



Electronic Business Systems

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(3)

Engineering & Management of Business Processes

Internal Value Chain: The chain of processes and activities involved within a company to deliver products and services to its customers. [Westland 2000]

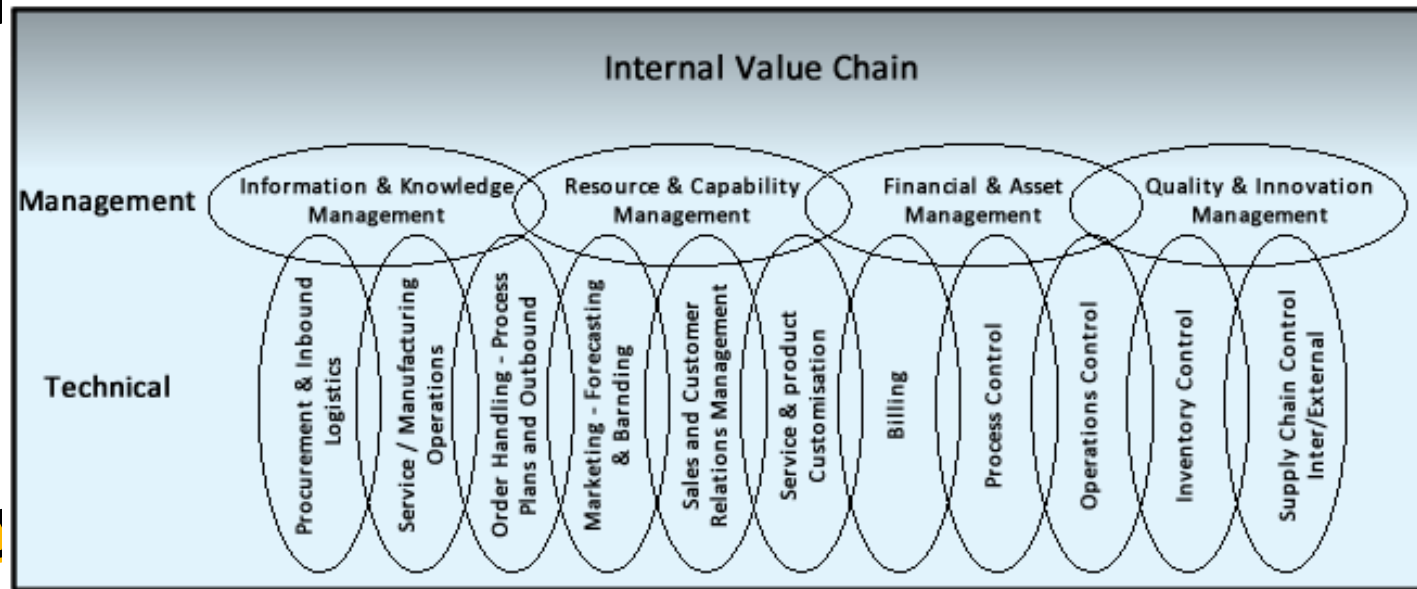
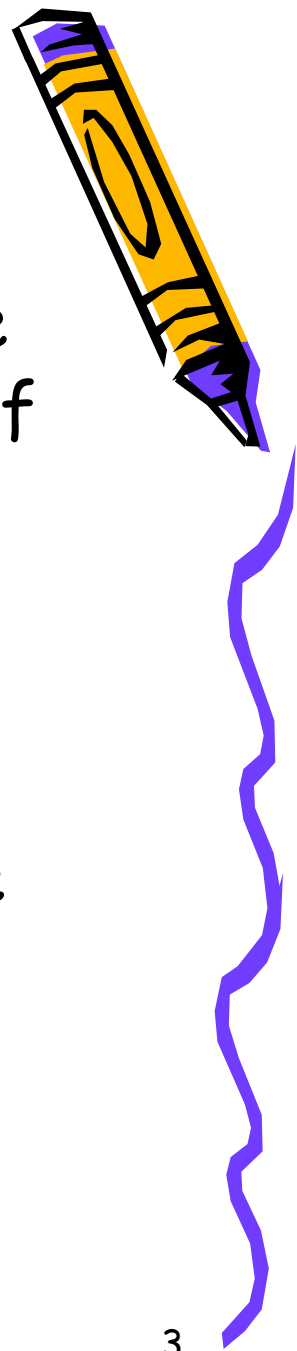


