Triple inaugural address for the Rotating Chair for Research in Organisation and Management

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The Rector of the Erasmus University Rotterdam hereby announces that

Prof.dr. Barrie G. Dale

Prof.dr. Ray Richardson

Prof.dr. D. Mike Wright

appointed as professors on the Rotating Chair for Research in Organisation and Management in the Faculty of Economics, because of the "Vereniging Trustfonds Erasmus Universiteit Rotterdam" respectively with the teaching commitment Quality Management, Human Resources Management and Management Buy-out, will accept their appointment on Wednesday, March 28, 2001 by giving their inaugural addresses.

The inaugural address of Dr. B.G. Dale is entitled:

"Quality Management Research: Standing the Test of Time"

The inaugural address of Dr. R.Richardson is entitled:

"Performance Related Pay - Another Management Fad?"

The inaugural address of Dr. D.M.Wright is entitled:

"From Downsize to Enterprise: Management Buyouts and Restructuring Industry"

The ceremony starts at 14.30 hours in the Aula of the university, Burgemeester Oudlaan 50 at Rotterdam.

Afterwards there will be a reception, starting at 16.00 hours.

The rector kindly invites you to the ceremony and the reception.

Rotterdam, February 2001

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INAUGURAL ADDRESSES RESEARCH IN MANAGEMENT

Erasmus University Rotterdam 28 March 2001

Erasmus Research Institute of Management

&

Rotterdam School of Economics, Department of Organisation and Management

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Rotating Chair for Research in Organisation and Management Erasmus University Rotterdam

28 March 2001

QUALITY MANAGEMENT RESEARCH: STANDING THE TEST OF TIME

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INTRODUCTION

I have been researching the subject of quality management since 1981. During this time research funding to the order of £4.5m has been received to advance the subject of quality management. Arising from this and other non-funded research, 10 books and over 400 papers have been published. In this inaugural lecture I will discuss the key aspects of this research, focusing on that which I consider has stood the test of time. A considerable degree of selectivity has been exercised in choosing the material to be included in the presentation. For example, in a number of cases, models and guidelines developed in the eighties have been superseded and incorporated in more recent models. To close the loop I also identify some of the quality management issues which need to be considered in the future.

Much of the research has been carried out with colleagues, both inside and outside UMIST, and in collaboration with students studying for higher degrees, I am indebted to them for their contribution.

QUALITY CIRCLES

(a) Quality Circle Failure (Hayward et al, 1985)

Based on postal questionnaires surveys and case study work, evidence was gathered from UK organisations on the reasons for quality circle failure, the three major causes being:

Redundancies and restructuring: The economic situation causing redundancies and/or company restructuring resulting in individual circle failure and quality circle programme suspension.

Circle leadership: A lack of time on the part of circle leaders to organise and attend meetings and progress key issues relating to the project being tackled.

Lack of co-operation from middle management and first-line supervisors: These levels of management have the power to ensure that meetings are cancelled due to production or other pressure, block access to necessary information, belittle circle achievements, frustrate implementation of circle findings and steal their ideas.

These three major causes of failure are most relevant to the lack of success which organisations experience with improvement teams, in whatever form they take. In the introduction and subsequent operation of teams used within a continuous improvement process, organisations would do well to study what was written about quality circles in the mid-1980s, in terms of guidelines for success and how to avoid failure.

(B) Quality Circle Programme Life Cycle (Dale and Lees, 1986)

The hypothesis was made that a circle programme has a life cycle with the following phases:

- Phase 1: *Introduction*. A few circles are implemented as an organisation attempts to get the process going.
- Phase 2: Establishment and growth. Expansion of the number of circles in existence begins as initial obstacles are overcome.
- Phase 3: *Maturity and consolidation.* The circle programme reaches a plateau.
- Phase 4: Integration and dynamism. The number of circles decline as they become part of a wider company commitment to employee involvement and continuous improvement.

In Europe, quality circles by name have all but disappeared but their features live on in the bodies of improvement teams focused on departmental improvements, but with less emphasis on some of their typical classical characteristics such as freedom to select projects, meeting frequency, project resolution rate and management presentations. So it could be argued that the integration and dynamism phase has been reached.

Six Occasional Papers were produced on the subject of Quality Circles in the period 1982 to 1985 and some of these are still in demand today.

QUALITY COSTING (Dale and Plunkett, 1999)

Commencing in 1982 a variety of research studies of quality costing have been carried out in both manufacturing and service organisations. The quality costing textbook, first published in 1991, remains a major source reference on the topic. The following is a flavour of the main issues in advancement of the subject:

 Much of the published quality-related cost data needs to be qualified if they are to be meaningful; consequently comparisons of costs should be treated with the utmost caution.

- The importance of definitions to the collection, analysis, reporting and use of quality costs is crucial. Without clear definitions there can be no common understanding or meaningful communication on the topic. The definition of what constitutes quality costs is by no means straightforward and there are many grey areas where good production/operations practice overlap with quality-related activities.
- There is a preoccupation with the traditional prevention appraisal failure categorisation, even though arrangement into these categories tends to be a postcollection exercise carried out to accord with convention. Categorisation of costs in this way seems to be of greater interest to quality managers than to anyone else. There is a need to consider and develop other forms of categorisation to better suit business practices.
- The strategy to be adopted for collecting quality costing will be influenced by the purpose of the exercise. Getting the purpose clear at the outset can go a long way towards avoiding pitfalls and unnecessary work.
- When establishing a quality cost collection procedure for the first time, five points must be kept in mind:
 - 1. The methodology adopted for the collection of costs must be practical and relevant in that it must contribute to the performance of an organisation's basic activities.
 - 2. In the beginning there is no substitute for a thorough examination of the operating processes. Modifications to the procedure may be made later, as necessary; with hindsight and as experience of applying the procedure grows.
 - 3. People will readily adopt ready-made procedures for purposes for which they were not intended if they appear to fit the situation. Hence the 'first-off' should be soundly based.
 - 4. Procedures should be 'user friendly'.
 - 5. Management accountants must be involved in the exercise from the outset.
- An important consideration in the presentation of quality costs is the needs of the recipients. Good standards of reporting are essential if the cost figures are to make an impact and provoke action. For maximum impact quality costs should be included in a company's cost reporting system. Quality cost collection and measurement still lacks sophistication and is not carried out in the same detail and to the same standard as, for example, those related to production/operations and marketing functions.
- The potential uses of the information contained in a quality cost report are limited only by imagination of management. Many of the uses can however be grouped into four broad categories:
 - 1. Promote quality as a business parameter.
 - 2. Performance measures.
 - 3. Planning and controlling.
 - 4. Motivators.

QUALITY MANAGEMENT TOOLS, TECHNIQUES AND SYSTEMS

The author is from a quality engineering background and naturally tools, techniques and systems have been a focus of research since 1981.

(a) General (Dale and McQuater 1998)

A number of common difficulties have been identified in relation to the use and application of tools and techniques:

- Poorly designed training and support
- Being able to apply what has been learnt
- Inappropriate use
- Resistance to use
- Failure to lead by example
- Poor measurement and data handling
- Failure to share and communicate the benefits achieved

A four part classification to aid the effective use of tools and techniques has been developed: role in the improvement process, organisation and infrastructure of the company, data collection, and use and application. Each of these four categories is subject to five main influences of experience, management, resource, education, and training. It is the effects of these influences which cause the issues and difficulties associated with the application of tools and techniques.

A self-assessment method to investigate the use and application of tools and techniques has been developed. In this method applicants are asked to score the tools and techniques they recognise on a grid, relating to: importance, relevance, use, understanding, application, resource, management, training and benefit.

(b) Statistical Process Control and Failure Mode and Effects Analysis (Dale and Shaw 1988 and 1990)

Using the Ford Motor Company suppliers who have received SPC training from UMIST as the sample (this training commenced in 1984), a number of surveys of the use of SPC and FMEA in the automotive industry have been conducted. These became the reference source for a number of other studies undertaken both within and outside UMIST on these techniques and a number of the findings of the UMIST studies remain of significance today. For example, the main problems encountered in the introduction and use of SPC include:

- Senior management not taking their obligations for continuous improvement seriously.
- Insufficient thought given to the role of the SPC facilitator.
- Personnel (e.g. quality and technical) not directly responsible for control of a process collecting and charting process data.
- Too much reliance is placed on computerised aids and there is insufficient understanding of the basics of statistical methods.
- Confusion in deciding which of the various charting techniques to use.
- A lack of action on the data presented on control charts.
- A lack of confidence to experiment with the use of SPC to less straight forward processes.

