Business Analysis and Decision Making

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We regret that the author(s) is/are unable to enter into any correspondence relating to, or arising from, this guide. Correspondence should be addressed to the module leader, via the WWLC.
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Welcome to the course

An understanding of key economic concepts is essential for those who manage business enterprise. This course analyses the real-life problems facing actual businesses, and evaluates the effectiveness and limitations of different management attempts to solve them.

Aims
This course aims to:
- equip the student with a distinctive accounting framework that can be used to deconstruct a firm's market, productive and financial performance.
- develop students' understanding of the financial calculations employed to direct strategic management and to communicate effectively how these calculations are employed to enhance strategic decision-making.
- develop an understanding of how business analysis can reveal the possibilities and limitations of strategy and decision-making.
- contextualise understanding of accounting numbers within a specific industry and institutional context and enable students to analyse and develop independent working skills employing a range of data sources.
- enable students to search for company data using databases such as EDGAR and Mergent online and to present analyses in a clear and concise manner.

Objectives
By the end of this course you should be able to:
- critically understand the variable relation between product markets, internal organisation, cost structures and capital market expectations, and how they impact on strategy formulation;
- deconstruct the return on capital employed;
- critically appreciate that accounting numbers reflect complex market, organisation and institutional relations;
- explain and understand that the outcomes of strategy are shaped by accounting calculations but are often subject to vagaries that limit management control;
- understand and explain the relationship between efficiency, distribution and stakeholder interests;
- apply interpretive and analytical skills to interpret the performance of companies, and be able to employ analyses and numbers to construct well argued presentations and reports.
Introduction

This module on Business Analysis is designed to equip you with the basic skills required to carry out business analysis. We review the models of business analysis grounded in economics but also introduce an accounting framework for business analysis. This so-called value added accounting framework uses publicly available information to interpret business performance, combining aspects of business market trajectory, capital market relations and the organisation of internal resources to deliver strong profit and cash flow performance. As you progress through this module the framework of analysis is extended from a static analysis of business at the beginning, progressing to a more dynamic framework that takes into account how performance changes over time. We also introduce a capital market dimension into the analytical framework to demonstrate the way firms are under pressure to drive up return on capital and shareholder value.

In addition to the framework of analysis, we also show you how this can be employed in a practical way to strategically audit business strategy. From this analysis we explore the possibilities and limitations that firms face as they strive to increase return on capital. At the end of this module you will be able to carry out your own business analysis and identify factors that might promote or limit firm performance.

About the author

Colin Haslam

Professor Colin Haslam, the author of this module, is currently Director of the Management School at Royal Holloway College. His research interests cover work in an earlier period on the car business with the book Cars: Analysis, History, Cases. He has in recent years been concerned with issues relating to shareholder value and the pressure that institutional investors put on firms to deliver surplus earnings on capital. His recent work employs a distinctive accounting framework to reveal the possibilities and limitations facing firms as they compete to generate profit and cash from operations. He has, with other academics, introduced the concept of financialisation, which is used as a framework for his analysis, as distinct from other academics who generally utilise the concept of globalisation to frame their research agenda.

Formative assessment

Essay titles

You are expected to produce ONE piece of written work for the formative assessment component of this course. You have a choice of three essay questions. Formative assessment is intended to provide feedback on your progress in the course; however, it does not contribute towards your final course grade.

The essay choices are:

1. How would you calculate value added? In what ways can this framework of business analysis help us to understand the connections between market trajectory, operating ratios and financial performance?

2. Firms are under increasing pressure to increase their return on capital and deliver increasing shareholder value. What do you understand by the term ‘shareholder value’? Why is it so difficult to increase return on capital and shareholder value?

3. What are the main benefits assumed to flow from a merger or takeover?
Why do so many mergers and takeovers fail to deliver improved financial performance? Illustrate your answer with relevant financial case analysis.


Submitting the assignment: Submit the assignment online, via the WWLC.

A note on this text

This guide contains various different elements. Some of these need to be explained in a little more detail:

Quick summaries

Quick summaries appear in the text margin and have been provided wherever the text is a little dense. Where the text is broken up or bulleted, I have not provided a summary.

