

# Management Quarterly

PART 7

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## Management Quarterly

### *A new way to keep ahead*

*Management Quarterly* aims to deliver the basic building blocks in core management disciplines. It is produced in association with Cranfield School of Management. Each issue will usually contain articles on Strategy, Human Resources, Marketing and Finance, with other occasional subjects such as Project Management and Knowledge Management. Over a three-year period this will build up to a comprehensive overview of practical business knowledge, and modern management ideas.

### *Management Quarterly will :*

- Provide a comprehensive grounding in the knowledge needed to operate a successful business.
- Enable the reader to understand current issues and debates in these areas, and distinguish core ideas from current fads.
- Provide a wide ranging programme of CPE suitable for members both in business and advising businesses.

### Key points

- Each part will be self-standing and include recommended further reading.
- Writers are selected from Cranfield School of Management and other leading business schools.
- Experts in each field explain and discuss the relevance, practicality and usefulness of key new concepts and ideas, thus enabling the senior executive to keep really up to date.
- A message board is available on the faculty internet site.
- Chartered accountants often have limited reading time. *Management Quarterly* is succinct and the writers will direct the reader to other, and often fuller, expositions on the subject. The programme is no substitute for an MBA but it will follow some of the major threads on an MBA.

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*Management Quarterly*  
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## STRATEGY

## ASSESSING INTERNAL CAPABILITIES



Phil Davies, Cranfield School of Management

*Firms cannot expect to purchase sustained competitive advantage in open markets. Rather, such advantages must be found in the rare, imperfectly imitable and non-substitutable competencies already controlled by the firm. One key issue is 'how do you know what you're good at?'.*

What allows some firms to compete successfully in various markets worldwide while others fail ?

Honda, for example, is successful with products as different as motorcycles, cars, snow blowers and small marine engines. Its success seems to contradict the conventional strategic wisdom that urges businesses to find out what their customers want and then to do one thing very well. Those companies that do not do this are seen as diversified conglomerates with a break-up value that is greater than their market capitalisation. Companies such as Honda, however, seem to defy this logic.

What is different about companies such as Honda, and Hanson in its heyday, is the way in which they compete. They do this by stretching their core competencies rather than trying to fit their business to customer needs. Hanson, for example, stated that it was 'competent in acquiring, restructuring and managing mature, low technology businesses'. The mission of Honda, a very different business, is 'technical leadership and manufacturing excellence in 4 cylinder gasoline engines'. These mission statements, which are based on an analysis of core competencies, give managers and stock market analysts confidence in decision taking, especially in terms of what not to do.

Understanding core competencies is therefore an important part of strategy development. If you get it wrong, this can result in your corporation being seen as lacking in vision and a poor steward of shareholders' funds.

What do firms such as Honda do that is different ? How can you learn from their continuing success and apply some of these lessons in your business ? This article outlines a methodology for mapping the core competencies of a firm. It then shows how you can link that understanding to competitive analysis tools to develop a route map for devising and implementing correct strategies.

## Capabilities

Organisational capability is one of the factors that you should take into account during strategy development (the other two are the environment and the stakeholders). Capabilities are built upon

- resources;
- competencies.

Resources can be physical, for example

- plant;
- equipment;
- buildings;
- location;

and they can be financial, for example

- cash;
- borrowing capacity;
- reserves.

Increasingly, human capital, in terms of individual knowledge and skills, is extremely important, for example in service businesses, where relationships with customers are critical. Resources can also be intangible, for example

- goodwill;
- brands;
- reputation.

Competencies are concerned with doing things at the organisational level. They relate to how the firm uses its resources to deliver customer value.

## Competencies

What are the core competencies of the firm and how do they deliver sustainable competitive advantage ?

Resource-based theory (RBT) holds that a firm cannot buy sustainable competitive advantage in the market. It has to grow and protect competencies internally (see Hamel and Prahalad (1996)). To derive a competitive strategy, you must therefore link an understanding of what customers value (the perceived use value (PUV) of a product or service) to how you can deliver that PUV. The route map can be expressed as a sequence of 12 questions.

*What businesses are you in ?*

1. In which markets and which segments are you doing business ?
2. Which customers are you serving (market analysis) ?
3. What products and services are you selling (market analysis) ?
4. What is the perceived use value to those customers of your products and services as compared with those of your competitors (customer matrix) ?
5. Which stakeholders are you satisfying (stakeholder mapping, which will be covered in a future article in the series) ?
6. How might the above factors change over time (five-forces framework, political, economic, social and technological factors (PEST), and scenarios) ?

*How do you compete in those businesses ?*

7. What key competencies do you need to deliver PUV at a lower cost than your competitors ?
8. What are your core competencies, and how sustainable are they ?

*What needs to change, and how will that change be actioned ?*

9. If there is a gap, do you want to develop internally, outsource, acquire a competitor, form an alliance, or withdraw ?
10. Can you leverage your current core competencies to enter new market segments or to change the rules of the game in your existing markets ?
11. How feasible and how suited to your company is your proposed strategy ?
12. How do you plan to implement the strategy (change management, which will be covered in a future article) ?

You need to address the following two questions :

- What are the key competencies in which you must compete ?
- What are your core competencies, and how sustainable are they ?

### Key competencies

Key competencies are what a firm has to be able to do to compete in a given market. These are also termed 'order qualifying criteria' (OQC).

As one example, British Airways (BA) needs to be able to fly and manage passengers safely on its various routes. These competencies are the same for every carrier, and so they are the key competencies for that market. There is no value judgement here : one carrier can be better than another, but there is a threshold of competence below which no carrier can sink. Some of the key airline competencies, for example safety, are regulated.

What can airlines compete on ? BA competes on the global availability of flights (using alliances to add capacity) and on quality of customer service. Competitors attack them, largely on price but at the cost of a lower quality of customer service. BA's response is to focus on business users. However, the market seems to be moving against it, and low-cost carriers are probably the future within Europe, as they are in the USA.

Airlines may now be a commodity market in which all the carriers compete on price. However, if a firm can develop and protect a core competency that cannot be copied, that will make it more competitive, and a price premium may be possible. Virgin Atlantic Airways has such a competitive strategy, which is based on its unique brand. BA's traditional core competency may be in decline.

### Core competencies

Core competencies are fundamental to organisations. They are underpinned by the organisation's values and culture.

Core competencies are delivered in ways that are usually difficult for others to copy. Indeed, even the senior management may not fully understand what the competencies are. They may exist at the level of tacit knowledge (the taken-for-granted actions), or they may be dependent on key relationships. Sometimes these can be very mundane.

Problems can arise when companies are unaware of their sources of sustainable competitive advantage, as the following case study shows.

### Case study : competitive advantage

An industrial cleaning company had a very successful business that picked up, cleaned and returned the overalls of factory workers in small and medium-sized engineering factories.

This West Midlands firm had an excellent cash flow, an expanding order book, and well motivated staff. Clearly it was necessary to grow the business. The directors felt that it would make financial sense to focus their business on simply cleaning uniforms rather than on the more time-consuming activity of the pick-up and return process, which could be outsourced cheaply. In view of the company's predicted cash flow, its bank was happy to loan it a sum to modernise its laundry facilities.

Perhaps the company could expand its service into other market sectors, such as airlines, service businesses or even the public sector? As an afterthought, it decided to commission a survey of customers to find out why they used its laundry as opposed to those of competitors. The response came as a surprise, and it led to the firm changing its strategy. What the customers valued was not the cleanness of the uniforms, but rather the quality of the service. The laundry van drivers who collected the dirty overalls picked them up personally. The competitors, on the other hand, insisted that the uniforms be bagged. Therefore, what created PUV in this case was the relationship between the customer and the firm, which was what the directors wanted to outsource !

The strategy was changed, and the directors outsourced the laundry. Their initial strategy was flawed because they did not understand the basis of their firm's competitive advantage.

### Core competency delivery and sustainable competitive advantage

To identify your core competencies, carry out a mapping exercise. Start with what customers value : the identified PUV. Then decide what competency delivers that PUV. For example, if the PUV were innovation then the competency required would be new product development (see Figure 1).

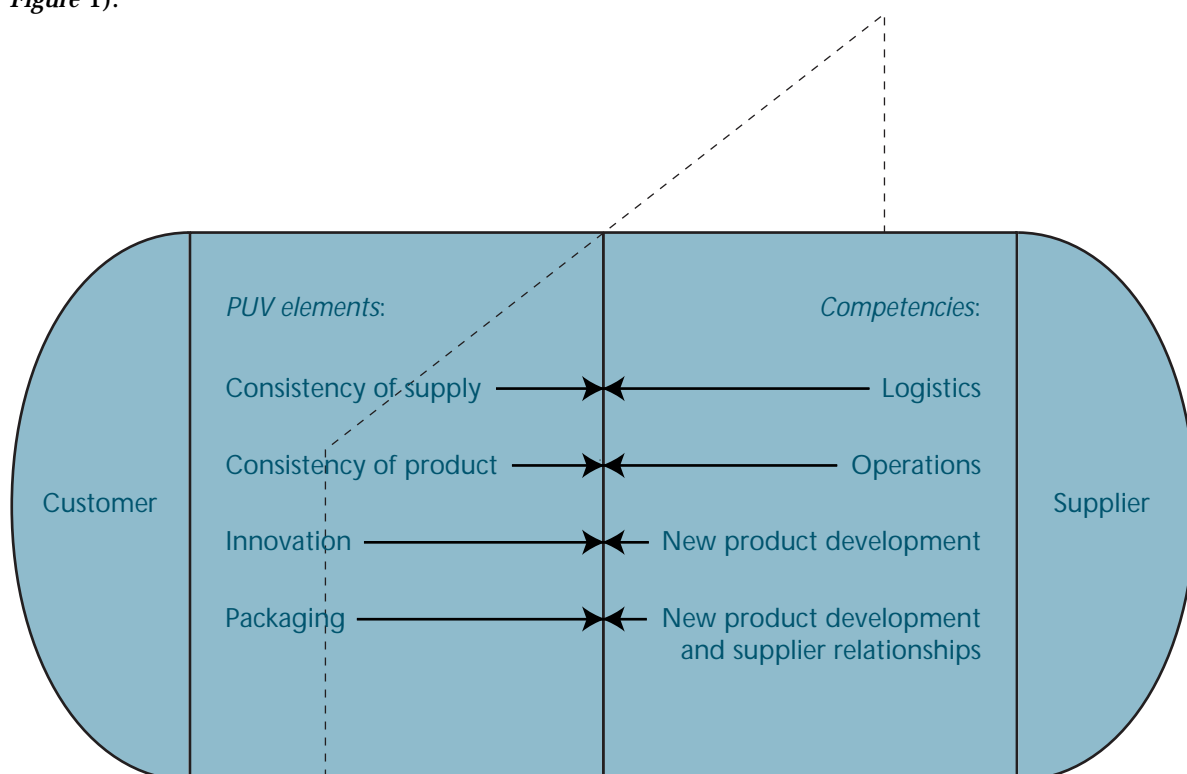


Figure 1 Mapping exercise

Ask yourself what gives rise to the competency. Keep asking the question until you are satisfied that you have the complete answer, and then repeat the process for all of the other competencies.