Amongst the main findings into the use and application of FMEA are:

- Two phases are identified in its use (i) minimum application to satisfy the demands of the customer and (ii) using the technique to improve internal processes.
- Less difficulties are faced with the implementation and use of FMEA than was the case with SPC, principally because the former requires a greater understanding of statistical methods.
- Engineers find FMEA a labourious and time-consuming task.
- Teamwork is not used sufficiently in preparation of FMEA.
- The main difficulties encountered relate to time constraints, poor organisational understanding of FMEA, inadequate training and lack of management commitment.
- (c) Quality Management Activity Planning (QMAP) (Crossfield and Dale, 1990)

This tool, based on the IDEF definition method, was developed as part of a Teaching Company Programme with Allied Signal, Garrett Automotive, for the mapping of quality assurance procedures, information flows, quality related responsibilities, policies and activities of an organisation. In this way it facilitates control and assists with business improvement. The tool has been developed in such a way as to encourage all members of an organisation to map their key processes. A management consultancy - Business Systems Mapping Ltd - was established some 10 years ago by Crossfield to sell the QMAP package including the associated software. This commercial venture has been successful and currently has an annual sale turnover of £3M.

(d) Quality Management System (McTeer and Dale, 1996)

A model (see Figure 1) has been developed that illustrates the progress of small companies towards achieving ISO 9000 Series registration. This is proving extremely useful in pinpointing the potential pitfalls in the implementation of procedures to meet the requirements of the appropriate contractual standard. The three domains of motivation, information and resources can be visualised as spheres that are either expanded or compressed under the influence of a set of negative or positive factors. The planning domain is the magnet that draws and binds them together.

Figure 1 AN ACTIVE QUALITY MANAGEMENT SYSTEM REGIME

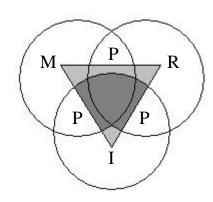
Domains

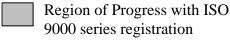
M = Motivation

I = Information

R = Resources

P = Planning





The dynamics of the model are first, inflate the four domains of motivation, information, resources and planning and second, through the influence of planning, draw the domains together. Figure 1 illustrates the situation when the pursuit by a company towards ISO 9000 Series registration is advancing and maturing, the three elements are overlapping and locked together by the planning element. When in the area of the union of the three elements progress is being made, the area of overlap provides a portrayal of the intensity of a company's progress towards acquiring ISO 9000 Series registration.

SUPPLY CHAIN MANAGEMENT (Lascelles and Dale, 1989)

A five part categorisation has been developed to describe the main barriers that hinder the development of an effective buyer-supplier relationship:

Quality Management Research: Standing the Test of Time

- Poor communication and feedback.
- Supplier complacency.
- Buyers have poorly defined and unstructured supplier improvement processes.
- The credibility of buyers as perceived by their suppliers.
- Misconceptions regarding purchasing power.

THE CONTINUOUS IMPROVEMENT PROCESS

(a) Motivation (Lascelles and Dale, 1989)

The motivators of quality improvement have been identified as belonging to one of the following three categories:

- Catalysts of change competition, need to reduce costs.
- Change agents demanding customers, Chief Executive.
- Change opportunities greenfield ventures, restart situations.

These are not separate elements but links in a chain. The influence of competition, demanding customers and the need to reduce costs acts upon the Chief Executive, who in turn, is the key to the causation of the improvement process within an organisation. The interaction between competitors and demanding customers in changing market perceptions of quality has resulted in a structural shift in the market paradigm, which in turn has influenced the perceptions and actions of Chief Executives. This has proved useful in examining why organisations start out on the TQM journey of transformation.

The findings were developed from material studied as part of examining the effects of the UK National Quality Campaign. Material acquired from leading four missions to Japan to study TQM also found that the main reasons for Japanese organisations deciding to introduce the concept could also be grouped into these three categories.

(b) Quality Improvement Framework (Dale and Boaden, 1993)

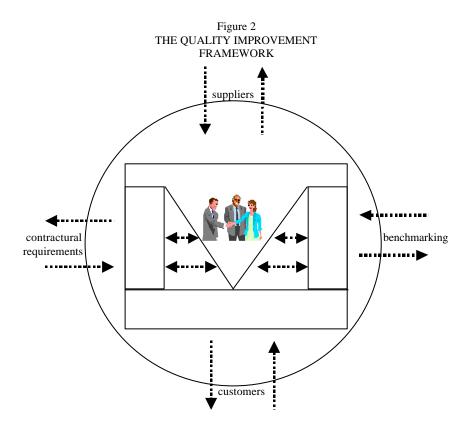
The framework, see Figure 2, has been used in Europe, Hong Kong, Singapore and South Africa to assist a number of private companies (manufacturing and service), public sector organisations and Government Departments, with the introduction of a process of continuous improvement.

It is divided into four main sections. The foundation of the framework is 'organising' and the two pillars which form its structure are the use of 'systems and techniques' and 'measurement and feedback'. 'Changing the culture' is something which must be considered at all stages, including the initial organising activities, but primarily results

from the other initiatives described, interacts with them throughout the process, and will evolve with the organisation's operating experience of TQM. The framework integrates the various aspects of TQM, from 'soft' approaches such as teamwork and employee development to the use of 'hard' techniques and systems.

The framework provides an indication of how the various aspects of TQM fit together and is particularly useful for those organisations who:

- 1. Are taking their first steps on the improvement journey.
- 2. Have got ISO 9000 Series registration and require some guidance and advice on what to do next.



The framework is not a 'how-to' guide for TQM, there are a considerable number of such guides outlining a step-by-step approach to TQM. These guides usually have a set starting point and follow one single route. The framework is a means of developing and presenting plans in a non-prescriptive manner; it is a guide to action and not things to be followed in a slavish manner. In this way it allows an organisation to choose an appropriate starting point and course of action and develop the improvement process at a pace which suits their business situation and available resources. If used in the correct manner the framework

ensures that there are adequate mechanisms in place to enable continuous improvements to take place. At this stage they can turn to the use of self-assessment methods against a recognised model to identify strengths and areas for improvement in their approach.

(c) The Evolution of Quality Management (Dale (ed.), 1999)

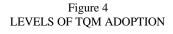
During the last three decades there has been an evolution in quality management in which simple inspection activities have been replaced or supplemented by quality control, quality assurance has been developed and refined and now many companies are working towards TQM. A model (see Figure 3), first developed in 1988, has been advanced to describe this hierarchical progression. This model has been found helpful in explaining the difference and gaps between an ISO 9000 Series quality management system and TQM and the main characteristics of detection compared to a preventative approach to quality.

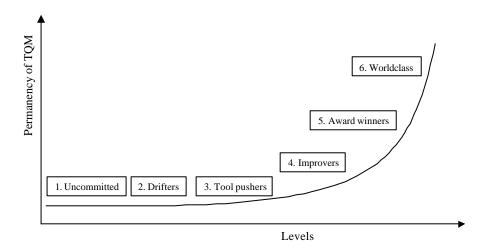
Policy deployment Involve suppliers and customers Total quality Involve all operations management Process management (TQM) Performance measurement TQM Teamwork Employee involvement Quality Systems development Advanced quality planning Quality Use of quality costs assurance Involvement of non-production operations (QA) Failure mode and effects analysis OC TQM Statistical process control QA Develop quality manual Process performance data Self inspection Quality control Product testing Basic quality planning (QC) Use of basic statistics Paperwork controls Salvage Sorting, grading Inspection Corrective actions Identify sources of non-conformance

Figure 3 LEVELS IN THE EVOLUTION OF TOTAL QUALITY MANAGEMENT

(d) Levels of Total Quality Management Adoption (Lascelles and Dale, 1991)

The extent to which organisations across the world have adopted and committed themselves to TQM as the ethos of the business is variable. Six different levels of TQM adoption (or lack of it) have been identified which characterise this, these have been termed: 1. *Uncommitted*, 2. *Drifters*, 3. *Tool Pushers*, 4. *Improvers*, 5. *Award Winners* and 6. *World Class*, (see Figure 4).