Figure 2.1: Internal Value Chain for a typical business system

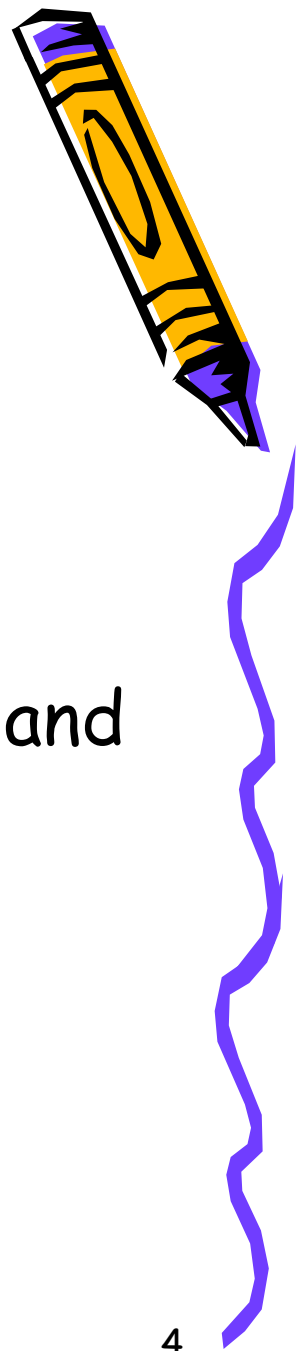
Business Process Engineering

Business Process Engineering (BPE): The design, configuration and establishment of the Internal Value Chain in a company is called BPE.

Business Process Re-engineering (BPR): Sustainable companies should have capabilities to configure and re-configure internal value chains and external relationships to retain competitiveness.