What linkages have you identified? Often these will be to do with relationships and key people. They will be the resources that you need in order to deliver core competencies. Then ask yourself how sustainable these factors are. Are these resources superior to those of the competition? Can they be copied? Can other people gain access to them, for example by headhunting a partner with an important relationship? Can customers easily substitute another service for yours? Finally, how durable are these resources?

Figure 2 shows this competency mapping process for a large UK biscuit company. Its core competencies were branding, manufacturing, supply chain management and new product development.

The consultants wanted to find out how sustainable the core competencies of the company were. They asked the management what made the firm excellent at branding. The managers said that the excellence of the branding resulted from the high quality of the advertising. This was derived from the organisational capability of working with the best agencies. That was based on the fact that there was a common Oxbridge recruitment base for the agencies and the biscuit company. The company's marketing director was an Oxford graduate, and this reinforced the organisational capability.

The consultants' analysis begged the question of how sustainable this competitive advantage was. Competitors could imitate the core competency in the short term simply by headhunting

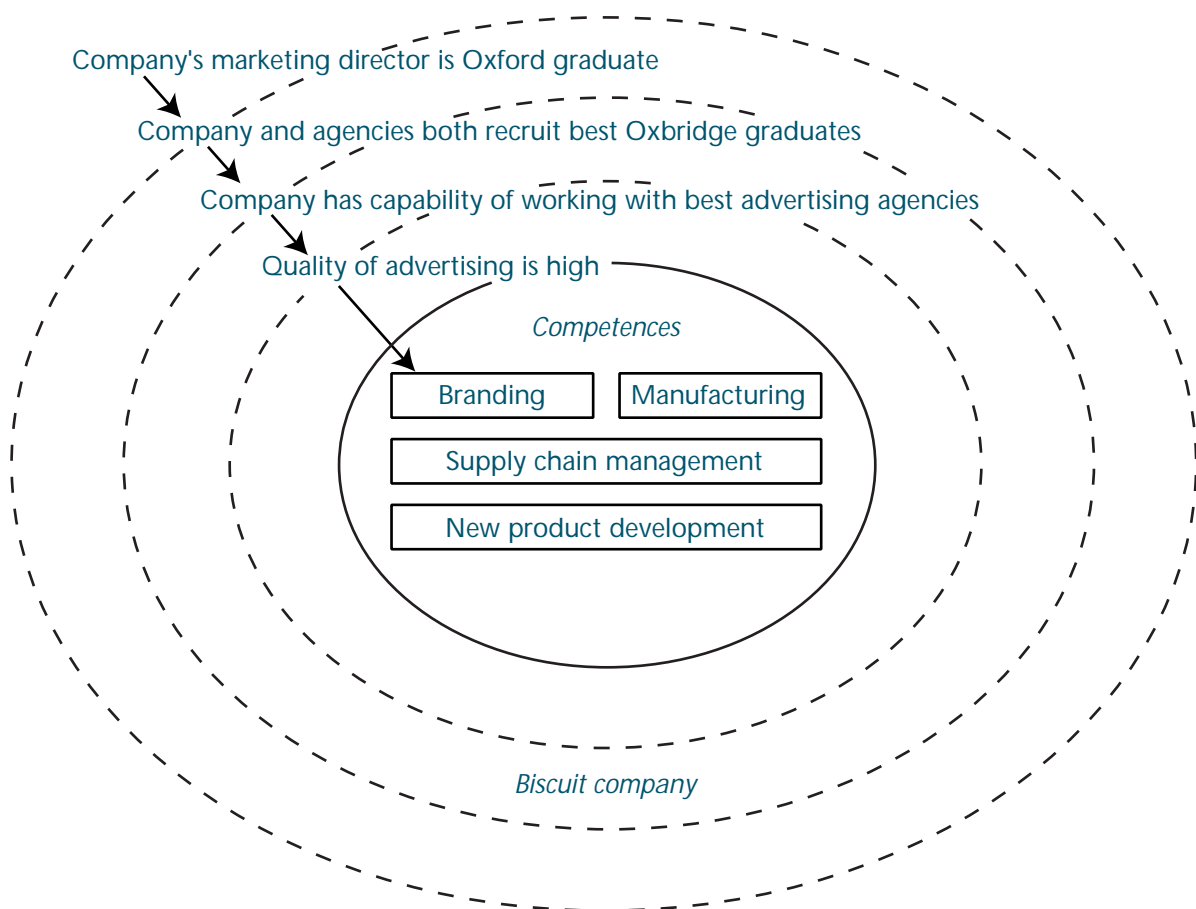


Figure 2 Mapping process for biscuit company

the marketing managers from the biscuit firm, and in the long term by recruiting Oxbridge graduates for management positions. The key relationships involving the marketing director were personal, and would disappear if that person moved on. Finally, even if the core competency was sustainable, could it be used outside the company's traditional markets? What if the firm wanted to sell more product in Asia or Latin America? Would the UK-specific competency be translatable to new areas?

This analysis demonstrates that sources of sustainable competitive advantage may be quite limited. Indeed, apart from organisations such as pharmaceutical companies that hold patents on successful drugs, most firms have limited sources.

It is even more sobering to realise that all the firms in a market sector may be competing on the same basis. The key competencies for an accountancy practice include professional competence, capacity, industry understanding and relationship management. However, location and networks often play a more significant part in selection than is realised, and these may be the real core competencies. I chose my accountants because I knew one of the partners socially and because their offices were convenient to get to. A colleague who is a treasurer chooses banks on the quality of personal relationships between the bank and the customer. She takes their professional competence for granted.

## Summary

This article has looked at how a company actually delivers customer value through its capabilities. It is surprising to find that, as the case study demonstrated, the management may not recognise the source of the firm's competitive advantage.

The extent to which a company has a sustainable competitive advantage is dependent on whether its competencies can be copied, appropriated or substituted for, and on how long they will last.

It is important to understand where competitive advantage comes from. The sources can be mundane and very simple. The way in which the company deals with people on the telephone is one example.

However complex the development of organisational strategy seems, the secret of its success is simple. It is based on the quality of the execution of the strategy. Success results from deciding what you are good at, and then delivering it consistently.

## Reference

### ■ ***Competing for the Future***

Hamel, G and Prahalad, C K (1996) Harvard Business School Press

*The most accessible of the books on competencies.*

## Further reading

### ■ ***Managing the Multibusiness Company : Strategic Issues for Diversified Groups***

Goold, M and Sommers Luchs, K (1996) Routledge

*A useful reference text.*



## HRM

PERSONAL DEVELOPMENT AND PEOPLE  
MANAGEMENT COMPETENCIES

Steve Macaulay, Cranfield School of Management

*If, as so many companies state, 'people are our greatest asset', then we need to understand how they can be managed individually for the greatest benefit. This contribution examines diversity, individual competencies and individual management styles, and looks at how these relate to personal development.*

This article describes the management capabilities that a manager needs to make the most of a key resource : people. It then goes on to examine what these capabilities are and why they are important. Some approaches to understanding and developing the capabilities are considered.

## Managerial interpersonal competencies

Professionals often spend the early part of their career attending to specialist professional and technical matters. Increasingly, however, career progression leads to a manager having to place more focus on human factors. The professional then enters what can feel like a labyrinthine world.

Consider the following management situations, which have a significant people dimension :

1. A financial controller puzzles about how to overcome line managers' refusal to use a newly introduced, computerised financial costing database.
2. In the face of an increasingly urgent need to achieve growth targets, a senior manager wants to create a climate that will lead to fresh ideas and less caution.
3. A middle manager, finding that the days of generous budgets are gone, needs higher quality and an employee commitment to do more with less.
4. A team leader struggles to motivate his team, who refuse to be 'yes men'. However, he badly needs them to be consistent in their approach and eager to anticipate and meet client requirements.

These are examples of the type of challenges that many managers and specialists face and need to manage.

Today's businesses rely on people to make the organisation work. Inside and outside, relationships are a key issue. A strong business performance depends on a whole range of factors (the product, processes, the business strategy, and so on), and people knit all these together. Knowledge-based service businesses in particular depend heavily on people working together and projecting to the outside world their enthusiasm and willingness to meet customer needs, their flexibility, and how easy it is to do business with them. Organisations are becoming increasingly complex. In an era of globalisation, they must work in a range of cultures. Devolution, localisation and delayering mean that staff carry more responsibility. Technology supports new ways of working with customers and colleagues. In the final analysis, managers must lead and work with others to make all these elements come together. The pace of change in this area is accelerating.



There is thus significant pressure on managers to move away from the old style of command and control, in which orders were issued and obeyed unquestioningly. In many cases, this approach simply does not achieve the required results. There is often too much information about an issue for any one manager to absorb, and he or she therefore cannot take the decisions alone. Leaner staffing ratios mean that better use has to be made of an educated workforce.

Managers are thus moving towards a more facilitative style, which gives individuals more freedom and authority, and creates greater flexibility and responsiveness. This style is more difficult to use. It places a premium on skilful approaches and strategies, but managers are often given little leeway to operate in this way. One employee of a major blue chip business commented 'in this brave new world we are "empowered" to do things, and then my manager takes it back and says "are you sure you've got the cost right ?"'.

