

IT6506 - eBusiness Technologies

4. Development of eBusiness Strategies

Level III - Semester 6

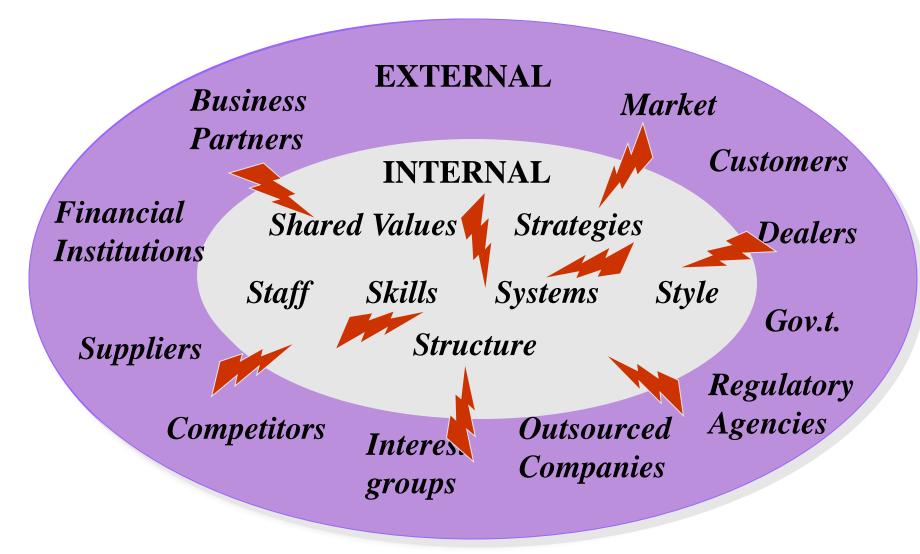




4.1 The Business Environment

Business Partners	EXTERNAL Market				
Tarrers	INTERNAL		Cu	Customers	
Financial Share Institutions	d Values	Strategies		Dealers	
Suppliers Suppliers	Skills Struc	Systems cture	Style	Gov.t.	
Competitors	Interest groups	Outsource Companie	ed Ag	gulatory rencies	

The Forces in The Business Environment



4.2 Driving Forces for Change

There are several driving forces for change in a business organization

- i. Technological advancements: Rapid technological advancements can disrupt traditional business models and create new opportunities for businesses. To stay competitive, organizations must adapt to new technologies.
- **ii. Market changes**: Changes in consumer preferences, competitor strategies, and economic conditions can all drive changes in a business organization. Organizations must be able to respond to these changes to stay relevant.
- iii. Government regulations: Changes in government regulations can force organizations to change their business practices to remain compliant.

4.2 Driving Forces for Change... Contd.

- iv. Internal factors: Internal factors such as poor performance, financial constraints, and employee turnover can all drive change within an organization.
- v. Globalization: Increased globalization can create new opportunities for businesses to expand into new markets, but it can also create new challenges that require organizations to adapt.
- vi. Social factors: Changes in societal values and beliefs can also drive change in an organization. For example, increasing concern about sustainability and the environment may force companies to adopt more environmentally friendly practices.
- vii. Demographic shifts: Changes in demographics, such as aging populations or changes in workforce composition, can also drive change in organizations as they adapt to changing customer and employee needs.

4.2 Driving Forces for Change... Contd.

Technical Forces

- •Internet & WWW
- •Communication Explosion
- •Technological advancement
- •Information Revolution
- •Virtual Connectivity
- •No Geographical boundaries
- •etc.

Driving Forces for Change

- **Business Driven Forces**
 - •Bargaining power of buyers
 - •Bargaining power of suppliers
 - •Market Changes
 - •Strong Competition
 - •Adopting New Strategies
 - •Diversifying in to new products
 - •etc.

- •Government regulations
- •Pressure from business partners
- •Pressure from interest groups
- •Market changes
- •etc.





- •Changes in business processes
- •Changes in management
- •Changes in staff/structure
- •Changes in value systems
- •etc.

Internal Forces

4.2.1 Technical Forces for Change

- ➤ Information Technology: Rapid advancements in information technology can have a significant impact on business processes and systems. Organizations need to adapt to new hardware, software, and networking technologies to remain competitive and efficient.
- ➤ Automation and Robotics: The integration of automation and robotics technologies in various industries can lead to significant changes in job roles and processes. Businesses may need to implement automated systems, retrain employees, or create new roles to leverage these technologies effectively.
- ➤ **Digital Transformation:** The shift from traditional analog processes to digital systems is a major force for change. Organizations may need to adopt digital technologies, such as cloud computing, big data analytics, artificial intelligence, and Internet of Things (IoT), to streamline operations, improve customer experiences, and stay relevant.
- ➤ E-commerce and Online Business Models: The rise of e-commerce and online platforms has disrupted traditional business models. Companies need to adapt to online selling, digital marketing, and omnichannel strategies to reach customers effectively and compete in the digital marketplace.

4.2.1 Technical Forces for Change... Contd.

- ➤ **Cybersecurity and Data Privacy:** With the increasing reliance on technology and data, organizations face challenges related to cybersecurity and data privacy. Businesses must implement robust security measures, comply with regulations, and protect customer information from cyber threats.
- ➤ **Mobile and Remote Workforce:** The proliferation of mobile devices and remote work arrangements has transformed the way businesses operate. Organizations need to provide mobile-friendly solutions, collaboration tools, and flexible work options to support a mobile and remote workforce effectively.
- ➤ Emerging Technologies: New technologies, such as blockchain, virtual reality, augmented reality, 3D printing, and quantum computing, can disrupt industries and create opportunities for innovation.

 Organizations must monitor and evaluate the potential impact of these emerging technologies on their operations.

It's important for business organizations to stay agile, embrace technological advancements, and proactively adapt to these technical forces for change to remain competitive and meet evolving customer needs.