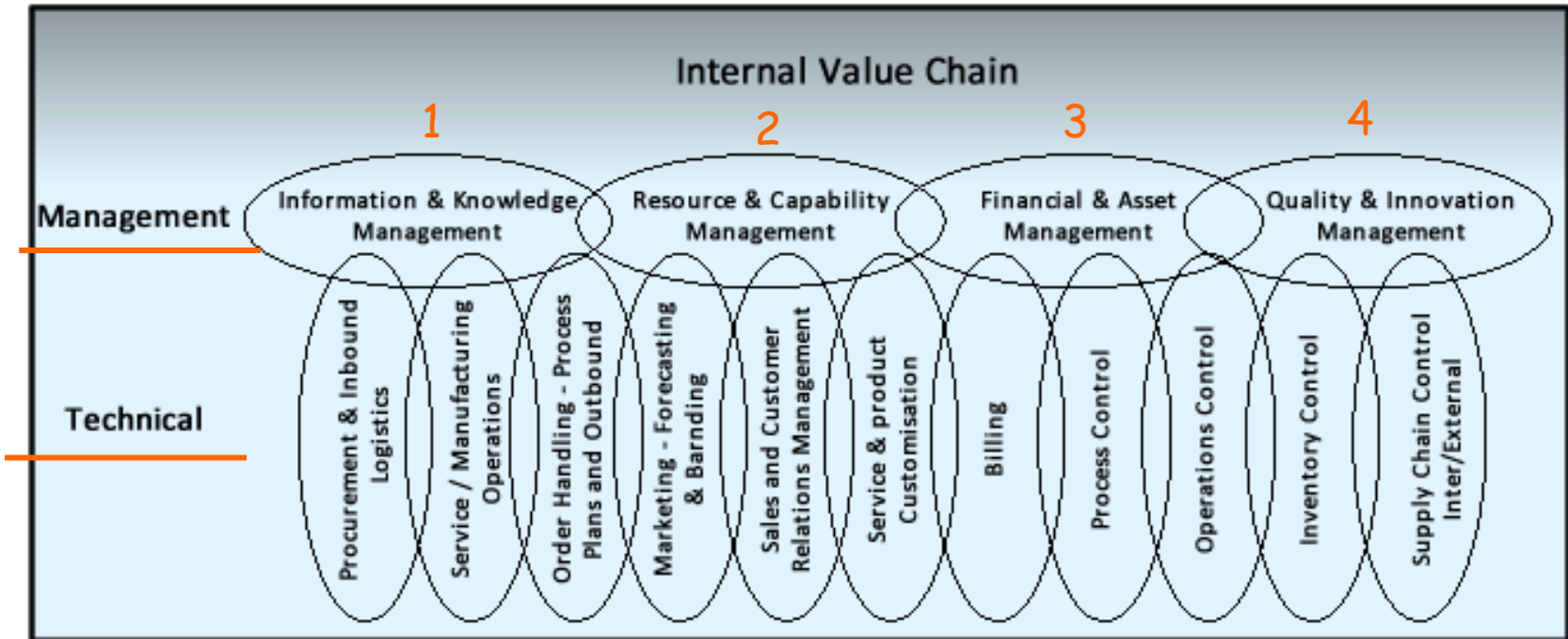
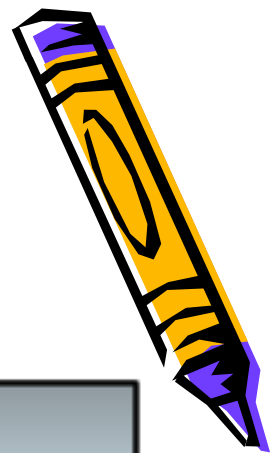
Businesses Utilise ICT to:



1. Improve Efficiency,
2. Reduce production/service cycle time, and
3. Optimise customer relationship



Internal Value Chain (IVC)



IVC Break Down - 1



1. Information and Knowledge Management:

- Defines the information and knowledge required to set the direction of the company
- The technical people will establish the infrastructure to produce the information
- Establish the data acquisition points, data storage and management, data mining, and translation into Key Performance Indicators (KPI)
- The information will be on activities (e.g. Procurement, Operations, Inventory, Customer Relationship, Billing)



IVC Break Down - 2



2. Resource and Capability Management:

- Assess and possess the necessary resources (i.e. human resources, equipment, and software/hardware)
- Identify and fortify the capabilities that enable the company to smoothly and without major shortcomings meet customer needs



IVC Break Down - 3



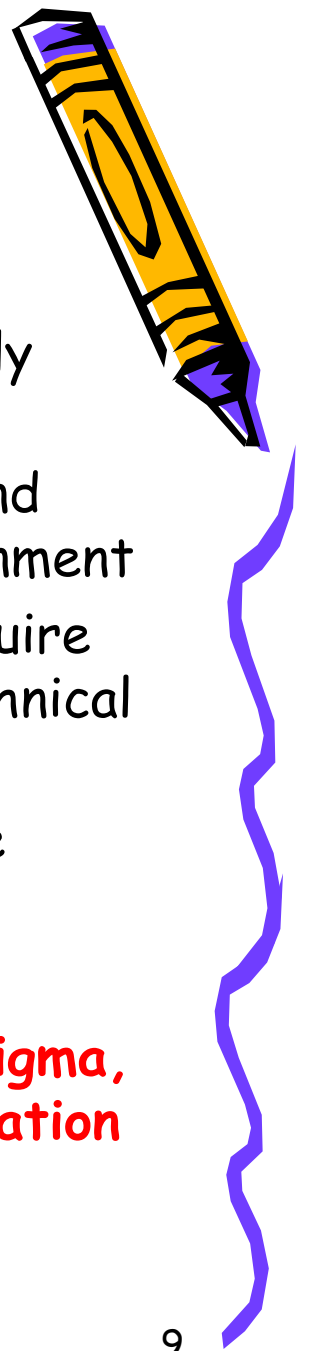
3. Financial and Asset Management

- Ensure that the company has sufficient financial and assets to run commercial operations
- Having the means to continuously monitor its financial condition and forecast the trends of fund availability
- Meet obligations towards its staff, stakeholders, partners, and customers.