## People skills

If you were to observe managers with sound people skills, what would they be doing ? In the early 1990s, chemicals group Ciba set out eight behaviours that it expected from its managers :

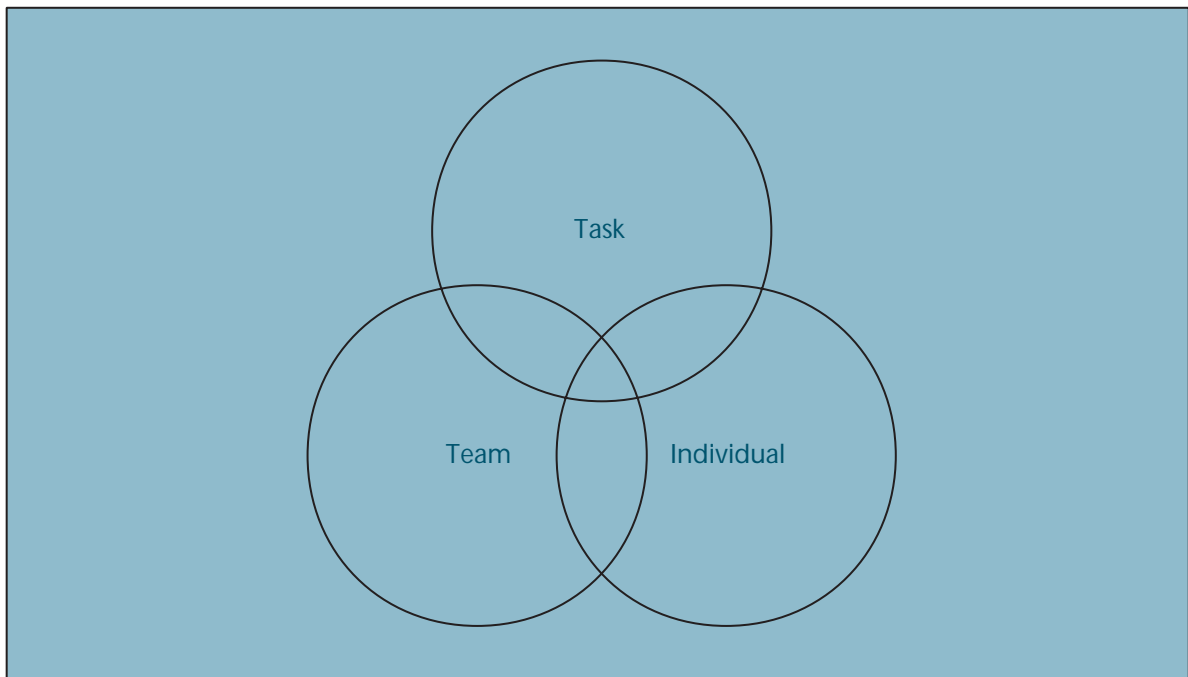
- ensures openness;
- delegates authority;
- manages performance;
- develops people;
- promotes co-operation;
- communicates effectively;
- encourages innovation;
- resolves issues.

This list is a useful indication of how managers need to operate in the modern business environment if they are to manage skilfully.

Where should the focus be for a manager ? Adair (1988) described the process of management as managing and leading through attention to three interlocking elements (see *Figure 1*). He believed that, to be successful, managers must pay an equal amount of attention not only to the task, but also to the team and the individual. These areas overlap in the diagram to indicate that they are all equally important. Hence no one element should be favoured at the expense of the others over the long term. In the short term, of course, a manager may need to pay particular attention to one of the elements. A new, inexperienced employee may require help, or the members of a team may need to establish new ways of working together.

This view puts an emphasis on the skills of managing others (one definition of management is 'getting results through others'). It is important that people be committed to, and that they buy in to, the achievement of organisational goals, and this cannot be taken for granted.

Goleman (1988) coined the term 'emotional intelligence' to describe the fundamental competency of a manager, which his research suggests is far more important than technical skills. He believed that managerial competence is made up of the ability to manage oneself and the ability to handle relationships. Self-management comprises self-awareness, self-control and motivation, while social competence consists of empathy and social skills such as influencing, conflict management and team building. He firmly believed that 'companies in which people collaborate best will have a competitive edge'.



**Figure 1** Management process elements  
[Source : Adair (1988)]

Studies of top managers worldwide by Andrew Kakabadse (1998) confirmed that functional knowledge needs to be combined with the ability to work successfully with colleagues across the business. He stated that leadership and executive teamwork go together. They entail working through conflict, developing trust, and dealing with differences to form a coherent view. His research suggested that these skills are by no means common.

Three coherent management skills which build on this work are the following :

- the valuing and management of diversity;
- influencing and negotiating;
- individual development.

## Valuing and managing diversity

In a pluralist world, it is becoming more important for a manager to be able to work with and value people from diverse backgrounds. The growth of global management means that a manager may well have to manage across borders, perhaps while working in multinational project teams. Team members may come from various backgrounds. Technical specialists may mix with line managers with different experience and priorities. There may be mixes of race and sex. Approaches that have been fashioned by education and outlook may vary. The need to understand and manage such groups is a significant challenge to a manager's ability to deliver results. When it works, there is a more creative, lively atmosphere; when it fails, it can lead to paralysis.

Every manager is likely to agree in principle that good use should be made of all the talent available. However, many managers may find it difficult to do this in practice. This is because it brings them face to face with barriers and prejudices resulting from difference. Many assumptions and judgements are made on the basis of, for example, dress, language, attitudes to authority, and presentation of ideas. This can lead, for instance, to colleagues or team members challenging a manager to the point of conflict. Managers can misinterpret communication. For example, unless we read signals correctly, silence borne out of deference can be misinterpreted as standoffishness or a lack of ideas.

Awareness of the assumptions of others and ourselves is a first step. The next step is to develop the skills to manage successfully in an environment of diversity. This can be fostered through training based on knowledge of national and other customs and styles, and on simulated tasks that help the manager to learn how to handle multicultural matters.

One would think that all managers would manage in accordance with the truism that people differ. In practice, however, many people treat others as though they have, or should have, the same priorities, values and behaviours as they do. This can lead to misunderstandings, and ultimately to lack of trust and co-operation.

### People management frameworks

The Myers–Briggs Type Indicator (MBTI) is a useful framework that can help managers to understand some fundamental personality and behavioural differences (see Briggs Myers and Myers (1995) and Tieger and Barren-Tieger (1999)). (MBTI is a registered trademark.) In this framework, there are four dimensions of personality (see *Table 1*).

**Table 1** MBTI framework

Dimensions	Preference	Preference
Energy	Derived from getting out and about (extravert)	Derived from quiet reflection (introvert)
Information gathering	Holistic (intuitive)	Piece by piece (sensing)
Focus on decision making	Primarily on people and values (feeling)	Primarily on tasks and logic (thinking)
Methods of coming to a conclusion	Slowly, at the last minute (perceiving)	Rapidly (judging)

The MBTI framework suggests that we can either take in information in a very holistic intuitive way, or be very detailed and precise about it. It suggests that we have a preference for one approach or the other. How we then use this information depends on our antennae or our focus towards people and things. This again differs for different people. We may prefer to move quickly towards a decision, or we may want to keep things open for as long as possible. We also need to pay attention to whether someone is an introvert or (in MBTI terminology) an extravert, that is, whether they prefer to be energised by the outside world and by other people (extravert), or by their own thoughts (introvert). These preferences add up to well worn paths of choices.

Such preferences help to explain differences in approach. People take a range of routes when reaching a decision. The task of the manager is then to work successfully with differences and similarities. For instance, a marketing director might be inspired by talking through imaginative pictures of a new project, and only then wish to look at costings. On the other hand, an IT manager might prefer to go through all the details first, perhaps on her own, and only then be ready to ask ‘and where will this take us?’.

‘Reading’ people is clearly a vital management skill that is a core competency. One way of learning this skill is to ask someone to complete an MBTI questionnaire, and then discuss the results with him or her. This can also be done for a working team, and one can then learn more about the work style that each member brings to the group.

The differing responses and preferences of people can be translated into a model of managing more influentially. Managers need to take account of not just different personalities and approaches, but also job requirements. Many managers take insufficient account of the needs of people whose co-operation and support are essential. In the worst case, this can lead to a breakdown in communication, with neither side understanding or trusting the other.

A number of other frameworks have been developed to help managers understand where people are 'coming from'. One popular model is situational leadership. Its originator, Ken Blanchard (1985), believes that the manager's style should vary in accordance with the employee's readiness to take decisions, on the basis of such factors as the person's motivation, knowledge and skills, which he describes as maturity. Some staff require more direction, for example those who are new in their role. Then, as their maturity develops, the manager can begin to let go of the reins. A consultative approach is more appropriate for those with some experience. This moves on to a coaching style, and finally to a 'hands off' approach within broad parameters for the most experienced.

## Influencing and negotiation

### Influencing

Modern organisations that are managed as one-way dictatorships are rarely, if ever, successful. Persuasion, influencing and negotiating have thus come to the fore. This is a challenge, as Mary Bragg (1996) has commented : 'managers in every field are being forced to rethink the management principles which have guided their institutions for so long'.

Managers need to understand the various approaches to influencing, and how they should translate these into the way they influence people.

One model uses the terms 'push' and 'pull' to describe influencing. With a push style, you force or push your own view forward. This can be a useful approach when you are sure of your ground, there is a clear hierarchy, or speed is required.

A pull style takes relationships into account. It is characterised by asking questions, listening, reflecting, clarifying and supporting. This style is likely to be used in situations where joint commitment is important. However, the approach is time-consuming, and it needs to be used skilfully. Many managers find it difficult to understand what motivates people and how to 'pull the right levers' to operate in pull style. In this approach, the individual is drawn towards the influencer by his or her vision or compelling ideas.

### Negotiation

Negotiation is a vital element of influencing. Negotiation skill components include the ability to state one's interests, take on board the interests of the other party, and reach agreements. A negotiator often uses a process of give and take which moves the parties together.

Good listening is clearly an important managerial skill that enables the listener to pick up on underlying themes or concerns. Regular employee attitude surveys indicate that the majority of managers have considerable scope for improvement here.

It is not always recognised that managers may have to negotiate, and that they in fact do it all the time. One dictionary definition of negotiation is 'to confer with another, with a view to a compromise or agreement'. Gavin Kennedy (1999) suggested that negotiations progress through various stages. An awareness of what is required at each of these stages will help a manager to adopt the correct skills and approaches at the right time.

These stages are as follows :

- *Prepare* : Identify the terrain beforehand.
- *Propose* : Ensure that each person puts forward his or her case.
- *Bargain* : Engage in the process of give and take.
- *Agree* : Progress and conclude an agreement.

Experienced negotiators suggest that the following principles can be useful when you want to negotiate with others successfully and reach agreements which both parties are prepared to honour.

- Clarify your own objectives and those of the other party, and rank them in order of priority.
- Be prepared to make concessions, particularly in lower priority areas, that will carry both sets of objectives forward.
- Continually seek to understand the other person's priorities and position, even when they are different from your own and you find it hard to agree with them.
- Talk about the issues that are important to the other person as well as your own priorities.

During interpersonal exchanges such as negotiation, you should also pay attention to non-verbal communication and body language. Some observers believe that factors such as tone of voice and stance account for two-thirds of the way in which we communicate.

Negotiators often have a hidden agenda, for example a desire to come out on top. Although most people would agree that this approach is short-sighted in theory, in practice you need to be able to spot any signals that suggest that such factors are at work.

## Developing the individual

### Coaching

If managers are to be successful, their teams must be successful. In a changing world, individuals need to enhance and develop their skills regularly.

The manager must therefore be skilled in helping employees to carry out their tasks more effectively by developing skills in a planned way while they are doing their job. This is often called 'coaching'. Some managers feel uncomfortable with coaching, and in particular with 'letting go' and allowing employees to learn by themselves.

Downey (1999) identified the following steps in the coaching process :

- Clarify the areas in which the employee is to be coached.
- Set objectives, and decide how best to achieve the task.
- Break the task into smaller steps.
- Offer feedback, encouraging where possible.
- Review the final outcome against the objectives.

Whitworth (1998) devised a useful coaching acronym, GROW :

- *Goal* : Agree the coaching objectives.
- *Reality* : Assess the current situation.

