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PREFACE

This Faculty publication is produced in parallel with the Braybrooke Press publication of the same name. Accordingly, references in the text to issues of *Manager Update* prior to April 1997 relate to the Braybrooke edition.

Manager Update helps the general manager keep abreast of the latest articles in specialist management journals. The most useful ideas in the fields of Strategy and Organisation, Marketing, Accounting and Finance and Human Resources Management are carefully selected from a wide range of publications with the busy general manager in mind. Experts in each field explain and discuss the relevance, practicality and usefulness of the key new concepts and ideas, thus enabling the senior executive to keep really up-to-date.

The articles represent the personal views of the authors and not necessarily those of their organisations or of the Faculty. The nature of some subjects will preclude the articles from being definitive or mandatory. Being general in nature, the points made in *Manager Update* may or may not be relevant to specific circumstances.

The Faculty committee intends that *Manager Update* will act as an aide-memoire for members, provide new ideas, and encourage good practice, but cannot accept responsibility for their accuracy or completeness. Responses from the membership will be a very important part of the successful development of the series. Comments please, to Chris Jackson on *0171-920 8486*. (or by e-mail to CDJackson@icaew.co.uk)

Manager Update *is compiled and edited by* Professor Keith MacMillan, *Academic Dean and Deputy Principal of Henley Management College.*

Stephen Parkinson *is Professor of Business Strategy and Director of Ulster Business School at the University of Ulster.*

Richard McBain *is Intercompany MBA Programme Manager at Henley Management College.*

Ian Turner *is Director of Studies of the Distance Learning MBA and Diploma in Management at Henley Management College.*

Roger Mills *is Professor of Accounting and Finance at Henley Management College, and Consultant Professor to Price Waterhouse on Shareholder Value.*

ARTICLE SUMMARIES

Marketing *Marketing in China*

China is a huge and rapidly-growing market; but few non-Chinese companies have made much money there. What can be learned from the experience so far? Is there a better way to enter the market? Are joint-ventures really necessary? What is known about the Chinese consumer? What kind of distribution is needed? Contrary to popular opinion, a direct approach can be successful. **Page 2**

Human Resources Management *The Role of Human Resource Management and the Psychological Contract*

In times of rapid change, the employment contract, and hence the role of HRM, needs to be re-thought. There is a shift underway from 'relational' to 'transactional' contracts. These can not only provide organisations with greater flexibility, but also can benefit employees. Special attention however, needs to be paid to the contracting process. **Page 5**

Strategy and Organisation *The Myth of Core Competence*

How can 'core competences' be created and sustained as a basis for strategy? Can they be easily identified? Can they be used to conceive a diversification strategy? And where does knowledge fit in as a core competence? To gain most benefit, individuals in organisations need good interactions with each other. **Page 9**

Accounting and Finance *The Options Approach*

Today's uncertain environment requires managers to become more sophisticated in the ways they look at assets and account for risk. The 'Options' Approach to investment appraisal creates more flexibility in decision-making than traditional approaches, such as Discounted Cash Flow. Managers need to keep their options open. **Page 15**

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MARKETING

Marketing in China

Stephen Parkinson is Professor of Business Strategy and Director of Ulster University Business School

As the time for handover of Hong Kong to the People's Republic of China arrives, it is interesting to note the increase in articles which have focused on different aspects of marketing to China. The sheer size and diversity of the market makes the prospect an enticing one for many would be entrants. The complexity and subtlety of many aspects of doing business in China make it a complex problem for many companies to resolve.

In this issue of *Update*, we review three articles which have addressed this issue from different perspectives. Vanhonacker[1] looks at market entry strategies. His conclusion is that joint ventures are not the only way into the market. Wholly owned foreign enterprises are an alternative approach which can yield results. Schmitt[2] examines the nature of the Chinese consumer. His article focuses on different approaches to segmentation, and provides insights which are helpful in planning alternative marketing strategies. Finally, McDermott and Choi[3] examine some of the practical difficulties of identifying and planning alternative routes to market.

Joint ventures are not the only strategy

Vanhonacker estimates that almost half of foreign investments in China by the year 2000 will be wholly foreign owned enterprises (WFOEs). Whilst the most common form of operation in the past has been equity joint ventures, the author predicts that this form of participation will be increasingly replaced by foreign companies which establish a separate identity. Resistance to such forms of operation is diminishing as Chinese officials realise the benefits which this form of market entry may bring to China as well as to the locating organisation.

Several aspects of China create an extremely difficult operating environment, even in the case of joint ventures. Political, cultural and social systems are extremely complex. The market place is rapidly advancing and fragmenting. The voice of the customer is increasingly being heard as an independent one, with real purchasing power behind pent up demand. Local manufacture has increasingly targeted consumer markets, in competition with large multinational organisations which are currently attempting to build up their own access to the market place as part of a long term investment strategy.

In parallel with the rest of the developed world, retail and distribution links are increasingly concentrating, creating fewer more powerful customers which are better able to control the distribution channels for many consumer products. The author describes how the traditional Chinese distribution system (national, provincial, local) is being replaced with a variety of different channels, each of which serves different segments in a variety of ways.

Very few Chinese companies have a national presence, making it difficult to identify an obvious joint venture partner. The author gives several examples which demonstrate that companies are often prescribed to operating within pre-existing administrative boundaries. Companies which overstep these boundaries and sell outside the agreed area often run into difficulties.

Joint ventures can also run into difficulties because of differing perceptions. The author suggests that many Chinese perceive marketing as an order-taking activity. The concept of free market competition is still alien to many, leading to a situation where the local partner is less inclined to compete in the market place as competition intensifies. Local partners may also have unrealistic expectations of the extent to which technology will be available from the joint venture. Whilst Chinese partners may expect a free transfer of knowledge, the overseas partner is frequently reluctant to share all of the know how, particularly when this may be copied.