Any miscalculation can significantly affect operations and reputation



IVC Break Down - 4



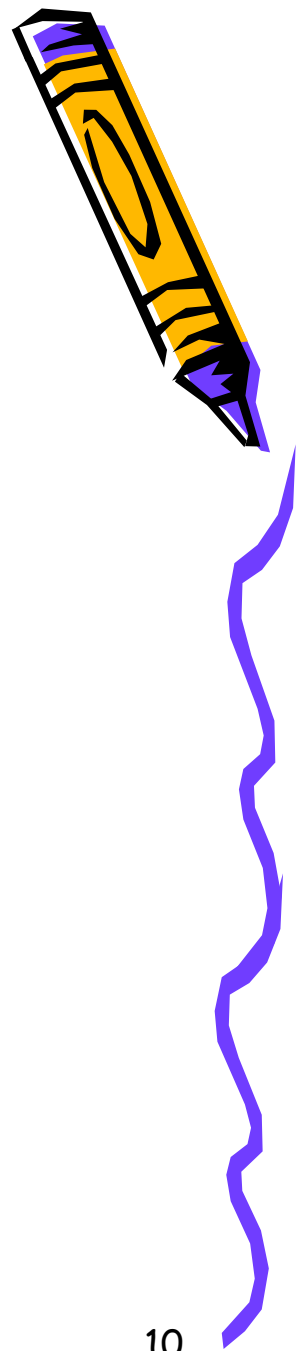
4. Quality and Innovation Management

- **Viable enterprise** ability to monitor and continuously improve quality
- **Quality Assurance** is intertwined with innovation and adjustment to the ever changing commercial environment
- **The technical infrastructure** should be able to acquire customer requirements and translate them into technical specifications
- **Final product** should always be to the taste and the requirements of the customer

Further Reading: Total Quality Management, Six Sigma, Quality Function Deployment and Customer Optimisation and Route Evaluation (CORE)



Internet and the WWW as the enabling Vehicle

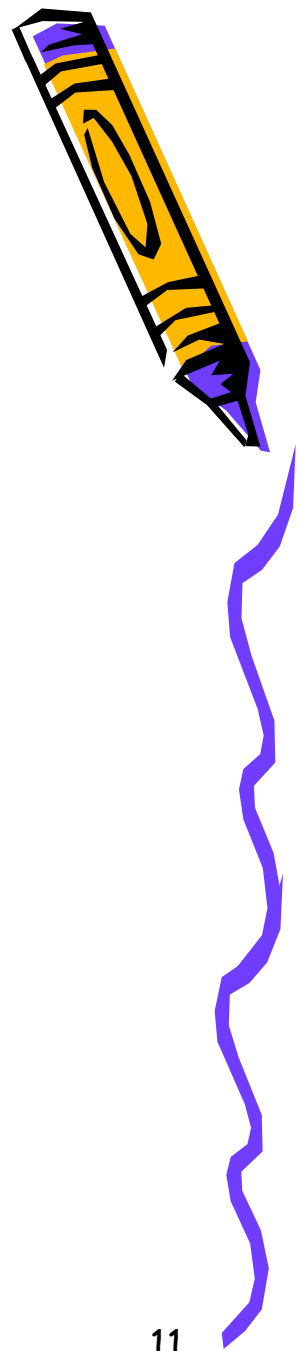


The key characteristics:

- Availability
- Accessibility
- Omnipresent
- Digitisation
- Multimedia
- Interactivity
- One-to-One
- Networking effect (community)
- Integration



