

THE ADAPTABILITY OF STRATEGIC MODELS

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The Study Guide for Paper P3, Business Analysis, features a number of models to aid Information System (IS) strategy planning. These models can be used to assist in identifying and assessing strategic opportunities, or diagnosing and appraising the current strategic situation.

Some of these models are known by acronyms, such as the PEST or SWOT checklists. Some are represented as matrices, such as the Boston Matrix. Others are diagrammatic, such as Porter's 5-forces or the Value Chain.

At Paper P3, you should be both familiar with the models in their traditional form, and be able to apply them to different scenarios. Although the textbooks describe what could be called the 'classical' application of models, the value of the models often lies in their flexibility. To illustrate this, two well-known models are discussed in this article - PEST and Value Chain - showing how they can be used to reflect different situations.

PEST

PEST (Political, Economic, Sociological, Technological), also known as SLEPT (including Legal) and PESTLE (including Legal and Environmental), represents the factors in the wider environment to which an organisation needs to react. The Political, Economic, Sociological, and Technological elements are usually applied at a macro-level, to the world at large. They can, however, be scaled down to show internal, organisational influences on a given target department.

Table 1, at the end of this article, illustrates the macro and micro-levels of PEST, with examples at an organisational and departmental level, indicating the factors that an analyst may want to examine.

PEST is not only relevant to environment analyses - it can also be used to help assess the feasibility of a proposal for business change. Thus a business analyst, when considering a solution in a department or division of a company, might perform a PEST analysis. The analyst would examine the organisational strategy, board make-up, and organisational structure for political influences. Economic factors would include the budget allocation, cross-charging policies, and accounting models. Sociological factors might be the prevailing organisational culture, or the likelihood of a change in work practice or redundancies. Technological considerations would cover

the capability of the current infrastructure to handle the new system, and the compatibility of different components of the system.

As can be seen, used in this way, the PEST model draws more on the internal, departmental level experience. By focusing on internal factors, the analysis allows us to see whether or not the proposed solution will be compatible with the company's present position and expectations. The model itself has not been changed by using it in this way, but it has demonstrated flexibility in its application.

THE VALUE CHAIN

Another model that can be used to illustrate flexibility in application is Porter's Value Chain. Most textbooks describe the Value Chain in terms of the handling of physical resources.

In itself, the Value Chain is a model which helps us break down the business cycle into strategic activities that add value to a product or service. Through this analysis, the company can identify where costs are too high, or are reasonable, and also understand where and how differentiation from competitors can be achieved. In the context of managing business information, the company can also decide where information systems can help reduce costs and deliver competitive advantage.

As mentioned above, in most textbooks the Value Chain refers mainly to the handling of physical goods, often in a manufacturing or retail context. In Example 1, only the primary activities are considered, as 'backroom' support (or secondary) activities are similar, regardless of the type of organisation.

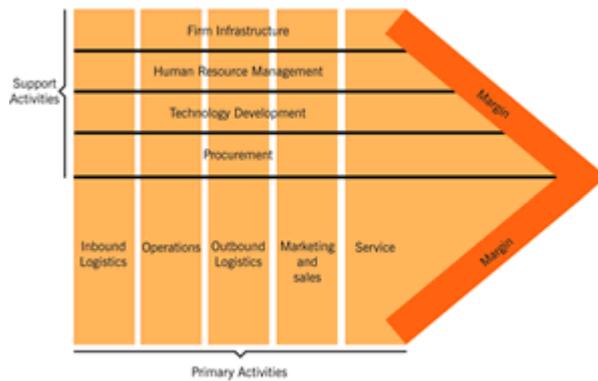
Example 1 - Handling physical goods

Inbound logistics may be met by automated warehouse procedures for manufacturing, or by a dedicated transport fleet for shipping stock into branch stores.

Operations would be controlled by a manufacturing system, such as a production scheduling system, or by a stacking and selling process in a retail business

Outward logistics could be handled by a delivery fleet, a transport scheduling system or a collection point.

See Figure 1: The value chain (M E Porter (1980))



Although Porter defined the Value Chain as pertaining to both products and services, most textbooks simply describe the physical aspects, as reflected in the descriptions above. The terms 'Inbound logistics' and 'Outbound logistics' give emphasis to the idea of physical movement. Services, however, are less tangible, so we need to examine whether the Value Chain model can still be applied. Service sectors include financial services, travel and tourism, marketing, and advertising.

