Strategic planning is based upon 3 key assumptions

1. Environmental forecasting is sufficiently accurate to predict the future.
2. Strategy formulation is a rational process; objectives can be formulated and alternatives can be identified and optimised.
3. Behavioural dimensions can be ignored.

Forecasting – especially long range – can be very inaccurate, important factors such as product life cycles cannot be predicted; behavioural and cultural aspects are hugely significant to the formulation and implementation of strategy. In reality under the stress of making such organisationally vital decisions making may degrade. Currently strategic management focuses upon understanding the general principles that govern competition.

The process of strategic planning is an ongoing activity of assessment, selection and implementation.

Model of strategic planning process

<table>
<thead>
<tr>
<th>Planning Element</th>
<th>Plan Component</th>
<th>Key Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Analysis</td>
<td>Mission</td>
<td>What should we be doing?</td>
</tr>
<tr>
<td></td>
<td>Goals</td>
<td>Where are we going?</td>
</tr>
<tr>
<td>Strategic Choice</td>
<td>Strategies</td>
<td>What routes?</td>
</tr>
<tr>
<td>Strategic Implementation</td>
<td>Policies</td>
<td>How do we guide our collective decisions to get there?</td>
</tr>
<tr>
<td></td>
<td>Decisions</td>
<td>What choices do we have?</td>
</tr>
<tr>
<td></td>
<td>Actions</td>
<td>Shall we do it?</td>
</tr>
</tbody>
</table>

Strategic planning is a management process so it can be viewed like any other process – it takes inputs and performs a transformation in order to generate some outputs. View the available understanding of the organisation as the inputs, process of strategic planning as the transformation and the output is the defined strategy.

An effective planning process is one which generates a sufficient flow of worthwhile strategic options which the effective planning process is then able to assess and evaluate with respect to possible futures.

Components of a strategic plan.

Mission
The mission represents the view that senior managers have for the future of the organisation, it is what they want it to become or achieve.
Goals
This component defines the desired future positions of the organisation. They are selected on the basis of the defined mission. Sometimes goals are separated from objectives. In this case goals are broad and timeless statements of the end results that the organisation considers will achieve the mission. Objectives would then flesh out these goals with quantitative and qualitative terms since they are specific measures of the goals to achieve the mission. In some instances goal, objectives and aim are used interchangeably.

Strategy
This element is the definition of the general direction in which the organisation chooses to move in order to meet goals to achieve the mission. It is constrained by the nature of the organisation including resources, capabilities, culture, structure etc. and by the environment in which it works. The strategy constructs a framework which hopes to ensure that the organisation makes the best of what it has to work with and adequately compensates for its limitations. The strategy also defines how an organisation will not achieve its aims. The strategy plan should document which strategic opportunities are deemed the most beneficial to pursue.

Policy
Policies provide a framework for the implementation of any major changes needed to be made. The policies should provide key measurements and key ratios that summarise the expected benefits the strategy is intended to yield so that in due course it can be judged.

Analytical tools in Strategic management

Strategic analysis
This is the part of the strategic management process which concerns itself with attempting to understand the strategic position of the organisation. Strategic analysis aims to form a picture of the influences playing upon the organisation in order to be informed for the strategic choice element of the overall strategic management process.

Johnson and Scholes suggest that strategic analysis involves understanding three factors. The organisations,

- Environment – strategy of the organisation should be directed at exploiting the environmental opportunities facing it and to blocking environmental threats in a way that is consistent with internal capabilities.
- Values and objectives.
- Resources – The object of this is to understand the organisations strategic capabilities, establishing the strengths and weaknesses of the organisation.

Strategic choice
Strategic choice also involves three factors,

- Identifying the options – involves identifying as many courses of action as possible.
- Evaluating these options – evaluating within the framework created by strategic analysis.
• Selecting an option – may result in a single strategy or a strategy set that will be the target for the strategic implementation element of the process.

