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Information Systems Analysis

*Topic 9:
Analytical Techniques for Understanding a
Complex Organisational Environment*


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Analytical Techniques for Understanding a Complex Organisational Environment Topic 9 - 9.2

Scope and Coverage

This topic will cover:

- the meaning of a knowledge-based view of organisations
- the purpose and potential of PEST
- the purpose and potential of SWOT



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Learning Outcomes - 1

By the end of this topic students will be able to:

- Define and explain the term 'knowledge-based view of organisations'
- Define and explain the abbreviation PEST
- Demonstrate how PEST can be used
- Apply PEST to a business scenario



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Learning Outcomes -2

By the end of this topic students will be able to:

- Define and explain the abbreviation SWOT
- Demonstrate how SWOT can be used
- Apply SWOT to a business scenario


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Terminology

- Terminology will be explained in the lecture, seminar and tutorial and you should take notes.
- Ask questions if there is anything that you don't understand.


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Knowledge-Based View of Organisations - 1

- The knowledge-based view of an organisation (what it does, how it does it and why) should be considered as one of the most important resources of the organisation.
- In strategic terms, explicit and tacit knowledge is vitally important as it can provide an organisation with a competitive advantage and high standards of performance.
- It is also one of the most flexible resources as it can increase over time.


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Knowledge-Based View - 2

- However, an organisation is not always aware of the amount of knowledge available (particularly tacit knowledge) or how to use knowledge efficiently.
- Knowledge from one part of an organisation needs to be shared with other parts to ensure that both the staff and organisation benefit.
- Knowledge can be deemed a *core competency* for an organisation.

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Knowledge-Based View - 3

- An information system that encourages the sharing of knowledge across an organisation facilitates its competency.
- Sharing of knowledge develops existing competencies and raises awareness of new knowledge.

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Knowledge-Based View - 4

- An example of such a system could be one that connects Research and Development departments with Production, Marketing and Finance and provides access to documents, reports and other information.
- The analyst needs to identify whether the organisation understands and manages its knowledge-base and takes maximum advantage of this valuable resource.

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Knowledge-Based View - 5


- An organisation's knowledge needs to be managed to ensure that it is:
 - identified
 - located
 - created
 - developed
 - shared
 - used
 - retained

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Knowledge-Based View - 6

- A knowledge-based system can be analysed using various methodologies but is probably best analysed using a combined soft and hard approach, such as Multiview
- This approach acknowledges the relationship between the social and technological factors of the system
- Various techniques such as PEST and SWOT could also be used to analyse the social factors

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PEST - 1


- Considers the following factors:
 - Political
 - Economic
 - Social
 - Technological
- **Political factors** assess political influence on an organisation.
- **Economic factors** assess local, national and global influence.
- **Sociological factors** assess ways in which a society can influence an organisation.
- **Technological factors** assess the impact of new and emerging technology on an organisation.

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PEST - 2

- The effect of legal and environmental issues on an organisation can also be assessed using PEST.
- It can also be used to understand:
 - an organisation's growth and decline
 - knowledge management
 - strategic planning
 - competitive analysis
 - marketing

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PEST - 3


- It is important to clearly identify the subject of a PEST analysis, for example:
 - a strategic option, such as attracting new customers or selling a new product
 - developing a competitive strategy
 - a potential merger with another organisation
 - an opportunity to expand

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PEST - 4


- The larger and more complex the organisation or project the more useful PEST can be as it can identify problems and issues.
- The purpose of the PEST assessment and its implications must be clearly explained to the participants for maximum benefit.

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SWOT - 1

- Refers to:
 - Strengths
 - Weaknesses
 - Opportunities
 - Threats
- It is a strategic planning method for gathering, structuring, presenting and reviewing data that specifies the aims of an organisation and identifies the **strengths, weaknesses, opportunities** and **threats** that are relevant to achieving the aims.

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SWOT - 2

- A SWOT analysis:
 - provides a framework for reviewing the strategy, position and direction of an organisation.
 - measures a business's market and potential according to external factors
 - helps focus activities into areas of strength and where the greatest opportunities lie. It is used to identify dangers in the form of weaknesses and both internal and external threats.

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Strengths

- An analyst needs to identify an organisation's strengths, such as:
 - what characteristics give it an advantage over other organisations?
 - what are the advantages over other organisations?
 - what activities are done well?
 - where are the greatest opportunities?
 - what are its assets?
 - what experience and knowledge does it possess?

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Weaknesses


- An analyst needs to identify an organisation's weaknesses, such as:
 - the characteristics that place the firm at a disadvantage
 - what improvements could be made?
 - what tasks are done poorly?
 - what resources are lacking?
 - what could be done better?
 - where is money being lost?

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Opportunities

- An analyst needs to identify an organisation's opportunities, such as:
 - when are the chances to make greater sales or profits?
 - what new needs of customers could be met?
 - what economic trends could benefit the organisation?
 - are there beneficial political and social opportunities?
 - are there technological opportunities?
 - what does the organisation possess that its competitors don't?

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Threats

- An organisation can face many threats, for example, **internal threats**:
 - factors relating to products, costs, budget, performance, quality, people, skills, adaptability, technology, services, processes, supplies, etc.
- **External threats**, for example:
 - factors relating to customers, trends, competitors, economics, politics, society, culture, technology, environment, media, law, etc.

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Documenting SWOT Analysis

Strengths	Weaknesses
Opportunities	Threats

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SWOT - Matching and Converting

- Another way to use SWOT is for:
 - **Matching**
 - **Converting**
- **Matching** is used to find competitive advantages by matching strengths with opportunities.
- **Converting** is used to apply strategies to convert weaknesses or threats into strengths and/or opportunities, e.g. finding new sales opportunities.

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CATWOE

- CATWOE can also be used for analysis as discussed in Topic 5.
- It could be useful to identify information relating to an organisation's knowledge-base.

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Topic 9 – Analytical Techniques for Understanding a Complex Organisational Environment

Any Questions?

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