These levels are not necessarily the stages through which organisations pass on their TQM journey; rather they are characteristics and behaviours which organisations display at one point in time in relation to TQM. Whilst there are obviously exceptions to these generalised descriptions, with some organisations mid-way between either of the six levels displaying hybrid characteristics and behaviour, it has been found that this is a useful way of characterising organisations and helping them, in particular senior management, to recognise shortfalls of their approach to continuous improvement.

(e) Human Resources and Quality Management (Wilkinson et al, 1993)

In the early 90s I became more sympathetic to the so-called "soft" issues of TQM and teamed up with colleagues Wilkinson and Marchington to pursue a project funded by the Institute of Personnel Development (IPD) to explore the impact of human resources on quality management. This was followed by an Engineering and Physical Sciences Research Council (EPSRC) funded project to explore in more detail the key issues arising from the IPD project.

The contribution of the Human Resources (HR) function to TQM can be categorised by breadth and depth. Breadth is a measure of the range of TQM-related activities to which the HR function makes a contribution and depth is a measure of the penetration of HR principles, within the organisation in the range of its TQM-related activities. This concept of breadth and depth dimension can prove a useful mechanism for organisations assessing the contribution of their HR function to TQM and to provide guidance as to where the function should direct its efforts. The role of the HR function in TQM has also been categorised by level (strategic versus operational) and profile (high versus low) to provide

four role types - change agent, hidden persuader, internal contractor and facilitator, see Figure 5).

Figure 5
THE ROLE OF HR IN QUALITY MANAGEMENT



(f) Sustaining Total Quality Management (Dale et al, 1997)

A five part categorisation has been developed which describes the main issues which impact on the sustaining of TQM. "Sustaining" in this context means the maintaining of a process of continuous improvement. The categories are: internal/external environment, management style, policies, organisation structure and the process of change. Based on this categorisation an audit tool has been developed to examine and identify the factors which are perceived to be having a negative impact on sustaining TQM.

(g) TQM Education, Training and Research Directory (van der Wiele and Dale, 1996)

In early 1989 Professor Williams (Erasmus University, Rotterdam) and I proposed to the European Foundation of Quality Management (EFQM) that a Directory be produced which detailed the TQM research, education and training activities undertaken by European Universities and Business Schools. The first Directory was produced in 1991, updated in 1993 and the third edition was released in May 1996. The Directory has received "yellow-pages" status within the European academic and business fraternities, its uses include:

- Students can identify those universities with a track record in TQM when deciding their postgraduate courses and exchange programmes.
- Universities can identify potential partners, with whom they can forge an alliance with respect to seeking funding from the EU.

• Businesses who wish to explore collaboration with Universities and Business Schools can identify contacts in that part of Europe in which they have a facility.

SELF-ASSESSMENT (Van der Wiele, 1996)

The first European survey on self-assessment against a recognised Quality Award Model which obtained data from 519 organisations, was undertaken by a research team drawn from UMIST, Ecole Supérieure de Commerce de Paris, University of Valencia, Universitat Keiserslautern, University of Limerick, and Erasmus University, Rotterdam. The main findings of this research which focussed on: the reasons for starting self-assessment, the mechanics of the self-assessment process, and value of undertaking self-assessment have been included in the EFQM self- assessment guidelines in relation to the Excellence Model.

FUTURE RESEARCH ISSUES

- (a) The importance of quality will come to the fore in E-Commerce during the near future. One of the challenges will be to explore and adapt the quality tools and techniques and the associated problem solving process to the E-Commerce environment. For example, QFD can be used to capture the voice of the customer and the data used to build a web site that the customer wants; SPC can be employed to monitor the voice of the process, to check if the processes are in control and provide guidance for improvement; and Design of Experiments can be used to find the optimum interaction of technical features in a site with marketing requirements.
- (b) From a quality management perspective E-Commerce is immature. As E-Commerce develops and starts to flatten the value chain it will be necessary to undertake quality management-related research using this environment as the focus. Preliminary work has already been undertaken in identifying the main quality issues involved in web site design and exploring, using the service quality gap model, the key quality factors and determinants in satisfying customers when they interact with businesses over the internet.
- (c) There will be a development in the direction of integrating quality into the normal management procedures and operations of a business. This will be aided by the development of integrated management systems dealing with quality management, environment, occupational health and safety and data protection, see Wilkinson and Dale (2000). Research is required in the best way to approach such integration.
- (d) In this current age of privatisation, contracting-out of government services and pressure for value for money services, government departments, universities, public services and service providers are coming under increasingly competitive

pressures for the pursuit of excellence. In these organisations the challenge is how to effectively apply the <u>basic</u> principles and mechanisms of continuous improvement. The same can be said for ensuring that improvement becomes a daily issue in situations when resources and people are already fully stretched and feel overworked.

(e) In a number of quality management situations (e.g. self-assessment against the EFQM Model) the performance measures are of both a quantitative and qualitative nature, consequently it is necessary to conduct some activities (e.g. assessments) using subjective judgements in conjunction with numerical data. General theoretical frameworks are available to handle uncertain information, including Bayes probability theory, the Dempster-Shafer theory of evidence and fuzzy set theory. Research, funded by two EPSRC grants, is currently being undertaken at UMIST to adapt these methodologies to developing decision models and analyse approaches in quality management situations.

SUMMARY

Four of the main learning points over the last twenty or so years are:

- Knowledge and understanding of TQM are inadequate without the development of skills and practice.
- TQM is a practical subject and an academic researcher will increase their pace of understanding by using 'industry' as the laboratory. Working with business and industry is a skill that not all academics possess or indeed wish to have and thought needs to be given on how the business-academia interface can be developed, monitored and advanced and how new academics can establish a network of industrial contacts, if they so wish. This is especially important in today's environment when Research Councils are looking for details of industrial collaboration when considering research proposals for funding. During the last decade a considerable number of managers have become aware of the importance of TQM and are devoting considerable resource and intellectual thought to its development. This has been a rich time for researchers to collaborate with organisations in researching TQM and testing out concepts and ideas.
- TQM is a fundamental change in the way that business is organised, perhaps similarly it is necessary for changes to be made in the way in which research is undertaken. For example, there is a need for multi-disciplinary teams, often cross institutional, to study the interactions of the elements of TQM as much as the elements themselves. In recent times this practice has been followed at UMIST with reasonable success. For example, I have developed my understanding of the subject, in particular, becoming more aware of service quality considerations and people issues by working respectively with Marketing, Human Resources Management and Organisation Analysis specialists. Also collaboration with research teams from other European

- countries has, for example, broadened my knowledge of how TQM needs to be shaped to fit different cultures.
- The case study has been found to be the most robust of the research methods for investigating TQM. On the other hand, the least rigorous is the questionnaire survey and, if used, the findings should be supported by other research methods. The researcher investigating TQM should use every method at their disposal to collect and analyse data and test emerging hypothesis to advance the research process. They should always be alive to non-traditional methods in order to reach problems and issues not normally addressed through the more usual methods.

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Quality Management Research: Standing the Test of Time

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PERFORMANCE RELATED PAY - ANOTHER MANAGEMENT FAD?

Ray Richardson London School of Economics United Kingdom

'Times are bad. Children no longer obey their parents, and everyone is writing a book.'
Marcus Tullius Cicero, (106-43 BC)

Standards of Enquiry

INTRODUCTION

We look to the natural sciences for cautious, qualified and modest statements, the result of a combination of hard theorising (often expressed in forbidding equations) and ultracareful data analysis. Even their findings which look to us to be utterly convincing retain the peculiar status of 'hypotheses that have not yet been falsified'. The history of the hard sciences teaches us humility, as well as the optimism that comes from demonstrable intellectual progress.

The social sciences are different. Even in economics, which has the closest methodological link to the natural sciences, there is no more than the palest imitation of, say, physics. There has, of course, been intellectual progress in economics, but more in theoretical formality than in an uncontentious better understanding of the real world. It's hard, for example, to think of very many thoroughly dubious propositions in economics that have been decisively refuted by empirical analysis. The other social sciences, including the analysis of management issues, are even further from the scientific norm of tough theorising and rigorous testing.

This situation encourages the phenomenon of the management guru. The word itself is instructive, with its overtones of the non-rational, the religious, and even the mystical. The best popular science writing rests on hard scientific achievement. Popular management writing, by contrast, is generally the triumph of the merely plausible over the true; gurus are long on assertion and advice and short on convincing demonstration and analysis.