4.2.2 Business Driven Forces for Change

- ➤ Market Dynamics: Changes in market conditions, such as shifts in customer preferences, emerging trends, or new market entrants, can create a need for change. Organizations must adapt their products, services, and strategies to stay relevant and meet customer demands.
- ➤ Competitive Pressures: Intense competition within an industry can force organizations to change in order to maintain or improve their competitive position. This may involve innovations, cost reductions, differentiation strategies, or entering new markets.
- Customer Expectations: Evolving customer expectations and demands require businesses to continuously improve their products, services, and customer experiences. Organizations must stay attuned to customer feedback and adapt their offerings accordingly.
- ➤ Organizational Growth or Restructuring: When organizations grow or undergo restructuring due to mergers, acquisitions, or changes in leadership, it often necessitates change. Integration of systems, cultures, processes, and alignment of objectives become critical during such transitions.

4.2.2 Business Driven Forces for Change... Contd.

- ➤ **Performance Improvement:** Declining performance indicators, such as decreased profitability, low productivity, or customer dissatisfaction, may trigger the need for change. Organizations must identify areas of improvement and implement strategies to enhance performance and operational efficiency.
- ➤ **Regulatory and Legal Compliance:** Changes in laws, regulations, or industry standards can require organizations to adapt their practices, policies, and procedures. Compliance with new requirements and avoiding legal risks becomes a driving force for change.
- > Strategic Initiatives: Organizations may embark on strategic initiatives, such as entering new markets, launching new products, or implementing new business models. These initiatives often require significant organizational change to align with new strategic directions.
- ➤ **Technological Advancements:** As mentioned earlier, technological advancements can be both a technical force and a business-driven force for change. Organizations must leverage technology to drive innovation, improve processes, and gain a competitive edge.

Business organizations must be proactive in anticipating and responding to these business-driven forces for change.

4.2.3 External Forces for Change

- **Economic Factors:** Changes in the economic environment, such as fluctuations in market conditions, economic recessions, inflation, or changes in interest rates, can significantly impact businesses. Organizations may need to adjust their strategies, cost structures, pricing, or investment decisions to adapt to economic shifts.
- > Technological Advancements: Advancements in technology, as discussed earlier, are both technical and external forces for change. Technological breakthroughs, disruptive innovations, or the emergence of new technologies can compel organizations to adopt new systems, processes, or business models to stay competitive.
- > Social and Cultural Factors: Changes in social and cultural norms, values, lifestyles, and demographics can drive changes in consumer behavior and expectations. Organizations must understand and respond to these shifts to meet customer needs, address social concerns, and maintain their brand reputation.
- Political and Legal Factors: Changes in political landscapes, government policies, and regulatory frameworks can have a significant impact on businesses. Organizations must comply with new regulations, adapt to policy changes, to manage political risks w.r.t. legal/ethical © 2022 e-Learning Centre, UCSC

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4.2.3 External Forces for Change... Contd.

- ➤ Competitive Forces: Competition from existing competitors or the entry of new players can create pressure for change. Organizations must continuously monitor and analyze the competitive landscape, identify opportunities for differentiation, and respond with strategic changes to maintain or improve their market position.
- ➤ **Environmental Factors:** Growing concerns about sustainability, climate change, and environmental protection have prompted organizations to adopt environmentally friendly practices. External pressures, such as environmental regulations, consumer demands for eco-friendly products, or reputational risks, can drive organizations to implement sustainable strategies and reduce their ecological footprint.
- ➤ **Globalization and International Factors:** Expanding into global markets or facing international competition can introduce new forces for change. Organizations must adapt to diverse cultural norms, global supply chains, international trade policies, and global economic conditions to succeed in the global marketplace.

These external forces for change highlight the importance of organizations being responsive & adaptable to the external environment. By monitoring & anticipating these forces, businesses can proactively identify opportunities and challenges, and develop strategies to effectively navigate & get advantage of external changes.

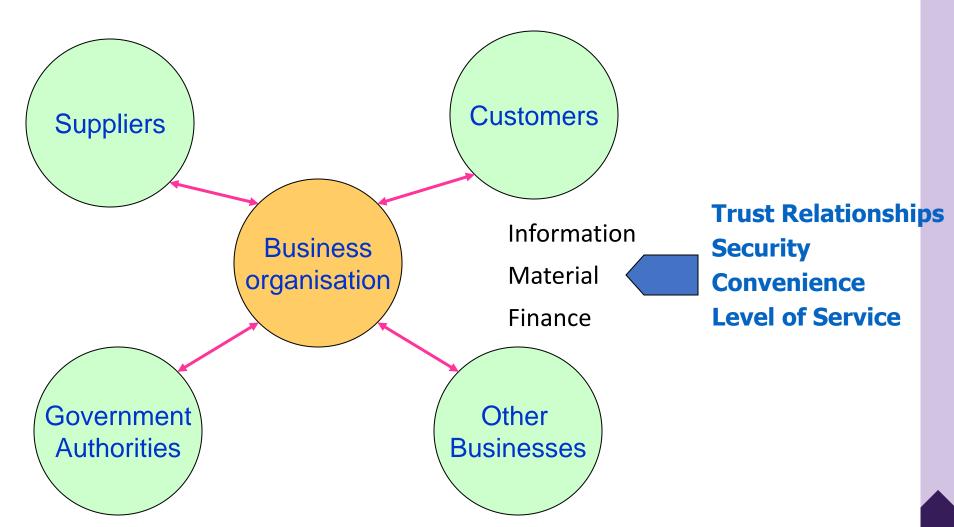
4.2.4 Internal Forces for Change

- ➤ **Organizational Strategy**: Changes in strategic direction, goals, or priorities of the organization can create a need for change. This may involve entering new markets, diversifying products or services, or adopting new business models. Strategic shifts often require adjustments to structures, processes, & resources within organizations.
- Leadership Initiatives: Leadership decisions, such as changes in top management, new executives, or shifts in leadership style, can trigger organizational change. New leaders often bring different perspectives, strategies, or priorities that require adjustments in organizational practices and culture.
- ➤ **Organizational Culture:** Cultural factors, such as values, norms, beliefs, and behaviors within the organization, can influence the need for change. Cultural change initiatives may focus on fostering innovation, improving collaboration, enhancing employee engagement, or creating a customer-centric culture.
- Figure Engagement and Feedback: Input from employees, such as feedback, suggestions, or employee surveys, can reveal areas that require change. Employee engagement initiatives or programs that encourage innovation and continuous improvement can generate internal forces for change within the organization.