**Strategic implementation**

This element of the process aims to turn the selected strategy into action. It requires the organisation to deal with,

• Resources required – identifies the major tasks to be done and assesses how and by whom these tasks can be resourced.
• Organisational structure changes required – the organisation must judge how best to organise the business in order to carry through the strategy.
• Systems and work force necessary – the business procedures and information systems may need adjusting and the skill mix may also require tweaking.

Chapter 1–2 “Strategic Management and Information Systems”, *Wendy Robson*

**Definitions**

**Information Technology (IT)**

Describes any kit concerned with capture, storage, transmittal or presentation of information.

**Management Information System (MIS)**

The entire portfolio of computer-based systems and their manual procedures.

**Decision Support Systems (DSS) and Executive Information Systems (EIS)**

A sub-set of MIS contains the systems designed and implemented to specifically address the need to provide automated support during the decision making process.

**Strategic Management Information Systems (SMIS)**

Another sub-set of MIS, the set that contains systems considered critical to the current or future business competitiveness – hence survival – of an organisation.

**Information System (IS)**

A chosen adjective for the part of the whole organisation and/or that part of a manager's activity related to IT, MIS, DSS or SMIS.

**General model of MIS**

![General model of MIS](image)
When a business event occurs it provide raw data for the MIS. It may be recorded, appropriately stored, transmitted, combined with other raw data and ultimately presented.

Levels of MIS

The best-known model of levels and planning horizons on management activities is that of R. Anthony defined in 1965,

![Management Hierarchy Diagram]

The role of the IS strategy is to ensure that the effective development and implementation of IS within the strategic direction and to do this each node must play the role indicated in the circle to avoid the dangers noted.

- Low involvement = low success
- Need involvement at policy level

- Project failure = Low involvement
- Awareness of new tools and Tech changes
**IS strategy planning**
The process of planning that will deliver a document that defines what the IS strategy is.

**IS strategic planning**
Implies that the process of planning has as its purpose and time horizon, strategic levels of importance.

When talking of the process we use the first definition but when implying business importance use the second.

**Where does an IS strategy fit in the wider set of strategies**

Hierarchy of strategies

```
Business strategies
     ↓
Divisional strategy
     ↓
Production Strategy    IS strategy    Marketing strategy
     ↓    ↓
IT Strategy    Manual Systems    Communications strategy
     ↓    ↓
Software Strategy   hardware strategy   data strategy   voice strategy
     ↓    ↓
Planning Strategy    Staffing strategy
```

This does not imply a fixed sequence. During early experiments in IS strategy planning IS often acts as the catalyst for generating and documenting the business strategy.

Relationship between IT, IS and Business strategies.
What might an IS strategic plan contain?

The plan aims to achieve two things,

- Clearly identify where IS intends to go and so avoid the danger of getting lost – i.e. taking courses of action that do not contribute to the overall mission.
- Provide a formalised set of benchmarks so that progress on the journey can be measured.

It is possible to identify the necessary core elements to the IS strategy plan,

1. A clear statement of the IS objectives that give a clear sense of direction - where the organisation wishes to be.
2. An inventory and assessment of both current capabilities and problems resulting from current practices – where the organisation is now.
3. A concrete implementation plan that translates the sense of direction and knowledge of the start point into a navigable route. It must identify long and short-term actions and resource allocations. It must acknowledge that organisational change is an almost inevitable corollary to the planning process.

Wards model of a planning process suggests the IS strategy plan should contain 3 elements

1. Business Information Strategy – indicates how information will be used to support the business.
2. IS functionality Strategy – indicates what features and performance the organisation will need from the systems. This demonstrates how the resources will be used.
3. IS/IT strategy – defines the policies for software and hardware. Also defines the organisations stand on the IS organisation.

The long-term plan although coinciding with the business plan time of three to five years tends to be far more project specific than the equivalent business plan. The short term IS plan is very like the short-term business plan. It defines the specific stages of projects that may run over several years. It specifies dates, goals and budgets for software and hardware acquisitions.