Of course, there's a ready market for plausible advice, especially where the issues involved are important, so there's no shortage of gurus. Management issues are seriously complicated, and it should be no surprise that they resist solution. This is certainly true in my field of human resource management, traditionally one of the less intellectually exciting management areas.

HUMAN RESOURCES MANAGEMENT

The effective harnessing of an organisation's employees is arguably the single most difficult, most complex and most ambiguous task that managers face. It is also, among all the areas of management policy-making, one that is very high on the list of the intellectually under-developed and least permeated by rigorous professional standards. The principal reason for this is that HR is centrally concerned with human behaviour, which is always messy to deal with; it's also no help that individual HR policies are extremely difficult to evaluate, and that senior managers too often to believe that 'people management' is no more than common sense.

PERFORMANCE RELATED PAY

Amongst all the many policy areas of HR that I could talk about today I have chosen to concentrate on performance related pay, the practice of directly linking part of someone's pay to some performance indicator. PRP is, I think, a good example of an arrangement whose attractions to senior management rest in good part in the fact that it seems 'only common sense'. The most obvious strand of common sense reasoning might go like this:paying people according to how much they contribute gives them a direct incentive to try harder; unless the system's designers get the numbers horribly wrong, the employees benefit from higher pay (albeit at the expense of greater effort) and the organisation benefits from higher productivity and lower unit labour costs.

What would a scientist say about this conjecture? First, a scientist would be cautious about relying on common sense. What, for example, would common sense make of the absurd idea that the earth moves around the sun, and rotates rapidly while it does so? Common sense used to dismiss this out of hand, and agree that anyone who believed it should be burned at the stake. Instead, the scientist would try to develop an explanatory model from general principles, and then try to specify and carry out discriminating tests to see whether the conjectures were true. I shall try to be scientific.

PRP in one form or another is significantly on the increase in many countries. In the UK of twenty five years ago, for example, it was unusual – it is now normal, even in the public sector; in countries with stronger traditions of centralised collective bargaining (like the Netherlands) it is still marginal, but the scene is evidently changing here too.

Why has this happened? Do we have firm evidence that such schemes really achieve their objectives and do more good than harm? I don't think we do, at least, not yet. Nor do I think that the growing use of PRP is itself sufficient evidence to believe that it works. As an economist I am happy to assume that decision makers normally act in a broadly rational way; but as an HR specialist I am reluctant to accept that managers reliably know (or even bother to find out) the true consequences of their policy decisions. Nor do I think that the economy's equivalent of natural selection is so quick and precise that doing a

silly thing in one area of management policy-making condemns the organisation to oblivion.

Let's ask first why organisations introduce PRP. If you ask managers directly you often initially get a rather muddled answer. It is perhaps most commonly justified as an incentive system designed to motivate employees to perform better. But heightened motivation is not its only possible purpose. It is also used in an attempt to improve the recruitment and retention of staff; to signal a change in organisational culture; to align employee interests more with those of the organisation; to reward more selectively, and thereby secure better control of the paybill; to reduce the power of trade unions; and to reinforce other human resource policies, such as appraisal procedures or employee development programmes.

Given this multiplicity of potential aims, a scientific enquiry into the success of PRP is going to be difficult, which is perhaps why many of the existing studies concentrate on motivation and leave the other aims to one side. If we were to accept this, how could we discover the real motivational impact of PRP?

One reputable procedure would be to take a large sample of organisations that have introduced PRP and look for an improvement in levels of motivation there. There are at least two major practical problems with this procedure. The first is that motivation is not easy to measure. It is anyway a state of mind, a willingness to do something; it is therefore subjective. The second problem is that many things could cause motivation levels to change so they too have to be taken into account; this, in turn, raises fresh problems of measurement.

A way of getting around the first problem would be to focus not on motivation as such but on some more objective consequence of higher levels of motivation, like organisational performance. So, if one could establish that organisations with PRP performed better one might infer that PRP had raised motivation. This approach also raises serious measurement problems (performance indicators that are comparable across organisations are not always easy to find); but even if these were solved we may still have a problem. As before, very many things other than the use of PRP will be affecting organisational performance, so we have a lot of things to control for. There is also the issue that the impact of individual HR practices like PRP may, even if it is positive, be relatively small, and therefore hard to detect. Is it likely, for example, that one could pick up the impact of PRP on, say, company profits unless one had a very large data set?

An alternative line of enquiry is to focus not on many organisations but on one at a time. The aim here would be to get judgements from many participants about their experience (or perhaps the prospect) of PRP in any given organisation. One could also follow through people's judgements over time, so as to avoid relying on possibly fallible memories. So, one could ask questions like 'are you more motivated at work because of PRP?', or 'has PRP made you work differently?' or 'has PRP made your subordinates work harder?'.

Of course, some scientists are uneasy with subjective questions, and, no doubt, one has to be careful with the questions' wording. But there has by now been a vast amount of work on subjective measures and I would claim that their use can give real insights. For example, it is practically impossible to discover precisely why a policy is not working from a study which relies wholly on objective performance data; one may be able to conclude that a policy is failing, but not why, or not precisely what could be done to lessen the failure and increase the degree of success. At some point, people have to be asked.

DOES PRP WORK?

If one asks people about PRP, what does one typically discover? I have done some asking in the UK, particularly for public sector employees. PRP used to be virtually unknown in the UK public sector. Now, in a widely debated recent development, even school teachers face an element of PRP. My first piece of research in this area (done with a colleague at the LSE, David Marsden) focused on one of the early PRP schemes in the UK public sector, introduced in the Inland Revenue.

This was a fairly typical form of public sector PRP under which, first, the performance of each member of staff was annually assessed against his/her individual objectives. This assessment resulted in a 'box marking', i.e. being placed in one of 5 boxes, or performance categories. Staff getting a good mark received additional pay.

More than 2400 Inland Revenue officers replied to our questionnaire, a response rate of slightly more than 60%. The questions about effects typically asked people to respond to statements on a five point scale running from strongly agree to strongly disagree. Table 1 collapses this scale into two categories (agree and disagree) to give a broad indication of whether employees thought that performance related pay had motivated them to change their work behaviour in specified ways.

Performance Related Pay - Another Management Fad?

Table 1 - Self-reported motivational effects of PRP in the Inland Revenue

	Agree	Disagree
	(%)	(%)
Performance Pay has led you to:		
improve the quality of your work	12	80
increase the quantity of your work	14	78
work harder	9	71
work beyond job requirements	21	70
give sustained high performance	27	63
improve your priorities at work	22	64
show more initiative	27	61
express yourself with greater clarity	13	67
be more effective in dealing with the public	9	68
improve your sensitivity towards colleagues	14	63

Marsden and Richardson, 1994, p.251.

The items in Table 1 were not chosen at random, but reflected the appraisal criteria in use in the Inland Revenue at the time, so they relate directly to the payment scheme being assessed. It will be seen that respondents never reported a very strong motivational effect, although there was always a minority, usually small, who felt that PRP had affected their behaviour in the direction which management had sought.

As a cross-check on these responses we asked those respondents who were also appraisers, or line managers, to answer similar questions on their subordinates.

Table 2 - Appraiser perceptions of the motivational effects of PRP on Inland Revenue staff

	Agree	Disagree
Performance Pay has:	(%)	(%)
caused many staff to work beyond the requirements of their job	15	79
led many staff to give sustained high performance at work	14	77
helped to increase the quality of the work of many staff	10	82
led to an increase in the quantity of work of many staff	22	71
made many staff more committed to their work	12	79

Marsden and Richardson, 1994, p.252

Appraisers were typically no more enthusiastic about the motivational effects of performance related pay than were staff as a whole. Certainly there was no sign that the self-reported data from staff seriously understated any positive effects of performance related pay.

Not all forms of employee response to performance related pay are organisationally beneficial. Table 3 gives staff responses to some possible adverse consequences.

Table 3 - Additional self-reported motivational effects of PRP in the Inland Revenue

	Agree (%)	Disagree (%)
Performance Pay has:		
helped to undermine staff morale	55	25
caused jealousies between staff	62	21
made staff less willing to assist colleagues	26	53

Marsden and Richardson, 1994, p.253.

Inland Revenue staff certainly saw some adverse implications from their experience of performance related pay, with majorities agreeing that morale and co-operation among staff had suffered. Indeed, after looking at all the available evidence, we concluded that the positive motivational effects of Performance Pay were at most very modest. It was hard to see that they had been felt positive to any degree by more than a small minority of staff. Even worse, there was clear evidence of some demotivation. Although we could not be sure of this, it was easy to conclude that the net motivational effect, although small, was actually negative!