These problem areas may account for an increasing interest in wholly foreign-owned enterprises (WFOE's). The main advantages are seen as increased flexibility and control. Companies control their own strategic direction, and are not restricted by the speed of their local partner. The biggest disadvantage is the problem of establishing local political and social connections (guanxi). Such WFOE's will also only be accepted where they can demonstrate they are making a contribution to the local economy through employment and sourcing. Commitment to local business should also be demonstrated. The author cites Coca-Cola which transferred the trade mark of one of its drinks, Tian Yu Di, to a local concentrate producer.

WFOE's are not allowed in certain areas of the economy. These include financial services and insurance. However, they are increasingly encouraged in areas of strategic importance including machinery, equipment and electrical goods. The author's advice is to pick the best combination of joint venture or WFOE to meet the particular situation. Increasingly, the WFOE may offer the quickest and most effective route to market.

Who is the Chinese consumer?

The first and most important step in marketing planning is determining who is the customer. Schmitt recommends that companies seeking to develop the Chinese market must understand how the market segments and how needs in each segment are likely to require different types of response.

Schmitt's article looks at geographic, demographic and psychographic bases for market segmentation. In 1994, Gallup China produced the first recorded national survey of Chinese consumers. According to the author this was the first market research survey of its type ever to be completed. The author draws from this survey to illustrate differences in basic patterns of consumer behaviour.

Whilst there are many individual differences between groups of consumers, the most pronounced differences appear from comparisons of rural Chinese with those who live in the city. The urban population was significantly more likely to study advertisements before the purchase of durable products. It was also more likely to pay higher prices for products of higher quality. Brand preferences were also stronger amongst the urban population. All of these differences can clearly be associated with higher levels of income and education in urban communities. The author points out the danger of assuming that patterns of behaviour in the Chinese consumer can be assumed from an observation of the urban Chinese. He comments:

> 'These statistics are a stark reminder that when it comes to consumer behaviour in China; Shanghai, Beijing and Guangzhou and other cities are as Chinese as New York is American . . . Cities as a whole account for only 20 per cent of the population.'

Further analysis reveals major cultural differences between cities such as Beijing, Shanghai and Guangzhou, which are reflected in the preference for different types of products.

Analysis of differences in patterns of consumption between the different sexes suggests that there may be basic similarities around the world. For example, young women among young consumers betray the least concern with price. Despite relatively low levels of income, a significantly high proportion spend large amounts on cosmetics and fashion. The author relates this to the relative success of many Western cosmetics firms in Chinese cities.

The author concludes with an analysis of the applicability of psychographic and lifestyle segmentation techniques to a sample of Chinese consumers. His major conclusions are that attitudes and lifestyles are key predictors of a wide variety of consumer behaviour, as they are in other parts of the world. However, word of mouth communication takes on a major role especially amongst educated consumers. Social relations are especially important. Some aspects of the traditional model of consumer behaviour do not fit well to the Chinese setting. There is less experience of the consumption of expensive products and well known but affordable Western brands have a greater significance.

The significant message from the article is that the Chinese market is as fragmented and variable as all other markets. Companies seeking to develop their position in this market need to approach it with as much care as they would extend to market development elsewhere. The sheer size and complexity of the market means that any company looking at market development will have to identify carefully the major influences on consumer behaviour as the first part of their strategy. There is no universal stereotype of the Chinese consumer.

A large and complex market

McDermott and Choi present a useful overview of developments in the Chinese consumer market place. The most striking feature in their review is the sheer size of the market opportunity and the rate of growth of the market. In 1995, five regional areas (Shenzhen, Shanghai, Guangzhou, Beijing and Tianjin) had an average per capita income of approximately $1000. In two years' time it is estimated that 16 cities will have reached this level of income.

According to the authors, Chinese consumers are optimistic about the future, positively disposed to trying new products and many are sophisticated shoppers who like to make well informed choices. As a consequence, it will become increasingly difficult to build consumer loyalty unless companies can offer demonstrable value for money. Already, 65 million consumers can afford most fast moving consumer goods, and there is a distinct preference for foreign branded products.

Against such a context, one of the critical issues is to manage distribution systems for competitive advantage. Current distribution systems are identified as poor, and there are some very real problems in developing an appropriate infrastructure.

The author's discussion focuses around the problems facing four companies involved in distributing products into China. These companies are major multinational businesses with interests around the world. All four companies began with local joint ventures. They all have wide distribution in China, and operate through regional sales offices. The article contains a useful summary of the main distribution issues facing these companies and the approach which they have adopted to deal with these issues.

For example, common weaknesses are identified in the distribution system. These include conservatism amongst the wholesalers, who were unwilling to serve new markets, poor information flow and poor merchandising service to retailers. On the one hand, a partnership with a local company allowed each of these companies to enter the market rapidly: on the other hand, this meant that they also inherited the existing distribution systems which had traditionally served the market.

Each of these companies had to develop new strategies to reach the market more effectively. Such strategies included improving information about current distribution systems, especially product flow to the consumer, an emphasis on better targeting of effort by the sales force, and the provision of more services to wholesalers to assist them in doing a more effective job. In some companies consideration was being given to moving to direct distribution to retail.

Wholesalers in China perform many of the functions which wholesalers would provide in more developed settings. However, there are major difficulties which each of the companies has encountered. Such wholesalers frequently provide poor levels of service due to poor transportation facilities, neglect small retailers, and lack sales staff to carry out effective personal selling tasks.

These problems are similar to those which exist in many of the former Eastern European markets. Companies which have entered such markets have encountered similar problems in understanding the patterns of product flow; a similar structure of poorly motivated and poorly managed distributors is still common, and expectations of customer service levels are low.