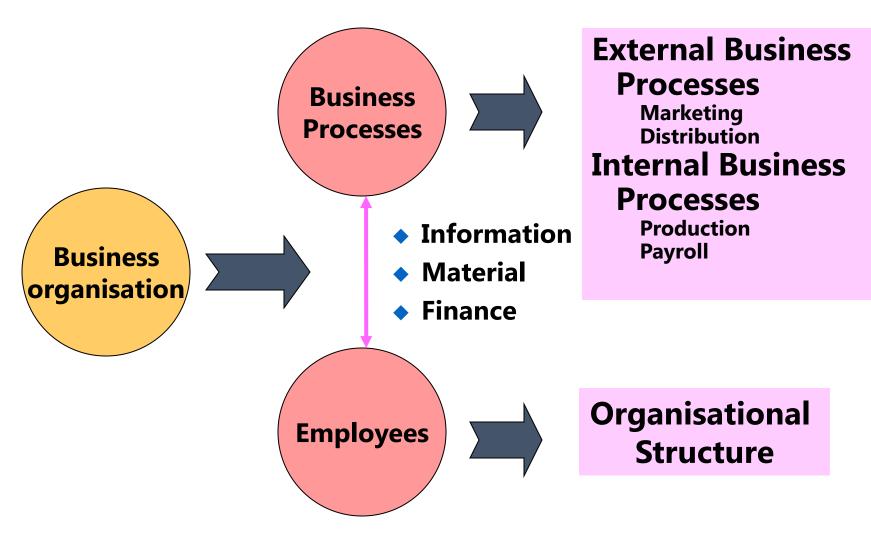
4.2.4 Internal Forces for Change... Contd.

- ➤ **Organizational Structure:** Changes in the organizational structure, such as mergers, acquisitions, or restructuring, can drive the need for change. Structural changes often involve realignment of roles, responsibilities, reporting lines, or the creation of new teams or departments.
- Performance and Productivity: Poor performance, declining productivity, or inefficiencies can create internal pressures for change. Organizations may need to streamline processes, improve operational efficiency, or implement performance management systems to enhance productivity and profitability.
- Employee Skills and Development: Changes in the skills and capabilities required by the organization can necessitate internal change. This may involve training programs, talent development initiatives, or workforce planning to ensure employees possess the necessary skills to meet evolving organizational needs.
- Technology Adoption: Internal decisions related to technology adoption or upgrades can drive change within the organization. Implementing new systems, upgrading infrastructure, or integrating digital tools may require adjustments in processes, training, and workflows.