Parts of the content are inherently linked to the activity or journal activity that follows it. This means that you are responsible for interpreting the content and providing your own definitions and summaries. In these cases, too, I have refrained from providing summaries, but as the text has a broad margin, it will be a good idea if you provide your own summary here for future use.

The summary can be read as an introduction or used as a memory aid, but does not replace the actual text or your own summaries. They are no more than guides to the content.

Journal activities

The Journal activities will help you to prepare for your TMA and the exam. They appear at pivotal moments and urge you to think through the material that you are reading. If you take part in all of these exercises, you are bound to do better when you are confronted with the kinds of questions we will expect you to be able to answer.

Possible discussion topic

Where an activity or journal entry is marked with the phrase “Possible discussion topic”, it means your tutor will decide whether this topic should be discussed online.
Objectives

The purpose of this topic is to:

- review the history of business analysis and the shift from operational to strategic issues;
- demonstrate that strategic management results from structural adjustments to the way in which organisations are managed;
- review the main models of business analysis that are founded in economics, e.g. Porter’s work on industry-structure analysis.
Introduction

In this introductory topic we introduce you to the historical background of business analysis, a background that very much centres on gathering information about operational issues. This is not to say that firms did not also have strategic intent. However, when organisations adopt a divisional structure the process of strategic management is made more visible. Here, strategic management is separated out as a function of head office, with texts stressing the importance of planning, strategy and the nature of leadership – see, for example, Peter Drucker’s 1950s text The Practice of Management.

International business analysis

In this first topic we review the historical development of business analysis. We start by noting that much of the literature on business policy and analysis is American.

If we trace the American literature on this subject back over fifty years we can make a general observation about the nature of business analysis: that is, analysis tended to focus on factory or process and was less concerned with firm-level strategic considerations.

This might well be a rather general oversimplification but it allows us to first consider the nature of business analysis at the operational level, before turning to the object of this topic, the nature of strategic business analysis.

The importance of Peter Drucker

In The Practice of Management (1968) Drucker suggests that economists do not take seriously the role of management and how management calculations and business analysis can improve decision-making:

- The strategic imperative motivating management action is said to be that of utilising business resources in ways that improve competitiveness and sustain competitive advantage.

The object of this course is to equip you with an accounting framework that informs business analysis and is relevant for managing the modern international business.

This framework of analysis will allow you to assess critically the possibilities and limitations of particular strategic action(s) directed towards maintaining competitiveness through cost reduction and market expansion.

Quick summary

Peter Drucker

- The ‘economist’ model of the manager is incorrect insofar as it refers to the manager as a passive and reactive economic actor.

When Drucker referred to the economists’ model of the firm he referred specifically to the theory of perfect competition:

- In this model of the firm all the owner needs to do is to adjust output in relation to price.
- This is because the assumption is that all factor inputs (land, labour, capital and materials) are already combined in a technically and economically efficient way to meet the required market price.

The economist ‘business man’ – the picture that underlies the prevailing economic ‘theory of the firm’ and the theorem of ‘maximisation of profits’ – reacts to economic developments. He is still passive, still adaptive … Basic this is a concept of the ‘investor’ or ‘financier’ rather than that of a manager. (Drucker, 1968)
What exactly is Drucker trying to say in the quotation above?

The point Drucker makes is that the management agency within the discourse of economics is essentially passive and reactive rather than active and purposeful.

**Economic theory in the 1960s and 1970s**

In the 1960s and 1970s economic theory takes on board the fact that there has been a separation of ownership and control and that the objectives of the manager may differ from those of the shareholder who takes an ownership stake in the business.

Economists such as Baumol and Marris do consider the fact that the objectives of management may interfere with the single overriding objective of profit maximisation:

- At a general level the economist has accepted the role of management in shaping overall goals and objectives.
- However, the detail of business analysis and calculation(s) that shape the combination of factor resources – land, labour, capital and materials – in relation to output, are seldom articulated.

The economists’ model of the production function survives, representing the business as a black box within which an optimum mix of resources will be applied to meet a particular price set by the market.