- *Options* : Explore a range of options.
- *Wrap-up* : Agree the actions and the support needed to achieve objectives.

Coaching can be formal and prepared. Alternatively, it can be flexible and impromptu, and take advantage of opportunities that arise in the course of day-to-day work.

It is important to give individuals the confidence to carry out the task in their own way, and to delegate enough authority and resources to make this a success.

## Continuous learning

Managers must promote the development of continuous learning. Many people are likely to need help in learning how to learn (including the manager). To help them, you need to have insight into the way individuals learn.

People learn in various ways, and you should encourage them to explore a range of learning methods. Options that facilitate further learning include the following :

- visits and secondments;
- open learning;
- job enlargement;
- working on projects;
- deputising for managers.

Increasingly, responsibility for individual development is being given to the person concerned. This reflects a move away from predictable career ladders and the notion of jobs for life. Instead, everyone should maintain a topped-up set of skills that they can use in changing environments.

The manager's responsibility is to help individuals to enhance their transferable skills and to develop employability. Even if individuals stay with the company, they are likely to use those skills in a range of differing roles.

William Bridges (1997) is one of a number of authors who have suggested that people should develop their skills as if they were running their own company and ensuring that they had the entrepreneurial and personal skills to handle the opportunities which life will provide. Charles Handy (1995) saw individuals becoming portfolio workers with a range of employment roles.

## Implications for finance professionals

How can you acquire management interpersonal competencies ?

One view is that people-related skills are unteachable ('you've either got it or you haven't'). They can only be acquired with the wisdom of years. There may be a grain of truth in this idea. However, if it were accepted, managers would repeat their mistakes year in year out, rather than learning and enhancing their capabilities.

A more widely held view is that, although such skills are complex, they can be learned. The two main learning methods are focused development programmes, and learning on the job. With both of these, you need some feedback to clarify what you are doing and what effect it is having. On training programmes, this can be given after simulated work situations such as a meeting

with a colleague. At work, a good manager or mentor can make comments that are invaluable. Input from a variety of sources, for example colleagues and staff (360° appraisal), can yield useful information if it is transmitted by a third party in a supportive manner.

The first stage in understanding others is to develop a sound understanding of oneself.

## Conclusions

This article has explored the nature and demands of working with others. The necessity of actively understanding others and skilfully working with people has been highlighted.

The focus of attention has been on three areas :

- working with a range of people, not necessarily always harmoniously, but with respect for differences;
- communicating and influencing for a successful outcome that should usually be satisfactory for both parties;
- developing individuals by fostering a learning environment for oneself and others.

The impact on managers of the requirement for interpersonal competencies is considerable. No senior manager can carry out his or her role successfully without such a competency.

Much of the skills and knowledge required can be learned. The challenge for many task-focused professionals is that they must consciously acquire these skills, rather than downgrade their importance or assume that they will automatically acquire them on their way to the top.

## References

- **Effective Leadership**  
Adair, J (1988) Pan  
*An exposition of action-centred leadership.*
- **Leadership and the One Minute Manager**  
Blanchard, K (1985) William Morrow  
*Discusses increasing effectiveness through situational leadership.*
- **Reinventing Influence**  
Bragg, M (1996) Pitman  
*An award-winning management guide to more successful influencing.*
- **Creating You & Co**  
Bridges, W (1997) Nicholas Brealey Publishing  
*Explores the notion of employability and transferable skills.*
- **Gifts Differing: Understanding Personality Type**  
Briggs Myers, I and Myers, P (1995) Davies-Black Publishing  
*The ideas of MBTI explained by the originators of the concept of personality type.*
- **Effective Coaching**  
Downey, M (1999) Orion Business  
*Covers practical ways to coach at work, with case studies.*



■ **Working with Emotional Intelligence**

Goleman, D (1998) Bloomsbury Publishing

*A readable account of the importance of emotional intelligence in the workplace.*

■ **The Age of Unreason**

Handy, C (1995) Arrow

*A ground-breaking book in its time on the new world of work.*

■ **Essence of Leadership**

Kakabadse, A and Kakabadse, N (1998) International Thomson Business Press

*A comprehensive overview of leadership and its challenges.*

■ **The Perfect Negotiation**

Kennedy, G (1999) Century/Arrow

*A concise 'how to' guide to negotiation.*

■ **The Art of Speed Reading People**

Tieger, P and Barren-Tieger, B (1999) Little, Brown

*A useful introduction to MBTI in practice.*

■ **Co-Active Coaching**

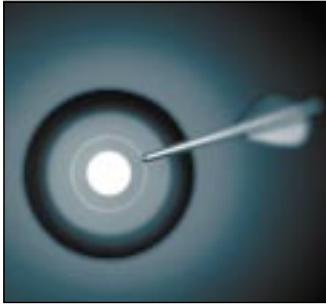
Whitworth, L (1998) Davies-Black Publishing

*A description of skills for coaching people towards success.*

## MARKETING

## MARKET SEGMENTATION AND POSITIONING

Susan Baker, Cranfield School of Management



*Success in marketing depends in part on understanding to whom you are selling, and how you are meeting their needs. This article examines market segmentation and positioning, and it gives practical examples of how they can be used to develop a winning proposition.*

Market segmentation and positioning are key determinants of successful marketing. They are fundamental to the matching process which is the *raison d'être* of marketers. It is marketers who are responsible for ensuring that the offer made by the company in the marketplace satisfies the wants and needs of the target market of customers and consumers. Segmentation and positioning analyses enable the marketer to make informed choices about what to offer, to whom, and in what way.

This article considers the processes of segmentation and positioning in turn, illustrating the theory behind these activities with practitioner examples. These relate to consumer markets, but the processes are equally applicable in the business-to-business sector. However, these activities are more sophisticated in the former sector than the latter.

## Market segmentation

### The importance of definitions

We must first define some terms to help us to understand market segmentation.

'Customer' and 'consumer' are often used interchangeably. The term 'consumer' generally means the final consumer, who is not necessarily the customer. For example, a parent buying lunch box snacks is probably acting as an agent on behalf of school-age children. The parent can therefore be described as the 'intermediate customer' and the child as the 'end consumer'. To market such snacks effectively, the marketer must differentiate the wants and needs of each party influencing the purchase process. He or she must also be clear about which actors in the process are to be the subject of any segmentation exercise.

The term 'market' must be defined unequivocally. For example, Mark Warner and Saga are both holiday companies but they are not in the same market. The former offers holidays for families, young couples and groups in Alpine and sunshine resorts, while Saga caters for the more mature traveller who may be looking for holidays involving leisure pursuits such as sightseeing, bridge or walking. We need a definition so that we can

- measure market share and market growth;
- specify target customers;
- recognise relevant competitors;
- formulate marketing objectives and strategies.

As a rule of thumb, a market should be defined in terms of a consumer need, and in a way that covers the aggregation of all the alternative products and services which consumers regard as being capable of satisfying that need. For example, a brand of instant coffee not only competes with other brands in the same product category, but also with alternative hot drinks such as tea and chocolate. Consumers may even see cold drinks such as colas and water as substitutes for it.

Needs-based definitions evolve over time as trends emerge in the marketplace, and companies must be prepared to revise their definitions accordingly. Nevertheless, they need to devise a definition that is manageable. At the extreme end of the range, micromarketing is about marketing to the individual as a segment of one. However, companies must be able to meet the needs of individual segments in a way that is commercially viable. They therefore concentrate their efforts on groups of many customers who share approximately the same needs.

The next steps are to measure, manage and maximise the market. It is at this point that the process of segmentation becomes important.

### Segmentation in practice

Market segmentation allows companies to gain advantage over their competitors in the marketplace by enabling them to concentrate resources on clearly identified opportunities. It is based on the assumption that 'birds of a feather flock together'.

In many cases, the segments form separate markets in their own right, and they can often be of considerable size. There are number of criteria that make a market segment of commercial interest, including the following :

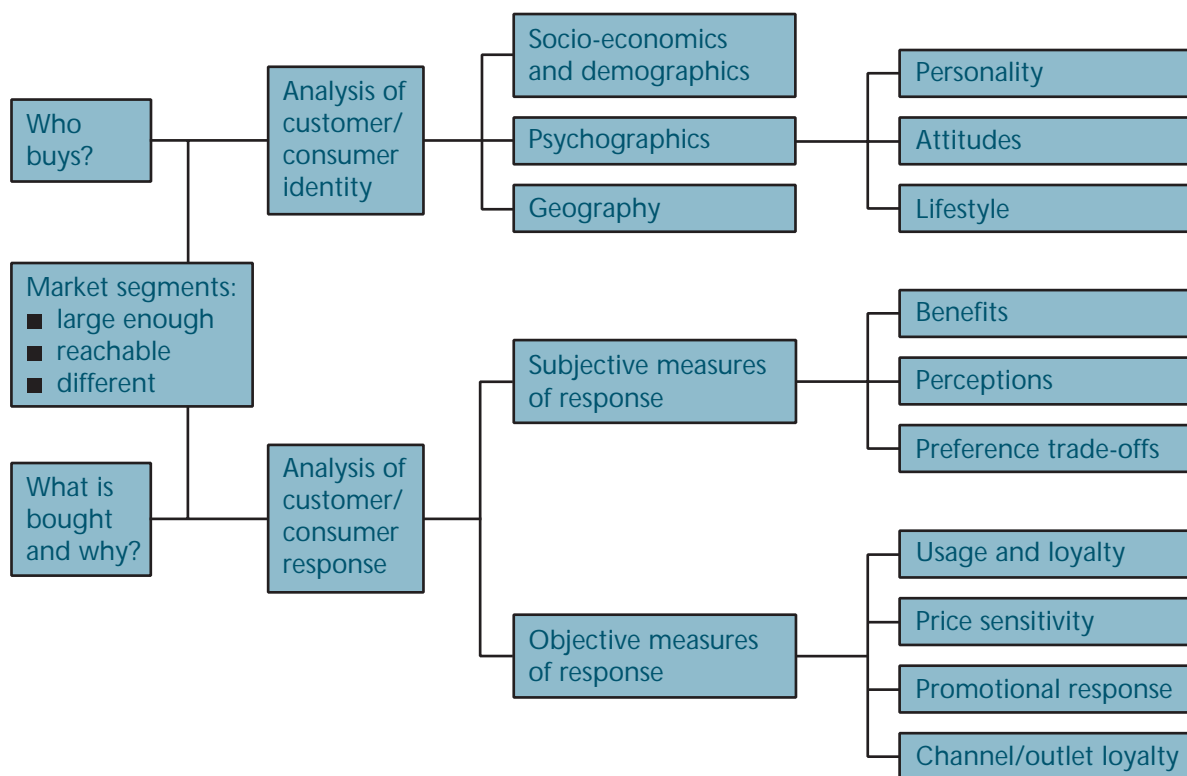
- The segments should be large enough to provide an adequate return on investment.
- The requirements of segment members should be very similar, but the members should be distinct from the rest of the market.
- Segments must be reachable, that is, the channels, or routes to market (where people buy), must be accessible.