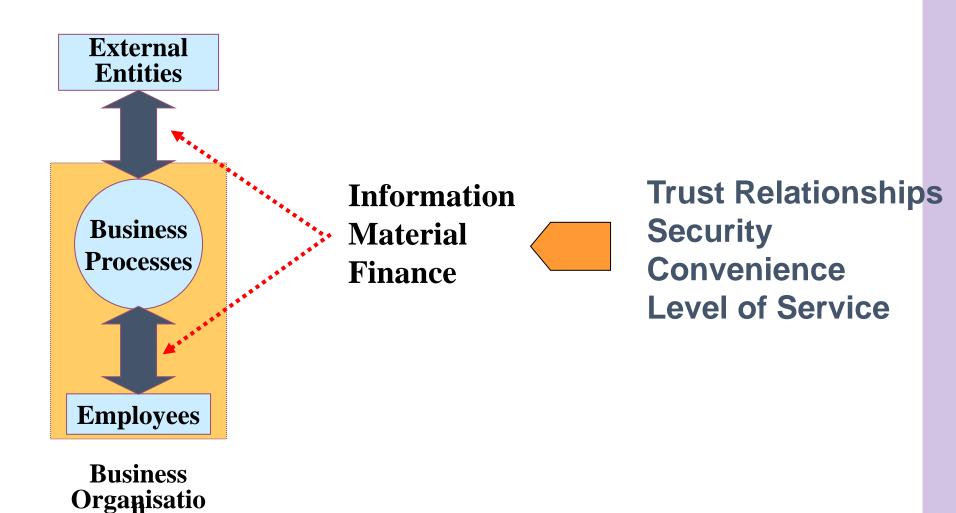
Interactions with the external World



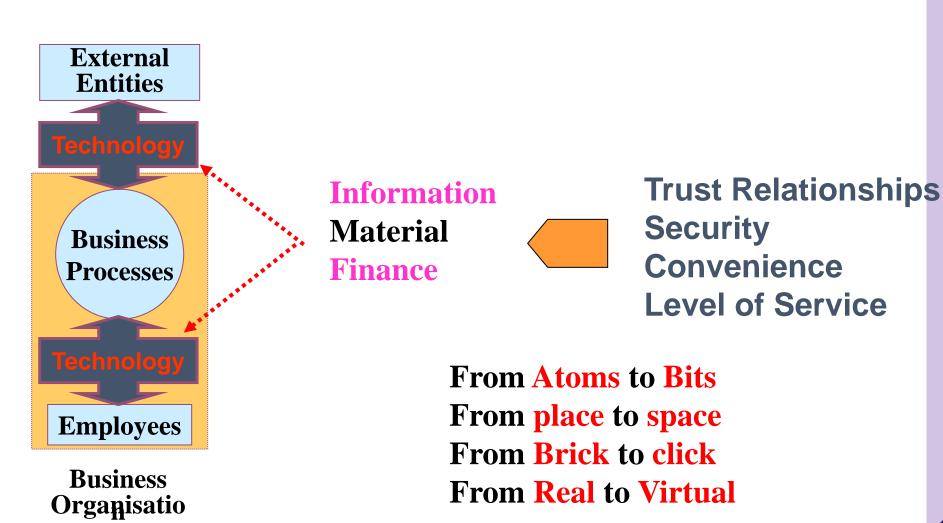
Business Processes



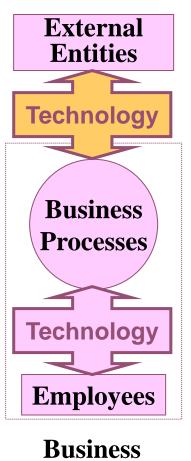
Nature of Interactions



Impact of Information Technology



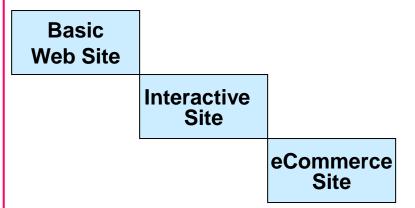
External Processes



Marketing Information

Two way Communication

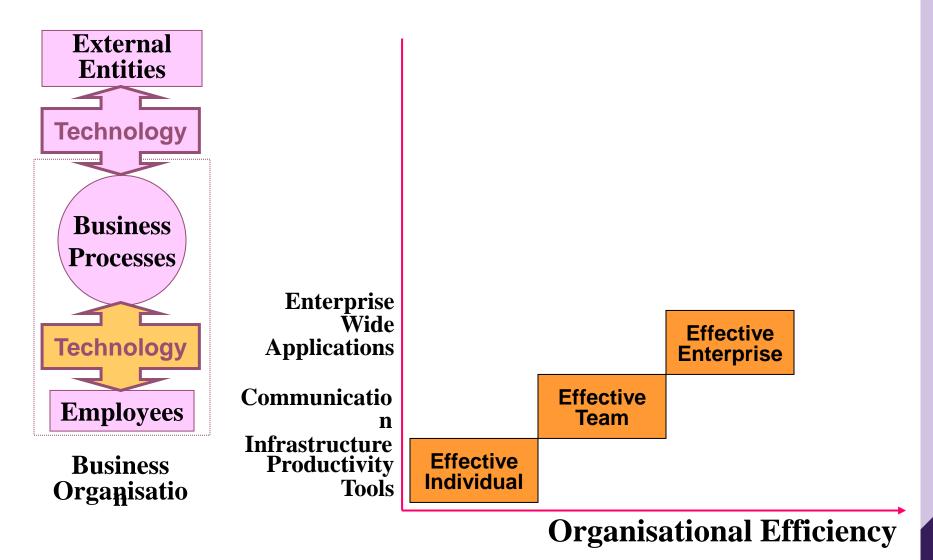
Payment and follow up

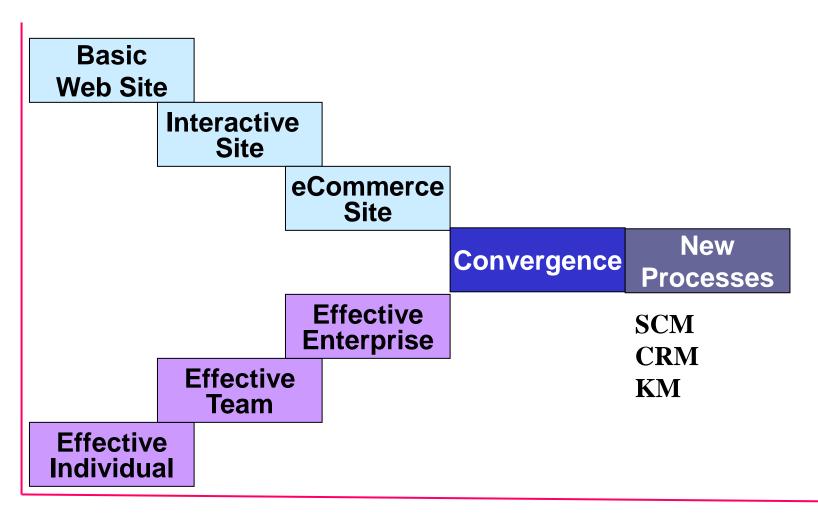


Business Organisatio

Organisational Efficiency

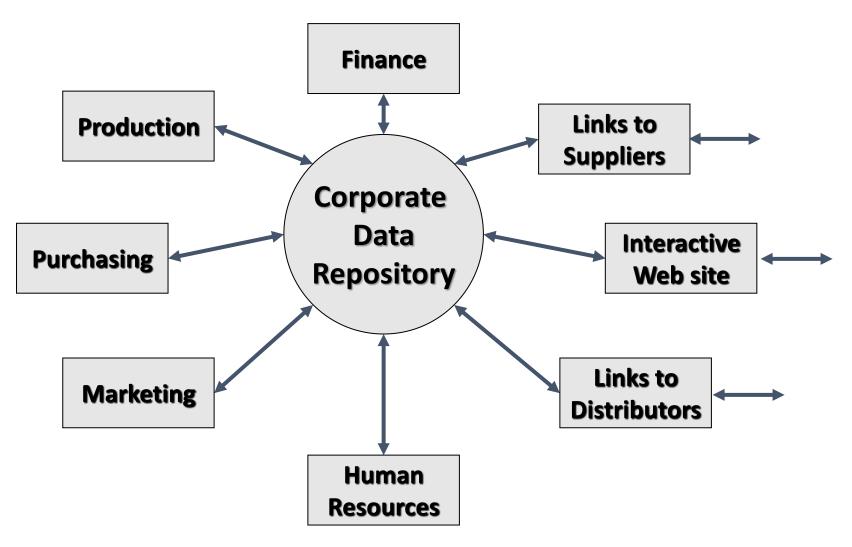
Internal Processes



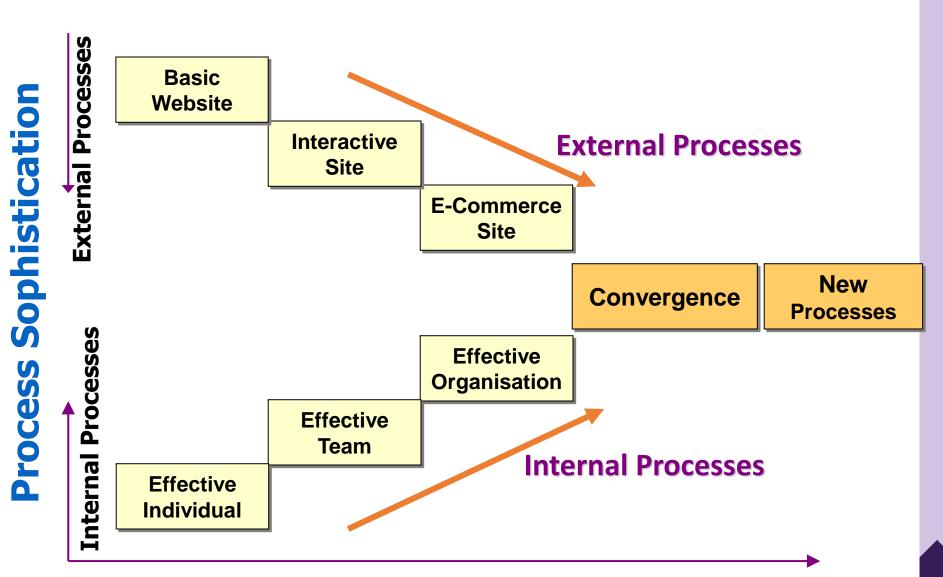


Organisational Efficiency

Convergence



E-Business Road Map



Internal

Basic Web Site

External Processes

Basic

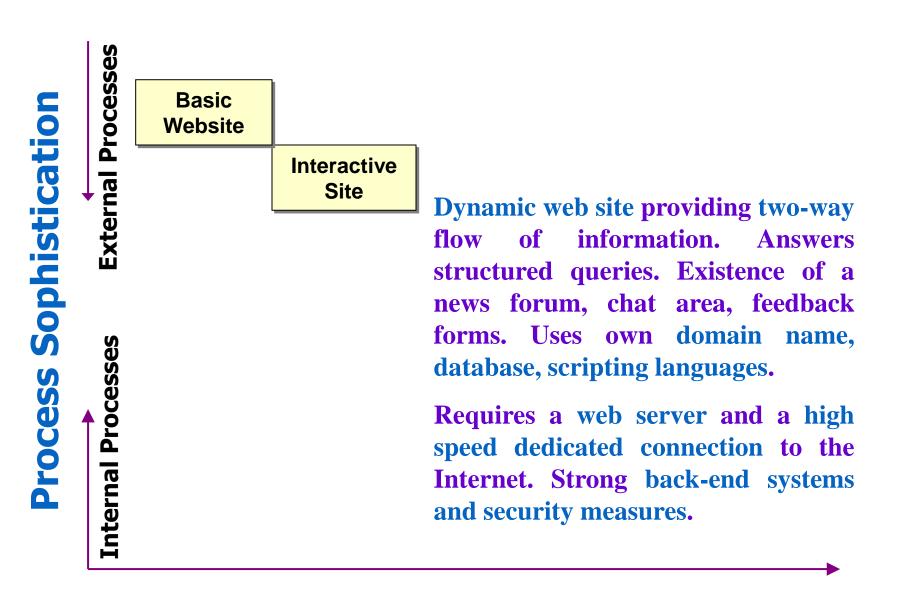
Website

The organization has it's own domain name and 'brochure ware' type of website hosted with an ISP.

The website contains company information, static e-catalogue, e-mailing lists, Answers to FAQs, e-messages to masses.



Interactive Site



eCommerce Site

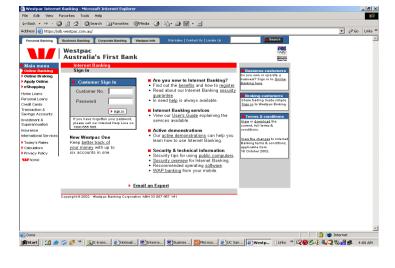
Ŋ Proces Sophistication Externa **Process** Interna

Ü

Basic Website

Interactive Site

E-Commerce Site



The organization should have a secure web server to facilitate financial transactions or a link to a payment gateway to process online payments.

Supporting back-end
Systems, International
Security standards,
Business Contingency
Planning, needs to be in
place.

Trust Relationships and Security are major issues