**The reality of business life**

In practice, an organisation needs to react to a complex set of internal and external factors which are:

- economic
- political
- social
- institutional

**What is the role of senior management?**

The role of senior management, with both the power and responsibility to make and shape corporate performance, is of great importance.

Management uses the information at its disposal to reconfigure resources dynamically – both operationally and strategically – in the interests of sustaining corporate competitive advantage.

**Drucker’s view on the role of management**

Drucker takes the view that management has an active role to play in the organisation of the firm’s resources so as to achieve a particular set of objectives.

Managing goes a long way beyond passive reaction and adaptation. It implies responsibility for attempting to shape the economic environment, for planning, initiating and carrying through changes in that economic environment, for constantly pushing back the limitations of economic circumstances on the enterprise’s freedom of action – it is management’s specific task to make what is desirable first possible and then actual. (Drucker, 1968)

**The contribution of Porter**

The general assumption is that good management practice is an important weapon in the fight against external competitive market forces.

In a series of articles written in the 1980s Michael Porter also considers how

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**Quick summary**

**1960s & 1970s**

- 1960s & 1970s economic theory accepts the fact that there has been a separation of ownership and control & that the objectives of the manager may differ from those of the shareholder who takes an ownership stake in the business
- Organisations need to react to a complex set of internal and external factors: economic, political, social & institutional
- Managing goes beyond passive reaction and takes responsibility for shaping the economic environment, for planning, initiating and carrying through changes in that economic environment
the application of analytical techniques can be employed to support business analysis and evaluate competitive strategic moves.

Porter employs his SWOT framework of industry structure analysis to assess the nature of the competitive environment within which the firm operates.

What does Porter’s SWOT model consist of?

**Figure 1.1 Porter’s Model**

Using Porter’s model of analysis managers can run through a checklist of the strengths, weaknesses, opportunities and threats facing the business. See the example below.

**Example: Motorola**

- **Strengths**: High R&D, knowledge-driven business, international brand image.
- **Opportunities**: Digital 3G communications and digital video communications.
- **Weaknesses**: High R&D does not deliver strong profits. Market conditions volatile.
- **Threats**: Intensified competition for mobile telephony, Price Discounting and market maturity.

Porter’s framework is a framework of business analysis that can then be used to inform and direct strategic management and the choice of generic strategy.

Knowledge of these underlying sources of competitive pressure provides the groundwork for a strategic agenda of action. They highlight the critical strengths and weaknesses of the company, animate the positioning of the company in its industry, clarify the areas where strategic changes may yield the greatest payoff, and highlight the places where industry trends promise to hold the greatest significance as either opportunities or threats. (Porter, 1979)

Porter’s SWOT analysis can reveal much useful information for the business analyst.

**Task 1.1**

Conduct a simple SWOT analysis on a company you know well.
From Porter we see that business analysis is a process of collecting information that can be used to inform management action.

This management knowledge can, according to Porter, be systematised using a classification process in which information is collected under different headings, often known as Porter’s Five Forces Model (see diagram below).

- Competition among existing industry businesses
- The bargaining strength of suppliers
- The bargaining power of buyers
- The threat of new entrants
- The threat of substitute products.

![Porter's Five Forces: Industry Structure Analysis](image)

Once knowledge from Porter’s analysis method has been collected and assessed then opportunities emerge that, according to Porter, are related to an assessment of the strengths and weaknesses of a business and the strengths and weaknesses of its rivals/competitors. For Porter, business analysis provides “the groundwork for a strategic agenda of action”.

Successful management applies management knowledge to improve internal resource use and to react to external competitive forces strategically, thus underwriting the competitiveness of the business.

The role of business analysis should be, as Porter observes, to interrogate critically the environment within which the business operates and to seek out ways of sustaining competitive advantage.

Articulating and understanding the operating context within which national and international businesses operate is an important objective of this course.

**American management**

We start by illustrating, through the case of Ford at Highland Park, the importance of American management practices.

In the 1920s Ford exported its production systems and management practices overseas. Visitors also observed the workings of the factories and the production methods used, and these were often documented in texts and journal articles of the time.
Two issues are important here:
- first, the spread of American best practice via literature and the physical location of plants overseas;
- second, the idea that business analysis is about attention to operational detail.

