Lecture Two – The Information Economy

- An economy where information is the main driver of growth, competitive advantage and employment
- The inputs, through-puts and outputs of work are knowledge-based.
- Knowledge based service jobs are dominating the market
- Info. Resources are critical for the success of this economy.

Product Economy	Information Economy
• Exchange of *products* • Wealth is created by owning and *manufacturing* products • Based on manual *labour* • Customer *receives* product • Low customer-provider familiarity	• Exchange of info-based *services* • Wealth is obtained through application and *exchange* of specialised knowledge and skills • Based on *knowledge* work • Customer is *co-producer* of service • High customer-provider familiarity

Information economy in a historical context

- Started in the **industrial era** – machine tools replaced manual labour
- The **information era** – information becomes the source of competitive advantage, automation increases productivity, there is a larger focus on the exchange of information through services E.g. consulting.
- Manufacturing is declining due to automation and the increase in exchange in information
- IT enabled globalisation favours outsourcing

Information – anything that can be digitised

Digital Info as an 'experience good'

- Consumers have to consume a product to value it – quality is difficult to assess before using it

Information Costs

- Costly to product but cheap to reproduce
- High development cost but low marginal cost – E.g. producing the first copy if Windows cost millions, but each additional copy is cheap.
- Influence on pricing:
  → **Cost based pricing** – unit cost is zero so adding a mark up to the cost of production makes no sense
  → **Value based pricing** – set according to the value the information has for the customer
- **Lock-in** and **switching costs** enable firms to enter markets and grab most of the market share. Consumers will feel affiliated and are accustomed to one product.

- Lock-in: investment in durable complementary assets to a particular system, knowledge barriers and lock-in contracts also contribute to lock-in costs
- Leads to high switching costs
- Economies of scale – high first copy cost but low/essentially no cost for later copies
- Traditional businesses – focus on reduce unit cost but in information industries they focus on increasing volume.

Network Effect – network externalities

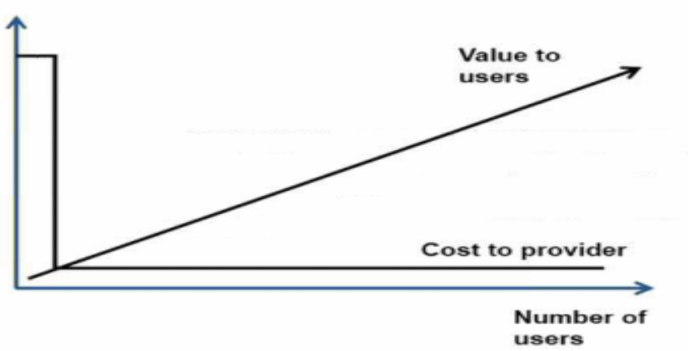
- When the value of a product to one user depends on the number of other users
  E.g. cell phones, internet, email, FB, Skype, Video games etc.
- The more people using a network the more benefits everyone has.

3 Distinctions

- **Positive/Negative** – cell phones vs. cars
  E.g. more cars on the road would be a –ve
  E.g. more people using cell phones would be a +ve
- **Direct/Indirect** – value of product vs. value of complementary product
  E.g. Blu ray players would indirectly increase the sales of Blu ray DVD's
- **One/Two-sided** – one user group vs. two distinct user groups that provide each other with network benefits
  E.g. Buyers and sellers in an online market. The value of the marketplace is dependent upon the number of participants from the other party

**Developing network effects can at times take large amounts of time and money as the value gained depends on the users and providers.

A strong positive network effect translates into the demand-side economies of scale – increasing value to users as market share increases. ***The value to users increase as the number of users increases.



- Key challenges is to obtain a critical mass of users and become the standard
- Use of free and premium products is used to gain a large mass of users
- E.g. Freemium, penetration pricing, heavy advertising