Effective Individual

Sophistication

External Processes

Internal

Process

computers **Individuals** using and standalone productivity software such as accounting packages, Payroll s/w, Inventory **Control** software, spreadsheets, word-processors, etc. May be connected to the Internet and using email, too.

Effective Individual **Getting users to own** the processes

Effective Team

Effective

Individual

External Processes Sophistication **Processes Process** Internal

Computer network being used in functional units such as Accounting, Production. People work in teams using networked applications, e-mail, intranet capabilities to enhance team productivity.

Existence of LAN, shared I/O devices, drive space, databases, etc.

Effective Team

Internal Processes

Effective Organisation

External Processes Process Sophistication

All computers in the organization are networked, and the databases and information systems are interlinked. Enterprise wide applications are used for purchasing, manufacturing, sales, accounting, etc. Information integration and sharing across the enterprise.

Existence of an ERP, VPN, Intranet. Strict Security and password protection.

Effective Organisation

Effective Team

Internal Processes

Convergence

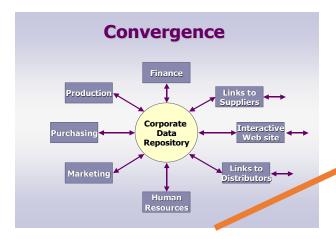
External Processes

Sophistication

Process

Internal Processes

organization The has achieved integration of all information needs to support all business processes to interact with it's and business partners.