Why was the Ford plant considered revolutionary?
From 1909 to 1916 Ford increased output fifty times starting with the production of 10,000 Model T’s:
- seven years later the company was producing 500,000 Model T’s at the Highland Park plant in Detroit;
- as output expanded so Ford managed to take cost out of the product;
- cost reduction was achieved not so much from the automatic results of economies of scale but through a judicious and continuous process of re-organisation of production;
- the reorganisation of internal processes enabled the firm to produce more of the Model T in-house;
- Ford also paid attention to the design characteristics of the Model T. It had to be light but strong for driving on the dirt tracks that led out of Detroit.

What was the outcome of Ford’s cost-reduction strategy?
Cost and price reductions, coupled with reliability, fed the latent demand for personal transportation and this expanded at such a rate that Ford was unable to satisfy the demand. One of the main challenges facing the managers of Ford’s Highland Park factory was that of satisfying the rapid growth in consumer demand by constantly improving the way in which materials flowed within the factory and thinking about ways in which the factory could deliver higher output from one year to the next (Williams et al., 1993).

The management of operations at Ford was dynamic and subject to constant change in the struggle to take cost out. The operations of the factory and analysis undertaken to reduce costs is excellently described in Arnold & Faurotes’s (1914) study *Ford’s Methods and Ford’s Shops*. (See also Tolliday, 1998.)

The contribution of F. W. Taylor
Concern with the management of operational detail in the early part of the 20th century was reflected in the work of F. W. Taylor and consultants such as C. Knoeppel.

F. W. Taylor’s contribution to operational management is generally described within the generic title ‘scientific management’ and is specifically outlined in his publication *Principles of Scientific Management* (1929). In this work Taylor outlines the principles of time and motion study, in addition to his work on the variables affecting the cutting of metals and the functional organisation.

What was the focus of ‘scientific management’?
Taylor’s approach to business analysis required an understanding of ‘how work should be done’:
- In particular, it was first necessary to understand existing operational details before improvements to the method of work could be implemented to reduce costs.

As you will see later in this course it is still the case nationally and internationally that the most important internal costs for an organisation to manage are labour costs. Placing great emphasis on how work should be done makes sense in light of the fact that most conversion cost is labour cost.
How did Taylor establish how work should be done?

Establishing a measurement of the standard was important because as Taylor saw it:

Both sides (the workforce and management) must recognise as essential the substitution of exact scientific investigation and knowledge for the old individual judgement or opinion. (F. W. Taylor, 1929)

The measurement of time

The importance of time measurement to the management and use of labour time lies in the fact that measurements can then be used to plan and schedule the work to be done:

- After carrying out a time and motion study at Bethlehem Steel in the materials yard, Taylor introduced a planning department that issued instructions to the foremen as to what work was to be done at what time during the day.

At this early stage in the development of management practices we can already observe that the collection and measurement of standard work times was a particular form of business analysis appropriated by management. The analysis could be used to determine what was to be done in the working day and the best way to meet demand at the lowest cost.

The preoccupation is with measurement and its presentation in various forms, to management, for the purposes of exercising control over operations:

- At Ford’s Highland Park, the time elapsed for particular operations was of high importance to management in establishing the labour costs for a particular operation and was recorded in great detail in Ford’s cost books.
- Attention to operational detail was not just employee centred but consideration was also given to factory layout and the use of machinery.
- Ford engineers were concerned to combine operations performed at one machine so that a bundle of tasks could be completed at one workstation. They also arranged the layout of machines according to their sequence of use.
- As Bornholt observed, the company’s practice was to arrange machines regardless of function, according to ‘sequences of use’ (Bornholt, Iron Age, 1913).

C. E. Knoeppel

The sheer size of American organisations was such that by the 1920s the literature was reflecting a concern with planning and coordination. In order to strategically coordinate, plan and control, management needs to be provided with summary knowledge describing the detail of operations. One concern was therefore with how organisations were to be structured and what information needed to be produced to ensure that management could plan, coordinate and control the enterprise.