At the outset, we need to be comfortable with what the model portrays. The core activities can be seen as a simple process model, as shown in Figure 2: Simple process model.



Any service must have identifiable inputs and outputs. Inbound and outbound logistics refer to the input and output to and from the process part of the system. Our other primary activities of marketing, sales and service also feed into the process, but not in the same manner, hence their separate boxes on the process model.

Considered in this way, we can reconsider our view of the Value Chain as only appraising the cost of handling physical goods. So what can we see from this view? Here's an example of a training company that specialises in providing online learning rather than traditional classroom instruction. The source for this is a study undertaken by Woudstra and Powell in 1989.

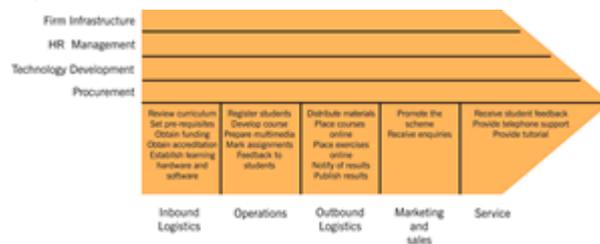
Rather than talk in terms of logistics, we need to consider what represents the inputs to, and outputs from, the process. One way to approach this is to list some of what we (ie the business) consider to be the core activities, and see how they map onto the process model. Typical core activities undertaken by an online learning provider will include:

- market research into learning needs
- curriculum planning
- course development
- preparing written and multimedia teaching materials

- developing a learning technology
- strategy
- exercise preparation
- course promotion
- seeking affiliation with a funding or accreditation body
- deciding pre-requisites for modules
- student registration
- assessment marking
- distributing materials
- scheduling tutorial/guidance sessions
- providing telephone support for students
- ensuring students have access to learning materials
- feeding results back to students.

Figure 3 suggests how these may populate the Value Chain. Although the term 'logistics' is there, think more in terms of what is input to, and output from, the process.

Figure 3: Value chain



Once the activities have been identified and the model populated, the business can analyse the costs of each element, as in the traditional model.

This example shows how a company selling a largely intangible service still has to control its value chain in order to manipulate its costs to maximum effect. In the current economy, where service industries generate as much money as manufacturing, it is important to be able to recognise the primary activities in these sectors, and how they can be appraised.

Porter's Model is flexible enough to accommodate all types of services, as long as the analysis is not 'frozen' by the rigid terms used in the original model.

CONCLUSION

The various models cited in the Paper P3 Study Guide are described in their original form and context. However, the evolving business environment and the range of business strategies currently used means that these models should be used with thought and flexibility. Their use is intended as an aid to thought, not a substitute.

FURTHER READING

- Porter, M, Competitive advantage: Creating and sustaining superior performance, Pub Free Press, 1985
- Woudstra, A and Powell, R, Value Chain analysis: A framework for management of distance education, The American Journal of Distance Education, 3(3), 7-21

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TABLE 1: MACRO AND MICRO-LEVELS OF PEST

POLITICAL

Organisational level

Government policies, possible changes of government, international law, industry regulation.

DEPARTMENTAL LEVEL

Company policies, organisational strategy, change of CEO or Board members, organisational structure and lines of control, management style.

ECONOMIC

ORGANISATIONAL LEVEL

General state of economy/stock market, level of exchange rates, interest rates, share prices, level of disposable income in the marketplace, volatility of marketplace.

DEPARTMENTAL LEVEL

Budget allocations, cross-charging policies, stage of the financial year.

SOCIOLOGICAL

ORGANISATIONAL LEVEL

Fashions, trends, social priorities, demographics.

DEPARTMENTAL LEVEL

Organisational culture, work practices, expected working hours, flexibility of work time, level of autonomy among staff.

TECHNOLOGICAL

ORGANISATIONAL LEVEL

New technologies, whether information or production, such as wireless, broadband, portable.

DEPARTMENTAL LEVEL

Technology owned and used in-house, organisational infrastructure, whether IT is developed in-house or outsourced, availability of standard packages to suit the department's tasks.