management thinking. The relationships are shown in Figure 6.3.





**Figure 6.3** Internet Enabled Commerce and the Value Chain (adapted from Porter (1985))

Value chain analysis is used to identify potential sources of economic advantage. The analysis disaggregates a firm into its major activities in order to understand the behaviour of costs and the existing and potential sources of differentiation. It determines how the firm's own value chain interacts with the value chains of suppliers, customers and competitors. Companies gain competitive advantage by performing some or all of these activities at lower cost or with greater differentiation than competitors.

This approach requires an understanding of the linkages between activities and the way the performance of one activity affects the cost and performance of others. To perform value chain analysis:

- divide a firm into its key activities and assign costs to those activities;
- for each activity, understand the cost drivers, the linkages between activities and the company's cost position relative to competitors;
- identify linkages to the buyer's value chain and assess potential sources of differentiation; and
- develop a differentiation strategy that maximizes value to the buyer and minimises increases in cost.

## The basic concept

The focus of Porter's argument is that winning by charging less or by having distinctive features should be understood and planned for as a result of the total activities that a company performs.



By splitting these activities these into strategically relevant groups, managers should be able to understand the behaviour of costs as well as work out potential sources of differentiation.

#### What is a value chain?

In this analysis "value" is defined as the amount buyers are willing to pay. The value chain is therefore designed to display total value and consists of the firm's value activities (defined below) and its margin (the difference between total value and the collective costs of performing the value activities). This allows us to describe the generic value chain for any single firm in terms of three main elements: its primary activities, its support activities and the margin.

#### Primary activities

Primary activities create the product, its sale and transfer to the buyer as well as after-sales service. These are:

- Inbound logistics warehousing, materials handling, inventory control, and so on.
- Operations the activities that change inputs into finished products (machining, testing, packaging, equipment maintenance).
- Outbound logistics the activities that store and distribute products to buyers (warehousing, delivery fleet operations, order processing).
- Marketing and sales the activities that provide the means for the buyer to purchase (advertising, sales force operations, selection and management of distribution channels).
- **Service-activities** which enhance or maintain the value, such as installation, upgrade, repair, spare parts.

### Support activities

Support activities are those which support primary activities and each other. Three of these (procurement, technology development and human resource management) can be associated with specific primary activities, while the fourth, business infrastructure, supports the entire chain.

Support activities comprise:

- Procurement While raw materials procurement is usually concentrated in a purchasing department, other purchasing is often dispersed throughout a firm.
- Technology development includes engineering and process development and, while usually associated with an engineering or development function, may also be dispersed (office automation, telecommunications).
- Human resource management recruitment, hiring, training, development and compensation of all personnel. Partly centralised but increasingly dispersed. Porter points out that the



skills and motivation of employees and the costs involved may be critical to competitive advantage.

Firm infrastructure – broadly encompasses general
management activities, as well as finance, accounting, legal,
corporate affairs and quality management. Often viewed as an
overhead, these can be a considerable source of advantage
(skilful negotiations with regulatory bodies).

### Defining a value chain

Starting with the generic value chain, individual value activities are identified for the particular firm within its particular industry or the service provider within the public sector. Each of the main categories in the overall model can be subdivided into separate activities. In this way, Sales and Marketing might be subdivided into marketing management, advertising, sales force administration, sales force operations, technical literature, promotion, and so on. This process of subdivision can continue down to activities that are very narrowly defined, if they have clear boundaries.

Determining which activity lies within which category requires judgement. In particular it depends on the nature of the firm, its industry and where it derives the competitive edge which keeps it in business. Thus, order processing can belong within outbound logistics but its correct category is marketing if it is an important element of the way a firm interacts with its buyers. One way or another, however, everything a firm does should be captured and identified.

### Linkages within the chain

Although definition requires this process of disaggregation, the value chain is not a series of independent activities but of interdependent ones. Linkages exist because of the relationship between how one activity is performed and its impact on the cost or performance of another.

Porter argues that competitive advantage frequently emerges from such linkages – for instance, how buying high quality, well-prepared raw material can simplify manufacturing and reduce scrap, or how the timing of promotional campaigns can help production and capacity scheduling in a fast food chain.

Linkages are not always obvious: the same function can be performed in different ways. Thus, keeping parts within specification can be achieved by buying in high quality parts, by specifying tight manufacturing tolerances or by imposing 100 per cent inspection of finished goods; different firms will choose different routes and achieve different potential advantages. Another under-recognised factor is that the cost or performance of direct activities is improved by greater effort in indirect activities. For example, better scheduling (indirect) can reduce time spent by either the sales force (customer complaints) or the cost of delivery vehicles (by making fewer runs).



#### The value system

Porter extends the value chain concept to what he defines as a value system, "taking account of the fact that an individual firm's value chain is inevitably embedded" in a larger stream of activities. This matrix concept suggests that there are at least three additional value chains of which account must be taken:

- 1. **Supplier value chains** which create and deliver the essential inputs to the firm's own chain;
- 2. **Channel value chains** which are the delivery mechanism(s) for the firm's products on their way to the end buyer, customer or consumer; and
- 3. **Buyer's value chains** which are the ultimate source of differentiation, because it is the product's role in this chain that determines buyer needs.

As you see, managers need to understand not only their own firm's value chain but also how it fits into the industry's overall value system. The underlying point is that the value chains of separate firms in an industry will differ according to each organisation's history, its strategies and its skills at implementation. For instance, one or more firms may have restricted their competitive scope. This decision to serve a focused industry segment may enable a firm to tailor its particular value chain to that segment and thus gain advantage either through lower costs or greater differentiation.

Since Porter introduced the notion, it has become ever clearer (particularly when the explosive growth in, and reduced costs of, ICT are studied) competitive advantage does not just arise within the firm. It may be derived from looking at the entire system and recognising that different firms can adjust and improve their own value system. For instance, quite often supplier linkages mean that the relationship with suppliers is not a zero-sum game in which one gains only at the expense of the other but a relationship in which both can gain. Similarly, coordination and joint optimisation with different distribution channels can be important – especially in those industries where the channel may represent as much as 50 per cent of the ultimate selling price to customers (consumer goods, wine, newspapers, and so on).

## Eight steps for determining the basis for differentiation

- 1. Determine who the real buyer is the one or more specific individuals, within the buying entity, who set the purchase criteria.
- Identify the buyer's value chain. The value the firm provides to the buyer is determined by the way, directly or indirectly, it impacts upon the buyer's value chain, either by lowering costs or improving performance.
- 3. Determine and rank the buyer's reasons for purchase. Analysis of the buyer's value chain will identify such criteria. These should then be ranked according to the value the buyer attaches to each.



- 4. Assess the current and potential sources of differentiation. By determining which of its value activities affect each of the purchase criteria, a firm can identify its current or potential sources of uniqueness.
- 5. Identify the cost of these sources of differentiation. The cost of differentiation is a function of the cost drivers for those activities that distinguish the firm from its rivals.
- 6. Design the value chain to maximise value relative to cost. The aim is to create the widest gap between what the buyer will pay and the cost of providing it.
- 7. Test for sustainability identify both stable sources of buyer value and the firm's own capacity to raise barriers against competition.
- Reduce costs in activities that do not affect the chosen forms of differentiation.

Porter's advance of this analysis foresaw the globalisation of businesses and industries and with it, a shift from straightforward growth as the main corporate objective to an era when companies would need to identify and strengthen their competitive position if they were to survive.

Porter's identification of five competitive forces and his arguments for positioning companies so as to reduce their impact has become known as 'the strategy as position' school of thought. As we have seen, understanding an enterprise in terms of the value chains involved emphasises the centrality of communications systems in implementing any business activity. It is the restructuring of value chains and the reduction of costs of communicating between these activities that keeps value chain analysis very much to the forefront of enterprises today.

# Strategic analysis for e-business solutions

## Technology leadership

Plant (2000) identifies seven dimensions of an e-commerce strategy: three bonding factors – leadership, infrastructure and organisational learning and four positional factors – technology, branding, service and market. He also emphasises that the keys to successful development of e-business strategies are:

- Develop a strategy before developing a Web presence.
- Develop a strategy by focusing on technology, branding, service and market.
- Develop an IT infrastructure capable of matching the strategic objectives.
- Identify and use knowledge in the organisation.



- Focus on added value for customers.
- Continually evolve these strategies.
- Have a senior executive as project champion.

For some organisations, the entire strategy will be based on strength and leadership in the area of technology, whereas for others it will play an enabling role, but for all e-businesses, strategy will play a very important role. This is particularly true for those companies developing Value Webs, sometimes referred to as Extended Value Networks (EVNs). In EVNs, companies will develop strategies with their business partners in mind, and a whole new breed of IS will be created that integrates the processes and information flows among partners. These will be third-party-provided, web-enabled Enterprise Resource Planning Systems (ERPs). Companies such as SAP, Oracle and PeopleSoft do the packaging, integration and marketing of ERPs.