American Journals such as Industrial Management reflect a desire to improve the functioning of management through the use of ‘management information systems’. In 1919 Charles Knoeppel, founder of the consultancy firm C. E. Knoeppe pl & Co. Inc., presented a series of articles on ‘Graphic production control’.

His purpose was to explain how graphical charts could be used to visually represent the manufacturing activity as a relationship between revenues (volume multiplied by price per unit) and cost incurred in production. The two purposes for which these calculations were carried out were: analysis and control.

Analysis

According to Knoeppel ‘analysis’ was:
The determination of what is to be done, the manner of doing and what it should cost in time and money – the standard to work to.

Control
And ‘control’ was:

The means provided for enabling the shops to either measure up to the standard determined upon, or to investigate variations in such a way as will result in a constructive attempt to subsequently attain it. With Analysis and Control utilised to the fullest – the manufacturing world can be assured that it will secure the maximum operating efficiency.

Why is Knoeppel considered to be important?
The importance of Knoeppel’s work lies in the fact that it combines the measurement of standard times to do the work with the cost of performing the operations:

- It does this by multiplying labour time by the labour rate per hour.

According to Knoeppel, his business analysis using graphic production control not only “controls production, but leads indirectly to better strategic organisation” (Knoeppel, Industrial Management, 1919).

There is no doubt that up to a point the focus of management, academics and consultants was with internal resource management issues. As American firms reaped the benefits of output expansion of an earlier period, coordination and control became more of a corporate business-wide issue. How best could the organisation coordinate the activities of the business and monitor the performance of these activities?

Charles Knoeppel was already presenting possible solutions, as he saw it, to the issue of large-scale business coordination and management. In 1917 he argued that:

No business can be as successful as it is possible to be with two or three heads running things. There must be a single coordinating and directing function. (Knoeppel, 1917)

Numbers, structures and control

What we observe then is the increasing use of financial numbers as a means by which analysis can be undertaken and so contribute to planning and control. This system of collecting information for analysis should also go hand in hand with an appropriate organisational structure.

What is the appropriate structure for organisations?

- Alfred Chandler observes that the appropriate structure for managing the organisation is the multi-divisional form of business modelled in General Motors, Sears and ITT, for example.
- In this structure the head office fulfils a planning function, strategically overseeing the divisions that set targets via the financial plans that then become the responsibility of divisional managers to achieve.
Multi-divisional structures

In a divisional structure the organisation operates with a head office and has divisions that can be geographically specified or defined because of the needs of a product. For example, at General Motors, divisions are specified by product, e.g. Buick, Oldsmobile and Cadillac.

In more recent years divisions might be specified from regions, such as the ‘North American’, ‘Far East’ and ‘European’ Divisions.

Within each division we observe a collection of functional units that often ensure each division has a full operating system or operates as a mini company unit.

According to Chandler,

> The executives in charge of these divisions, in turn, have under their command most of the functions necessary for handling one major line of products or set of services over a wide geographical area, and each of these executives is responsible for the financial results of his division and for its success in the market place. This administrative form is often known in business parlance as the ‘ decentralised structure’. (Chandler, 1962)

The divisional form of organisation (also known as the decentralised form) is an organisational structure in which the divisions take responsibility for operational and day-to-day administrative functions:

- the head office is then free to concentrate on more long-term business planning and regulating the outcomes of longer-term policies;
- the planning and coordination function is the basis for creating a business strategy according to Chandler.

The departmental and divisional offices may make some long-term decisions, but because their executives work within a comparable framework determined by the general office, their primary administrative activities also tend to be tactical or operational. The general office makes the broad strategic or entrepreneurial decisions as to policy and procedures and can do so largely because it has the final say in the allocation of the firm’s resources, men, money and materials. (Chandler, 1964)

Why is the divisional structure a significant development?

A divisional structure was an important development because it sealed the separation of operational management and its associated calculations from strategic business analysis, which would be undertaken in the head office.

Accounting techniques, such as budgeting and the development of strategic management accounting, inform business analysis and influence corporate decisions:

- For example, in the 1950s, Joel Dean presented the first discussion of the financial investment appraisal technique Discounted Cash Flow (DCF).
This accounting calculation was presented as a form of financial analysis that could predict future returns on investment.