These criteria may seem obvious, but the annals of marketing literature are full of examples of products which did not meet them. The Sinclair C5 car, for example, did not appeal to a large enough segment to provide a feasible return on investment, and its demise was almost concurrent with its launch.

In practice, segmentation is about attempting to answer questions such as 'who buys?', 'what do they buy?', and 'why?', 'how?' and 'where?'. The answers are based largely on data collected through market research programmes (as discussed by Ryals (2000) in MQ).

*Figure 1* sets out a number of analytic routes to gathering this information. For example, in endeavouring to build up a picture of who buys, companies may investigate socio-economic or geographic variables. Increasingly, however, all the variables listed along this route are being combined in sophisticated geodemographic software packages (such as Tactician). Their output can fully describe a geographic location (such as an individual postcode area) in socio-economic, demographic and psychographic detail at the click of a mouse. (Psychographic segmentation analysis presents purchaser profiles which are an aggregation of attitudinal data.)

Alternatively, when one wants to analyse what is bought and why, one can measure a number of variables. These are classified as objective (examples are usage and loyalty scores : how often do buyers purchase brand X), or subjective (for instance the benefits sought by buyers of brand X).



**Figure 1** Approaches to market segmentation  
[Source : Cranfield School of Management]

This type of data can then be used by marketers to create a typology of buyers for a particular set of products or services. These consumer profiles are usually assigned labels that are an abbreviation of a complex set of consumer characteristics and typical buying behaviours. This is demonstrated in the following case study (sourced from UK press articles in March 1999).

### Case study : a typology of British shoppers

Bluewater, which is Europe's largest and newest shopping complex at the time of writing, opened in Kent, to the east of London, in 1999, at a cost of £350 million. The centre incorporates more than 320 shops, restaurants, cafés, a crèche, a 12-screen cinema, a boating lake, a picnic area, mountain bike trails, and numerous cash point machines. Approximately 80 000 customers with an average spend of £25 are expected to visit the complex every day. It is expected that Bluewater will become a valuable business for its Australian owners Lend Lease.

No aspect of the Bluewater project was left to chance. For five years, researchers investigated consumer buying behaviours using a variety of methods in order to create psychographic profiles for the shopping centre planners. The research was directed by a psychotherapist with a background in marketing, and it identified seven definitive types of British shopper, as shown in *Table 1*.

Bluewater's research into consumer behaviour was designed to ensure that the shopping centre's offerings would be aligned to shoppers' needs. Every aspect of the shopping experience has been made customer friendly and customer focused. Shoppers enter the complex through hotel-style 'welcome' halls, where they are advised by concierges who will do everything from escorting them to a particular shop to carrying their bags and reminding them where they left their car in the 13 000 space car park.

**Table 1** Seven types of shopper

Type of shopper	Description
County classics	House-proud. Shop at John Lewis and Jaeger. Interested in success, concerned about what others think of them and cynical about fashion. Numerically the largest cluster.
Club executives	BMW's and Boss suits are part of their iconography. Career-oriented. Expect service to be efficient.
Sporting thirties	Interested in sports. A tendency to be disruptive ; do not really want to shop, prefer the bar instead.
Home comfortable	Mature customers with traditional tastes. Like to be served by someone their own age.
Young fashionable	In search of an identity. Interested in cosmetics, personal grooming and outward appearance.
Young survivors	Want low cost amusement. May use shopping to boost their self-esteem.
Budget optimists	Do not need to have their egos massaged. Looking for a sense of trust in their transactions.

Bluewater's investigations also identified gender issues common to certain groups of shoppers. These traits have been addressed through measures such as ensuring that stores such as Marks & Spencer, which the shopping psychologist reported 'is where men tend to get bored and want to go home', are placed conveniently next to gadget shops such as Dixons or the bar of a TGI Friday.

## Positioning

As the Bluewater example shows, when the relevant segmentation data has been collected, the next step in the strategic process is to use this to drive the positioning of the product or service. In the case of Bluewater, the offerings made to shoppers were scoped to appeal to the maximum number.

Positioning is a prerequisite of the branding process (which will be discussed in a future paper in MQ). It is about occupying a relevant place on the mental map of consumers of the product. On this map, the company's brand is placed in relation to competitive brands as defined by the consumer. An understanding of this cognitive positioning provides the insights that enable the marketer to define and differentiate his or her brand.

Importantly, as Sergio Zyman, formerly of Coca Cola, maintains, 'if you want to establish a clear image in the minds of consumers, you first need a clear image in your own mind'. In other words, managers must be able to answer the simple question 'what business are we in ?' before proceeding with the matching process. Frequently, however, positioning is far from clear in companies. This can be for a variety of reasons, which include the following :

- It is quite common for companies to want their products to 'be all things to all men'.
- They do not know where to start with the positioning process.
- Everyone connected with the product or service has to be allowed to express an opinion.

Companies with a clear positioning for their brands of products or services tend to share the following characteristics :

- They have only one template, which is used company-wide (that is, everyone 'sings from the same hymn sheet').
- The allocation of responsibility for developing the positioning is unequivocal.
- A long-term rather than short-term view is taken.
- Communications activities are soundly based on the positioning.
- Simplicity (that is, 'less is more') becomes a byword for marketing activities.

### Creating a positioning

A typical positioning would be made up of the components shown in *Table 2*. This is based on a hypothetical Nike case.

**Table 2** Typical positioning : Nike

Definitions of core elements	Example
<i>Target</i> : This describes the core users (not all users). It can be defined by demographics, attitudes or behaviour.	For teenagers and young adults around the world.
<i>Frame of reference</i> : This is the grouping in which the consumer sees the brand. It describes the things for which it could be substituted.	Nike is <i>the athletic shoe</i> .
<i>Point of difference</i> : This is the specific benefit we want consumers to associate with the brand to distinguish it from the competition.	Which has street credibility.
<i>Support</i> : These are the 'reasons why', or the 'proof' that the point of difference is true.	Because only Nike uses leading edge design and materials technology and is the choice of professional athletes worldwide.

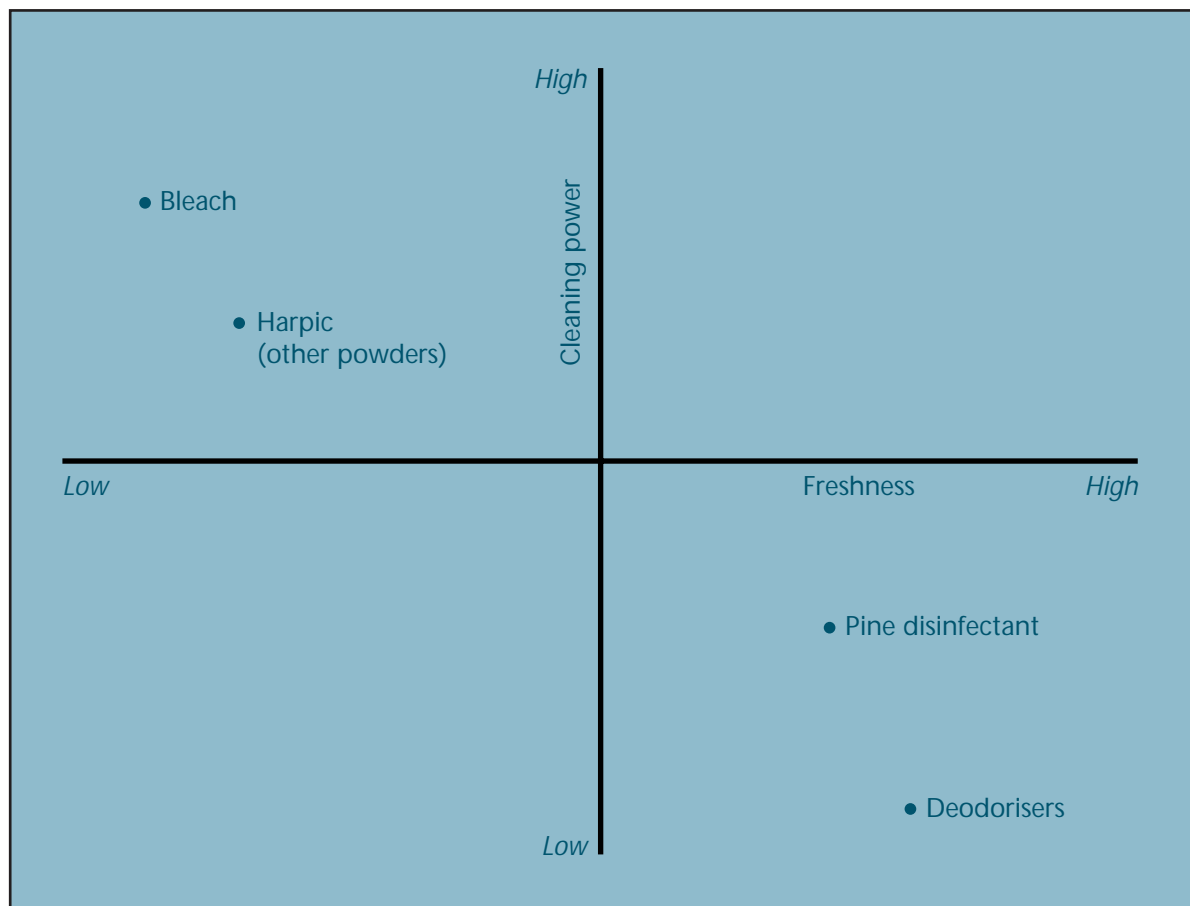
[Source : Cranfield School of Management]

In positioning, marketers work with consumer perceptions. These can only be determined through primary research on users of the product. (In some cases, it can also be helpful to use non-users as respondents).

The three main information domains that need to be covered are the consumer, the competition and the product or service. From this data, the key dimensions underpinning the mental map can be explicitly identified.

- **Consumer** : What is the target consumer's unique set of needs and wants ? Is the value of the needs and wants grouping large enough ?
- **Competition** : What locations are occupied by other brands ? What are their strengths and weaknesses ? What level of resources do they command ?
- **Product** : What are the current beliefs about the brand ? What benefits does the brand really have, or what benefits can you afford to add ?

A market map for household cleaning products is shown in *Figure 2*. The key dimensions of 'cleaning power' and 'freshness' are the main driving attributes in this product category. In this highly competitive market, the map shows that pine disinfectants are perceived as delivering freshness but less cleaning power than bleach (which is not perceived to be strong on freshness).



**Figure 2** Market map for household cleaning products  
[Source : Cranfield School of Management]

Once the consumers' mental map has been represented, one can understand the positioning of individual brands, for example Harpic, within the marketplace.

When the brand positioning has been identified, this needs to be activated. (Branding will be covered in a future article in the series).