**Strategic Opportunities – the industry and competitive impact if IS/IT**

The approach to the competitive marketplace (external) and the approach to operations (internal) can both offer two type of strategic opportunity, either by significantly improving the traditional ways of operating or by making significant changes to the way of doing business. Benjamin et al offer a system of categorising the impact of IS/IT suggesting IS/IT may be significant in one of four ways,
This is one of the few models that explicitly suggest that internal operations can be a source of strategic gains.

Parsons (1983) was one of the first to suggest that the strategic importance of IS could be assessed within the frameworks defined by Porters work. Parsons felt that importance analysis could be done by looking at how IS/IT could contribute to the competitive opportunities surrounding,

- Products and services – nature, production life cycle and speed of distribution
- Markets – overall demand, degree of segmentation and geographic distribution possibilities.
- Economies of production – Relevant range of economics of scale, necessary flexibility versus standardisation trade-offs and the value adding stream.

Porters Five Forces Model

The classic 5 forces model of industry competitiveness provides a multi-purpose model which can be used to assess,

- Current situation
- Opportunities
- Threats

Porters five Forces model and IS opportunities

<table>
<thead>
<tr>
<th>Internal</th>
<th>Improve traditional ways</th>
</tr>
</thead>
<tbody>
<tr>
<td>External</td>
<td>Alter traditional ways</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Threat of new Entrants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bargaining Power of Suppliers</td>
</tr>
<tr>
<td>Rivalry amongst existing competitors</td>
</tr>
<tr>
<td>Bargaining power of buyers</td>
</tr>
<tr>
<td>Threat of substitute Products or services</td>
</tr>
</tbody>
</table>

Can IS build barriers to entry

Can IS change The balance of Power with Suppliers

Can IS change the basis of competition

Can IS build in switching costs
Can IS generate new Products or services

Once the relative power of these 5 forces has been assessed or in order to change that relative power it is possible to analyse the opportunities to use IS.

Buyers
IS can be used to reduce the bargaining power of buyers by increasing the switching costs by making it more expensive for a buyer to go to another supplier. It can be used to categorise and differentiate buyer groups so that it is possible to reduce or increase costs of supply to certain groups.

Suppliers
IS automation can reduce the power of suppliers perhaps robotics can reduce the need for human labour. IS can identify potentially new products.

New Entrants
When an industry is attractive others seek to move in. IS can be used to defend a market position or to penetrate barriers others have erected around an attractive industry.

Substitutes
Determinants of the substitution threat are relative price performance, switching costs and the inclination of buyers to use substitutes. When suppliers have alienated their customers they increase the readiness of these customers to use an alternative product when it becomes available. If the price performance balance of products shifts dramatically then that will increase the threat of a substitute being used.

Rivalry
The intensity of rivalry between competitors is usually greater in mature and declining industries. IS determinants are industry growth, fixed assets, intermittent over capacity. It is possible to use IS to support collaborative efforts to lower cost.

At the level of a business the strategic potential for IS can be classified by the five forces

<table>
<thead>
<tr>
<th>Buyers</th>
<th>Switching costs</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Buyer selection</td>
</tr>
<tr>
<td>Suppliers</td>
<td>Avoid switching costs</td>
</tr>
<tr>
<td></td>
<td>Backward integration</td>
</tr>
<tr>
<td>New entrants</td>
<td>Entry barriers</td>
</tr>
<tr>
<td></td>
<td>Entry deterrents</td>
</tr>
<tr>
<td>Substitution</td>
<td>Relative price performance</td>
</tr>
<tr>
<td></td>
<td>Product features</td>
</tr>
<tr>
<td>Rivalry</td>
<td>New basis of competition</td>
</tr>
<tr>
<td></td>
<td>Shared IT</td>
</tr>
</tbody>
</table>

Information systems department:

**Programmers** – highly trained technical specialists who write the software instructions for the computer.
**Systems analysts** – principle liaisons between IS groups and the rest of the organisation. They translate business problems and requirements into information requirements and systems.

**IS managers** – leaders of teams of programmers and analysts, project managers, physical facility managers, telecommunications managers and heads of office system groups.

**Chief information officer (CIO)** – senior management position that oversees the use of IT in the firm.

**End users** – representatives of the departments outside the IS group for whom applications are developed.

**Strategic Information systems** – systems that have become especially critical to a firms long-term prosperity and survival.