- At a strategic level these tools of corporate financial planning could then be used to select the most profitable investment options and so secure the competitive position of the business.

**Strategy and statistics**

The important point here is that the language of strategy and the use of financial numbers to support the processes of planning, coordination and control are central to the process of business analysis:

- Business analysis is about strategic moves that secure competitive advantage and this advantage is reflected in the firm's ability to sustain above-average profit performance.

In his text *Contemporary Strategy Analysis*, Grant notes:

> The purpose of strategy analysis is not to prove answers but to help us understand the issues. Many of the analytic techniques – are simply frameworks to identify, classify and understand the principal factors that influence strategic decisions. Such frameworks are invaluable in understanding the complexities of strategy decisions: the infinite richness of the firm's environment and the tangle of people, resources, structures and traditions that make up the business enterprise. (Grant, 2002)

The models of analysis we explore in this course are tools by which you can organise information. Some of the frameworks we start with are grounded in economics and the work of Porter and Prahalad & Hamel is very much influenced by the field.

The work of Grant and his strategy analysis, whilst outlining the standard models of analysis, also introduces an accounting framework – see his chapter the 'Quest for value'. In this chapter he argues that we can use accounting data to analyse business performance.

As you progress through the topics in this course we will increasingly employ an accounting framework to understand the possibilities and limitations facing managers as they manage strategy.

**Summary**

In this topic we have:

1. considered that in the early part of the last century the focus of business analysis was with operational management – we illustrated this through the case of Ford at Highland Park and the attention given to managing operational detail;
2. argued that the appearance of the multi-divisional structure also coincides with the development of a management literature devoted to business strategy;
3. illustrated some of the key models of business analysis and the importance of Porter's model of industry-structure analysis.

**Task 1.2**

What do you understand to be the differences between operational and strategic management?

*See possible answers on p. 21*
Task 1.3
What lessons can we learn from the management practices of Henry Ford at Highland Park?

See possible answers on p. 21

Task 1.4
What are the main advantages of the multi-divisional form of organisational structure?

See possible answers on p. 21
Possible Answers

Task 1.2
Operational management is concerned with the detailed planning associated with managing tasks, processes and the factory. We often think of the operational as relating to actions that have immediate and short-term impacts on the way in which the business is being managed. It is often associated with adjustments to operational detail within the factory or within a particular process.

Strategic management, by way of contrast, is concerned with medium- to long-term goals where the resources of the business are to be redirected towards new objectives. Strategic decision-making and its formulation is often located at a senior level within the organisational structure.

The two are also interconnected because much of the literature on strategy observes that strategy is the outcome of a series of incremental operational moves which, in aggregate, execute strategy.

Task 1.3
We can learn a great deal for the management practices of Henry Ford at Highland Park. The stereotype of Ford’s management was summed up as “you can have any colour so long as it is black”. The inflexible business producing cars using de-skilled labour.

Contrast this stereotype with the fact that:
1. The Model T was subject to many design changes from 1909 to 1916 and that these design changes made the product cheaper to manufacture.
2. Design changes necessitated adjustments to the factory layout to ensure that redesigns were put in place.
3. Demand-side pressure required adjustments to factory layout to improve flow so that volumes could be increased.
4. Employees were re-trained to do new tasks and old tasks were replaced with new ones.
5. As flow improved so indirect labour was also reduced, releasing employees to do work that supplies once did, thus reducing purchase costs without increasing the overall wages bill.

Ford’s factory was a flexible, high-volume business where the reality was different from the stereotype constructed in the strategy text.

Task 1.4
The multi-divisional organisation establishes a mechanism by which the strategic can be separated from the operational. The head office is concerned with planning, budgeting and looking ahead. The divisional managers of the respective product or geographically specified divisions are in charge of operationalising the strategic decisions of the head office.

The head office will normally set financial objectives for the divisions, e.g. a target return on capital. The process of setting and then delegating the financial target ensures that there is a process of decentralisation of responsibility. It is argued that this process of assigning or decentralising responsibility will enhance the motivation of divisional managers who are free to articulate divisional resources in a way that delivers the strategic outcomes expected from the head office.