## Summary

While managers do not need to understand the nuts and bolts of constructing market research surveys or building databases, they do need to know how to understand customers, consumers and markets. Along with market research, market segmentation is crucial in developing this understanding. It forms the basis of successful competitive strategy, and it is one of the fundamentals of marketing.

Activating positioning is the next step in the marketing process. The wants and needs of the target consumer are matched with the offer the company has to make. Positioning activities involve working with consumer perceptions and then using this knowledge to direct branding activities.

## Reference

- 'Market research and information technology'  
Ryals, L, *Management Quarterly* Part 6 (2000) p 18



## Further reading

### ■ ***Creating Powerful Brands***

de Chernatony, L and McDonald, M H B (1992) Butterworth–Heinemann

*Examples are now becoming dated, but a clear exposition of what creates a successful brand.*

### ■ ***Principles of Marketing***

Kotler, P, Armstrong, G, Saunders, J and Wong, V (2nd European ed., 1999) Prentice Hall Europe, Chapter 9 : Market segmentation and targeting, Chapter 10 : Positioning

*A clear and comprehensive description of the processes, with appropriate cases to illustrate the theory.*

### ■ ***Market Segmentation : How to Do It, How to Profit From It***

McDonald, M H B and Dunbar, I (2nd ed., 1998) Macmillan

*An easy to read guide to the complete process of segmentation; if you buy only one book on this subject, this is the one to go for.*

## FINANCE

## VALUATION OF COMPANIES



Ruth Bender, Cranfield School of Management

*This article builds on previous work in the series to examine ways of valuing companies. There is no 'correct' answer to the question 'what is the company worth?', but there are some standard valuation techniques. The methods used most commonly in practice are discussed, together with their advantages and disadvantages.*

## Introduction : why do a valuation ?

There are many reasons why you might need to value a company, for example

- to buy or sell the company;
- to invest in or sell shares in the company;
- to price an issue of new shares in the company;
- for taxation purposes.

This article looks specifically at company valuation from the point of view of the commercial buyer or seller, rather than that of the casual investor or the tax authorities.

Three main methods of valuation will be considered, which between them account for most corporate valuations :

1. asset-based methods;
2. market-based methods;
3. discounted cash flow methods.

In most instances, you should use more than one method, and then compare the results to see which seems to be the most reasonable.

## What information do you need ?

Whichever methods you use, it is important that you set the valuation in the context of why it is needed, and for whom. You will need to gather information about the business, the industry, the stakeholders, and so on. Then use this to establish how the company and the management have performed to date, and to determine what factors are likely to influence future performance. If you do not have a thorough understanding of how the company is situated, the basis on which your valuation will be carried out will be flawed, and it is unlikely that any valuation technique that you use will produce a reasonable figure.

## Assets basis of valuation

It is a well known fallacy that the balance sheet of a company represents its value. People often refer to the balance sheet equity as the 'net worth' of the company, and then attach some significance to this amount. In most instances, this idea is wrong. One must allow for the choice

of accounting policies, for the revaluation of fixed assets, for the absence of most intangibles, and so on. Most accountants appreciate that balance sheet value is merely a matter of opinion.

In addition, the balance sheet, however it is valued, represents what the company has done in the past; a purchaser is only interested in what it can do in the future. Thus a balance sheet valuation is normally a poor basis on which to buy or sell a company.

However, there are instances in which it is useful to value a company on the basis of its balance sheet :

- You can use net asset value if the asset values are current, and if the purchaser would be able to use all of the assets after acquisition. This can sometimes put a floor on the valuation.
- Property companies and other asset-intensive businesses can be valued on the basis of the assets, as these are so closely linked to future earnings.
- In some less-developed markets, where accounting results may be misleading, current balance sheet values are used as a basis for corporate valuation, as they may be more accurate than other sources.
- Liquidation balance sheets may be an appropriate basis on which to value companies in financial distress that are likely to be broken up.

## Market-based valuations

A market-based valuation, which is usually derived from a multiple of profits, is the most commonly used type of valuation in the UK.

For a listed company, valuation by this method is easy; the market price per share and the market capitalisation are known. However, a quoted company almost always costs considerably more than its market capitalisation, for two reasons :

- The pre-sale market price is the price as which most shareholder *did not* sell their shares. A purchaser needs to offer them a higher price to tempt them to sell.
- The market price reflects the price for a small percentage of the share capital. If a purchaser wants to acquire the whole company, it has to pay a control premium.

Thus, although market valuations are available, the purchaser of a quoted company has to use other valuation techniques to assess how much it should offer. It may also compare the price/earnings (P/E) ratio at which the company trades with those of similar companies, to determine whether the company is comparatively cheap or overpriced. Issues that you should consider include the expected earnings growth and the company's results relative to those of others in its sector.

An unlisted company or a division of a group has no market price, and so there is no P/E ratio. However, you can use P/E ratios to value unquoted companies. Find a quoted company which is in a similar business, adjust its P/E ratio, and apply it as a proxy to the earnings per share of the unquoted company, as follows :

1. Find a quoted company in a similar business. Use its P/E ratio or the P/E ratio of the industry.
2. Adjust this P/E ratio to allow for the fact that the company that you are valuing has a lower liquidity, and may have lower growth and a higher risk factor than the comparator company, or a different level of gearing. (The amount by which you should adjust the P/E ratio is a matter of professional judgement : a reduction of 25–50% is common for small businesses.)

3. Determine the *sustainable profit* of the unquoted company. This is the profit after tax that you expect to be maintained in the future. Calculate this by taking the previous year's (or last few years') profits after tax, and adjust these for non-recurring items, such as one-off expenses or revenue, family salaries (which may be higher or lower than normal commercial salaries), and other items that one would not expect to see in the profit and loss account of a commercially run business.
4. Multiply the adjusted P/E ratio by the adjusted sustainable profit to give a valuation.

One can also perform a similar calculation by taking the company's *operating profit* and multiplying it by a suitable multiple that is based on the value of other companies in the industry. This gives the company's *enterprise value* (the value of all its business, whether financed by equity or debt). To calculate the value of the equity, subtract the amount of debt in the balance sheet from the enterprise value.

You can also carry out the same type of calculation by using a multiple of the earnings before interest, tax, depreciation and amortisation (EBITDA). EBITDA is used as a (very rough) approximation of cash flow.

Whichever method you select, you should use multiples that are appropriate to the profit measure in question and to the forecasts. If you apply a historic P/E ratio to prospective profits, this could give a misleading result. Similarly, the outcome of applying the P/E ratio of a company with low gearing to the profit after tax of a highly geared company would also be flawed.

In many industries, rules of thumb are used rather than any of these traditional methods. A multiple of turnover, or a multiple of a physical quantity, may be used to obtain a valuation :

- Petrol stations can change hands on the basis of the price per gallon of petrol sold.
- The price of funeral parlours is often calculated on the basis of the number of burials carried out.
- Hotels can be valued on a per-room basis.
- The price paid by each subscriber can be used to value a telecoms or Internet business.

Such industry 'norms' are based on the assumption that a standard level of profit can be generated from the driver in question.

The main problem with all of these market-based methods is that they rely heavily on estimates. Also, they assume that the market is a good benchmark for the estimation of value. The following example shows why this may not be the case.

### Example : the problem with market-based valuations

In the Netherlands in the 17th century, a single Viceroy tulip bulb changed hands for every item in the following list (Buckley *et al.* (1998)) :

- |                        |                          |
|------------------------|--------------------------|
| ■ 17 bushels of wheat; | ■ 4 tuns of beer;        |
| ■ 34 bushels of rye;   | ■ 2 tons of butter;      |
| ■ 4 fat oxen;          | ■ 1000 pounds of cheese; |
| ■ 8 fat swine;         | ■ 1 complete bed;        |
| ■ 12 fat sheep;        | ■ 1 suit of clothes;     |
| ■ 2 hogsheads of wine; | ■ 1 silver drinking cup. |

Had one been valuing a less exotic tulip bulb on a market basis at that time, one might have started with the premise that it must be worth at least the wheat and the rye, and possibly the oxen too !

If market values are unrealistic, a comparative valuation may not be of much use.

## Discounted cash flow valuations

Discounted cash flow (DCF) valuation is often known as valuation on fundamentals. Whereas market-based values are derived from comparatives, DCF values are based on the company's forecast results. The theory behind DCF valuations has been covered in previous issues of MQ, in particular by Minchington and Francis (2000). The methodology is outlined below, and then the issues are discussed.

The criterion for buying a company is the same as that for any other type of investment. The company should generate a return in excess of its cost of capital, that is, a positive net present value. To value a company using the DCF method, one has to evaluate the expected cash flows and a suitable discount rate.

The steps in valuing a company this way are as follows :

1. Determine a suitable initial time period for the valuation. This is generally the period over which you expect the company to maintain a competitive advantage.
2. Estimate the *free cash flow* of the company for each year over the initial period. (The free cash flow is the amount of cash generated by the business before financing is allowed for. It is calculated as the operating profit, plus depreciation, less tax, less capital expenditure, plus/less the change in working capital.)
3. Estimate the *terminal value*, that is, what you think the business will be worth at the end of the initial period. You can use annuity or perpetuity calculations, or a P/E method on earnings at the end of the initial period, or a balance sheet method. Discount all these calculations back to today's value. It is worth using several methods of calculating the terminal value, as this figure is often fundamental in the valuation of the company. Using various methods of calculation may help you to determine whether one particular method is out of line with the others and should perhaps be discarded.
4. Determine a suitable cost of capital for the investment. This cost of capital (weighted appropriately for the debt and equity of the target company) should reflect the equity risk of the target company. (For details of how to calculate the cost of capital, see Muradoglu (1999) and Broyles (1999) in MQ.)
5. Discount the cash flows, using the cost of capital.
6. Add in the value of any non-operating assets. (These might include investments, surplus property and excess cash.) You have now calculated the *enterprise value* (the value of the whole business), which has been financed in several ways.
7. To calculate the value of the equity of the company, deduct the current amount of debt (and non-equity shares) from the enterprise value.

This method, with its string of calculations, seems to be very accurate. However, most of the underlying figures are assumptions, and these may be open to various interpretations. In particular, the terminal value is often more than half of the whole company valuation; another method of calculating the terminal value can therefore give a very different answer. A great strength of DCF valuation is that the underlying assumptions can be tested individually in a

sensitivity analysis, which can be useful when carrying out due diligence for a target company. It can also be useful in evaluating synergies, which are discussed below.

## Value to whom ?

There is no such thing as 'the' value of a company. In different circumstances and at different times, businesses are worth different amounts to different owners, as illustrated in *Figure 1*.