EVN companies must learn to share their business intelligence about customers and processes, may outsource non-strategic business processes and will explore new ways of conducting business (for example, negotiating the portion of total profit each participant in the EVN will receive from the delivery of goods and services to customers).

The organisation at the centre of the EVN is responsible for managing a network in which information is substituted for inventory at every step of the process of delivering value to customers. Today the network master is typically the large organisation which possesses the resources necessary to pull together business partners and suppliers and instil their standards on the EVN. However, e-business technologies and applications and data mining and analysis may shift the role of the network master out to the organisation closest to the customer. This fundamental power shift makes it imperative for e-businesses to develop technology-based strategies to capture customer knowledge and loyalty and to foster the role of the technology champion in the organisation.

#### The Seven "S" Framework

Plant (2000) introduces the Seven S Framework for technology leadership, identifying the following seven areas:

- 1. Strategy
- 2. Structure
- 3. Systems
- 4. Staff
- 5. Style
- 6. Skills
- 7. Shared values

These seven variables together form a web of relationships within the strategic management of the organisation and these can then be aligned towards the e-business strategy as shown in Table 6.5.



	Strategic Variables	e-Business Focus
1.	Strategy	Alignment and Planning
2.	Structure	Model of an e-business and EVN
3.	Systems	Technology Integration and ERP
4.	Staffing	Knowledge empowered employees and CIO
5.	Skills	CIO and relationship management
6.	Style	Leadership from the top
7.	Shared Values	Technology leverage, and leadership for added value

Table. 6.5: Strategic management and e business strategy

Ironically, for most companies the first challenge in creating an EVN is to put their own house in order internally. They will have to change their systems, processes, organisation and culture to achieve rewards. The Seven S model is one approach which can assist the organisation to move from a functional to a process flow EVN through effective e-leadership. The EVN will provide the ultimate agility and flexibility to adapt to changing market conditions and shift activities to and from business partners in real time. The EVN, then, is the learning organisation based upon a strategic infrastructure to support the e-business evolution.

## Globalisation and the culture of distance

#### Introduction

The World Wide Web has created vast new opportunities for the development of global business through online presence. This, however, provides many challenges and even threats to businesses wanting to or being forced to play in this arena. The organisation that succeeds in the global marketplace must be prepared to recognise the many cultural issues which will affect their strategies.

Culture operates at many levels of aggregation: group, firm, industry, profession, region, country, group of countries. Regardless of groupings, culture remains the means by which non-genetic information is transmitted either within a given generation of agents or from one generation to the next. Technological practice forms an integral part of such information transmission but usually combines universal theoretical knowledge with more practical, local and culture specific application. This has particular implications for the management of communication within multinational, multicultural organisations and IOS which comprise technology based alliances over several cultures operating in a global environment.



Information and communication technology (ICT) is, by definition, the technological foundation of e-business consisting of a number of business-centric categories such as business-to-business (B2B), business-to-consumer (B2C), and business-to-employee (B2E). As discussed in previous modules, e-business has been extended to allow for the systematic integration of an organisation's internal and external systems, via the Web, both up and down the supply chain. This in turn, will change today's business-centric e-business topologies so that they evolve into customer-centric e-communities.

In this section we review cultural influences on organisations and information technology applications. This is expanded into the development of online communities where a shared culture of common practices is a key factor in effective development and maintenance. Finally, the whole issue of global expansion through global branding is placed under the spotlight and the implications for the future examined.

In future, an organisation's success within the global e-community will require culture-focused organisations where communities allow for:

- differentiation and the creation of attractive communities;
- creation of unique value propositions;
- the ability to be a good citizen and to enter into engaging dialogues with other members of the e-Community; and
- understanding of and compliance with political, legal and societal standards.

## Global organisations and global markets

Truly global markets now produce and consume about 20 per cent of world output – about USD 6 trillion of the planet's USD 28 trillion gross domestic product. Within 30 years, as that GDP expands to USD 91 trillion (assuming an overall real growth rate of 4 per cent), global markets could multiply twelvefold, reaching about USD 73 trillion. This will be more than 80 per cent of world output (Figure 6.4).

The size of the global arena will have increased nearly 12 fold by 2027.



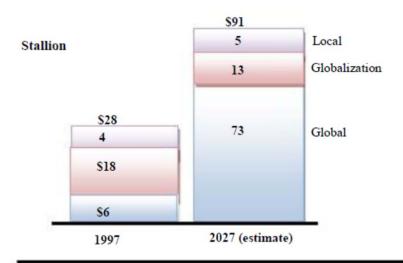


Figure 6.4 Global Market Growth

Economic integration, the force driving this expansion, will promote the formation of global markets in almost every industry (including service-based enterprises such as education) and more integration will take place in the next 30 years than occurred in the previous 10,000 or more. In a world without economically significant geographic boundaries, the rules will change.

The **good news** is that companies will have access to the world's finest resources: the most talented labour, the largest markets, the most advanced technologies, and the cheapest and best suppliers of goods and services. The **bad news** is that the risks will be high because every business will have to compete against the world's best, and markets undergoing integration are volatile and uncertain.

Prahalad (1998) foresees at least eight significant discontinuities which must be handled simultaneously:

- 1. Global
- 2. Deregulation
- Volatility
- 4. Convergence
- 5. Indeterminate industry boundaries
- 6. Standards
- 7. Disintermediation
- 8. Eco-sensitivity

These driving forces will impose new demands on managers who, in turn, will have to create new competencies. Managing these competencies in a multi-cultural environment is a complex task, one that will require managers to absorb and integrate new streams of knowledge, collaborate



across cultures, learn to forget and deploy competencies across business unit boundaries. Mastering these competencies will require global firms to give a critical re-examination to their existing competency profiles.

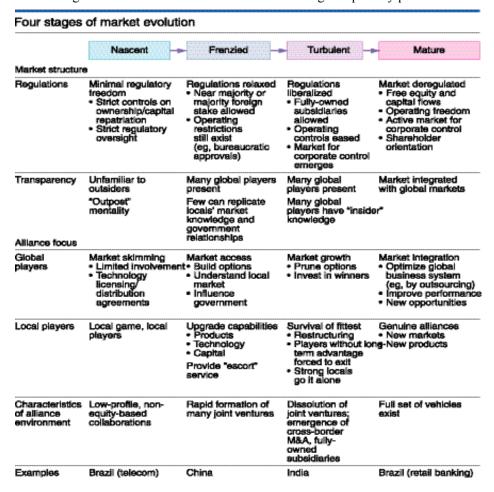


Figure 6.5 Four Stages of market evolution

The global market is not a single static environment but rather comprises many different markets at different stages of evolution. For example, a U.S. organisation wishing to expand into the China market would face very different problems from a Malaysian business wanting to expand into Europe. Different products also have different global profiles, and so as mentioned earlier there will be different market sectors in the global community. Figure 6.5 presents an evolutionary model very similar to the co-evolutionary model, but you will see that the emphasis now is on the alliance members and the regulatory structure. Global companies are looking to emerging markets for growth. Companies in emerging markets are searching for ways into the burgeoning global economy. Alliances can seem the obvious solution for both sides (Adarkar et al, 1997). Yet alliances between global and emerging market players are hard to get right, and are often highly unstable. Many have failed to meet expectations, required extensive restructuring, or been bought out by one of the partners. Differences of size, ownership structure, objectives, culture, and management style can all prove stumbling blocks. Alliances



also need to recognise that there are different stages of market evolution and each stage of this will be driven by each partner's shared strengths and weaknesses and by the relative importance of each contribution in shifting the balance of power. To assess whether an alliance will evolve, Adarkar et al (1997) suggest that the partners in the alliance should plot how contributions are likely to shift, as shown in Figure 6.6.

Exhibit 3

#### Assessing bargaining power

	Importance	Balance of p	Balance of power		
Determining factors	of factor High Low	Now Us Partner	Future Us Partner		
Product or process technology					
Brand ownership					
Channel control					
Manufacturing capacity					
Ability to invest In the business					
Local relationships (eg, regulators)					
Global relationships (eg. global suppliers; global customers)					
Management control					

Figure 6.6 Checklists for Power Shifts

Likely evolution is along four paths:

- 1. Sustainable power balance
- 2. Power shift to global partner
- 3. Power shift to local partner
- 4. Competition, dissolution or acquisition



#### Four possible outcomes

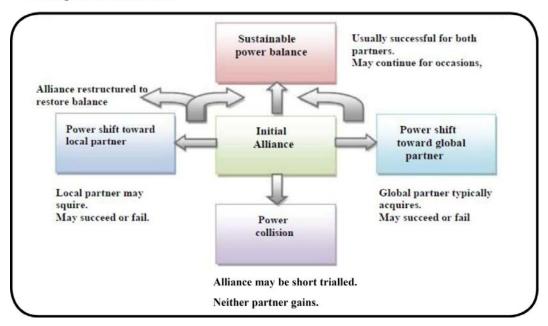


Figure 6.7 The Four Paths of Evolution

These vulnerabilities are all inherent within global virtual alliances and must be recognised when global partnerships are formed. It is especially important to recognise that emerging market alliances pose different challenges from those faced by alliances in mature markets and are generally far less stable. Structural change in an industry is usually the result of cumulative processes leading to large-scale discontinuity. An organisation that wishes to take advantage of such discontinuity must have the ability to see it coming earlier than their competitors and to react more quickly. This alacrity takes a focused strategy for change.