Subsequent studies, some of which have involved me, have broadly confirmed these findings for the UK public sector. One may now say with some confidence that public sector employees are generally very sceptical that PRP, as they have experienced it, works for them. Managers, particularly senior managers, may continue to claim that it works for their organisations but I have yet to find one who can demonstrate that success convincingly.

I should stress that this is not a definitive judgement on PRP, even for the public sector. It may, for example, be true that it will be more successful over time, or that the early research missed some important benefits. In some parts of the private sector it may be much more successful in motivating employees. But that will not usually be the case merely because they are in the private sector. It is more likely to be true because some jobs in the private sector have particular features. This takes me to the issue of why PRP seems not to be more of a success.

WHY DOES PRP FAIL?

One useful payoff to doing the kind of research I am describing is that it also gives insights into precisely where the schemes go wrong. Most PRP schemes, particularly those which focus on the individual, are inherently complex. They involve setting individual work targets for the period ahead, giving feedback during the period, making an assessment against the targets at the end of the period and then making a financial award based on that assessment. Each of these elements can be a source of failure and each can be separately evaluated.

We can also investigate the possibility that PRP fails because employees, particularly perhaps in the public sector, think that linking pay to performance is wrong in principle. In practice this does not seem to be a serious issue according to most of the studies. Marsden and Richardson, for example, found that nearly 60% of Inland Revenue staff agreed that performance related pay was 'good in principle'. Subsequent studies have usually found similar results. So PRP failure is not guaranteed from the beginning.

In order to investigate the causes for failure it is useful to start with some general theory that purports to explain motivation. There are a number of these but we might in particular consider goal setting theory, expectancy theory and equity theory.

GOAL SETTING THEORY

Goal setting theory focuses on the nature of the objectives laid down or agreed to in the first step of the performance management process. The theory predicts that performance management systems are more likely to enhance employee motivation if they result in goals that are well-defined rather than vague, specific rather than general, and challenging rather than easy to attain. As a corollary, goal setting theory suggests that a multiplicity of goals is likely to cause problems, because it reduces goal clarity. Being under pressure to meet many goals, especially where some of them are ambiguous, makes it difficult for employees to focus their efforts properly.

Over and above these properties of goals, however, goal setting theory also predicts that employee motivation will be enhanced only if people accept, or are committed to, the goals that are set. This requires them to believe that their goals are attainable and legitimate, that the objectives should make sense to them as professionals and do not violate their professional judgements. It also means that an employee should trust the person setting the goals; externally imposed goals may be rejected as illegitimate.

EXPECTANCY THEORY

Expectancy theory is a second framework that may be used to understand why performance related pay succeeds or fails to motivate staff. It argues that a new reward system will succeed in motivating employees if and only if three separate conditions are all satisfied:

- i) employees must believe that they can achieve what is being asked for,
- ii) employees must believe that achieving what is asked for will reliably generate the new rewards on offer, and
- iii) employees must value the new rewards sufficiently.

If, therefore, employees do not feel able to achieve what is being asked for, or if they do not believe that changing their behaviour will reliably bring them the rewards, or if they do not think the additional rewards on offer are big enough, then expectancy theory predicts that the new system will fail to enhance their motivation.

EQUITY THEORY

Equity theory stresses the importance of relative pay. This might refer to the pay of some employees relative to others, or of one group of employees relative to those of other professions. Individual performance related pay systems inevitably change the distribution of earnings within a profession, which may raise equity issues leading to some degree of de-motivation for those who think the new distribution is unjust.

These theories suggest at least four important questions about the structure and mechanics of performance related pay regimes in general. First, is goal clarity likely to be secured; second, is goal commitment likely to be secured; third, are people likely to confident that they will be given the rewards if they deliver on their objectives; fourth, are the rewards on offer sufficiently attractive? We consider these questions in turn, illustrating some of them by the recent UK proposals to extend PRP to school teachers.

IS GOAL CLARITY LIKELY TO BE SECURED?

There are many studies supporting the proposition that motivation will be enhanced if work goals are clear, specific and challenging. A number of enquiries have concluded that this is one of the big benefits that employees perceive in systems of PRP. A study I did with Bernard Dowling, for example, concluded that managers in the National Health Service were indeed more likely to report heightened motivation from their PRP system if they felt that various arguments from goal setting theory had been met.

So the increased goal clarity which PRP often brings is a source of strength. Even here, however, employers have not always learned the right lesson. When the UK Government recently introduced PRP for school teachers it proposed that successful teachers would have to satisfy a long list of performance criteria. I quote just four from a longer list of no fewer that 16 criteria:

1 as a result of their teaching, teachers are required to show that pupils are well-motivated, show a consistent pattern of high achievement in relation to prior and expected attainment,

- 2 teachers are required to show that they understand the contribution that information and communication technology makes to their subject and use it effectively in their teaching and assessment.
- 3 teachers are required to show that they understand and use the most effective classroom organisation and a wide repertoire of teaching techniques, and
- 4 teachers are required to show that they contribute to and promote wider school policies, values and practices in both their teaching and in working with others inside and outside the school.

Taken at face value, these four criteria, and the other 12, constitute a serious problem. For goal setting theory, they do not constitute well-defined and specific objectives. Many of them are vague and nearly all are difficult to measure, so they remain irreducibly ambiguous. How, for example, could teachers truly show that they understood the contribution of ICT? How could they establish that their way of organising their classrooms was done in the most effective fashion? How much of a contribution would they have to make to policies, values and practices? Finally, and going beyond the four selected criteria, how could anyone respond satisfactorily to as many as 16 different and complex criteria?

IS GOAL COMMITMENT LIKELY TO BE SECURED?

Goal clarity is an important condition but it is not the only one that deserves attention. According to the theory, goals also have to accepted, which means that employees have to believe that they are both attainable and legitimate. But employees don't always feel this.

To qualify for PRP awards, UK school teachers, for example, are now required to show that, as a result of their teaching, pupils are:

- 1 well-motivated, show a consistent pattern of high achievement in relation to prior and expected attainment,
- 2 attain good marks in relevant national tests relative to prior and expected attainment, and
- 3 achieve results which help the school meet its overall targets for pupil attainment.

It would be impossible for an individual teacher to show that, as a result of his or her teaching, these objectives had been attained. First, it is hard to measure the motivation of a group of pupils, so it hard to know what impact any individual teacher has had on it. Second, it is not always possible to predict with sufficient accuracy how well a group of students will do on their examinations (as any university selector will know). Third, it is extraordinarily difficult to establish the contribution of any individual teacher to the examination performance of a group of pupils. Surely the common belief is that there are very many influences on the performance of a group of pupils, few of which are under an individual teacher's control. The link, therefore, between one's own efforts and pupil performance may well be tenuous, and will certainly be difficult to measure objectively. If so, try as they might, teachers could well see examination outcomes as too much of a random variable, as yet another turn of the system's roulette wheel. This, according to motivation theories, would mean that teachers would reject the goal as not being

attainable. If so, teachers would not commit to the objective and not be effectively motivated by the new reward system.

ARE PEOPLE CONFIDENT THAT THEY WILL GET THE REWARDS IF THEY DELIVER ON THEIR OBJECTIVES?

This is at the heart of many studies of PRP. Performance related pay tries to change behaviour by changing motivation. What happens if someone believes that he or she has done what was asked for but does not get the reward that was apparently on offer? Expectancy theory predicts that the employee will become disillusioned and will stop trying.

This can happen if the employee and the assessor disagree about the employee's performance. Or it can happen if the assessor's judgement is overruled by someone else. Both of these are seen to have happened in earlier PRP experiments in the UK public sector. Table 4, for example, reports some results from Marsden and Richardson on Inland Revenue staff beliefs about the link between performance and pay.

Table 4 - Staff views on the Inland Revenue's appraisal system

	Agree	Disagree
	%	%
Performance Pay has made staff question the fairness of the appraisal system	87	5
Staff are frequently denied the Box marking the deserve because of a quota system	74	10
A good appraisal is too often overrules by someone higher up	63	16
People get a good Box marking not so much because of their performance but because managers want to reward their favourites	35	45

Marsden and Richardson, 1994, p.254

The number of Inland revenue staff who perceived unfairness in the way their system operated is striking, and these perceptions were correlated with whether people felt motivated by performance related pay. If they discerned unfairness in the procedure they were much less likely to say that they had been motivated by the new system.