The authors indicate that the solution to many of the problems may be for manufacturers to go directly to the market, and take over many of the functions provided by the intermediary. Whilst such an approach may give greater control, there are cost implications which need to be related to the size of the market. It would have been interesting to have seen how each of these companies has been able to export its know how from operations in Eastern Europe to the Chinese market.

China is not a single market place. Each of the articles in this issue of *Update* has emphasised the importance of recognising the diversity of customer needs. It is clearly a rapidly expanding market place in which there are increasing opportunities for companies to take a pro-active stance, rather than the conventional route of working through a complex political and legal process.

The articles all illustrate the potential return which can come from applying a professional approach to marketing, whether at the initial stage of market entry, or later on in terms of market assessment and market development. Readers will find much useful information and examples which will be of assistance if they are considering market entry.

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HUMAN RESOURCES MANAGEMENT

The Role of Human Resource Management and the Psychological Contract

Richard McBain is Intercompany MBA Programme Manager at Henley Management College

In recent years organisations have experienced a bewildering degree and variety of change. At the same time, the role of human resource management and the nature of the employment relationship are changing. Recent research throws light onto these developments and their inter-relationships.

Changing the emphasis in HRM

Gennard and Kelly[1] consider the changing relationship between line management and personnel specialists in the UK. The rise of an 'enterprise culture', and a shift in the balance of power from employee to employer in the 1980s and 1990s, saw an end to the 'bureaucratic control' model of labour and personnel management. In its place, it has been argued, an 'HRM paradigm' has emerged, which stresses the integration of human resource policy and practice with business strategy, and which has supported the trend to give line management 'personal control' for employees. Is this realignment a 'threat' to personnel specialists, or an 'opportunity' for them to increase their power and influence?

In a study of 28 organisations, Gennard and Kelly find support for the idea of a realignment in the relationship between line management and personnel specialists, but not for the argument that the influence of personnel management has been threatened. They argue that 'its role has been advanced as line managers demand higher value contributions in a situation of financial stringency, fiercely competitive markets, and pressure for them to secure the maximum utilisation of all resources at their disposal'. This is not simply a case of personnel specialists re-emphasising their power and status. Rather, they contend that there has been a 'marked change in the role of personnel including a reduction in the number of personnel specialists employed at the operational level'. Neither the 'threat', nor the 'opportunity' hypotheses capture the more varied role that personnel now plays and they argue for a third proposition, that of the 'flexible business manager', in which there is a business driven partnership between personnel and line managers. In 26 of the 28 organisations studied, the personnel director was either a member of the board or top management team and this, together with a business orientation which mitigates against a rigidly functional view of HR, is key to this change. A further factor is the growing trend for personnel departments to review their effectiveness in contributing to business objectives.

Evidence of the role of HRM from a European perspective is provided by Kabst, Larsen and Bramming.[2] Using the European Cranfield data covering 14 European countries, they consider the role of training and development in the 'lean organisation', which 'tries to achieve competitive advantages by the simultaneous utilisation of cost leadership and customer-orientated differentiation'. The principal characteristics of human resource management in lean management are a human capital orientation (that is, human resources are not considered merely as a cost factor), a decline in hierarchies, and an emphasis on teamwork and on permanent learning. Although they acknowledge that the statistical results could have been more significant, and that their operational definition of a lean organisation (as one which continues to make a profit whilst reducing staff numbers) is a narrow one, their findings support the following characteristics of training and development in such organisations: greater employee involvement in training and development; the use of work groups; the importance of training in quality, customer orientation and people management; line management responsibility for training and development ; the use of job enlargement; the provision of more information about management decisions; and the use of team briefings and quality circles.

The 'HRM paradigm' not only stresses the importance of integrating HRM policy and practice with business strategy, it also emphasises the importance of gaining the commitment of employees to the organisation's vision and goals. How successful have organisations been in gaining this commitment, or is the need to gain commitment a matter more of words than deeds? Moreover, has the nature of employees' commitment changed and how far are the needs and expectations of all employees the same? Finally, how important is commitment to an organisation's performance, and what could and should the organisation, human resource managers, and employees themselves, do to develop and maintain this commitment?

Psychological contract

One concept, originally developed in the 1960s and which has been the subject of increasing recent interest, since it provides insight into these questions, is that of the 'psychological contract'. Herriot and Pemberton[3] define it as 'the perceptions of both parties to the employment relationship, organisation and individual, of the obligations implied in the relationship'. Each individual may have a different psychological contract, and also, as Robinson[4] argues, the perceptions that make up the psychological contract must be distinguished from 'general beliefs held by employees about what they will find in their job and organisation', since 'only those expectations that emanate from perceived implicit or explicit promises by the employer are part of the psychological contract'.

Hendry and Jenkins,[5] focus on one aspect of the changing employment relationship and psychological contract, that of the decline of the stable career. Not all employees have participated in career systems which exchanged loyalty to one employer for security until retirement. However, they argue that 'there is general agreement that what we are now seeing is a shift from 'relational contracts'—characterised by company specific skills, long-term career development, and extensive training—to 'transactional contracts', which focus on short-term financial relationships and involve low emotional commitment by employees'. The shift is from a 'paternalistic' to an 'individualistic' relationship, and a return from the 20th century notion of 'careers' located within the context of bureaucratic organisations, to an earlier notion of 'jobs', or even 'tasks'.

Does a 'relational', as opposed to a 'transactional' contract, in itself affect the nature of the commitment to the organisation, and the level of performance achieved? Hendry and Jenkins point out that not only can transactional relationships provide organisations with greater flexibility, they can also provide employees with greater freedom and choice. For them, the main issue with the transition lies in the way in which the old contract was broken, and the new one established. Organisations must be careful not to give out 'mixed messages', for example by pushing through 'heavy job cuts and re-structuring' whilst still using the 'public language of commitment', and they must ensure a coherence in their culture and employment policies consistent with the 'new deal, and new dealing'. For them, an organisation must first establish 'a process for psychological contracting, characterised by accurate information sharing on both sides', and second, 'HR practitioners need to develop more differentiated career contracts which reflect the interests and contributions of different groups of employees'. At the same time, employees need to develop a greater sense of realism about what the organisation can offer, particularly those who had previously come to expect a stable career pattern.