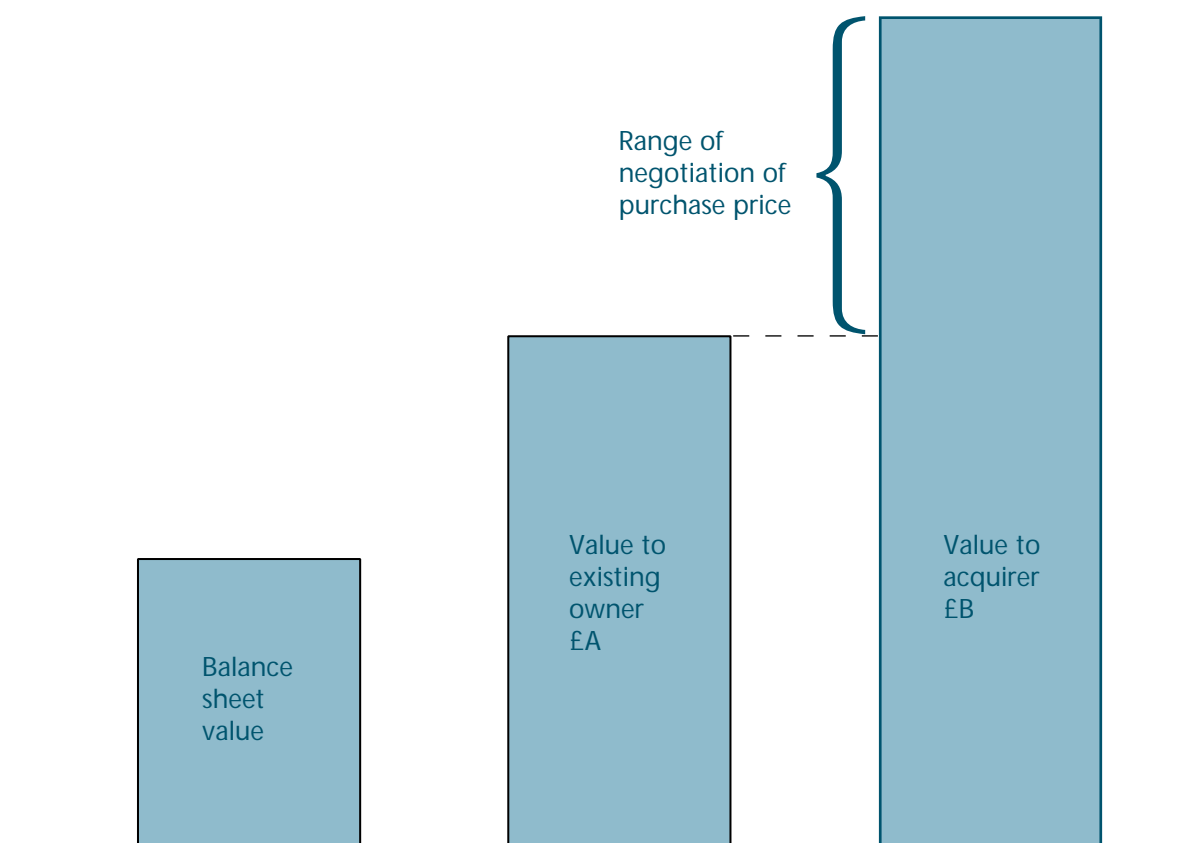


Figure 1 Value to whom ?

In *Figure 1*, the business is worth more to the acquirer than to the existing owners, and so it would be beneficial to both parties for it to change hands. The price at which it is sold should be somewhere between £A and £B. If it is less than £A, the vendor loses out; if it is more than £B, the purchaser effectively gives away all of the value to the outgoing shareholders.

It is worth examining this issue more closely. Why would the business be worth more to one company than another ? Minchington and Francis (2000) discussed Rappaport's seven drivers of value :

- growth in sales (+);
- operating profit margin (+);
- cash tax rate (-);
- working capital as a percentage of sales (-);
- incremental capital investment as a percentage of sales (-);
- weighted average cost of capital (-);
- competitive advantage period (+).

The signs after each of the drivers indicates the direction in which the driver must move for more value to be created. Thus an increase in sales growth or profit, or a decrease in capital investment, results in a higher value. We can hence see that the company will be worth most to an owner that can move the drivers in the right direction. For example, a company with an international distribution network could acquire a local business and increase sales through wider distribution; a manufacturer with spare capacity could acquire another business and combine the factories, making better use of capital. This is synergy.

'Synergy' is often used as an excuse to justify poor acquisitions. When an acquisition is considered, it is a useful exercise to try to determine which of the seven drivers would be affected by the change of ownership, and how. If the increase in value cannot clearly be identified, it probably does not exist. Once the drivers of synergy have been determined, post-acquisition plans can be drafted to ensure that the synergies are achieved.

## Conclusions

It is a cliché that valuation is more of an art than a science. However, like most clichés, it is true. The value of a company depends on how the valuer sees its future prospects, and forecasts differ in accordance with who is making them and in what circumstances. Research shows that professionals involved in valuation use many techniques to calculate value, and then compare these before arriving at a result on which they act. There is no single correct answer.

## References

- **'The cost of capital'**  
Broyles, J, *Management Quarterly* Part 5 (1999) p 23
- ***Corporate Finance Europe***  
Buckley, A, Ross, S A, Westerfield, R W and Jaffe, J F (1998) McGraw-Hill  
*A comprehensive standard finance textbook that emphasises European issues rather than the more usual US point of view.*
- **'Shareholder value'**  
Minchington, C and Francis, G, *Management Quarterly* Part 6 (2000) p 23
- **'The cost of equity'**  
Muradoglu, G, *Management Quarterly* Part 4 (1999) p 17

## Further reading

- ***Valuation : Measuring and Managing the Value of Companies***  
Copeland, T, Koller, T and Murrin, J (1996) John Wiley  
*Written by McKinsey consultants, an indispensable 'how to' for DCF valuation; very practical, but also gives the supporting theory (third edition due some time in 2000).*
- ***Investment Valuation : Tools and Techniques for Determining the Value of Any Asset***  
Damodaran, A (1996) John Wiley  
*Another excellent book that covers the subject in more depth and breadth than Copeland, Koller, and Murrin (1996), and is a bit more theoretical, but is still extremely useful.*



■ **‘Damodaran Online’**

Damodaran, A (2000) <http://www.stern.nyu.edu/~adamodar/> (accessed 12 March 2000)

*A valuable site that includes the author's working papers on valuation and his thoughts on valuing Internet stocks.*

■ **‘Creating value in unquoted businesses’**

Tranter, J, Case Study, Issue 6 (1999) Faculty of Finance and Management, Institute of Chartered Accountants in England & Wales

*Clearly sets out the drivers of an internally derived P/E ratio for an unquoted business that are used to manage corporate value.*

## RISK MANAGEMENT

## DEALING WITH PROJECT RISK



Elaine Harris, University College Northampton

*An important aspect of strategic decision making is how to deal with project risk when outcomes are uncertain. Managers often make subjective judgements about risk, but these are rarely recognised in formal corporate decision making processes. Corporate finance theory is largely based on economic models which focus upon quantitative analysis. This article presents a new project risk assessment technique.*

### Project risk

A practical problem faced by accountants in business is how to deal with project risk in strategic decision making. Most textbooks prescribe an outcome-based model, with the chance or probability of an outcome (which is usually measured in discounted cash flow terms) being estimated. Outcomes may be contingent upon one or more events, which the texts assume can be identified and measured.

#### Example : building of a new depot

The outcome in discounted cash flow (DCF) terms of building a new depot to service customers in a particular region may be contingent upon the response of competitors and upon the market share gained. The textbook approach to dealing with this kind of project risk is to forecast cash flows and calculate the net present value (NPV) on the basis of alternative market responses, and estimate the chance of each response (see *Table 1*).

**Table 1** Market responses

Market response	A (good)	B (fair)	C (poor)
Net present value outcome, £M	+ 2.8	+ 0.3	- 4.4
Chance, %	30	50	20

The expected NPV is then given by the following expression :

$$\begin{aligned}\text{expected NPV} &= (0.3 \times 2.8) + (0.5 \times 0.3) - (0.2 \times 4.4) \\ &= \text{£}0.11\text{M}\end{aligned}$$

In this example, contingency theory has been applied to assess the likely impact of deciding to build. (Contingency theory deals with risk by attempting to measure two variables. One is the level of uncertainty (that is, the chance of an event occurring), and the other is the outcome (what is at stake, that is, the size of loss or damage that will result). When multiplied together, these variables predict the expected outcome of an uncertain event, such that either variable, if sufficiently large, can have a significant impact.) However, the only assumption that has been tested is the market response. For multiple assumptions to be tested in this way, a full simulation would be needed. However, this would still only deal with risk analysis in outcome terms. By the time an actual outcome is known, there is little opportunity to act to reduce its effect.

## Other methods of dealing with risk

Other ways of dealing with projects with unequal risk at board level include modifying the cost of capital or the hurdle rate applied. This can be a way of capturing an overall feeling about risk. You can add a risk premium using some rule of thumb, for example 2% for above average risk projects, and 5% for higher risk projects. This is a simplistic approach that is often based on a subjective judgement about the project which may not be clearly articulated or justified. Alternatively, a risk premium can be based on a market risk measure such as a beta estimate, with the capital asset pricing model being used (see Broyles (1999) in MQ).

The corporate finance texts often fail to take account of alternative perspectives that can help managers to understand better where the risk is coming from in terms of what causes events or outcomes to occur. These aspects are discussed in project management and corporate strategy literature, but they are rarely linked to financial analysis.

## Project risk assessment technique

This section explains how to use a new project risk assessment tool by following these six steps :

1. Identify the sources of project risk (attributes).
2. Assess the relative importance of each attribute (weightings).
3. Assess the risk profile of the project on each attribute (raw scores).
4. Apply the weightings from step 2 to calculate the weighted risk score (grid).
5. Interpret the score along with financial appraisal measures (matrix).
6. Formulate a management response (decision).

### 1. Identify the sources of project risk

Projects which are considered at board level often fall into a general category with which the business already has experience. Examples are business expansion by new product development or through an increase in market size or market share. Knowledge about such projects and their risks is often vested in several managers, although in smaller businesses it may be vested in an individual. This step is concerned with eliciting that knowledge.

Techniques for drawing out such knowledge range from brainstorming to repertory grid techniques and cognitive mapping. (The repertory grid technique is a method of eliciting human perceptions or constructs about a particular topic within the person's range of experience. It is particularly useful for complex topics, where people may find it difficult to articulate ideas about the issue that are often subconscious. Cognitive mapping is a method of mind mapping that comes from the same area of cognitive psychology as the repertory grid technique. It is more often used with groups of people, for example in strategic thinking exercises.)

Where experience is limited, for example in new business ventures, surrogate attributes drawn from other businesses can be used.

The example below is taken from research in a large logistics company in which 12 project risk attributes were found. The last two are not included here, as they are specific to the logistics sector, and ten are enough to illustrate the technique. Each attribute could be broken down into several subcategories and discussed at length, but the aim is to establish a cost-effective decision support technique which focuses managers' attention on key risk areas.