Five years later, 63% of Inland Revenue staff were still agreeing that "even if my performance is good enough, I doubt that I will receive an 'Exceed'", while 57% perceived favouritism, and nearly 80% believed that a quota system was in operation on the better grades (Marsden and French, 1998, p.24-27).

ARE THE REWARDS ON OFFER SUFFICIENTLY ATTRACTIVE?

In spite of attempts by some psychologists to show that pay is not a true motivator, I remain an economist and believe that it is. This does not, however, mean that the amount of money on offer in the typical PRP scheme is necessarily a motivator.

Previous studies have often found that performance related pay awards are not especially salient in the minds of employees. One NHS manager wrote in "if the financial inducements were substantial then perhaps performance related pay would be taken seriously by all concerned. But, the financial inducements are 'silly money' and I would rather receive a higher grade for achieving objectives than a pathetic PRP enhancement"; another wrote "I think that the financial reward is a joke!" (Dowling and Richardson, 1997, p.357). Among Inland Revenue staff, only 17% thought that the awards on offer were a sufficient inducement for them to change their behaviour (Marsden and Richardson, 1994, p.254).

These judgements are an outcome of two things. First they reflect the amount of money theoretically on offer, and the chances of being assessed accurately. Second, they take into account the very real gaps in some systems between what is theoretically on offer and what the financial health of the organisation at a particular time allows to be paid. I know of cases in the financial sector where, say, foreign exchange dealers have had their obscenely large expected bonuses cut back savagely because the organisation as a whole had had a bad year, even if they themselves had done the business. This was not a motivating experience for them.

CONCLUDING THOUGHTS

I have only scratched the surface of the PRP debate. I have not, for example, had time to consider any of the group PRP arrangements that have now become so popular. But what can we say from what the research so far?

First, I would not deny that PRP might well be a success in many organisations. Many situations seem to have the conditions that make it likely to work. But those conditions are not present everywhere, so managers are wise to be thoughtful and selective about where they apply it.

Second, PRP schemes are complicated, and can and do go wrong at many points, bringing significant net costs to the organisation. Managers need to customise their schemes with great care and not casually buy a plan off the shelf. Equally important, they should closely monitor the workings of their schemes. This monitoring may sometimes go against the grain. In my experience, managers are self-confident and bravely optimistic. They are strangely reluctant to introduce HR policies on an experimental basis (in contrast with, for example, their marketing colleagues who routinely introduce new products precisely on that basis). It's as if an experiment is an affront to their professionalism, whereas it should be seen as a testament to their wisdom and proper humility.

In my experience, academics tend instinctively look for complicated possibilities. They sow doubt rather than certainty, and it's easy to see why practical men (and women) get impatient with them. But, in the area of PRP it looks as though doubt has a genuine basis. Nobody knows for sure, because the scientists haven't done sufficient hard work on the problem yet. We have done enough work, however, to know that there are real potential pitfalls in the way.

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FROM DOWNSIZE TO ENTERPRISE: MANAGEMENT BUY-OUTS AND CORPORATE RESTRUCTURING

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INTRODUCTION

Increasing attention to corporate governance has emphasized shareholder concerns about the performance of corporate management. Increasing competition associated with globalization, rapid technological change, etc. has also added to this greater pressure on managers. A major response to these pressures has been the growth of corporate restructuring. Over the past two decades, leveraged buyouts (LBO) and management buyouts (MBO) have emerged as key aspects of this restructuring. They represent similar organizational forms in which a group of individuals or investors attains significant equity ownership in an enterprise (Wright, Robbie, Chiplin and Albrighton, 2000). The stereotypical leveraged buyout occurs in industries with mature products and stable cash flows. Researchers (Jensen, 1993) have generally cited improved governance resulting from the incentive effects of concentrated ownership, the discipline of debt and effective monitoring by active investors as the key attributes which contribute to value creation in LBOs. Most attention has focused on agency-based explanations, which has led to an association of buyouts with downsizing and slash and burn. Consequently, some have argued that the applicability of the buyout concept is highly restricted.

Taking a broader view, the buyout phenomenon can be viewed as a vehicle for strategic or entrepreneurial innovation which can be applied in a wide array of opportunities and situations. Scholarly attention on leveraged buyouts, particularly during the 1980s, focused primarily on "going private" buyouts of entire firms that were publicly traded. However, LBOs of publicly traded companies form only a minority of buyouts even in the U.S. and are relatively rare in other countries (Wright, Thompson & Robbie, 1992). Indeed, there are many other types of buyouts, including divisional buyouts, management buyouts (which are typically initiated by incumbent managers, even in privately held firms), buyins (where outsiders form a new management team by arranging for capital), privatization programs and buyouts of failed firms. Embedded in these different buyout types is considerable opportunity for change and entrepreneurial pursuits that go far beyond the traditional agency theory explanations for LBOs.

In this paper I compare the agency perspective with an entrepreneurial explanation of buyouts that takes into account opportunities for upside growth. Traditional leveraged

buyout financiers are increasingly focusing on businesses that have entrepreneurial growth opportunities. Furthermore, the currently expanding supply of funds for leveraged deals in the U.S., Europe and Japan has been driving LBO associations to seek deals that have substantial upside potential (CMBOR, 2000) as opposed to the traditional emphasis on cost saving efficiency improvements. These arguments are developed more fully in Wright, Hoskisson, Busenitz & Dial (2000) and Wright, Hoskisson & Busenitz (2001).

Initially, I outline trends in management buyouts. I then discuss how the agency viewpoint has been applied as a traditional lens through which to view the buyout phenomenon, primarily in relation to whole firm and large divisional buyouts. I briefly consider the effects of buyouts in terms of dispelling certain commonly held myths. This is followed by an outline of the entrepreneurial cognition perspective and development of an entrepreneurial perspective. Finally, I consider future contributions of buyouts.

MANAGERS OF THE WORLD BUYOUT!

Buyouts are probably as old as industrial society. There is evidence in the UK going back to the nineteenth century, for example, of mill owners buying out their sleeping partners and publicly listed textile mills being taken private (Wright, et al., 2000). However, the beginning of the recent growth in buyouts has been associated with the restructuring of US corporations from the late 1970s onwards, through taking companies private and divesting divisions of larger groups. In the US, the market developed through the 1980s, reaching an initial peak in 1989 with the LBO of RJR Nabisco. This market subsequently collapsed in the recession of the early 1990s but has since recovered. In 1996 and 1997, financial institutions in the US alone raised \$70 billion to fund buyouts.

The growth of the UK buyout market began in the early 1980s, initially with attempts to rescue and restructure failed businesses in the recession of that time. The market subsequently grew with the arrival of large numbers of funds providers and the shift to divestments as part of considered strategic refocusing rather defensive restructuring in crises conditions. Market development was also fuelled by the UK government's privatization program, which generated large numbers of management-employee buyouts, the emergence of public to private transactions and a growing stream of buyouts of family businesses facing succession problems. As in the US, the market changed in the recession of the early 1990s, although volume increased with the reappearance of buyouts of troubled businesses. Economic recovery from the mid-1990s was accompanied by a resurgence of the buyout market to unprecedented levels. In 1998 and 1999 financial institutions raised £10.4 billion for buyouts. UK market value reached a new record level in 2000 at £23.4 billion.

Growth of buyouts in Continental Europe lagged behind that in the US and UK, although some markets are now quite long established. The Dutch market in particular saw significant growth from the mid-1980s with the need to restructure larger groups, reaching a value of €3.4billion in 1998 and €2.6billion in 1999, while French market growth owed its genesis at this time to the need to deal with succession in family owned businesses. The French market subsequently grew to become the largest in Continental Europe, achieving a

value of €3.3billion in 1999, although the German market finally showed signs of realizing its potential in 1999 (€4.2billion) and 2000 with the completion of large transactions as competitive pressures forced groups to confront the need to restructure (CMBOR, 2000). European equity funds raised for buy-outs in 1999 were 12 billion Euros, indicating considerable further potential for growth. Across Europe, studies commissioned by national venture capital associations consistently show that buyouts have been the best performing investment stage for venture capitalist/private equity investors (Wright, Robbie & Albrighton, 1999b).