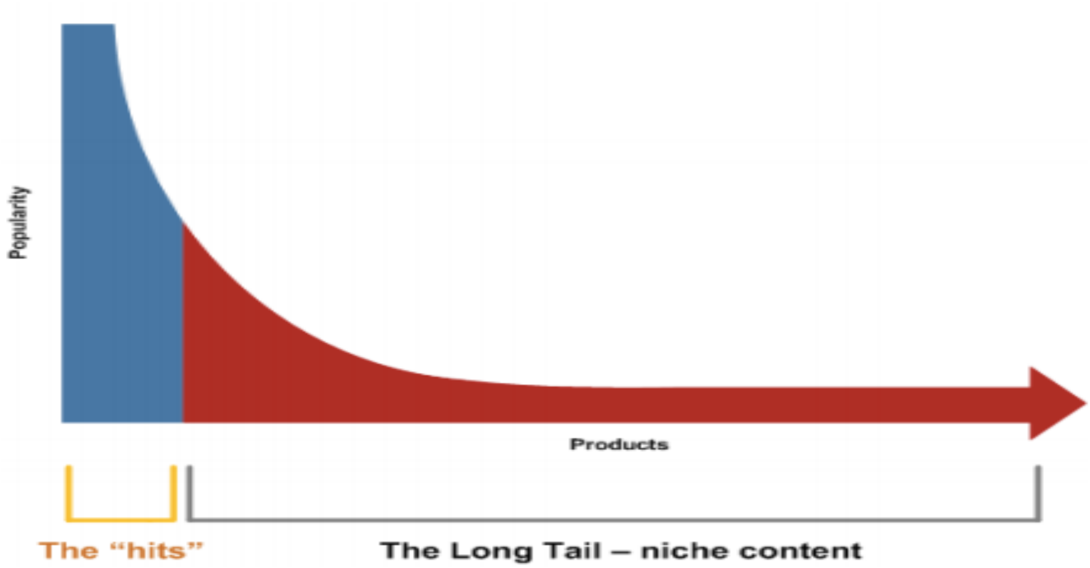
Challenges

- Two part sales process to grab users and then provide value for consumers

Long tail of information economies

***As there is **no increasing marginal cost**:

- No extra cost for selling more volume of the product
- Lowers the cost of production of information goods
- Lowers storage and shipping costs
- Lowers barriers to entry
- Increases market size
- Lowers the cost for consumers



- Having one customer enables the business to sell multiple products due to the network effect

Lecture Four – E-Business Strategy

E-business strategy

- Defines the future *direction* and *actions* of an organisation
- Direction and *scope* of an organisation over the *long-term*. Achieves *advantages* for the organisation through the configuration of its *resources* within a *changing environment*.

Strategy

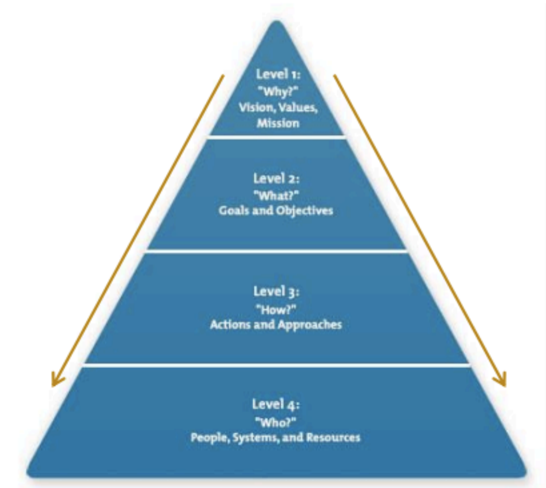
Consideration of current position	Planning
Definition of objectives	
Formulation of plans and policies	
Allocation of resources	Implementation
Evaluation	Monitoring

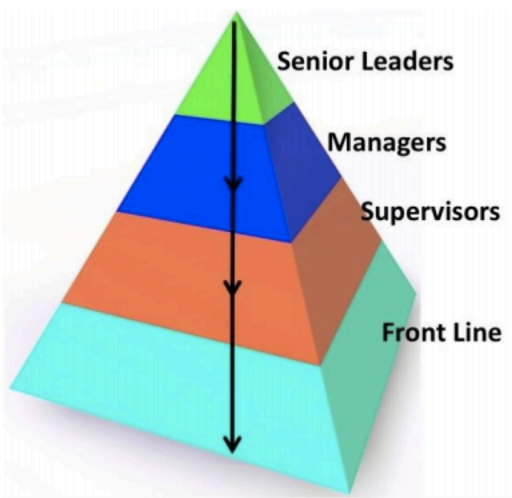
Evaluation – what is the definition of success? Goal posts? LT and ST markers?

**An undefined e-business strategy due to vague objectives can lead to missed opportunities and an unclear direction.

- Functional silos
- Resource wastage
- Different info systems not communicating
- Lack of strategy-IT fit

The Strategic Pyramid





Strategic Alignment

- Across organisational levels
- Across processes
- Across functions

Strategy Formulation Process

1. **Analysis of environment (industry and external environment)**

- Porter's 5 competitive forces analysis – Industry penetration
- Consider **substitutes** – products/services that provide the same or similar utility for customer, but with different technology E.g. cars and trains
- SLEPT Analysis of external environment
  - Social
  - Legal
  - Economic
  - Political: pressure from public opinion and interest groups
  - Technological