**Business level strategy**

Key question – How can we compete effectively in this particular market?

Based upon the five forces model is Porters classification of the three generic business strategies possible to respond to these forces.

The most common generic strategies at this level are

1. Become the low-cost producer – IS seeks to
   - Reduce overall cost directly.
   - Enhance the ability to reduce costs through other functions.
2. Differentiate your product or service – IS seeks to
   - Add unique features to products/services directly
   - Enhance the ability to differentiate the product/services through other functions.
3. Change the scope of competition by either enlarging the market or focusing on small niches not well served by your competitors – IS seeks to
   - Identify and create market niches directly
   - Enhance the ability to create market niches through other functions.

**Firm level strategy**

A business firm is a collection of businesses. Often the firm is organised financially as a collection of strategic business units and the returns of the firm are directly tied to the strategic business unit performance. The performance of all business units can increase in so far as these business units develop or create a central core of competencies.

A **core competency** is an activity at which a firm is a world-class leader. It relies on the knowledge gained over many years of experience and a first class research
organisation or key people who follow the literature or stay abreast of new external knowledge.

Any IS that encourages the sharing of knowledge across business units enhances competency. Such systems might encourage or enhance the existing competencies and help employees become aware of new external knowledge. Such systems might also help a business leverage existing competencies to related markets.

**Industry level strategy**

Firms together comprise an industry.

Key question – How and when should we compete with as opposed to cooperate with others in the industry?

Three principle concepts for analysing strategy at the industry level

1. Information partnerships – companies can join forces without actually merging by sharing information. Such partnerships help firms gain access to new customers, create new opportunities for cross selling and target products.
2. Competitive forces model – competitive advantage can be gained by enhancing the firm’s ability to deal with customers, suppliers, substitute products/services and new entrants to the market. By working with other firms industry participants can use IT to develop industry wide standards forcing all market participants to subscribe to similar standards. In the age of the Internet the traditional competitive forces are still at work but competitive rivalry has become much more intense (Porter 2001).
3. Network economics – In traditional economics production experiences diminishing returns, the more any resource is applied to production the lower the marginal gain in output until a point is reached where additional inputs produce no additional outputs. In a network the cost of adding another participant are about zero whereas the marginal gain is much larger.

**Competitive advantage to be gained from IS**

Set of categories proposed by Ward that the instances of IS for competitive advantage are where IS is,

1. Linking the organisation to customers or suppliers.
2. Creating effective integration of the use of information in a value adding process.
3. Enabling the organisation to develop, produce, market and deliver new products or services based upon information.
4. Giving senior management information to help develop and implement strategy.

There has been a revolution caused by the use of ITs which has permanently changed

- Supplier to customer relations
  IS can fundamentally influence competitive relationships and support the existence of partnerships without ownerships.
- Distribution channels
  E.g., distribution of cash is very different post ATMs.
- Production economies and product life cycles
- Value added services
  Information wholesaling and home and business information services and brokerages relating to the acquiring, storing and enhancing by repackaging of information.

The information revolution has altered how managers see the role of IS. It was once perceived to be only part of the operating of a business, now there is an increasing recognition of the value of information. All organisation now realise that IS contributes to both sides of the general business equation – it adds to both the revenue and the cost streams.

Porter and Millar (1985) suggested that the strategic significance of IS had the potential for deliberately gaining competitive advantage by following their 5 step process
  1. Assess the information intensity
  2. Determine the role of IS in the industry structure
  3. Identify and rank the ways IS might create competitive advantage
  4. Investigate how IS might spawn new business.
  5. Develop a plan for taking advantage of IS.

To gain competitive advantage an organisation must be able to make the distinction between
- Technology hype – area of the sales man pitch!
- Technology capability – what current technologies can actually do today.
- Useful technology – out of the larger set of capabilities this fairly small set that any organisation finds useful.
- Strategic technology – the hub that any organisation is seeking, the subset of IS that if not adopted would lead to business performance suffering.