The collapse of Communism also generated significant opportunities for buyout type operations, with sales to management and employees being important aspects of the transition process in countries such as Hungary and Poland and the voucher privatization program in Russia creating vast numbers of "give-away" management-employee buyouts (Wright, et al., 1993). The global spread of privatization and restructuring programs has also seen the emergence of buyouts in countries in Africa and Asia (Wright, Pendleton and Robbie, 2000).

The economic difficulties in Japan in the late 1990s called into question the traditional governance structures of Japanese corporations, bringing pressure to reorganize keiretsu and independent corporations alike. Since 1998, these pressures to reorganize have generated a modest but growing flow of management buyouts from corporations seeking to regain profitability (Wright, Kitamura and Hoskisson, 2001), including buyouts both from keiretsu and independent corporations.

In the light of this global spread of buyouts, it is important to examine the rationale for buyouts and the expected contributions they can make to corporate restructuring and the creation of wealth.

TRADITIONAL PERSPECTIVE

Managers (as agents of shareholders) in publicly traded firms owning small equity stakes in their companies may pursue non-profit maximizing behavior to the detriment of shareholders as principals. This problem is exacerbated by the absence of large blockholding, active investors to directly monitor management (Jensen, 1986). These typical governance problems have been extended to divisions as a second tier agency problem when firms over-diversify and lose strategic control of divisions (Wright & Thompson, 1987).

Agency problems appear to be particularly acute in mature industries where firms generate substantial cash flows but have few investment opportunities with a positive net present value. In these situations, Leveraged buyouts (LBOs) which introduce stricter governance, through active specialist buyout investors and the commitment to service high leverage, and significant managerial equity incentives, have been argued to mitigate the *downside* problems relating to over-diversification affecting mature firms. Buyout financiers provide tight financial control and the active oversight of companies that was missing under the previous ownership regime. High leverage is introduced to the financing of the business,

the servicing of which gives managers little discretion and places pressure on them not to indulge in wasteful investment projects and to reduce over-diversification. Management equity ownership helps to mitigate the principal-agent conflict by making managers share the economic consequences of their actions with owners.

The development of this traditional view of buyouts from the 1980s onwards accompanied the explosion in highly leveraged taking private of significant numbers of listed corporations, particularly in the US. However, the development of the buyout market is surrounded by a number of popular myths and misunderstandings.

MYTHS AND FACTS

Myth 1: Gains in buyouts are due to enhanced cost-efficiencies not innovation and growth

Extensive evidence indicates that buyouts are followed by significant improvements in financial and operating performance rather than mere transfers of wealth from one group of stakeholders to another (Kaplan, 1989; Jensen, 1993; Thompson & Wright, 1995). Research indicates that employment often falls on buyout, this is followed by subsequent increases in employment as more viable businesses are created (Smith, 1990). Research from the US, UK and Continental Europe also shows, however, that buyout is often also followed by increases in capital expenditure new product development that could not have been achieved under the previous ownership regime (Zahra, 1995; Wright, et al., 1992; Bruining, 1992). A recent Pan-European study of buyouts shows that 70% of respondents had increased their product range and 63% had expanded into new markets since buyout (EVCA/CMBOR, 2001).

Myth 2: Performance improvements in buyouts are down to the disciplinary effects of debt.

Research on the relative contributions of debt versus equity to post-buyout performance improvements tends to favor the latter (Thompson, Wright, & Robbie, 1992; Denis, 1994; Phan & Hill, 1995). Although debt mitigates managerial discretion because of the commitment to pay interest, high financial leverage may create potentially perverse conditions. Debt may lead to inflexibility in management's ability to respond to new opportunities (Hoskisson, et al., 1993). When managers are the main equity holders in a highly leveraged firm with only a small proportion of equity, the downside risk to equity ownership is relatively small. In an underperforming buyout, management may choose very risky projects to try and increase the value of their equity. Even though this may reduce the total value of the firm, management's expected loss in the event of failure is likely to be low. This potentially dysfunctional behavior may be mitigated through close monitoring of management by an LBO association or through the use of restrictive loan covenants (Citron, Robbie & Wright, 1997).

Myth 3: Buyouts have a detrimental impact on R&D

There is some evidence of an overall decline in R&D intensity in LBO firms (Long & Ravenscraft, 1993). However, Long and Ravenscraft (1993) also found that R&D intensive

LBOs outperformed both their non-LBO industry peers and other LBOs with low R&D expenditures. There is also some evidence that the decline in R&D post-buyout is not significant (Lichtenberg & Siegel, 1990). Zahra (1995) found that R&D expenditure is made more effective.

Myth 4: Buyouts occur only in mature sectors with low investment needs

While Jensen (1993) emphasized the role of buyouts in mature sectors with low investment needs, buyouts frequently occur across a wider spectrum of industrial sectors (CMBOR, 2000). An increasing number of buyouts are now emerging in technology-based industries, typically involving the divestment of non-core businesses where the parent did not understand or have the capability to manage the technology involved (Wright, Robbie and Albrighton, 1999a). These high-tech buyouts frequently develop new products and technologies, obtain patent rights, engage in R&D joint ventures, and undertake license agreements. Financing instruments are available to permit greater flexibility in payment of cash flows, such as quasi-debt and quasi-equity, alphabet debt, etc.

Myth 5: Buyouts are a short term form of organization

Evidence in both the US and UK clearly shows that buyouts display a heterogeneous life-cycle. A small percentage are sold or return to the stock market within three years, but the majority last for more than five years (Wright, et al., 1994). The timing of the exit is influenced, inter alia, by the objectives of financiers and management and the impact of market conditions.

This discussion indicates that buyouts are more heterogeneous than the traditional view would imply. The discussion also suggests that a fundamental limitation of the traditional view of buyouts is that it fails to address the entrepreneurial or *upside* potential of buyouts. There are often substantial growth opportunities, even in mature sectors, but the exploitation of these opportunities may be restricted by very high levels of debt. Therefore, there is a need to consider a more entrepreneurial view of buyouts.

ENTREPRENEURIAL PERSPECTIVE

If there are fundamental differences in the way buyout managers think and make decisions, they may represent sources of advantage. Since it may be difficult to shift from a managerial to an entrepreneurial cognitive mindset, the cognitive approach may represent a source of sustained competitive advantage (Barney, 1991). Individuals (entrepreneurial managers in this case) may use "heuristics" or simplifying strategies to make strategic decisions, especially in complex situations where less complete or uncertain information is available (Tversky & Kahneman, 1974). "Entrepreneurial cognition" refers to the more extensive use of heuristics and individual beliefs that impact decision-making (Busenitz and Barney, 1997). "Managerial cognition" refers to more systematic decision-making where management uses accountability and compensation schemes, the structural coordination of business activities across various units, and justify future developments using quantifiable budgets. Using heuristics in strategic decision-making allows one to

make inferences and set a future course for action based on experience and a deep understanding of the market that has yet to be systematically spelled out. Entrepreneurs use a heuristic-based approach to decision-making more extensively which enables them to more quickly make sense out of uncertain and complex situations, with limited information, allowing them to more readily navigate through a wide array of problems and irregularities inherent in the development of new opportunities. From this perspective, heuristic-based logic for entrepreneurs may be a very "rational" approach to decision making. To pursue comprehensive information before making strategic decisions will usually mean that a decision will never get made or the window of opportunity will pass before full information is obtained. This perspective can be used to understand different types of buyout, particularly where innovation is involved, and provides a complementary approach to the traditional agency theory lens.

Revitalization Buyouts

Although there has been a focus on buyouts in mature sectors, business entities often need to pursue at least some level of innovation and change for survival. Innovative activity is usually characterized by long time horizons, high-risk, unpredictability, labor-intensity, and numerous idiosyncratic factors. Innovation is particularly problematic in large integrated organizations, which due to a lack of reliable performance measures because of increased costs of obtaining information, leads to bureaucratic measures to ensure performance that are unfriendly towards major innovative efforts since they restrict experimentation and initiative (Holmstrom, 1989; Francis & Smith, 1995). Underinvestment may be exacerbated where the division is peripheral to a parent's product line and core competencies. In public sector enterprises, governments also typically introduce detailed mechanisms for auditing that stress internal accountability and generally give inadequate attention to developing competitive capability in order to perform in the external market place. These arguments suggest independence may be an important antecedent for innovation. This situation provides a good match for the "managerial cognition" archetype that typically characterizes the leadership in these types of buyouts since bureaucratic measures of performance are likely to screen out innovative personalities.