Contracting

The process of contracting is considered by Herriot and Pemberton,[6] who offer a model that is both prescriptive and an analytical tool to help organisations diagnose potential problem areas. Psychological contracting is seen as an iterative process involving four stages: informing, negotiating, monitoring, and re-negotiating or exiting. They argue that measures taken to reduce costs and enhance productivity in the past decade have damaged the conditions for innovation, a key requirement for survival in the global market place. A process of contracting, based upon negotiation, is considered to provide a context in which individuals may develop a 'sense of security and confidence to take risks and engage in innovative teamworking practices'.

Herriot and Pemberton also present outcomes from a number of workshops held with different groups of employees in a major UK organisation. A key finding was that there were differences in the psychological contracts of three groups of employees—graduates, middle managers and clerical staff—and that employees perceived their own and top management's wants and offers to differ. For example, speaking of the current contract, (1995) graduates 'felt perfectly comfortable with the idea of a time-limited career within the organisation, and were eager and willing to focus on business needs rather than to serve time. In exchange, however, they wanted to secure their employability through the opportunities for development that the organisation offered; and they assumed the right to challenge conformity. Overall, they perceived the organisation as failing to keep pace with their expectations and falling short on its side of the contract'. In contrast, middle managers felt that increased financial benefits did not compensate for the losses of other organisational offers such as job security. Speaking of the future (the year 2000), graduates 'did not see much in the future deal that was likely to engage their commitment', and middle managers still hankered after a 'traditional' relationship. These results may or may not be generalisable—however, they do caution against treating all groups of employees in a unitary way, and may suggest that negotiation is required regarding future contracts.

What are the consequences of a perceived breach of a psychological contract? Robinson[7] surveyed 125 alumni of a US graduate business school who had recently started jobs over a two-and-a half-year period. She found that respondents reported a relatively high initial level of trust in the employers—perhaps surprising in the context of increasing transactional contracts. Psychological contract breach was found to be negatively related to employee contribution (measured by performance, organisational citizenship behaviour, intentions to remain with the organisation, and job turnover), and the effects of such a breach may be both enduring, and more significant in determining variations in employee contribution than either pay or promotion. At the same time, the higher the level of initial trust reported, the lower was the perceived level of psychological contract breach, and the lower the decline in trust after a breach. Robinson argues that 'firms that actively establish and maintain trusting relationships with their employees may inoculate them from the negative effects of potential contractual transgressions'.

In periods of change, the occurrence of psychological contract breach is likely to increase. A significant conclusion of Robinson's study is the need to develop and maintain trust, but how is this to be achieved? The contracting model proposed by Herriot and Pemberton may help here, and it is also important to mitigate the effects of a breach of contract. Morrison and Robinson[8] distinguish between a 'perceived breach' of a psychological contract, which refers to the cognition of an organisation's failure to meet its obligations, and contract 'violation' referring to the emotional and affective state that may follow from that cognition. They argue that the 'psychological contract breach is sometimes unavoidable, yet the destructive reactions that often follow are not'. Both employees and 'organisational agents', such as supervisors and human resource managers can play an active role in engaging in 'explicit discussions of obligations to ensure that their perceptions of the terms of the employment relationship are shared and that those terms are as clear as possible'. This is particularly important during the recruitment process and periods of change, but there should also be frequent ongoing communication regarding obligations and expectations.

Performance management

The performance management process, concerned with setting objectives, evaluating performance, and linking performance with development and rewards, is therefore a key element of the contract-making process, and this has been examined by Stiles et al[9] in a case study of three large UK organisations undergoing large-scale change. The performance management process was used to support changes to the psychological contract, if not to an explicitly transactional one. The common characteristics of the process in all three organisations studied included a clearer link between objective setting and organisational vision and strategy, the agreement of targets between boss and employee, the use of competencies, ongoing appraisal linked to rewards and development, performance related pay for managerial grades, a service-focused training, an emphasis on continuous improvement, and individual ownership of development.

The use of the performance management process to support new organisational objectives brought difficulties in two main areas. The first was the presence of mixed messages, as short-term pressures, a continuance of old belief systems, and managers acting as buffers in the communication process between top management and employees, undermined the new objectives and values. The second area of difficulty was employees 'disenchantment' with the fairness and accuracy of the performance management process, including the lack of negotiation over targets and concerns about their achievability, and lack of understanding of the appraisal-pay linkage. In all three cases studied the 'changes were being driven in a top-down, systematic manner and the lack of consultation . . . brought cynicism and a lack of trust among employees'. The employees' negative perceptions of the changes is attributed in part to resistance to the change in the previously more certain and consistent relationship, but also to the neglect of procedural justice consequent upon a lack of involvement in decisions about the change, and ongoing input in objective setting and performance evaluation which led to the perception of a move to a more transactional relationship, in spite of employers continuing to use the language of a relational contract.

The implications of the recent research reviewed here are that the nature and context of human resource management is changing. It plays a key role in ensuring the promotion of business success and in managing change—but effective management of change requires attention to the process of establishing expectations and obligations with all groups of employees.

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STRATEGY AND ORGANISATION

The Myth of the Core Competence

Ian Turner is Director of Studies of the Distance Learning MBA and Diploma in Management at Henley Management College

There is no doubt that the dominant concept in strategy, at least competitive strategy, over the last seven years has been the notion of core competence.[1] The enormous success of Hamel and Prahalad's original article in the *Harvard Business Review* prompted many companies to review their strategy. After spending many hours in relentless pursuit of their company's core competences, managers often concluded that the concept, whilst enormously appealing in the abstract, in practice merely gives rise to frustration and bewilderment.