## Strategies for global change

The evolutionary models suggested for global expansion can be likened to the management of metamorphoses: at each stage, a different focus will be required and this may also mean different players and shifts in relationships. A Dynamic Resource System View is recommended where destruction as well as construction is a necessary strategy. The following steps should be taken:

- 1. Know your resource system
- 2. Look for leading indicators
- 3. Anticipate shocks
- 4. Identify resources that must be built to contribute to a future sustainable advantage
- 5. Identify resources that must be destroyed

In selecting alliances, you also need to develop a strategy to build power. What is the organisational goal? Is it to become the global hub as the



main competitor? Is it as a defensive measure to retain a share of the global market against predatory attack? Is it to develop a sustainable home-market based alliance to build a global entry point? Strategies for maximising power include:

- invest today for tomorrow's power base;
- think twice before allying with a global leader;
- consider alternative partners;
- protect your future by securing access to key intangible assets;
- create world class alliance opportunities;
- position early and shape the market; and
- clearly identify global and local capabilities and focus.

This power balance between local and global is not clear-cut, since globally distributed organisations obviously have to contend with disparities of culture within as well as beyond the organisation. This can make the global organisation playing in the virtual marketplace highly vulnerable, and so many look to governments for longer-term support.

A recent report from the OECD would suggest that one such approach might be appropriate, and cites the Learning City concept as an alternative approach. Europe has led the way in establishing the learning city concept with examples in Poitiers, France; Jena in Germany; the Oresund region of Scandinavia; Andalusia in Spain; and the Kent Thames-side area of London, U.K. However, this concept has also been embraced in Asia and is a specific strategy for technological and global development within China. These purpose-built cities or regions have advanced communications infrastructures but also a commitment to place innovation and learning at the core of the development. Firms and knowledge institutions clustered in the same location have greater opportunities to share a culture and understanding that facilitate the process of social interaction and learning where no institution has a monopoly on knowledge.

Blanning (1999) cautions that such strategies may only be appropriate for organisations with western-based strategic management concepts. In Singapore, the development of an information society may well be restricted by the political control over information flow and the current status of Singapore's democracy. Similar issues and concerns were raised by the World Bank in their 2000 report and frequently, since then, by groups such as OECD. This whole area of socio-economic change and the impacts of globalisation are discussed in a 2001 paper by Burn and Loch referenced at the end of this module.



## E-business cultures

## Organisational cultures

Schein (1996) defines culture as a set of basic tacit assumptions about how the world is, and ought to be, that a group of people share; it determines their perceptions, thoughts, feelings, and to some degree, their overt behaviour. Culture manifests itself at three levels:

- 1. The level of deep tacit assumptions that are the essence of the culture:
- 2. The level of espoused values that often reflect what a group wishes ideally to be and the way it wants to present itself publicly; and
- 3. The day-to-day behaviour that represents complex compromise among the espoused values, the deeper assumptions, and the immediate requirements of the situation.

Overt behaviours cannot be used alone to decipher culture because situational contingencies often make us behave in a manner that is inconsistent with our deeper values and assumptions. Hofstede (1980, 1994) is perhaps the most well known exponent of "culture as a predictor." He suggests that differences in cultural values are the ultimate determinants of human organisations and behaviours and ultimately of economic growth. His 1980 study identified four dimensions by which national cultures differed. These were:

- 1. Uncertainty avoidance
- 2. Individualism vs. collectivism
- 3. Masculinity vs. femininity
- 4. Power distance

For example, a society that prefers high power distance and low uncertainty avoidance (risk avoidance) would also prefer bureaucratic and hierarchically structured organisational models, whereas a low-power-distance society would prefer informal communication models and flatter organisational structures. This obviously has implications for global organisations where alliances span several different cultures. What is seen as an appropriate business model for a U.S. corporation may not be viewed as an appropriate model in Japanese society. Similarly, management styles may be very different and require very different roles and communication channels within different international subsidiaries or partners in the multinational alliance model.

"Japanese and American Management is 95 per cent the same and differs in all important respect" (Adler, Doktor and Redding, 1989, p.27).

These theories have been explored by many other researchers on organisational structures and strategy and Figure 6.8 shows an example of how organisational forms might be favoured by particular societies. This combines Hofstede's work with that of Boisot (1998).



#### HOFSTEDE

HOFSTEDE	High uncertainty avoidance	Low uncertainty avoidance	
Low Power distance	German-speaking, Finland, Israel.	English-speaking, Scandinavia, Netherlands	
Power distance	B: bureaucracy	B: market	
High Power distance	Latin, Mediterranean, Islamic, Japan B: field	Southeast Asian (esp. HK, Singapore) B: clan	

Key B - Boisot's form

**Figure 6.8** Associations of Power Distance and Uncertainty Avoidance with Societal Culture

It would be foolish to believe that societal culture is the only factor to be considered in organisational development. However, Southeast Asian organisations, as an example, are thought generally to exhibit some distinctive structural features:

- 1. First, they remain typically small and, even when large size is attained, select a mode where smaller scaled operations are loosely coupled to the central node, through the appointment of trusted persons reporting to the overall controlling family.
- 2. Secondly, they are characterised by higher levels of centralisation while resisting complexity and remaining structurally simple (Redding, 1990).
- 3. Finally, role differentiation and specialisation are also less extensive and rigid.



Dimensions	Cultural Assumptions
relationship between people relationship with environment masculinity/femininity	good/bad by nature dominance/harmony aggression/passiveness
power distance space	small/large private/public
collectivist relationships	individual/group
active/reactive primary mode of activity	talk/listen doing/being
linear/multi-task time orientation	procedural/unpredictable monochronic/polychronic
universalism	generalist/particularist
context	facts/opinions
temporal orientation Confucian Work Dynamism	past/present/future long- or short-term orientation

**Table 6.6:** A Composite Model of Cultural Dimensions

#### Culture and IT

The impact of Information and Communication Technologies (ICT) has extended far beyond organisational boundaries and permeates almost every aspect of daily life around much of the globe. Many of the changes which ICT has brought about were foreseen and have been well documented. The concepts of the Information Society, virtual organisations, networked communities and home offices have all been touted as the result of the information explosion and the advancements in technology. However, many of these IT-based applications have unlooked-for consequences which relate directly to cultural mismatches between the philosophy of the system application or methodology and the cultural philosophy in which it is expected to operate.

ICT innovations generally bring about greater user empowerment and help to promote flatter organisational structures, all of which are now held to be positive outcomes in the North-American-dominated management literature. The same attitude may not be held true in Southeast Asian societies, where high power distance and rigid hierarchies are the preferred organisational models and low individualism but high social interaction is the preferred personal role.

The division between subjective culture (referring to values, behavioural norms, attitudes and religion) and objective culture (referring to



infrastructure, technology and other material objects) is important since it is the unique combination of the two which defines how information is communicated in a society.

The United States and Japan both have access to the latest communication technologies, but whereas electronically mediated communication is heavily used in the U.S., Japan relies more on face-to-face or oral communication than the written or typed mode. In studying the effect on the use of e-mail and fax in Japan, significant differences have been found between Japanese and U.S. knowledge workers in both perception and use of ICT. The determining factor appears not to be the degree of industrialisation but whether the country falls into a low-context or high-context culture which will give a relative emphasis to written or oral communication respectively.

Boisot (1998) suggests that technology is itself an expression of culture and by institutionalising an organisation through ICT, an organisation is redefining a culture within certain boundaries. In current times, the results are often seen through the repercussions of downsizing and outsourcing.

Just as each society strikes a balance between individual separateness and interdependence, between authority and freedom, between achievement and compassion, between rigidity and uncertainty, so the global, networked organisation must tailor its global systems through its virtual cultural alliances to reflect cultural values and enhance performance without disrupting societal norms.

#### Virtual cultural alliances

In conventional organisations, shared assumptions typically form around the functional units of the organisation and are often based on members' similar educational backgrounds or experiences. This generalization assumes, however, that we define the boundaries of the organisation as the population of employees. What if we also include suppliers and customers?