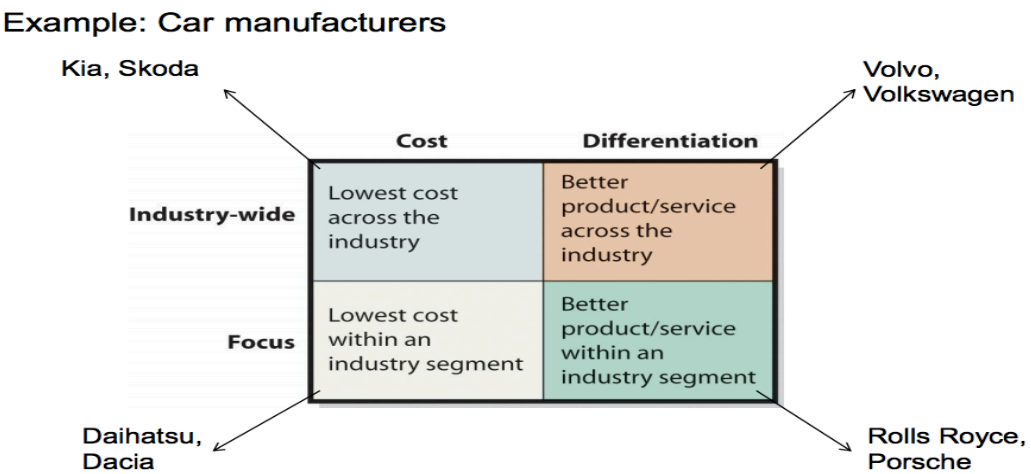
  **Focus on an industry where people have disposable income

2. **Evaluation and selection of a competitive strategy**

- Porter's 4 competitive strategies

Cost Leadership
- Broad cost leadership across an industry
- Narrow cost leadership focused on particular industry segment

Differentiation
- Broad differentiation across industry
- Narrow differentiation focused on particular industry segment



3. Creation of internal structures and processes to implement strategy

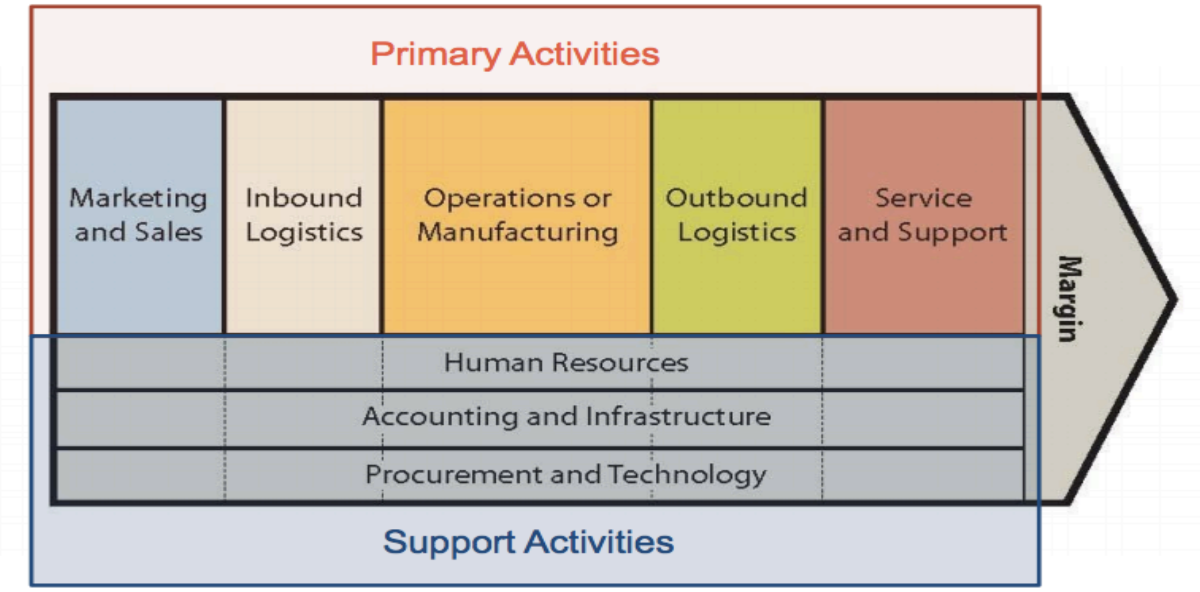
Value Chains

- Businesses need to organise internally to create and deliver products/services
- A value chain is a network of value-creating activities that consist of:

Primary Activities: add value directly to customers

Support Activities: assist primary activities

i) Human Resources
ii) Accounting and infrastructure
iii) Procurement and technology



4. Gaining and maintaining competitive advantage

Lock in customers

- High switching costs
- Automated ordering process, long term contracts

Lock in suppliers

- Make it easier to connect to and work with organisation
- Cross organisational JIT delivery process

Create barriers of entry

- Make it expensive for new competitors to enter a market
- Establish economies of scale

Establish alliances with external stakeholders