Clearly, the major consultancies have had the same experience of applying core competences as the rest of us, if a recent article in *The McKinsey Quarterly* is anything to go by.[2] Too often, as the authors point out, trying to define a company's core competences simply results in a list of things the company thinks it does well. They define a core competence as a combination of complementary skills and knowledge embedded in an organisation which enables it to perform one or more critical processes to a world class standard.[3] One may take issue with this definition (it differs, for example, from Hamel and Prahalad's definition which emphasises that core competences should be capabilities which competitors cannot easily emulate but which can be deployed across more than one business unit). Moreover, the emphasis on 'world class standard', whilst it may be accurate for large global companies, is largely meaningless for many smaller companies for whom competing successfully may be a matter of keeping one step ahead of the competitor down the road. What Coyne et al do do well, however, is to define what core competencies are not. The concept, they maintain, does not embrace patents, brands, products or technologies, nor sets of management skills like strategic planning or team work, nor properties like high productivity, customer satisfaction and quality. Instead, they propose that core competencies can be subsumed within two categories only. The first category they define as 'insight or foresight competencies' which enable a company to gain first mover advantages. Such insights may come from possession of technical knowledge or proprietary information but they may also result from creative flair or the ability to interpret data which is widely available. The other type of competence they call 'front-line execution competencies'. By 'front-line' they seem to mean aspects of the business which bear directly on the relationship between the organisation and its customers. A different reading of this might mean any aspect of the company's value chain which affects the delivery of an end product or service. This would certainly make more sense, since, in the case of many companies, such capabilities as they possess are often embedded in the production process (eg, Benetton, Ikea, etc).

Coyne et al remind us that core competencies are actually rather rare. In fact, for a set of skills to qualify as a core competence, they need to have the following characteristics:

- They need objectively to be better than the skills of competitors.
- They need to be relatively rare and not easy to imitate.
- They must generate at least as much value as other current economic levers such as economies of scale, first mover advantages or access to cheap resources.
- They need to be consistent with, and integral to, the company's value proposition.

These conditions make sense and indeed are commonly cited in the resource-based literature on capabilities.[4] The last condition, however, seems to be a little puzzling. 'A company should not invest in becoming superior in service, for example, if it does not intend to position itself with the customer as the best service provider'.[5] Fine, but should it not be the other way round? The value proposition, according to the resource-based school, should surely be derived from the core competence. Coyne et al go on to identify three routes to achieving core competence:

- Evolution, which is often best used to develop front line execution competences as they need to be firmly embedded in the organisation.
- Incubation, where a new unit is set up outside the core organisation to develop a new set of activities.

This seems to be most appropriate for insight/fore-sight competencies where the emphasis is on creativity, and:

- Acquisition, which works best for front-line execution skills which are not so sensitive to the departure of a few key individuals following the acquisition. Such acquisitions are often best left outside the core organisation as full integration may disrupt the routines which underpin their competitive advantage.

Leadership and core competencies

Coyne et al believe that creating core competences quickly requires adherence to two fundamental principles. The first is that the core competence itself, mediated via the respective function, has to 'steer the power structure'. This means that if a company wishes to acquire a core competence in, say, flexible manufacturing, that particular function must drive the organisation. The second principle is that the CEO must be the one who selects one or at most two core competences to focus upon. This should not be left to department or division heads. There may be sense in both of these tenets, at least in the short term. Focusing on one thing at a time is more likely to lead to success and somebody at some stage has to articulate what the priorities are going to be. However, the present writer believes that on investigating how core competences have evolved over time in successful companies, one would often find that they had evolved not through the deliberate promotion of top management but by accretion of a number of separate actions which in turn led to the acquisition of distinctive skills and capabilities. Likewise, allowing any one particular function to attain dominance in single-minded pursuit of a core competence runs the risk that the organisation could become locked into a particular dominant logic.[6]

Coyne et al maintain that the best route to achieving and sustaining a core competence is to measure and test it. This proposition seems to the present writer to be questionable and possibly self-serving. There are plenty of ways of assessing competitive advantage and most of them involve talking to customers, actual or potential. What is clear, however, as another article in the same issue of *The McKinsey Quarterly* points out,[7] is that sustainable competitive advantage is a rare commodity. A study of 400 companies over 30 years showed that few were able to maintain high performance levels for more than 5 years at a time and most regressed to the industry mean after three to seven years.

The new diversification

One of the interesting things about the core competence movement is that, paradoxically, it seems to have made diversification acceptable again. Diversification enjoyed a heyday in the 1960s and 1970s as many companies, in an effort to maintain their growth, started to expand outside their core businesses. Alas, as we know from the work of Richard Rumelt and others, much of this diversification was ill-considered and involved branching out into areas which were completely unrelated. Seared by the experience of unsuccessful diversification, companies in the 1980s were urged by management writers like Peters and Waterman[8] to 'stick to the knitting'. This management mantra, reinforced by the impact of competition, caused a reassessment in the strategy of many large companies. The late 1980s and early 1990s can be characterised as periods of 'refocusing on core businesses' in many firms.