Developing a single culture of reliability in virtual organisations is very much more difficult because of such extended boundaries (including subcontractors and other alliance members along the supply and demand chains) often encompassing several cultures. The existence of shared deep tacit assumptions and values across all members of the alliance, or of similar educational backgrounds or experience, is unlikely in such organisations, particularly if cultural lines are crossed. The various cultures represented in the different members of the network will almost surely introduce dysfunctionalities and miscommunication, as communication and functionality takes place across organisations that do not share common values, assumptions, or perceptions. Japanese firms, for example, typically exhibit cultures that extend well beyond the normal legal boundaries of an organisation. Virtual alliance strategies need to meld the varied cultures that comprise the system into a cohesive whole in which the deep assumptions and espoused values of each of the member organisations can be built around the need for reliability.



This is extremely difficult in distributed, multicultural IOS aligned by temporary linkages that may dissolve as business opportunities and requirements change. Virtual alliances may also be plagued by vulnerabilities that make the development of a melded culture of reliability very difficult:

- A proliferation of different languages and cultures.
- Different power structures and organisational politics.
- Communication between units and members of comparable stature but non-comparable experience and training.
- Rivalry between alliance members.
- A reluctance to listen and ask questions.
- An eagerness to "get the job done."
- Ethnocentrism, a tendency to discredit members or individuals not of the same background or experience.

These characteristics are present in traditional multi-national corporations, but are exacerbated in virtual alliances because of the distributed interdependence and amorphous nature of such networks. As Schein (1996) emphasises, too often behaviour is unwittingly in place that is dysfunctional to the system. For example, many organisations – virtual and otherwise – espouse teamwork and cooperation, but the behaviour that the incentive and control systems of the organisation reward and encourage is based more on a shared tacit assumption that only individuals can be accountable and that the best results come from a system of individual competition and rewards.

If the external situation truly demands teamwork, the group will develop some behaviour that looks, on the surface, like teamwork by conducting meetings and seeking consensus, but members will continue to share the belief that they can get ahead by individual effort and will act accordingly when rewards are given out.

Attention to incentive and control systems can help prevent situations where shared cultures of deep and espoused values are required for success but are undermined by the individual members' reward and control systems, or by competing business opportunities. As noted earlier, the balanced scorecard is one approach to introduce appropriate performance-based compensation structures.

## Impact of culture on e-business

One of the many challenges in the global virtual value alliance is deciding where a unified culture is essential and where "one thousand flowers" may be allowed to grow. Some of the questions that need answering in relation to culture are:

 Are virtual cultures industry-dependent or business-modeldependent?



- Is the relationship between culture and the networked organisation one of diversity exploitation or controlled manipulation?
- Is the extent of virtuality that can be exploited in the organisation constrained by the extent to which culture is defined by
  - o shared goals?
  - o synchronicity of work?
  - o co-locations?
  - o reciprocity of risk and responsibility?
- Are stronger cultures required at the interfaces of value alliances to ensure reliability enhancement?
- Where member goals, roles, and responsibilities are more carefully articulated in a global network, does this imply the greater need for a unified culture?
- How can the virtual organisation manage a diversity of cultures?
- Will a desirable diversity of cultures be supported only under conditions of high trust and open communication?
- To what extent should incentives and control systems be used in virtual organisations to develop unified cultures?

Four areas should be considered part of a basic framework for reconstructing the organisation:

- Investment in extensive socialisation: managers need to be able to cope with diversity of race, gender, culture and intellect.
- Development of language skills.
- Extensive documentation for common understanding.
- Extensive commitment to training, both analytic and experiential.

The future belongs to the imaginative.

## Culture and change

Senge (1998) states that the trouble with most business relationships is that they work like dysfunctional families. Everybody is basically concentrating on just pleasing the boss and avoiding getting their ass kicked, rather than on building real relationships.

To survive crises and change, there needs to be a deep level of trust and regard, yet change induces stress and under stress people revert to their most primitive behaviours. In an organisation, this means management control, time pressure, do it faster, do it cheaper. The irony is that this is the antithesis of all that is preached about the virtual organisation and the development of a change culture.

In order to be more adaptable and resilient, faster and more responsive, organisations must be more reflective and encourage people to really think together. An effective virtual organisation needs to be a learning organisation, and this represents a significant shift in culture over the norm for western models of management and organisational



development. This new mental model permeates through the organisation through different leadership styles, community behaviours and individual beliefs.

Four core attributes of this new mental model for the individualised corporation are:

- 1. Companies as collectors of people
- 2. Developers of horizontal knowledge flows
- 3. Builders of a trust-based culture
- 4. The organisation as an integrated network

(Bartlett and Ghoshal, 1998)

Whereas people are social animals and innately curious, interacting and learning from each other, the modern organisation has been constructed in such a way as to constrain, impede and sometimes kill these gregarious traits. Unlearning this construction and learning to forget are perhaps the most difficult challenge that managements face. In most organisations the forgetting curve is flat and takes an enormous amount of effort to shift.

One solution is the adoption of vulnerability management approaches and the use of vulnerability audits. For example, during reengineering, vulnerability analysis can be used to predict how cutback of resources will be distributed, what disappears, what survives and what prospers. Organisations may be resilient against spending cuts but be highly vulnerable to staff cuts, marketing strategy, IT adoption or management training. Identifying and learning from these can assist the corporation to be prepared for the unthinkable. There is a need for the organisation to shift design and culture from one that suppresses unpalatable news to ones that actively seeks different viewpoints, opinions, and contradictory information.

Nevertheless, culture has become a concept thrown around by consultants as if it can be changed as easily as donning a new set of clothes or a radical hair restyle. Culture is not easy to change and in times of change, people will cling to culture for their stability. The organisation must consider whether gradual change is an acceptable solution or whether a complete culture change is the only route and possibly accompanied by a complete change of personnel. Certainly the development of a one-company culture needs to be closely tied to reward systems aligned with learning-driven goals and objectives. Frequently the real target group should be the middle management level who can effectively act as a sink to prevent upward and downward flows of information.

## Success in cultural change

An example of successful cultural change is described by Buckman (1998) at Buckman International Laboratories as they designed a system and built a culture that facilitates the communication of whatever is needed across all the organisation's boundaries (1,200 people located in 21 countries, 90 countries for customers). The cost has been estimated at US \$7,500 per person (3.5-4.5% of revenue), but they believe the results justify every cent. Their philosophy has been to move the entire organisation to wherever it is needed at the time. This has been achieved



by expanding the span of communication and influence for each individual to work-anywhere-and-any-time (at your most efficient mode of operation). Such a transformation is both a consequence of and driver for the further globalisation of the e-community.

Globalisation is not necessarily a strategy to be embraced lightly, however, since it carries with it many more implications over and beyond the obvious cultural ones. E-businesses entering global markets need to learn from the experiences of long-term global players.

# Global community-building

## **Development stages**

Venkatraman and Henderson (1998) outline three stages in the development of an e-community. These are summarised in Table 6.7.

Vectors and Stage 1 Characteristics		Stage 2	Stage 3
Customer interaction (Virtual encounter) Remote experiences of products and services		Dynamic customisation	Customer communities
Asset Sourcing modules configuration (Virtual sourcing)		Process interdependence	Resource coalitions
Knowledge Work-unit expertise expertise)		Corporate asset	Professional community expertise
Target locus	Task units	Organisation	Inter-organisation
Performance objectives	Improved operating efficiency (ROI)	Enhanced economic value added (EVA)	Sustained innovation and growth (MVA)

**Table 6.7** Three levels of e-Community (after Venkatraman and Henderson 1998)

ICT, particularly systemic (ERP-style) integration of the organisation's ICT infrastructure and applications, is seen as the foundation of this model.

Increasing levels of e-community involve greater usage of ICT to increase the richness (particularly in terms of value-adding knowledge) and complexity of the relationships between the organisation and its supply chain partners, customers, and sources of expertise.

Clearly, one would expect to see considerable differences in the communications networks, and particularly in how those networks are used, in organisations that are at different stages of development.



## Shifting locus of core competencies

Prahalad and Ramaswamy (2000) suggest that organisations need to create their future by harnessing competence in an enhanced network that includes customers. They also present a three-stage model that is summarised below in Table 6.8.

	The company	Family/network of companies	Enhanced network
Unit of analysis	The company  The extended enterprise: the company, its suppliers and its partners		The whole system: the company, its suppliers, its partners, and its customers
Resources	What is available within the company	Access to other companies' competencies and investments	Access to other companies' competencies and investments, as well as customers' competencies and investments of time and effort
Basis for access to competence	Internal company- specific processes	Privileged access to companies within the network	Infrastructure for active ongoing dialogue with diverse customers
Value added of managers			Harness customer competence, manage personalized experiences, and shape customer expectations
Value creation	Autonomous	Collaborate with partner companies	Collaborate with partner companies and with active customers
Sources of managerial tension	gerial autonomy versus collaborator and		Customer is both collaborator and competitor for value

Table 6.8 Locus of Core Competencies

Table 6.7 shows that the idea of extending the organisation's ICT network and changing the nature of its usage to improve core competencies is a central component of their model.