External Processes

Convergence

Internal Processes

New Processes

Process Sophistication

External Processes

Processes

Internal

External Processes

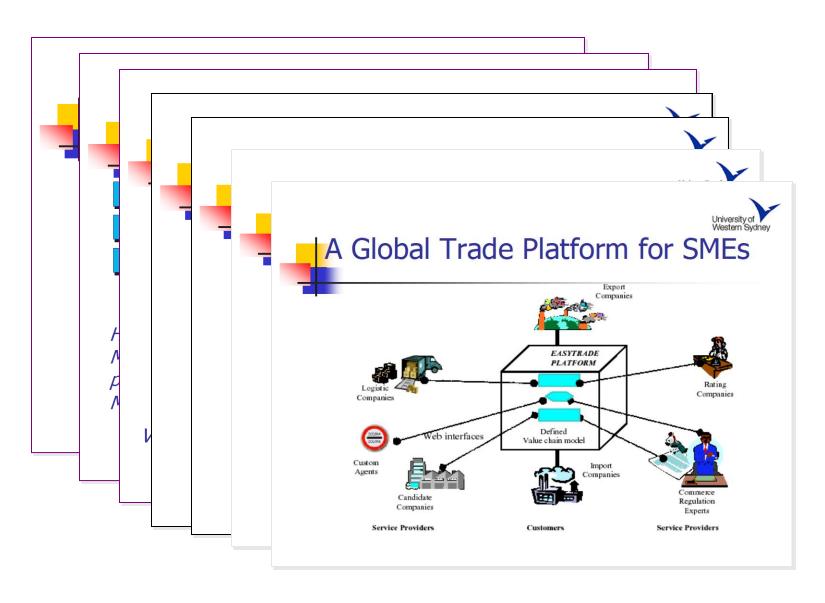
Such organization can handle new processes such as SCM (Supply Chain Management), CRM (Customer Relationship Management), KM (Knowledge Management), etc.

Convergence

New Processes

Internal Processes

Virtual Collaborations



Disruptive Forces

- 4.3. Customer disruption
- 4.4. Product disruption
- 4.5. Price disruption
- 4.6. Intelligent agents

4.3. Customer Disruption

"Customer disruption" refers to a situation where customers' needs, preferences, or expectations of customers change in a way that significantly impacts a business or industry. Customer disruption can be caused by a variety of factors, including changes in technology, social trends, economic conditions, or competitive pressures.

In some cases, customer disruption can lead to the obsolescence of existing products or services, or even entire business models. For example, the rise of online streaming services has disrupted the traditional television and movie rental industries. Similarly, the popularity of ride-sharing apps has disrupted the taxi and transportation industry.

Businesses that are able to adapt to customer disruption by innovating and developing new products or services that meet the changing needs of their customers can often gain a competitive advantage.

Examples for Customer Disruption

Online Shopping: The rise of e-commerce and online shopping has disrupted traditional brick-and-mortar retail stores. Customers now have the ability to shop from the comfort of their own homes, compare prices and products, read reviews, and have their purchases delivered directly to their doorstep.

Ride-sharing apps: Ride-sharing apps like Uber and Lyft have disrupted the traditional taxi industry by offering customers an easier and more convenient way to get around. Customers can request a ride, track their driver's location, and pay all through a single app.

Mobile banking: Mobile banking apps have disrupted traditional banking by allowing customers to access their accounts, make transactions, and pay bills from their mobile devices. This has made banking more convenient and accessible for customers who may not have easy access to a physical bank.

Examples for Customer disruption... Contd.

Streaming services: Streaming services like Netflix and Hulu have disrupted the traditional television and movie rental industry by offering customers an extensive library of content that can be watched on-demand, without the need for physical media or scheduled programming.

Electric Vehicles: The rise of electric vehicles has disrupted the traditional automotive industry by offering customers a cleaner, more sustainable alternative to gasoline-powered cars. As electric vehicle technology continues to improve and become more affordable, it is likely to disrupt the traditional automotive industry even further.

4.3. Customer disruption

Dealing Directly with Customers

Description

Bypassing of traditional sales and distribution channels to reach consumers directly

Cases in Point







Mattel Launches Limited Direct Play

Mattel avoids channel conflict by creating proprietary "Build Your Own Barbie" product for direct sales...

Barbie.com



Mattel.com



...leaving traditional doll product line to established retailers

toysrus.com



Example: DELL Computers

Built on a vision of customer responsive order fulfillment.

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- Payment is received at the time of the order.
- Uses a direct Sales approach with no middleman.



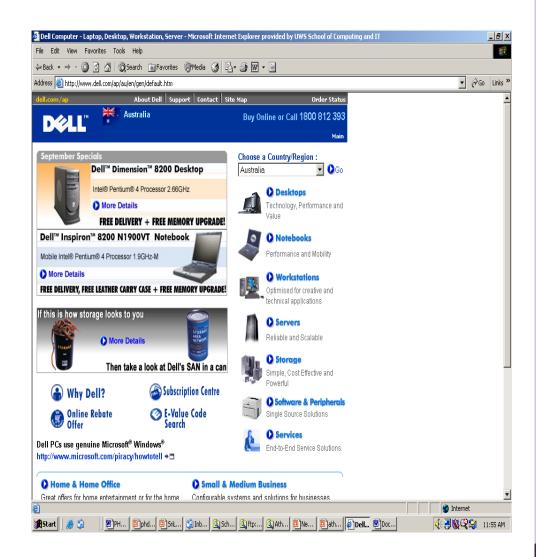
- Dell finds and hire the right professionals.
- Retained all efficient processes & operations and outsourced the rest to suppliers and distributors.