In the 1990s however, diversification in a new form has re-emerged. On the face of it this new diversification seems to be as dramatically unrelated as its forerunner in the 1970s. Electricity companies moving into 'phone services, supermarket chains offering retail banking services and exhaust fitters selling motor insurance all seem to run counter to the refocusing orthodoxy of recent years. Of course, we should not fall into the trap of citing these moves as evidence that this new diversification is likely to be more successful than the old diversification. The jury is still out on the supermarkets' excursion into retail banking and it represents a tiny proportion of the existing market and indeed of the existing business of supermarkets. Similarly, it is not known whether Kwik-Fit's move into motor insurance will ultimately be successful although the initial results seem to have surpassed their expectations. Cynically, we might say that if they are not unsuccessful, we can define them as examples of the old, much derided, unrelated diversification, whereas if they are successful they can be reclassified as 'competence-based diversification'

Competence-based diversification

This is a term coined by two Italian authors[9] who propose a theory of diversification which is based on internal determinants. They distinguish between two types of internal determinants. The first of these is organisation routines. They define these as 'patterns of interactions which allow the firm to deploy its distinctive skills and knowledge in a co-ordinated and integrated way. In other words, they represent ways of solving particular problems in order to obtain a better performance with respect to competitors'.[10] As they point out, the ability to replicate organisational routines usually involves a strong element of tacit knowledge and skills, ie, skills and knowledge which cannot be codified but which, because of their complexity and their contextualised nature, are often deeply embedded in the organisation. The other determinant is more conventional. It is resources, which can either be tangible, eg, plant and equipment, or intangible such as brand images and reputation.

The authors then conceptualise four sets of choices companies can make in diversifying along these two dimensions, resources and routines. Thus, deploying existing resources and existing routines is referred to as replication-based diversification. A good example of this type of diversification was the Shadow factory scheme operated by British car makers in the Second World War. When the war started, these factories were activated not to produce cars, but tanks and aeroplanes. Thus, they involved application of existing routines and resources to a new business area. Firms that take their existing routines and apply them to new resources are engaged in 'routine-based diversification'. Sony's diversification into successive areas of consumer electronics involving distinct technologies is an example, drawing as it does on Sony's ability to manage the introduction of new technologies in mass markets. Exploiting existing resources with new routines is 'resource-based diversification'. This can happen, for example, when a defence contractor used to 'gold-plating' products for the armed forces, is forced to adopt new routines in order to compete effectively in the private sector. The final option is unrelated diversification, where a company deploys completely new resources and new routines. This is probably the most common form of diversification and also one of the most risky. Interestingly, according to the authors' analysis, much of the diversification undertaken by Japanese companies like Sony and Canon, seems to be based upon routine based diversification. This would appear to be the type of diversification which has relatively low impact on the company's organisation and structure.

Knowledge management

One particular subset of resource based strategy is knowledge management. As we move into the information age and physical assets become less important, the attention of strategists is drawn to the concept of competing through knowledge. Indeed interest in knowledge management has recently been sanctified by a special issue of the *Strategic Management Journal*.[11] This is also another promising field of activity for consultancies like Ernst & Young[12] and Arthur Andersen.[13] Arthur Andersen, in their approach to knowledge management, place a lot of emphasis on knowledge sharing and they cite empirical evidence to the effect that tasks can typically be resolved more effectively in groups than by individuals. This leads them in turn to emphasise the role of information technology and particularly groupware systems in knowledge dissemination in companies. They summarise this in the formula: k=(p + i)s where organisational knowledge (k) represents the ability of people (p) to exchange and use information (i) through technology (+) dramatically enhanced by the power of sharing (s).[14] They construct an Organisational Knowledge Management Model consisting of four organisational catalysts—leadership, culture, technology and measurement—as the main levers for knowledge management in organisations. They then go on to identify the properties of each of these catalysts which support effective knowledge management.

In truth, most of these properties are fairly predictable—rewards and incentives should reinforce the development of knowledge in the organisation, for example, and the organisation's culture should encourage the sharing of knowledge. But they do have some interesting insights to offer. For example, on the problems of implementing knowledge management in global organisations, they comment that often the expectation of cultural difference proves to be a bigger obstacle than a diverse cultural background itself. So, even with the growth of video conferencing and groupware systems, it seems that the most effective way of encouraging free communication and sharing of knowledge is to increase physical interaction as only then can you increase the levels of trust and confidence upon which knowledge sharing ultimately rests.

Is knowledge measurable?

Like McKinsey, Andersens are great believers in measuring knowledge creation, on the grounds that it is impossible to manage something that cannot be measured. They argue for a combination of quantitative and qualitative measures and cite as an example NutraSweet, who calculate the annual value to the company of competitor information based on a combination of increased revenue and unlost earnings relating to competitors' activities. Preoccupation with measurement, of course, is one of the abiding themes of management and has cropped up again most recently in the shape of the balanced score card.[15] The problem is that the most important type of knowledge is also the least susceptible to measurement.[16]

In a challenging article in *Strategic Management Review*, Tsoukas[17] makes the case for the firm as a 'distributed knowledge system' in which it is impossible to survey the firm's knowledge as a whole because it is neither self-contained nor static but inherently indeterminate and continually reconfiguring itself. Tsoukas argues against attempts to disentangle the problem of knowledge management by classifying knowledge as either individual/collective or as tacit/explicit. Even explicit forms of knowledge which can be easily codified are based ultimately on what he calls an unarticulated background grounded in society and on our own past experiences. Because, Tsoukas argues, knowledge is distributed throughout the organisation and not concentrated in a single mind, no single individual has the ability to specify in advance what type of knowledge is likely to be relevant in the future. Knowledge management models, and by implication much of the approach advocated by consultancies like Arthur Andersen, therefore miss the point. The problem, as Tsoukas identifies it, is 'not only that we do not know enough but more fundamentally that we do not know what we need to know'.[18] If, as Tsoukas claims, a firm's knowledge is inherently emergent, partly originates from outside the firm and is never complete at any one point, then traditional approaches to management control break down.