## The customer as king

In the past, most practitioners and scholars have had a company-centric focus and have been primarily concerned with "alliances, networks, and collaborations among companies." The old idea of the "extended enterprise" (that is, a central organisation supported by a constellation of supply chain partners) should give way to the idea of an enhanced network of traditional suppliers, manufacturers, investors and customers. Managers need to recognise that consumers are a source of competence



forces. Managers and researchers must focus on developing relationships with the consumer as the agent that is most dramatically transforming the industrial system as we know it rather than just their supply chain partners. Table 6.8 summarises the changing role of customers.

	Customers as a Passive Audience			Customers as Active Players
	Persuading predetermined groups of buyers	Transacting with individual buyers	Lifetime bonds with individual customers	Customers as co-creators of value
Time frame	1970s, early 1980s	Late 1980s and early 1990s	1990s	Beyond 2000
Nature of business exchange and role of customer	Customers are predetermined	seen as passive role	buyers with specific patterns of consumption	Customers are part of the enhanced network; they co-create and extract business value as collaborators, co-developers, and competitors
Managerial mind- set	The customer is an average statistic; groups of buyers are predetermined by the company	The customer is an individual statistic in a transaction	The customer is a person; cultivate trust and relationships	The customer is not only an individual but also part of an emergent social and cultural fabric
Company's interaction with customers, and development of products and services	Traditional market research and inquiries; products and services are created without much feedback	Shift from selling to helping customers via help desks, call centres, and customer service programs; identify problems then redesign products and services	Providing for customers through observation of users; identify solutions from lead users, and re- configure products and services based on deep understanding of customers	Customers are co- developers of personalized experiences. Companies and lead customers have joint roles in education, shaping expectations, and co- creating market acceptance for products and services
Purpose and flow of communication	Gain access to and target predetermined groups of buyers. Oneway communication	Database marketing; two-way communication	Relationship marketing; 2-way communication and access	Active dialogue with customers to shape expectations and create buzz. Multilevel access & communication

**Table 6.9:** The Evolution and Transformation of Customers

Competence now is a function of the collective knowledge available across the whole of the enhanced network, and the market has become a forum in which consumers play an active role in creating and competing for value. The Internet is given as one of the main reasons why consumers have been increasingly engaging themselves in active and explicit dialogue with manufacturers of products and services and why corporations are no longer controlling dialogue.



## The increasing power of the connected consumer

Community and conversation are fundamental to human society. Prahalad and Ramaswamy maintain that in the past, giant bureaucracies were able to distance themselves from their customers and to suspend true market conversation by using their special knowledge, the power of advertising and public relations and their sheer size and power. They show how the rise of the Internet has enabled people to restart conversations in a global world. The basic message of the book is that the balance of power is rapidly moving away from giant impersonal corporations and shifting toward well-informed and articulate consumers. One of the main reasons behind the increase in power of the consumer is the fact that the Internet provides a means whereby they can group together into powerful virtual communities. One of the messages in this book is that the large suppliers who try to ignore this change will do so at their own peril.

One could argue that the balance of power, at least on the Internet, moved away from the giant corporations to articulate, well-informed and above all, well-connected consumers several years ago. This argument is supported by the 1994 Pentium fiasco. In June 1994, Intel engineers discovered a division error in their new Pentium chip. Intel managers decided not inform anyone outside the company on the grounds that the division error could only affect a very few customers. On 24 October, Dr. T. R. Nicely, a math professor in Virginia (who double-checked all his work by computing everything twice, on two different computers) detected the error and contacted Intel technical support to report the error. Intel did not get back to Dr. Nicely and so on 30 October Dr. Nicely emailed a few people to inform them of the bug he had discovered. On 3 November Terje Mathisen of Norsk Hydro posted a message entitled Glaring FDIV Bug in Pentium on the Internet newsgroup comp.sys.intel. By 24 November, the story had been reported by the New York Times and more than 200 other newspapers as well on the as radio and TV news networks.

At this stage, Intel made an offer to replace a Pentium processor only after Intel had determined that the processor would cause a problem in the application in which it would be used.

On 12 December, IBM issued a press release announcing that it had halted shipments of Pentium-based PCs and Intel stock had dropped by \$3.25 that week. By 20 December, Intel finally agreed to replace all flawed Pentiums upon request. Intel had to set aside a reserve of \$475 million to cover costs of the Pentium recall. On 18 January, 1995, the *Wall Street Journal* (cited in (Hoovers-Online 1994)) reported that Intel's flawed Pentium chips had produced a 37 per cent drop in their fourth-quarter profit for 1994.

The mistake made by Intel back in 1994 was to underestimate the power of, and fail to monitor the discussions of, their end-users who had become welded into a powerful virtual community by the Internet. Today, Intel posts all known flaws on the Internet to avoid a recurrence of this problem. It also provides a number of both technical and non-technical support forums for its user community. As Intel now say:



"The support that Intel provides with electronic messaging (email and support forums) provides the same technical expertise that can be found on the telephone as well as the instant documentation that can be found with self-help services. With publicly accessible forums, you have all of the benefits of email technical support, with the added benefit of the option of viewing previous messages written by other participants, and participating with pertinent suggestions and tips that can help others." (Intel 1999).

These forums also allow Intel to engage in conversation with their user communities and become a member of those communities.

However, as a manager you are not just concerned with the increasing power of virtual groups of consumers. We are also very much concerned with the nature and role of markets and how they should be regarded as communities.

# Community-building through ICT

Returning to Venkatraman and Henderson's concept of e-Communities, we might expect to see ICT vendors starting to market products aimed specifically at virtual community building. This has in fact happened. Indeed, in the ERP software arena, product developments have taken place almost exactly in accordance with the model.

Consider the premier ERP software vendor, SAP, and the developments in SA's product line (R/3) since the mid 1990s. Prior to the launch of release 3.1, in 1997, R/3 provided comprehensive and highly integrated functionality for virtually all of an organisation's internal business processes. However, it had no real facilities for interconnecting with either business partners or customers. Even traditional EDI was only supported if third-party products were bolted on to R/3.

The launch of release 3.1H in 1997, was the addition of a basic Internet Transaction Server layer to the traditional three-layer client-server architecture. Still, very little additional B2B or B2C functionality was provided with release 3.1. Then in 1998 and 1999, the launches of versions 4.5 and 4.6 included a massive new range of EC and EB functionality. SAP now provides a whole range of Internet-ready EC (front-end) and EB components providing linkages to the internal ERP components.

Since the release of 4.5, SAP has re-focussed on providing products that are designed to facilitate what Venkatraman and Henderson refer to as VO-ing and what Prahalad and Ramaswamy refer to as enhanced networks of traditional suppliers, manufacturers, investors and customers. Their major product groups are now labeled "marketplaces", "workplaces" and "business applications" and significantly they are presented in that order.

Marketplace products are primarily concerned with the creation of electronic marketplaces and include components such as portal management, auction systems, webcasting, forums, chat services and even a community management service. The Workplace products provide a one-stop, Web-based enterprise portal that lets the employee or any



other authorised person access the applications, information, and services available on the enhanced network. The business applications include:

- E-commerce (including the usual electronic catalogues, shopping carts, payment systems, etc.)
- Customer relationship management
- Supply chain management
- Strategic enterprise management
- Business intelligence
- Knowledge management

All these are in addition to the original core internal functions of and Human Resources Logistics Execution Manufacturing Product Lifecycle Management Financials. SAP's new outward focus is characterised by their own corporate portal. This has been re-branded mySAP.com and when accessed opens a window that displays:

#### **Share Your Thoughts About SAP's Web Site**

SAP values your opinion about all its products and services, and we would like to know what you think about our website. Our goal is to make SAP.com a truly customer-led site, and your comments are a critical part of our ongoing efforts to reach this goal.

Another vendor, NetSage, has developed customer relationship software agents, called "Sages", that integrate media with business and social rules. The software agents know when to intervene, what to say, and which product or recommendation is appropriate for a particular customer on the basis of what the customer has already done and the context of that customer's actions. The "Sages" are claimed to be socially intelligent and able to interact with a particular customers throughout the entire spectrum of the customer relationship.

NetSage state that the design of their software agents is based upon the psychological studies of Byron Reeves and Clifford Nass, who have demonstrated convincingly, in their book *The Media Equation*, that interactions with computers, television and new technologies are identical to real social relationships and to the navigation of real physical spaces.

However, it is possible for a business to create a virtual community without having to use extremely sophisticated extended ERP software or intelligent social agents. This is demonstrated by the ActionAce.com case. When ActionAce launched its website in June 1998, the site carried around 300 product items and had about 15,000 visitors in its first month. By August 1999, the site carried more than 1000 items and attracted more than two million visitors (Hong Kong Trade Development Centre, 1999).