Marketing Strategies and Plans



Characteristics of B-to-B and B-to-C markets:

- Customisation
- Knowledge based interactions
- Personal - direct relationship with customers
- Professional
- Negotiations
- Multi-party collaborative purchasing power
- International



Global E-Commerce (GEC)

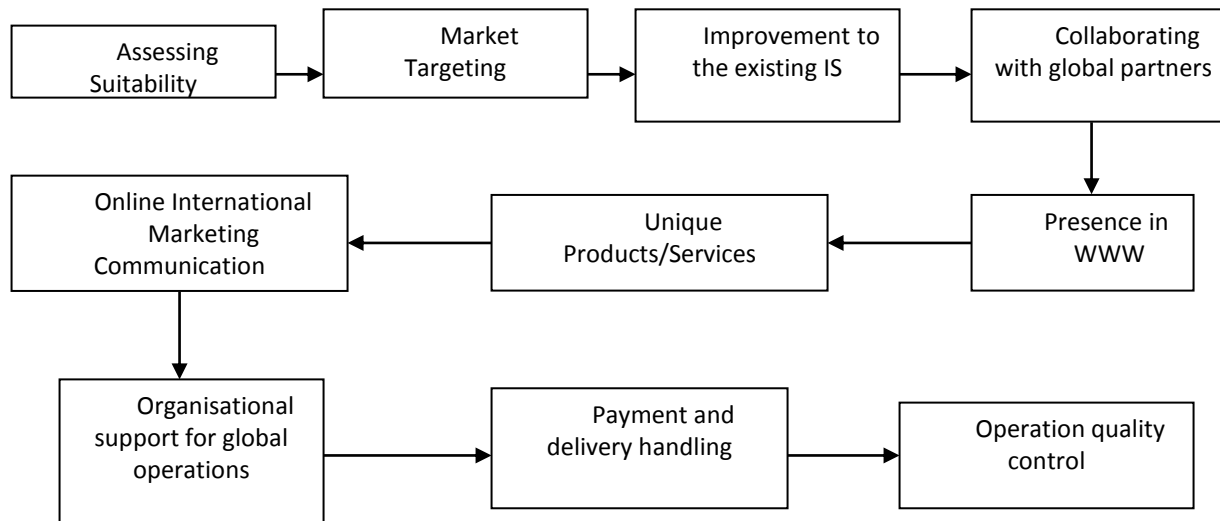
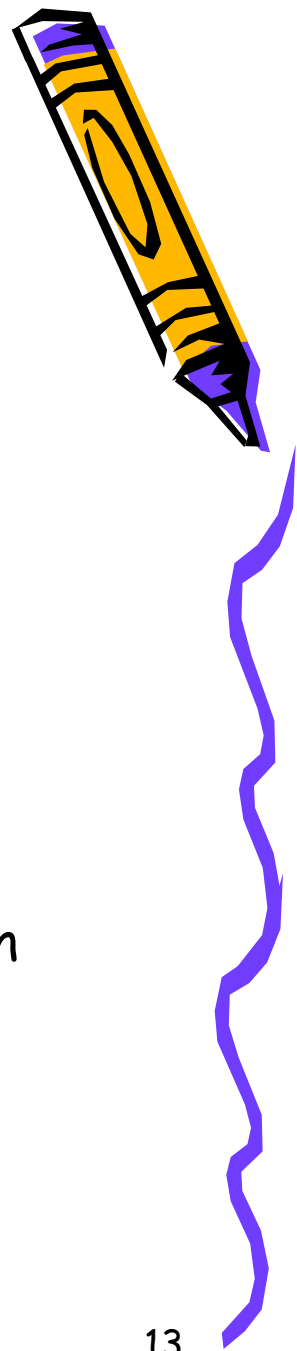


Figure 2.2: GEC Process [Hackney 2000]