How then are we to 'manage' knowledge in organisations? The 'key', Tsoukas argues, 'to achieving co-ordinated action does not so much depend on those higher up collecting more and more knowledge as on those lower down finding more and more ways of getting connected and inter-relating the knowledge each one has. A necessary condition for this to happen is to appreciate the character of the firm as a discursive practice; a form of life and community in which individuals come to share an unarticulated background of common understandings . . . this is just as important as finding ways of integrating distributed knowledge'.[19]

Building the knowledge organisation

If, as Tsoukas claims, managing knowledge in organisations has to do with encouraging interaction rather than attempting to measure knowledge, then defining a 'knowledge culture' becomes quite important. Michelle Darling from Canada's CIBC has developed some insights from her own firm into the characteristics of such a culture. Thus:

- Values knowledge and puts knowledge where it is required, specifically at the service of the customer.
- Uncouples the possession of knowledge from positional power and distributes it to those who deal with customer needs most directly.
- Values diversity and looks for new ideas and insights from across the organisation.

- Has a subversive effective on management hierarchies, undermining the traditional command and control mode and encouraging informal networks to develop.
- Concentrates not only on what the organisation knows it knows, but also on what it knows it does not know, what it does not know it knows, and what it does not know it does not know.[20]

Maybe Tsoukas has a point.

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ACCOUNTING AND FINANCE

The Options Approach

Roger Mills is Professor of Accounting and Finance at Henley Management College, and Consultant Professor to Price Waterhouse on Shareholder Value

The theoretical underpinnings for the use of investment appraisal techniques are drawn from the economic theory of the firm which contends that corporate investment decisions should be guided by the rule of net present value (NPV) maximisation. This gave rise to the widely accepted capital budgeting tool of discounted cash flow (DCF) analysis, which measures a project's desirability on the basis of its expected NPV. However, as discussed in previous *Updates*, the DCF model has not been without criticism.[1] Two particular defects of DCF analysis are first that it tends to overlook the strategic reasons for an investment, such as investing in a not-so-profitable project in order to acquire future growth opportunities (Hayes and Garvin).[2] With technology growing rapidly, there will be more investments made for competitive reasons alone and such investments typically will fail the DCF test.[3,4,5,6] The second important criticism of DCF analysis is that it fails to take account of the value of active management. Such management might involve waiting for major uncertainties, say over future market conditions, to unfold in order to avoid losses, or undertaking specific R&D expenditure intended to lead to new patents. Active management aims to produce valuable information, thereby reducing uncertainty over the future. Furthermore, subsequent to making an investment, management can revise operating plans that underlay an original cash flow forecast, like altering input and output mixes or shutting down plant temporarily, in order to maximise operating cash flows. Quite simply, active management can affect a project's value but it is often not accounted for in conventional DCF analysis.

Dixit and Pindyck have examined the shortcomings of the conventional DCF model and show that not only is it incomplete, but also it may lead to costly errors.[7] These errors arise from two sources. First, investments guided by the positive NPV criteria may be made too hastily. This is a problem because most capital investments are irreversible, and thus justifiable only if the expected profit margin is sufficiently large. Secondly, and conversely, worthwhile investments may be rejected inadvertently based on the same criteria. In keeping with literature that has emerged over the past decade, Dixit and Pindyck provide a response to its shortcomings. They contend that any theory of investment needs to address the question: how should a corporate manager facing uncertainty over future market conditions decide whether to invest in a new project? Their basic premise is that the capital investment decision is not a 'black box'. Management has to decide when to invest, how operating plans should be modified during the life of the project, and whether to abandon a project in midstream.

Options pricing

By guiding a project/investment from beginning to end, management may be able to squeeze its cash flow distribution towards a higher rate of return. This has led to the development of the idea that because management control can impact upon a project's payoff in terms of potential profits and losses, control opportunities can be seen as being analogous to 'call' and 'put' options and, therefore, may be analysed using options pricing theory. This theory has its origins in the valuation of stocks and shares, where a stock option is an explicit contract conferring certain rights to the holder, who exercises the option only when it is profitable to do so. In fact, an option is a contract that makes an agreement, but not an obligation to buy (a 'call' option) or sell (a 'put' option) at an agreed price at a future date.

The options approach can be extended in principle to capital projects, so that the opportunities inherent in a capital project can be viewed as implied contracts that allow management to choose only those actions that have positive cash flow effects. Where a difference arises, however, is that the underlying assets of the options in a capital investment decision are real assets, like the development of a new plant, rather than financial assets, like stocks and shares. As a consequence, the options imbedded in the investment decisions are referred to as 'real' options as opposed to financial options.

To-date, options literature has had relatively little influence on management practices. Attention to real options has been scant partly because modelling investments as options is a highly complex subject that is generally presented in a technical fashion. However, options have great potential relevance to managers, given that the manager's role is to use his/her skill to maximise shareholder wealth.[8] Ownership and control of an investment project can often generate follow-on opportunities which are additional to the project's cash flows. For example, the purchase of a computer software company entitles the owner to the company's free cash flow, but the assets in place are not the only opportunity purchased. Along with the assets are likely to come the chance to learn about other software companies that might be for sale. The company may include highly skilled individuals who could be used to produce extra at little cost but with high value. Because such follow-on investment opportunities are relatively intangible and speculative, their expected cash flows are rarely examined directly. Nevertheless, these opportunities may have important value.

Research and development decisions

Dixit and Pindyck illustrate the use of options pricing theory with reference to a number of examples, including investments in oil reserves, scale versus flexibility in utility planning, and price volatility in commodities. Other examples of its use have also been emerging in recent times. For example, Newton shows how attention to real options can help in a problem facing many managers: should a research and development project be pursued?[9] A specific illustration of the options approach in this context has been provided by Sender, executive director of financial evaluation and analysis at Merck.[10] The company wanted to enter a new line of business that required the acquisition of a number of appropriate technologies from a small company. Under the terms of the proposed agreement, Merck would pay $2 million over a period of three years. In addition, Merck would pay royalties to the company should the product ever come to the market. Merck had the option to terminate the agreement at any time if dissatisfied with the progress of the research.