In the second half of 1999 it expanded its product line significantly and invested heavily in advertising in the U.S. market to build up its brand name there. Its aim was to build a pop-culture community around its website. It already published a weekly magazine on toys, comics and movies at its site, and launched an auction market for collectible toys/action figures in quarter three of 1999.



By November 1999 the site had become the one of the web's premiere action entertainment portals with over 65,000 toys, action figures, video games and animated titles in stock, daily entertainment news, and original episodic animated content. According to NCompass Labs (Vancouver, Canada):

"Actionace.com is raising the online experience to a new level combining original content, a passionate community and e-commerce to create an all-inclusive action entertainment experience." (NCompassLabs 1999).

In the second quarter of 2000, ActionAce launched its new "NeoGlyphix" service, which provided exciting webisodic animated shows that play through your PC or MAC on Netscape and Explorer, using the Macromedia Flash plug-in.

They plan to introduce online gaming so that virtual community members can game together over the Internet. A visit to the ActionAce portal, and the services that lie behind, is more like spending time in a club than a retail outlet.

# Global branding and customer relationship management

# e-branding creation and positioning

Plant (2000) suggests that there are four variations e-businesses may adopt as marketing strategies, all of which relate to the concept of brand image:

- 1. Brand creator
- Brand re-inforcer
- 3. Brand follower
- 4. Brand re-positioning

These four strategies all have merits and must be assessed on the basis of the e-business strategy and the organisation's market positioning. However, what is important is how the customer relationship will be managed in each of these strategies and how it can be measured. The term, which is normally used to measure this concept, is "brand equity" and refers to the actual financially related value of the branding image. Coca Cola has a huge investment in brand equity as do Nike but a company supplying part-finished goods to branded suppliers has no brand equity and no need of one in these terms. (This should not be confused with company image and reputation.)

The four main drivers of brand equity are:

- 1. Brand name awareness
- Brand loyalty
- 3. Perceived quality



#### 4. Brand differentiation

Generally, there are seven key factors which together can provide an indicator of brand strength:

- 1. Leadership
- 2. Stability
- 3. Market
- 4. International scope
- 5. Trend
- 6. Support
- 7. Protection

These suggest that a global e-business needs to develop a multicomponent strategy for the creation and protection of brand equity, focusing on brand leadership, stability and global market positioning through proactive corporate policies.

# **Customer relationship**

#### **Customer orientation**

The Internet and e-business technologies that are enabling our new organisational forms are radically changing the relationship between supplier and customer. Customer relationship handling is seen to be a strong asset as it brings the benefits of improved service, choice, and convenience to the customer and aids in customer retention and repeat orders for the organisation. Today's electronic commerce isn't limited to shopping over the Internet. Neither is it confined to supply chain transactions between large trading partners. Electronic commerce means doing business electronically – all of the aspects of doing business. It embodies the total business process – from advertising and marketing to sales, ordering, manufacturing, distribution, customer service, after-sales support, and replenishment of inventory – managing the entire customer and product lifecycle.

When we look to apply e-business strategies, we're applying new technologies to streamline our business interactions. These technologies use the Internet as a backbone but are increasingly looking to integrate advanced telephone systems, handheld digital appliances, interactive TVs, self-service kiosks, smart cards, and a whole host of emerging technologies. All of these customer-facing technologies are supported, behind the scenes, by integrated customer databases, call centres, ERP and workflow systems, and secure transactional systems. They require sophisticated management so that systems communicate – seamlessly, reliably, and securely – across corporate and geographic boundaries.

### Common customer management themes

When we consider how companies are looking to manage the customer experience in a new way, we can identify eight recurring themes. They are:



- Targeting the right customers
- 2. Owning the customer's total experience
- 3. Streamlining business processes that affect the customer
- 4. Providing an all-round view of the customer relationship
- Letting customers help themselves
- 6. Helping customers do their jobs
- Delivering personalised service
- 8. Fostering community

#### Targeting the right customers

First, we need to ask whether we have identified the most profitable customer segment. Which people make or influence purchasing decisions? Which group of desirable customers are defecting or choosing a competitor? Therein lies the first target market for your initiatives – to make it easy for the right customers to do business with you.

#### Owning the customer's total experience

How much control do you have over your end user's total experience? The customer's experience starts with learning about your products, then choosing an item, making a purchase, taking delivery, setup, installation, after-care, purchasing follow-on products, taking delivery, receiving accurate bills, and perhaps filing a complaint or resolving a dispute. If you deal through channels, you are ultimately responsible for the customer's entire experience with that channel partner. If you outsource delivery, service, or other operations, you still care about the quality of the experience the customer is having.

#### Streamlining business processes that affect the customer

Federal Express and United Parcel Service (UPS) are good examples of companies that have automated and streamlined the entire end-to-end business process that affects the customer. Everything is a candidate for this process, from product design and manufacturing, shipment and delivery, pre-sales and post-sales service, to credit checking and billing. Most large companies have re-engineered internal operations to reduce cycle time or cut costs, but only a few companies have done this by focusing on the processes that have the greatest impact on customers. To be successful in e-business, you'll need to streamline your business processes from the outside in – from your customers' perspective – rather than from the inside out.

#### Providing an all-round view of the customer relationship

Efficient call centre and customer management are built on the same seamless infrastructure that gives customers (and customer service reps) direct access to all accounts and functions across computer systems, business units, and departments. This means that account reps and customers helping themselves have immediate access to every service the customer has asked for, the service history for each, and his or her current account status.



#### Letting customers help themselves

We can all learn how industry leaders are making a success of letting customers help themselves. A stroll though the online customer interfaces of Dell Online and iPrint shows how customers who want to help themselves can do so. They can simply find information but can also order products via the Web. These companies have thought through each step of the customer's decision-making and procurement process. It is time to measure your organisation against this standard. How far can customers go in self-service? What happens when they reach a stumbling block? Can customers interact with your organisation 24 hours a day from anywhere?

Once you get people to order online, or through any channel, for that matter, you need to allow them to check what is happening to the order. The Web provides the cheapest and simplest way for customers to do this and give them an empowered feeling of importance while saving the company money. In Cisco's case, as soon as they made online order status-checking available, calls to the call centre dropped to ten per cent of the former volume. Customers simply went to the Web, and liked it.

#### Helping customers do their jobs

Do you really understand your customers' decision-making process? Do you know how your product or service fits into your customer's job? Do you know what it would take to really integrate your product or service seamlessly into your customer's job?

#### Delivering personalised service

Dow Jones's Wall Street Journal Interactive and Liberty Financial's Stein Roe Farhnham websites are great examples of delivering cost-effective personalised service on the Web. Both build dynamic websites for each individual based on that person's profile. Personalisation may mean tailoring the offer directly for each customer, as in the two examples above, or it may involve simply making account information available, or selectively alerting customers to items of particular interest to them.

What, we may ask, is the difference between handmade shoes made to measure by the local cobbler versus the kitchen made to order by an Internet design service? Both provide customised service, but the latter combines it with post-industrial revolution economies of scale. This is achievable because the design service can serve a widely spread geographical population, using the data transport provided by the Internet and the physical transport of our late 20th-century infrastructure, plus a database-driven manufacturing facility.

#### Fostering community

Why is fostering community a way to make it easier for customers to do business with you? At first, it seems like a nice to have, but not essential, characteristic of an easy-to-use website or a successful customer loyalty programme. But as the success of Newsnet and online communities and chat rooms of many types demonstrates, customers gain a lot of value from interacting with one another and often find the community aspect of a website is what makes them feel taken care of.



Cisco Systems' incredible success in electronic commerce (in addition to good products) has been built on a foundation of community – customers helping each other to solve highly technical problems. Each company now needs to ask what its customers have in common. Would they value the opportunity to learn from one another?

# **Customer relationship management**

While companies like Dell and Amazon stay in the headlines, it is not surprising that many people believe that B2C e-business is a strong new business event. The reality is that, as many large (mainly U.S.) conglomerates know, the real value of e-business lies in B2B transactions. A survey by the U.S. Census Bureau of the Commerce Department published in 2001 shows that in 1999, B2B activity accounted for USD 485 billion as against USD 15 billion in B2C transactions.

This means that 12 per cent of manufacturing shipments were made, at that time, as a result of e-business transactions within the world's largest economy. And the figure has been rising since then, particularly through industry portals and e-hubs. The same survey published in May 2012 reported that in 2010, B2B activity was at USD 10,690 billion against USD 14,908 billion in B2C transactions. We therefore need to consider, as a matter of urgency, our strategy for managing the customers we have through these channels.