Origins and Founder

- Michael Dell, born in February 1965, is the chairman and chief executive officer of Dell, the company he founded in 1984 with \$1,000 and an unprecedented idea - to sell computer systems directly to customers.
- Mr. Dell became the youngest CEO of a company ever to earn a ranking on the Fortune 500 and is now the longest-tenured CEO in the computer industry.
- Mr. Dell has been honored many times for his visionary leadership, including in 2003 being named one of the top-ten most powerful people in business by Fortune magazine, the fourth most respected world leader by the Financial Times and the best CEO in the IT hardware industry by Institutional Investor magazine.
- In 2001, he was named chief executive of the year by Chief Executive magazine.

Dell Web Site

- Gives customers the ability to custom order
 & price various sizes
 & configurations of PCs online
- Receives money before product is shipped
- All customer service is done via the web helping to cut costs
- Customers can track shipments



Customer Disruption: E-Branding

Priceline.com Brand Extensions



Launch of new automobile sales on test basis July 1998



Sales of airline tickets
April 1998



Launch of grocery sales through "WebHouse Club" November 1999



Launch of hotel room reservations
October 1998



Launch of home mortgage services January 1999



Announcement of partnering with Budget (and eventually others) on car rentals

July 1998

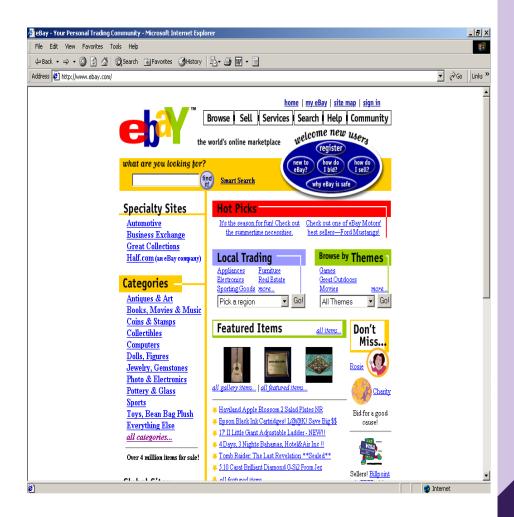
Over 12 million customers!



Market Makers: eMarketplaces – Auctions



- Puts buyer in control
- Establishing a "pure market price"
 - Sell-side auction
 - Buy-side auction
- eBay
 - First C2C marketplace
 - 1 million+ auctions/day



4.4. Product Disruption

Product disruption" refers to a situation where a new product or technology significantly impacts an existing product or market, often resulting in the obsolescence of older products or technologies. Product disruption can occur when a new product offers significant improvements in performance, convenience, or cost-effectiveness compared to existing products.

Product disruption can have a significant impact on businesses and industries. Companies that fail to adapt to product disruption can risk losing market share or becoming obsolete. However, companies that are able to innovate and develop new products that meet changing customer needs can often gain a competitive advantage and succeed in disrupted markets.

Examples of Product Disruption

Smartphones: Smartphones have disrupted a wide range of industries, from personal computers and cameras to music players and GPS devices. With the ability to connect to the internet, take high-quality photos and videos, and run a variety of apps, smartphones have replaced many standalone devices.

Digital cameras: Digital cameras disrupted the traditional film camera market by offering consumers the ability to instantly preview and edit photos, store them digitally, and print only the ones they wanted. This significantly improved the convenience and cost-effectiveness of photography.

Streaming media: Streaming media services like Netflix, Amazon Prime Video, and Hulu have disrupted the traditional DVD and Blu-ray rental market. With the ability to instantly stream movies and TV shows over the internet, consumers no longer need to visit physical rental stores or wait for discs to arrive in the mail.

Examples of Product Disruption

Electric vehicles: Electric vehicles (EVs) are currently disrupting the traditional automotive industry by offering a cleaner, more sustainable alternative to gasoline-powered cars. As battery technology improves and EVs become more affordable, they are likely to become an increasingly popular choice for consumers.

3D printing: 3D printing technology has disrupted traditional manufacturing by allowing businesses and individuals to create complex, customized products on demand. This technology has the potential to significantly reduce the cost and time required to bring new products to market.

4.4. Product Disruption:

Examples of Digitization Across Industries

Industry	Traditional Format	Digital Format
Product Substitution		
Recorded music	LP records, tapes	CDs, MP3
Journalism	Newspaper,	Web site
(Gainmain)	magazine, television, radio	

Product Digitization:

Examples of Digitization Across Industries

Industry	Traditional Format	Digital Format
Service Substitution		
Banking	Cash, check	Smart card, web banking and payment systems
Photo-finishing	Film to paper	Digital to paper, film to digital

4.5. Price Disruption

"Price disruption" refers to a situation where a product or service is offered at a significantly lower price than the prevailing market price, often resulting in a price war or significant market share shift. Price disruption can occur for a variety of reasons, including new entrants with lower cost structures, increased competition, or changes in technology that make it possible to produce or deliver products more efficiently.

Price disruption can have a significant impact on businesses and industries. Companies that are able to adapt to lower prices and maintain profitability can gain a competitive advantage, while companies that are slow to adapt risk losing market share or becoming obsolete.

Examples of Price Disruption

Low-cost airlines: Low-cost airlines like Southwest, Ryanair, and EasyJet have disrupted the traditional airline industry by offering lower fares and no-frills service. By streamlining operations and minimizing costs, these airlines have been able to offer significantly lower prices than traditional carriers.

Generic drugs: Generic drugs have disrupted the market for branded pharmaceuticals by offering lower-priced alternatives. When a patent expires on a brand-name drug, other companies can produce and sell a generic version of the same drug at a lower price.