In terms of analysing the strategic value of the project, Merck was unable to rely upon traditional techniques. Project returns were difficult to model both because of the high degree of uncertainty regarding the size and profitability of the future market segments, and because sales were not expected to commence until the latter part of the decade. The project had clear option characteristics: an overwhelming potential upside with little current downside exposure.

In keeping with the earlier discussion, two factors would determine this project's option value—the length of time the project could be deferred and project volatility. As regards the first of these, the longer Merck had to examine future developments, the more valuable the project would be. With more time, Merck would be able to collect more information and therefore make a better decision. In terms of project volatility, the high degree of uncertainty of project returns influences a project's value as an option because of the asymmetry between potential upside gains and downside losses. In the case of this project, Merck's downside loss potential was limited to the amount of the initial investment.

By all accounts, Merck used the Black-Scholes option-pricing model, containing the following five factors to determine the project's option value:[11] These five factors were defined by the analysts at Merck as follows:

1 **Exercise price** This represented the capital investment to be made approximately two years hence.

2 **Stock price** This represented the value of the underlying asset, or the present value of the cash flows from the project (excluding the capital investment to be made and the present value of the up-front fees and development costs over the next two years).

3 **Time to expiration** This varied over two, three and four years, with the option being exercisable in two years at the earliest. The option was structured to expire in four years because Merck thought that competing products, making market entry unfeasible, would exist by then.

4 **Project volatility** This was represented by a sample of the annual standard deviation of returns for typical biotechnology stocks obtained from an investment bank.

5 **Risk-free rate** A US Treasury rate of 4.5% was used over the two to four year period referred to in the time to expiration of the model.

The resulting option value from these five factors revealed that the option had significantly more value than the up-front payment that needed to be invested.

Options approaches may not be used in isolation, as Nichols illustrates also with reference to Merck.[12] According to her, it costs on average $359 million and takes 10 years to bring a drug to market, and seven out of 10 products fail to return the cost of the company's capital. Companies like Merck, therefore, have to face an enormous annual R&D expenditure. For example, it spends well over $2 billion annually on R&D and capital expenditures combined, and much of this is on risky, long-term projects that are notoriously difficult to evaluate. To evaluate such expenditures, the company uses a technique known as Monte Carlo simulation to produce a frequency distribution showing the probability that a project's net present value will exceed a certain level.

Scenarios

Options pricing theory is regarded as being useful in valuing a warrant written on a share or the right to use land to produce oil. It is also appropriate because the underlying asset—in these cases, the stock or the value of oil can be readily valued in the capital markets. Options pricing theory is, however, less likely to provide such readily quantifiable insights when considering an investment, the value of which is not driven exclusively by some traded asset. The valuation of a textile plant in an emerging market, for example, is unlikely to be accomplished more efficiently by using sophisticated options pricing techniques. In these instances, use of scenario-based cash flows combined with a tool like Strategic Value Analysis may be more beneficial.[13] Scenarios are a powerful tool for ordering one's perceptions about alternative future environments in which today's decisions might be played out. The point of scenarios is not so much to have one scenario that 'gets it right' as to have a number of scenarios that illuminate the major forces and trends driving the system, their interrelationships, and the critical uncertainties. By way of an example, Shell does not assign probabilities to its scenarios for several reasons. First, it intentionally looks at several scenarios that are more or less equally plausible, so that none is dismissed out of hand. Secondly, by definition, any given scenario has only an infinitesimal probability of being right because so many variations are possible. Thirdly, the reason to be hesitant about all scenario quantification is that there is a very strong tendency for people to clutch at the numbers and ignore the more important conceptual or structural messages.[14] The value of performing this procedure is not so much the ultimate valuation number that it produces, but the insights discovered in the process of investigating the nature and existence of the opportunities available to management.

Growth options

History shows that investment opportunities with the greatest value creation potential often arise at points of discontinuity caused by technological innovation, deregulation, or shifts in consumer behaviour. Yet investing in these opportunities is risky since potential losses could be substantial. Companies have two obvious choices in such uncertain growth situations. Either they can commit themselves to full investment and hope it pays off (high risk approach), or they can wait and re-evaluate once market trends become clearer (low risk approach)—by which time bolder competitors may have taken the lead. However, in many markets there is a third possibility—that of acquiring a growth option. A growth option buys a company the ability to participate in future growth without substantial risk. McKinsey has proposed an approach called the 'growth option stairway' to help companies in a wide range of industries and competitive situations use growth options successfully. The stairway involves identifying the growth option, acquiring it by paying the option price, nurturing it over time through development spend, and finally realising the value of the option by paying to exercise it and, in so doing, reaping the payoff.[15] Growth options have three distinct features. They carry no obligation to make a full investment; they are considerably cheaper than full investment; and they give the buyer a preferential position from which to make a full investment over competitors without an option. A good example of this is the use of joint ventures and strategic alliances as an entry strategy into emerging markets.

The use of options thinking has started to emerge in the financial investment community in analysts' reports. For example, SBC Warburg's report entitled *'BT - New BT, New Value - Buy'*, views BT's international investments and start-up businesses as entry platforms to markets around the world, in which BT has only invested option money, and in which it is not likely to begin major investment until voice licenses have been granted.[16]

Today's business environment is volatile and unpredictable because of growing market globalisation, together with exchange rate fluctuations and more rapid technology-induced changes in the market place. Irrespective of the causes of volatility, uncertainty requires managers to become more sophisticated in the ways they look at, assess and account for risk. With this in mind, thinking in terms of options provides the means by which managers can get a better understanding of available choices or possibilities that they can create. Ultimately, options approaches create flexibility which, in an uncertain world, means that greater realism can be introduced into valuations undertaken. The bottom line is that managers will increasingly have to manage in such a way as to keep their options open.

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