#### Online transactions: personal or impersonal?

Nobody, in their role as customer or supplier, likes being reduced to a line item in a catalogue. We value being treated as individuals and enjoy dealing with other people. But once we start to think about online opportunities, all sorts of possibilities open up. Replacing the static catalogue, sending an email, or possibly speaking with an inexperienced sales representative; sellers can use online technology to present their wares precisely the way they want. Instead of describing a product, suppliers will be able to show the product in use, offer real-time education and training, and actuate pop-up chat windows to speak with experts on the topic. Also, online-based sales methodologies are reliable. They aren't renowned for having a bad hair day or leaving the office to play golf. Getting the best of both worlds, content gets presented in a consistent fashion and can still be customised for groups and individuals.

#### Profiling and segmentation will boom

Exchanges that help suppliers develop close linkages with their customers through the marketplace will find it a lot easier to attract suppliers. They don't want to treat every customer the same and customers have different needs and differ in importance to the supplier. An intermediary represents a potential barrier between transacting parties. Exchanges that make that barrier as permeable as possible and provide technology infrastructure to foster relationship-building should have a good value proposition for suppliers.

Not surprisingly, a batch of specialist companies has emerged to provide the technology for profiling and segmenting customers by behaviour traits – both online (website traffic) and offline. Analytical technologies



for customer profiling and segmentation from companies like E-piphany, Broadbase, and Hyperion will be converted into marketplace services over time. So while buyers can compare suppliers on price, suppliers can also compare different types of buyers. Suppliers will be able to discover the 20 per cent of the customers that represent 60 per cent of the profits. Buyers will see presentations created on the fly and addressing their specific needs.

#### One-to-one marketing

A notion gaining currency in the context of e-business, both for B2C and B2B marketing is that of one-to-one marketing. This activity uses customer databases and interactive communications to sell to each customer on each occasion a bundle of as many products as are needed in that sales period. To happen, this marketing strategy is based on the combination of a deep knowledge of the customer's wants plus the company's ability to customise the delivery of products and services.

Serving the customer on the basis of lifetime worth, rather than single transaction-based profit opportunity, requires a combination of information gathering, storage and retrieval. Add also the ability to customise production and probably cooperate with other companies.

#### Marketing segmentation and automation

There is a strong counterbalancing opportunity to assure those who fear that large trading hubs and the widening of electronic markets will drive prices down everywhere, forcing many companies out of existence. That counterbalancing force is the potential for the digital medium to offer different customer segments different pricing, negotiated contracts, custom promotions, and related products and options. Suppliers will orchestrate marketing campaigns and promotions in the context of the marketplace. Suppliers have spent significant sums on marketing automation and aren't about to revert to one-size-fits-all marketing because of exchanges.

#### Personalisation and interactive selling

Exchanges will have to offer much more sophisticated selling metaphors over time to offer context-based promotions, suggestions, and configurations. Moreover, buyers want more information and context around the transaction to make more intelligent procurement decisions.

Advanced technologies such as streaming and interactive video will provide immediate information in context.

#### Cosset the customer – Web-based call centres

Before the Internet, we saw two major call centre technologies in operation. The first was the Interactive Voice Response (IVR) system which gave limited self-service to customers who used buttons on touchtone telephones to navigate the customer service centre where they searched for answers to queries. By means of the other technology, Computer Telephony Integration (CTI), the caller – as well as information about his or her account history – was directed by computer to the selected call centre representative.



Now, however, for many customers the Internet is the preferred channel of interaction with a business. Because of this, and because of the efficiencies involved, it is time to consider Web-enabled call centres to provide multiple contact points through which Internet users can access customer service at your company. The modern Web-enabled call centre includes a variety of vital functions: in particular, call back; automated email response; interactive chat; voice-over IP; and shared browser sessions. Let's review how these work out in operation.

#### Interactive chat

The caller opens the company website and uses a link on the browser to join up for an interactive chat session. The call is routed through the call centre to the appropriate service representative identified by such factors as language, product/model and/or history of site navigation. He or she then types into an appropriate chat session. Each service representative deals with many users, each of whom sees themselves as having a one-on-one chat with the representative.

#### **Voice over Internet protocol (VoIP)**

Again accessing the website and linking through the browser, the caller indicates that he wants to join a voice session and is equipped for this purpose with a microphone and headset plugged into the computer. This starts a Voice-over IP call (meaning that the cost of long-distance rates is forgotten and the call is merely charged at local Internet link rates.) Typically, information about the caller and the last Web pages visited on the site are displayed on a screen to the receiving service handler. Replacing expensive dial-up long-distance, international or 1-800 numbers, this facility can be widely used.

#### **Shared Web browser sessions**

To use this service, the caller dials in as above, using VoIP, and the service agent and user communicate by VoIP. The service representative then synchronises the customer's browser so that both parties are seeing the same screen in front of them, and the service agent leads the user to specific website pages while communicating with him or her by voice.

How far a company chooses to put in place one or more of these solutions depends on business strategy, products and the needs/preferences of customers. These solutions are typically layered, with visitor call-back often occurring as the starting point. For example, a customer service function that offers automated email response would want to offer call-back as an option as well.

#### The benefits

Moving to a Web-based call centre is more a long-term decision than a tactical one for several reasons. It determines the face that an enterprise presents to the public. It needs an awareness of, and decision in the management strategy about, two of a company's most important assets – its prospects and its customers. A Web-based call centre will have wideranging impact on the technology infrastructure. It should call for a broad segment of the organisation to take part in serving customers. We suggest that this will certainly be used to competitive advantage – by you or your competitors.



The value proposition to be made for the Web-enabled call centre and its major components includes: minimising lost sales, transforming information gatherers into shoppers, increasing the size of the average sale, and increasing long-term customer value. Visitors arrive at your website to buy or to obtain information by which they can compare your product value to that of your competitors. There will be an increasing number of customers who prefer to interact with your company through Internet channels for speed, convenience and cost considerations. There will also be others who need help in navigating your site for information you have provided but which they have been unable to locate.



# **Module Summary**



Summary

The increasingly widespread use of the Internet means that corporations can no longer control the information and knowledge available to their customers, as was shown by the Pentium fiasco. Instead corporations should be leveraging the knowledge their customers possess in order to co-create value for the wider community as well as the organisation.

The ICT required to do this is now readily available. Whether or not companies will make use of this technology to create their own customer communities remains to be seen.

However, success within the global e-Community will require:

- differentiation and the creation of attractive communities;
- creation of unique value propositions;
- The ability to be a "good citizen" and to enter into engaging dialogues with other members of the e-Community; and
- understanding of and compliance with political, legal and societal standards.

Jarvenpaa and Tiller (1999) suggest that this complex economic, social, political and legal e-business environment must be addressed by managers assuming a policy-making and interventionist role far beyond that which would normally be expected in a traditional marketplace. Research that brings such issues together is essential for the evolving global player and should address the following:

- What is the current and future landscape of policy affecting ebusiness?
- What strategies either individually or collectively are being developed to confront policy issues and institutions?
- How does e-business structure its assets and resources to take advantage of the uncertain policy environment?
- How does the policy environment affect the relationship between the e-business and the consumer?
- What is the role of the global e-business in policy choices and policy implementation?

For the e-business organisation playing in a global world, there are no rules but many lessons to be learned from multinational and cross-cultural organisations. Those that survive accept a much broader portfolio of concerns and apply constant reappraisals to their marketplace.



# **Assignment**



**Assignment** 

 Pacific Century Cyber Works www.cyberworks.com has as one of its mission statements:

Deliver innovative services that enhance the lifestyles and businesses of our customers.

Review their Network of the World (NOW) service and evaluate the extent to which this is a customer driven model using Table 6.7 and 6.8. as guides.

- 2. Compare the sites of the Lego Company, Toys 'r'Us, with ActionAce.
  - a. Which of these do you think provides the most effective e-community?
  - You should list three strengths and weaknesses of each site.
- Hofstede figure 6.8 summarises the work from a number of sociologists with regard to cultural differences between societies. Review this table and compare your own perceptions of cultural assumptions between your present country of residence and that of the U.S.
  - a. Where do you see the major differences? Where are there strong similarities? What advice would you give a U.S. manager who was about to take up a role as CEO for a joint venture based in Shanghai?
  - b. In your tutorial session you should also compare your perceptions with those of your fellow students – do you all agree?

To understand more about this model you are referred to Hofstede G.H., & Bond M.H. (1988). The Confucius Connection: From Cultural Roots to Economic Growth. *Organisational, Dynamics*, 16(4), pp. 4-21. 14.

- 4. Return to the Amazon.com website and, using the model presented in Figure 6.3, analyse their value chain and the players who interact at each stage of this chain. Take as an example another organisation with which you are familiar and identify the value chain in which it is embedded. This can be applied on their traditional (non- electronic) business model. Now evaluate their e-business strategy:
  - a. Do they have one? If not, why not?
  - b. What is or should be their strategy?
  - c. What alliances should they make?
  - d. What business model should they adopt (B2B, B2C, B2G, B2E)?