This situation extends previous applications of agency theory to buyouts to include cases where some degree of innovation is required. Revitalizing innovation based on a managerial cognition orientation is most appropriate for firms where managers tend to be comfortable with systematically evaluating and implementing incremental, though non-entrepreneurial, improvements and innovations. To balance the managerial mindset of the business leaders involved in this type of buyout, there is a need for governance mechanisms that support innovative possibilities. Buyout financiers may need to acquire more technical skills beyond their traditional financial monitoring skills. In order for the opportunities for innovation identified by management to be realized, a moderate degree of leverage needs to be established that provides sufficient flexibility to allow needed investment identified by management to occur. Given the presence of incumbent individuals with a managerial mindset, buyouts in this quadrant may typically be expected to involve management buyouts (MBOs) and management-led employee buyouts

(MEBOs) of divisions of a publicly listed corporation and state-owned enterprises (Wright and Thompson, 1994).

Although revitalization buyouts represent a development beyond traditional views, there are circumstances where a more entrepreneurial form of buyout is possible in which high-powered ownership incentives encourage risk-taking and long-term rewards in combination with heuristic-based logic nurture the innovation process. The first involves businesses with misalignments of incentives and managerial frustrations prior to a buyout, termed "entrepreneurial release". A second opportunity exists where technology based businesses run into substantial problems. This opportunity is referred to as a "busted tech" buyout.

Entrepreneurial Release Buyouts

In large private sector organizations, divisions with profitable and innovative investment opportunities may be disadvantaged if their division is not regarded as strategically central to the parent organization. Corporate control mechanisms that emphasize divisional competition on short-term efficiency indicators in internal capital market also inhibit entrepreneurial pursuits (Wright, 1988). In divisions of state-owned enterprises, executives' ability to foster divisional growth may be constrained because of noncommercial objectives, the loss-making nature of the parent and the limitation to accessing growth funds from the public sector. Managers with entrepreneurial skills are likely to become frustrated with a bureaucratic corporate structure and its stifling attitude toward innovations and renewal. When proposals for new ventures are presented, corporate management regularly rejects them because of the lack of information and because the information that is available does not fit into organization-level quantitative investment appraisal systems. In such circumstances, performance gains following buyout are more likely to result from senior management with superior and idiosyncratic skills being released to exploit unrealized opportunities than from close monitoring to prevent shirking. The possibility that the private or public sector parent may wish to dispose of the division may present a window of opportunity to managers with an entrepreneurial mind set. Buyout managers have often perceived the opportunities for innovation but are generally unsuccessful in realizing them under the previous ownership regime (Wright & Coyne, 1985). Evidence indicates that severing ties with the corporate infrastructure through an entrepreneurial buyout usually increases buyout managers' flexibility to more freely initiate innovations and growth opportunities with potential long term rewards (Wright, Thompson, Chiplin & Robbie, 1991).

Financiers need to understand the technology sufficiently to be able to assess the investment initially and to monitor it subsequently. For this reason, venture capital firms play an important role in financing entrepreneurial buyouts. Lower levels of debt are anticipated to provide scope for greater managerial equity incentives and provide sufficient financial flexibility to facilitate necessary investment. It may be expected, however, that in many cases where there are entrepreneurial opportunities, inside management do not possess the requisite entrepreneurial mindset. It may be necessary to bring in outside managers who have an entrepreneurial mindset and significant equity ownership as in a management buy-in or an investor-led buyout (Wright & Robbie, 1996).

Istel, a former subsidiary of Austin Rover, provides evidence of radical entrepreneurial actions. Prior to buyout in 1987, Istel was peripheral to the main automobile producing activities of its parent. For Istel, pre-buyout sales were primarily focused on a narrow range of computer services, with cash constraints on the loss-making parent restricting the ability of the management in Istel to exploit growth opportunities. The buyout enabled the management to become a global competitor in advanced telecommunication services, electronic document interchange and factory automation based on the company's data communications network. The growth opportunities were such that the company became an attractive acquisition target, being sold within two years of buyout to AT&T for £186 million compared to a buyout price of £26 million.

Busted Tech/Turnaround Buyouts

Entrepreneurial owner-managers may already have the skill set and the incentives to pursue strategic innovations as there is no misalignment of incentives. However, as a new venture, little control may be exercised over management. Similarly, where an entrepreneurial firm is listed on a public stock exchange, management may have a significant equity stake but be subject to little external monitoring or control. The opportunity for a buyout may arise when such a firm encounters difficulties, possibly with liquidity problems, presenting the opportunity for new finance arrangements and governance systems. Thus, at times a buyout can be a means of bringing better governance (e.g., financial monitoring) expertise to an innovative opportunity. Alternatively, poor execution of the business plan may also mean there is a need to develop better technological governance (e.g., monitoring by the active investor that includes the provision of technology management expertise) so that the strategy can more effectively proceed with new product development.

Dominant founders in such situations, with their unique decision-making style may pose problems to advancing the business. An IBO/MBI may be appropriate to bring in someone with the entrepreneurial mindset necessary to effect innovations but who also is more amenable to the control mechanisms likely to be brought in by investors (Robbie & Wright, 1996). A buy-in of this nature may be more appropriate to take the business forward than seeking to incorporate it into a large organization with entrenched and elaborate policies and procedures that may not be conducive to innovation and that can create disruption and turnover of key employees, resulting in acquisition failure.

On the one hand, the emphasis on financial control systems suggests a key role for traditional buyout associations. On the other hand, the need to understand the firm's innovation and new product development processes may indicate the need for technical skills from either a new breed of buyout firms or from a venture capital partner. Substituting debt for equity helps facilitate incentives by concentrating ownership. The demands of turning the firm around and the identification of a new entrepreneurial strategy generally suggest lower leverage than for other buyout types to allow the entrepreneurial strategy to emerge. With high leverage, cash flow is likely to be used to service debt rather than being used to implement innovative opportunities.

The buyout of Zilog illustrates these issues. Zilog was a listed computer chip manufacturer that had run into difficulties, suggesting a need for better financial governance. The buyout firm Texas Pacific Group acquired Zilog in an IBO/MBO with modest leverage and advice provided by the venture capital firm Mayfield Fund. The subsequent turnaround of Zilog was reported to have been achieved through the combination of the technical expertise of its management team and of Texas Pacific Group's technical venture capital advisers. In August 2000 it was announced that Zilog was to go public again.

FUTURE CONTRIBUTION

In this paper I have shown that buyouts have become a global phenomenon. I have also discussed how buyouts can bring benefits from upside growth, not just the benefits from cost efficiencies. In my view, this broader perspective has important implications for the future contribution of buyouts.

Private equity practitioners who fund buyouts are increasingly noting the difficulties in generating superior returns on their investment portfolios. The increased availability of capital is also contributing to an increase in competition among leverage buyout associations or private equity houses for good deals. As private equity houses increasingly need to distinguish themselves from the industry mean or median if they are to attract funding from institutional fund providers (Robbie, Wright & Chiplin, 1997) they have the incentive to move into buyouts that provide returns not just through efficiency means but also through growth by identifying innovative market niches. There is thus a developing need for more than financial engineering and leverage to achieve long term success (Baker & Smith, 1998).

For venture capitalists, entrepreneurial buyouts may be less risky than investing in early stage projects yet offer the possibility for significant rates of return. However, financial investors with track records in investing in classic buyouts (LBO associations) may need to recruit specialist staff, especially with respect to skills relating to the valuation and financial structuring of this kind of investment as well as to those required for monitoring the buyout. This development is leading to the emergence of strategic alliances that blur the distinction between traditional venture capital firms and buyout associations.

Traditional conceptualizations of buyouts have focused primarily on limiting managerial discretion. I have shown in this paper that, complementary to this approach is a rationale for buyouts that considers situations where it is necessary to expand managerial discretion to foster entrepreneurial opportunity. To accomplish this, agency explanations have been developed along with those of the cognitive approach. In so doing, it has been argued that significant entrepreneurial progress is made, not through managerial incentives alone, but through a cognitive shift from a managerial to an entrepreneurial mindset. This discussion also suggests the need for general developments in corporate restructuring and governance, which have focused excessively on enhancing accountability, to place more emphasis on promoting enterprise if firms are to become more competitive (Short, Keasey, Wright & Hull, 1999). The future research agenda for both buyouts and corporate restructuring

generally is to develop empirical analyses to compare the agency cost and entrepreneurial perspectives and to conduct these analyses in differing economic contexts worldwide.

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