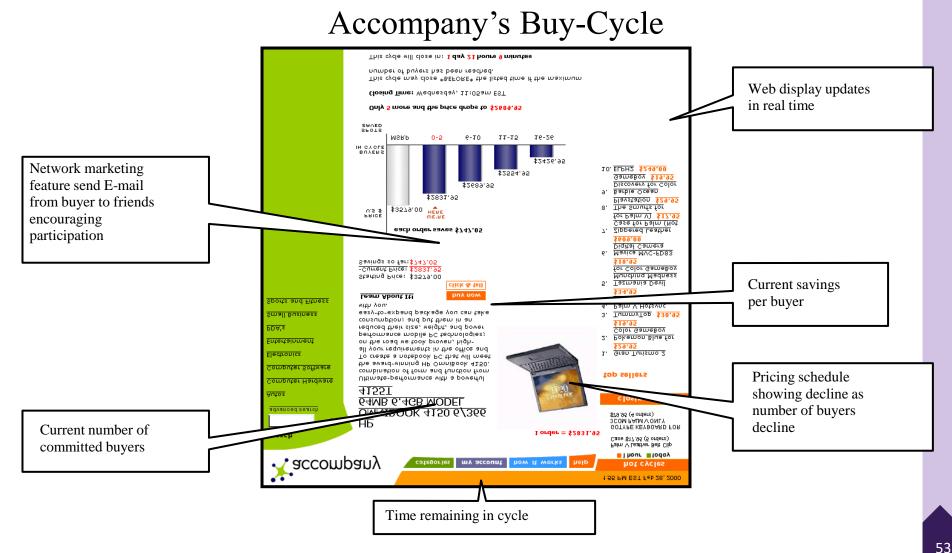
Online retailers: Online retailers like Amazon have disrupted traditional retail by offering lower prices and the convenience of online shopping. By operating with lower overhead costs and utilizing advanced logistics systems, online retailers can offer lower prices than brick-and-mortar stores.

Examples of Price Disruption

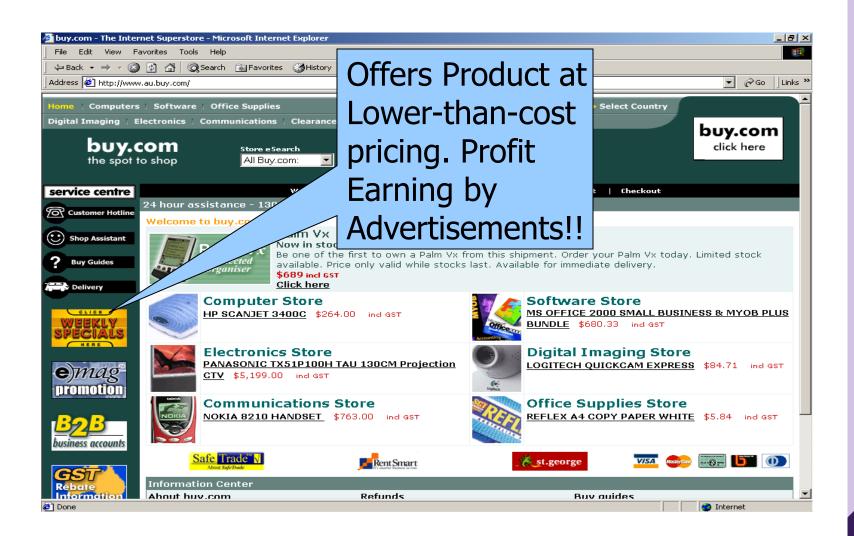
Digital music: The rise of digital music disrupted the traditional music industry by allowing consumers to purchase and download individual songs or albums at a lower price than buying physical media. This has significantly reduced the cost of purchasing music and made it more accessible to consumers.

Solar energy: The cost of solar energy has been decreasing rapidly in recent years, disrupting the traditional energy industry by offering a lower-cost and renewable alternative to fossil fuels. As the cost of solar energy continues to decrease, it is likely to become an increasingly popular choice for consumers and businesses alike.

New Pricing Models



Destroying pricing models



4.6. Intelligent Agents

Intelligent agents are computer programs or software applications that are capable of performing tasks autonomously or semi-autonomously, with a degree of intelligence and decision-making ability. These agents are designed to interact with their environment and make decisions based on a set of rules, algorithms, or machine learning models.

Intelligent agents are used in a variety of applications, such as robotics, automation, e-commerce, customer service, and healthcare. They are often used to improve efficiency, accuracy, and productivity in various domains.

4.6. Intelligent Agents Contd

Intelligent agents can be classified into different categories based on their level of autonomy and intelligence. Some examples include:

Reactive agents: Reactive agents are the simplest form of intelligent agents that only react to the current state of the environment and do not have any memory or ability to learn.

Proactive agents: Proactive agents have the ability to anticipate future events and take action accordingly. These agents have a degree of memory and can make decisions based on past experiences.

Learning agents: Learning agents are capable of improving their performance over time through the use of machine learning algorithms. These agents can learn from experience and adapt their behavior accordingly.

Intelligent software agents: These are computer programs that can perform tasks autonomously or semi-autonomously. These agents are typically designed to interact with users or other software systems to perform specific tasks.

Examples of Intelligent Agents

Chatbots: Chatbots are intelligent agents designed to interact with humans through messaging or voice. They use natural language processing (NLP) algorithms to understand user queries and provide relevant responses. Chatbots are commonly used for customer service, sales, and support.

Personal digital assistants: Personal digital assistants like Siri, Google Assistant, and Alexa are intelligent agents that use voice recognition and NLP algorithms to perform tasks such as setting reminders, making phone calls, and searching the web.

Autonomous robots: Autonomous robots are intelligent agents that can operate independently without human intervention. These robots can perform a wide range of tasks, such as cleaning, manufacturing, and exploration.

Examples of Intelligent Agents.... Contd

Recommendation engines: Recommendation engines are intelligent agents that use machine learning algorithms to analyze user data and provide personalized recommendations. These agents are commonly used in ecommerce, social media, and entertainment.

Fraud detection systems: Fraud detection systems are intelligent agents that use machine learning algorithms to analyze transaction data and identify suspicious patterns or behaviors. These agents are commonly used in the finance and banking industries.

Autonomous vehicles: Autonomous vehicles are intelligent agents that use sensors, GPS, and machine learning algorithms to navigate roads and traffic without human intervention. These vehicles are expected to revolutionize transportation in the coming years.

4.5. Intelligent Agents



Consumer







PriceSCAN