(Note: This model applies equally well to the non-profit or public sector and to the service sector as well as retail and manufacturing.)



Applying value chain analysis is a useful approach as a first step to understanding how useful ICT can be in developing shared competencies with other market players. The next step is understanding how to leverage this.

5. Go to the Yellow Pages website, http://www.yellow-web.com/, and explore the e-market forum.

How would you classify this marketplace? How effective are these marketplaces? How might you add value to this hub?

Now go to http://www.b2bYellowpages.com/. How does this forum differ from the previous one? Using Table 6.4., classify these emarkets according to controllers.

- a. If you were asked to advise a business in your own country how to join an e-marketplace, would you advise yellow pages as a way to go?
- b. How could this be adapted for government or public services?
- c. What factors would influence effective community use?



# **Case Studies**



Case study

1. Read the following news release published in The Ecommerce Times

#### **Seven-Eleven to Install Terminals**

E-commerce is exploding in Japan, according to a report by the Electronic Commerce Promotion Council of Japan (ECOM), which found that Japanese consumers spent \$3.2 billion (USD) online last year, and projected that they will spend \$68 billion online by 2005. Although 27 million Japanese, or 1 in 5, have Internet connections, 7dream.com is not taking any chances. Seven-Eleven said that it will soon begin installing terminals in its convenience stores for those people who do not have Internet access at home. Seven-Eleven plans to integrate the services of 7dream.com with its e-Shopping! Books, which is a joint venture with Internet investor Softbank. An announcement describing further details of the integration is expected in a month.

Seven-Eleven has applied for a patent for the 7dream.com e-commerce business model, according to Suzuki. Partners in the 7dream.com venture include electronics giants Sony and NEC, the Nomura Research Institute, and major trading house Mitsui & Co Ltd. Playing down the possibility of Softbank joining the venture, Suzuki said, "Partners of the venture will remain unchanged for the time being."

Seven-Eleven is aiming for profits of USD 1.4 billion in its fiscal year 2001 to 2002 and double that the following year. Although Seven-Eleven remains profitable, convenience stores in Japan have been dwindling in the last year. The Japan Franchise Association announced earlier this week that convenience store sales were 1.6 per cent lower in May than sales from the same month last year. The association said it was the second straight monthly decrease.

Despite Japan's economic woes, e-commerce is growing. Speaking at an e-commerce symposium of U.S. and Japanese executives earlier this week, Teruyasu Murakami, managing director of Nomura Research Institute, said e-business in Japan had grown steadily since the mid 1990s. He added that between 500 and 800 e-businesses opened their virtual doors in Japan each month. He also said that Japanese firms are starting to innovate and create new business models. He said a company such as 7dream.com would only be possible in Japan, where convenience stores are within walking distance from almost any location. (adapted from http://www.ecommercetimes.com/perl/story/3624.html).

Answer these questions:

- a. What do you think are the strategic objectives for 7dream.com?
- b. What cultural, social or political factors will



affect the successful implementation of 7dream?

- c. How would these relate to a similar venture in your own country of residence?
- d. Would you describe 7dream.com as a global or local e-business?
- e. Would you invest in a similar venture in your own country?





Case study

2. Read the following report condensed from a report in E-Commerce Times in 2002.

(http://www.ecommercetimes.com/perl/story/16578.html)

#### **Grocery Kiosks**

According to NetGrocer, kiosks will make it easier for supermarkets to fulfil special requests made by customers, rather than taking a week or more to fill the request. Today companies can seamlessly cross geographic borders and time zones by leveraging the power and flexibility of a Virtual Private Network.

NetGrocer, an online food delivery service that focuses on shipping packaged goods, has struck a deal with supermarket chain Stop & Shop to test in-store kiosks for its Web service. The kiosks, billed as the endless aisle, will feature items not typically found on grocery store shelves, NetGrocer president and CEO Lisa Kent told the E-Commerce Times. The programme will begin with a 90-day pilot at stores near Stop & Shop's Quincy, Massachusetts, headquarters. The supermarket chain operates 320 stores in the northeastern United States. At the same time, a NetGrocer link will begin appearing on the Stop & Shop website. If successful, the kiosks will be set up in other Stop & Shop stores and possibly in other chain stores owned by parent company Royal Ahold.

The kiosks will help Stop & Shop answer customer requests for specialty products – requests that, if not met, often frustrate shoppers and send them to a competing store, according to Kent.

The NetGrocer site features more than 50,000 products, many of which cannot generate enough sales to win space on store shelves but are still sought by numerous customers, such as those on special diets. For example the site carries Parmalat organic milk and some brands of Quaker cereal no longer available in stores. Purchases will be shipped to a customer's home by FedEx and will arrive within a few days. Right now, there is no easy way for a supermarket to fulfil a special request when a special request is made at a brick-and-mortar grocery store – it usually takes a week or more for the request to be filled. Sometimes the customer must buy a full case of the product, even if he or she does not want that much of it. Kiosks offer a way around such problems.

The in-store kiosk programme expands on an existing relationship between NetGrocer and Royal Ahold, which also owns online grocery firm Peapod. Last year, North Brunswick, New Jersey-based NetGrocer took over from Peapod when it discontinued Peapod Packages, a nationwide grocery delivery service. NetGrocer also announced that it is changing its name to NeXpansion – the decision reflects the fact that NetGrocer, which has begun to offer Web-based services to grocery chains, is now more than an online store. The NetGrocer site, which first appeared in 1996, will continue to operate as an e-commerce store.

Few e-commerce sectors have undergone as much change and upheaval as the online grocery space. Such companies as Webvan,



Streamline.com and HomeRuns.com have folded, while Peapod and others have abandoned national expansion programmes. But despite the struggles of these onetime sector heavyweights, new companies are entering the e-commerce grocery fray.

Safeway (NYSE: SWY), for instance, recently launched an online grocery service in conjunction with Tesco, which has had success with its online shopping model in the United Kingdom.

#### Answer these questions:

- a. How does this model differ from the Japanese model described at 7dream.com? Discuss the differences in the context of organisational models, global reach and cultural issues.
- b. Would this model attract success in your national environment? Please give reasons for and against.



# Case Study Reading 6.1



Case study

Read Case study 6.1. Farhoomand, A. and Chang, E. (2000). iTV: Marketing Interactive Services. University of Hong Kong. Ref 00/99c.

- 1. Apply a competitive analysis to iTV using any of the models we have introduced in the course
- 2. What are the major threats to iTV?
- 3. How would you evaluate their marketing strategy and what do you think they should do next?

# Case Study Reading 6.2



Case study

Read Case study 6.2. Ng. P. and Lovelock, P. (2000). Dell: Selling directly, globally. University of Hong Kong. Ref. 99/53C.

You should read this case study thoroughly and then investigate their website before you answer the following questions. Bear in mind that the market has changed substantially since 1999 and so you should try and relate your answers both to 1999 and then again to this year.

- 1. Do you think the direct model will work in China? What might the problems be?
- 2. Can Dell use their strategy to become number two in the Asia Pacific region?
- 3. How should Dell pursue its global strategy?



# **Assessment**



**Assessment** 

- 1. Plant (2000) identifies seven key drivers of change in the global environment: 1) Technology change, 2) Government and political change, 3) Service changes, 4) Market changes, 5) External relationship changes, 6) Branding changes and 7) Organisational changes.
  - Consider what the components of these key drivers might be in relation to your own organisation and identify three key issues which will shape future success.
- 2. Apply these four questions to your own organisation, identifying the specific features that apply and then justify the particular e-market model that should be applied.
  - a. Are there transaction savings or benefits to be realised?
  - b. Is an electronic market for our product developing quickly?
  - c. Would a neutral intermediary be beneficial?
  - d. Do we have substantial market share or buying power?
- 3. Using the knowledge you have gained from this course Management Information Systems, identify five specific opportunities and five threats to your organisation from entry into the global marketplace.
- 4. Compare the ICT environment for e-business development and the extent of national and global IT penetration between your country of residence and the U.S. Identify five key differences and review the likely impacts of these.
- Plant (2000) suggests four branding strategies to create unique positioning in the marketplace through effective use of ICT. These are: (a) Brand creation, (b) Brand reinforcement, (c) Brand reposition and (d) Brand follower.

Your CEO would like to understand these concepts and how to apply them in the organisation. Suggest answers to the following strategic questions posed by your CEO:

- a. What are the main advantages and disadvantages of each branding strategy? (You should provide between 1 and 3 for each.)
- b. What examples are there of companies who have been successful in pursuing each of these strategies in the global marketplace? (Give at least one example of each.)
- What examples can I look at in the local marketplace? (You can choose to give one example in detail or briefly mention several.)



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