Channels and Intermediaries

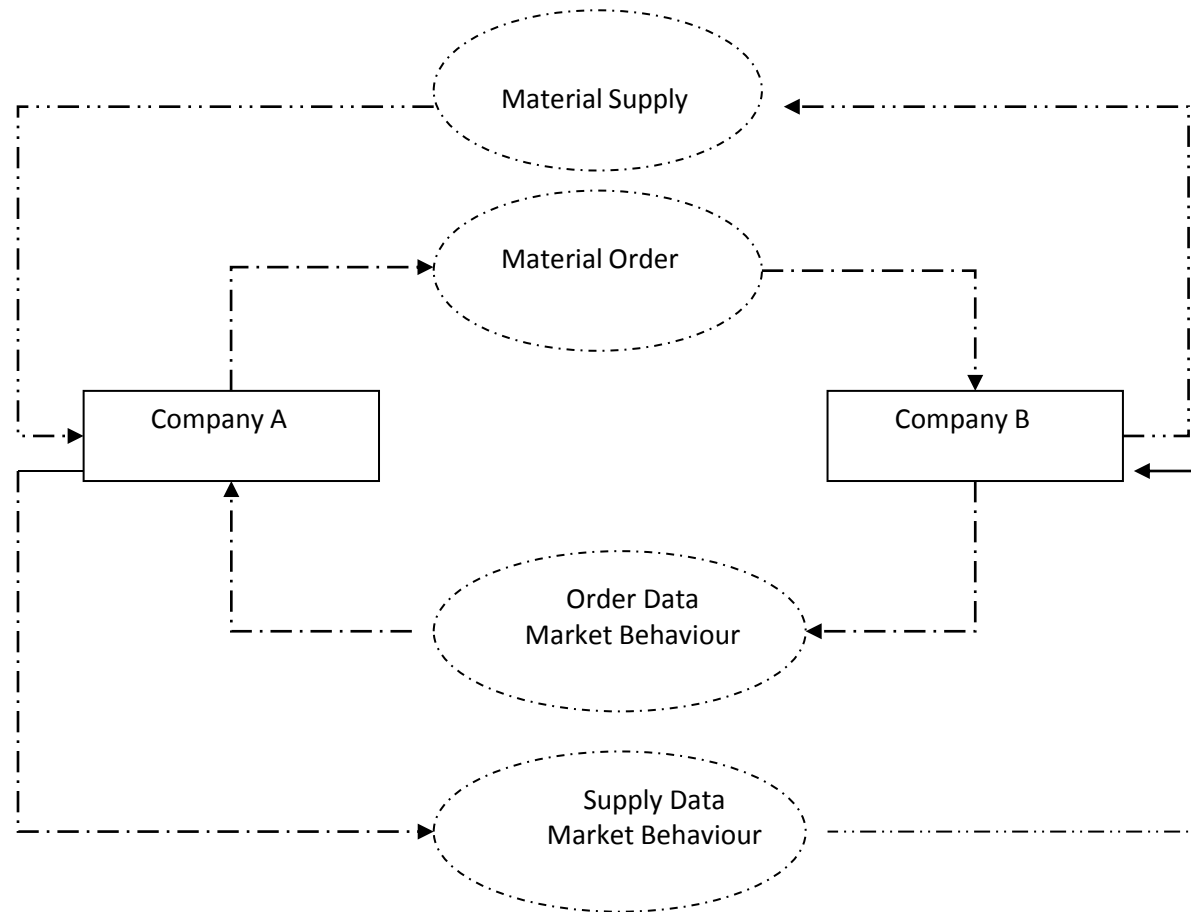


Attributes for successful business channels:

1. Inventory Control
2. Ownership (identification of physical and electronic property)
3. Production Promotion
4. Customisation
5. Marketing Information (market research)
6. Financing (provision of financial advice to customers)
7. Payments (move from cash to electronic transactions)
8. Risk bearing and insurance (needed for long production cycles, high investment requirements or significant liability).



Supply Chain Management



Some Questions

Go to page 26 of the book and try to answer the questions