### Example : logistics company

The project risk attributes were as follows :

1. *strategic fit* : the risk of operating outside an agreed strategy;
2. *expertise* : the risk of not having the right type of expertise for the project;
3. *image* : the damage to the company's reputation which could occur;
4. *size* : the risk of 'putting too many eggs in one basket';
5. *complexity* : the number and interdependence of the assumptions involved;
6. *planning timescale* : the time pressure to make a decision and to deliver;
7. *cultural fit* : the potential for misunderstanding between parties to the project;
8. *quality of information* : unreliable, insufficient or invalid assumptions;
9. *demands of customer* : unreasonable expectations and requirements;
10. *environmental factors* : the impact of political, economic, social and technical factors.

## 2. Assess the relative importance of each attribute

If, for a particular type of project, the attributes identified during step 1 are of unequal importance (for example if expertise has a greater bearing on the project's risk profile than cultural fit), then the next step is to agree appropriate weightings.

This can be achieved in a number of ways. The simplest is to start with equal weightings and move values up or down from there.

In the above example, as there are ten project risk attributes, each one would start with a weighting of 10%. Unless some were significantly reduced (to 5%, say) and others were significantly increased (say to 20%), this step would not be required, as the impact of the weightings on the overall score calculated in step 4 would not be sufficiently significant.

See the subsection on step 4 for an example with various weightings.

## 3. Assess the risk profile of a project on each attribute

This step can be undertaken by the project proposer, for example (who may best understand the issues), or by the accountant (on the basis of all the 'business case' information available). This may be appropriate in smaller businesses.

However, in a larger organisation, it should be carried out on a group basis, for example by the divisional management team, using a consensus-seeking debating process.

A scoring system is used to assess the risk profile of the project. This can be a score of 1 to 5, say, for each attribute. In the example below, 1 indicates a low risk, 5 a high risk, and 3 an average risk (in the company's experience), with 2 and 4 being intermediate points. These are recorded in a grid as raw scores.

## 4. Calculate the weighted risk score

In this step, a weighted average project risk score is calculated by applying the weightings from step 2 to the raw score from step 3. A simple average can be used if the risk attributes are considered to be of roughly equal importance (see the subsection on step 2).

**Example : European subsidiary project**

The example project has a good strategic fit. There is a single existing customer, with which there are generally good working relations. However, the customer wants the company to deliver services to its new European subsidiary in a very short timescale. There is insufficient time to validate efficiency assumptions properly before the deal must be agreed (to avoid a European competitor being awarded the business).

Table 2 shows the results of step 3 in the third column, step 2 in the fourth column, and step 4 in the fifth column. The weighted risk score of 3 shows the project to be of average risk (on a scale of 1 to 5). Without the weightings assigned in step 2, the overall score would have been 2.5 (25/10). This highlights the impact of weighting in this case. Whether a simple or weighted average is used, the effects of averaging can be dangerous if only the overall score is considered. It can be seen that the planning timescale (0.75) and the quality of information (0.80) are contributing over half (1.55) of the total of 3.00.

**Table 2** Project risk assessment grid for example project

	Attributes	Assessment raw score $x$ (step 3)	Weighting $w$ , % (step 2)	Weighted score $wx$ (step 4)
1	Strategic fit	1	5	0.05
2	Expertise	2	10	0.20
3	Image	1	5	0.05
4	Size	3	15	0.45
5	Complexity	3	10	0.30
6	Planning timescale	5	15	0.75
7	Cultural fit	1	5	0.05
8	Quality of information	4	20	0.80
9	Demands of customer	2	10	0.20
10	Environmental factors	3	5	0.15
	Totals	25	100	3.00

**5. Interpret the score along with financial appraisal measures**

If the result from the project risk assessment grid from step 4 is combined with the usual financial appraisal measures, for example NPV or internal rate of return (IRR), a useful decision support matrix can be constructed.

**Example : project appraisal matrix**

Table 3 shows the project appraisal matrix.

You can derive the hurdle points on the vertical axis of the matrix by ascertaining the cost of capital (which in this example is 12%), and the target rate of return for risky projects, which is often higher, for a number of reasons (in this instance it is 18%). The hurdle points on the horizontal axis of the matrix are a matter of managerial choice. One might have a fairly narrow marginal band around the midpoint, not necessarily equally distributed.

Table 3 Project appraisal matrix

Project return (IRR)	Project risk (weighted score)		
	Low (< 2.5)	Medium (2.5–3.3)	High (> 3.3)
High (> 18), %	✓	✓	?
Medium (12–18), %	✓	?	×
Low (< 12), %	?	×	×

The project example in the subsection on step 4 had a risk score of 3, which fits into the medium-risk band of the project appraisal matrix in this example. If the IRR calculated on the expected outcome or base case scenario (which might or might not incorporate probabilities) were to be 15%, the case for the project to go ahead would be questionable (as indicated in the matrix by a question mark). However, if the project return were to be calculated at 20%, the case for the project could easily be made (as indicated by a tick). If the return fell below the cost of capital, at say 10%, the case would be difficult to argue, unless loss of existing business from this customer was argued to be possible but not reflected in the cash flow or calculated IRR.

As with any decision aid, the matrix does not give management a final answer. Managerial judgement still has to be exercised, especially when any attribute is scored as a 5 (high risk). However, the matrix does provide useful guidance which takes into account both the quantitative analysis from the DCF and the slightly more subjective assessment from the project risk assessment. It comes with the usual warning about not placing too much emphasis on a single measure (which of course applies to the IRR as well).

The project appraisal matrix is one way in which the project risk assessment can be used as part of a strategic decision making process. Further uses are considered at step 6.

## 6. Formulate a management response

The project risk assessment technique outlined above can be used at various points in a project's life to help in management planning, decision making and control.

The amount of time which may elapse between a project opportunity first being identified and its formal board approval may be measured in days, months or even years. Smaller decisions may be made more quickly, and they may not require a full proposal document with detailed DCF analysis. However, it may be helpful if you carry out steps 1 and 3 (where the attributes identified at step 1 are used as a checklist for the assessment at step 3), and consider some response to the risk profile (step 6). It may be useful in larger projects to carry out steps 1–3 at an early stage to screen out projects that are too risky to warrant further analysis.

Larger projects can benefit from reassessment at a post-audit stage. This reveals how the risks have changed over the early period of implementation, and it helps in project management and control. This form of risk assessment really comes into its own when it is tracked over time. By identifying sources of risk, you can take management action in response to a project risk score before the outcome of the project is known.

Possible responses to 'marginal' risk scores include the following :

- Accept the risk, and keep a close watch on the attributes that contribute the highest risk scores.
- Pass on an element of the risk to the customer, for example through contract terms.

- Charge a premium price which moves the return into the 'high' category.
- Reformulate the project and do it differently in some way, so that the risk is reduced.

Responses to a 'high' risk score can include the following :

- Respond in any or all of the above ways.
- If possible, delay the decision until better information can be obtained or a major reformulation of the project can be considered.
- Reduce the scale of the project, or disaggregate it into separate phases with multiple decision points. Consider using option pricing theory on the financial analysis side. (Option pricing theory can be used to calculate the difference in expected value between investing in a risky asset or project now, and reserving the right to invest or not invest in the project in the future, where the decision to invest may be delayed. In the case of projects, the information available to the decision maker may change during the intervening period, as may the opportunity to invest.)
- Cover or insure some aspect of the risk via a third party.
- Reject or abandon the project.

## Conclusions

Steps 1 and 2 need only be carried out once for each type of project or organisation to put the framework in place. Steps 3 and 4 can be built into normal project appraisal procedures. In steps 5 and 6, the project risk assessment is used to guide management action.

Most businesses could benefit from using this form of project risk assessment at some stage in their development. Potential benefits include the following :

- extra confidence in decisions made;
- less time spent on planning 'reject' proposals;
- extra efficiency in resource allocation;
- identification of key factors for project management and control;
- organisational learning through shared managerial perceptions of project risk;
- enhanced managerial judgement exercised in decision making.

It may require some time and resources to carry out steps 1 and 2 to set up the framework for project risk assessment in the organisational context. In larger firms, it may be necessary to call upon a consultant to help with these steps, and possibly to facilitate group-based assessment when step 3 is first used. A trial can be undertaken using surrogate attributes in the first instance to test out the process before the organisation invests in the development of the technique. Step 4 can easily be built into a spreadsheet model.

Steps 3, 5 and 6 may lead to as much manipulation and as many behavioural problems as other forms of project appraisal where *post hoc* rationalisation of projects is carried out after managers have become psychologically attached to them. However, these potential problems can be overcome by means of internal audit, or through the development of links with reward systems and the encouragement of a culture in which some risk taking is viewed positively as long as it is carefully assessed.

The steps outlined above for dealing with project risk fit well within recently published guidelines on risk management, where the general principles of identification, evaluation and responses to risk are applied throughout an enterprise and its activities.



## Reference

### ■ 'The cost of capital'

Broyles, J, *Management Quarterly* Part 5 (1999) p 23

## Further reading

### ■ ***Project Risk Management : Processes, Techniques and Insights***

Chapman, C and Ward, S (1997) John Wiley

*A good UK text for project managers and accountants alike; in particular, see the section on risk drivers (on p 122), which could be used as surrogate risk attributes.*

### ■ 'Enhancing shareholder wealth by better managing business risk'

Global Risk Management Solutions Group, PricewaterhouseCoopers, Study 9 (June 1999)  
Financial and Management Accounting Committee, International Federation of Accountants  
*For further information, see the IFAC website : <http://www.ifac.org>.*

### ■ 'Project risk assessment : a European field study'

Harris, E, *British Accounting Review* Vol 31 No 3 (1999) pp 347–371

*An academic journal article that explains the research and development which underpins this contribution; contains a glossary of the risk attributes found in the example organisation as an appendix, and explains the technique more fully.*

### ■ ***Investment Appraisal and Financing Decisions***

Lumby, S (1994) Chapman & Hall

*A traditional corporate finance text which covers the treatment of risk in financial analysis using probabilities.*

### ■ ***Capital Investment Decision-Making***

Northcott, D (1995) Dryden Press

*An alternative text which covers both theoretical and practical approaches to investment appraisal in a very readable style.*

## Editor's bibliography

### ■ 'Business risk management'

Shackleton, J, *Technical Focus* No 10 (1997)

## Biographical note

From May 2000, the author will be the Professor of Accounting and Finance at De Montfort University, Leicester.

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The increasingly important area of conflict is analysed to determine why it arises and how it can be managed in various ways. The positive aspects of disagreement are also considered.

#### Marketing *Analytical tools for marketing*

An introduction to some of the key tools in the marketing manager's toolkit, as well as some computer-based tools, this contribution covers principles of lifecycle analysis, gap analysis, the Ansoff matrix, and the directional policy matrix.

#### Finance *Financial instruments*

Financial strategy involves the selection of the most appropriate financial instrument to suit the company's circumstances. This article looks at ways of combining yield, capital gain and downside protection in the various types of financial instrument.

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