

Is total quality management really unique?

RUTH J. BOADEN

Manchester School of Management, UMIST, PO Box 88, Manchester M60 1QD, UK

Abstract *The main proposition of this paper is that the principles commonly accepted as defining total quality management (TQM) are not unique to TQM but are part of many other organizational change initiatives or generally accepted 'good' management practice. The paper traces the development of TQM and the concept of management 'fads', and describes the development and definition of a number of approaches: world class manufacturing, guru theory, continuous improvement (CI), business process re-engineering (BPR) and human resource management. These approaches are then compared with each other and with the principles and practices of TQM. It is concluded that 'customer focus' is a key element of all approaches, as is 'commitment' and 'involvement' of all employees, although this is interpreted in various ways. TQM is not as unique as some of its proponent's claim, with its emphasis on processes shared with BPR, and CI one of its basic principles, although its development from the mathematical foundation of quality control does make it unusual. At best, TQM may be viewed as an alternative focus on a common set of management principles, derived from a statistical base, and at worst simply another management fad. Further work is needed to test the ideas of this paper in practice.*

Introduction

The vagueness of definition within the 'field' of total quality management (TQM) has become evident as the field has developed, and informal evidence from research collaborators indicating that "we have done TQM and now we've moved on", prompted the author to carry out some investigation into what TQM is commonly thought to be (Boaden, 1996) and its current status with respect to other organizational change initiatives. An additional motivation for this investigation was the view proposed by some academics (e.g. Burr, 1993) that "TQM is nothing new". The analysis presented in this paper is based on published literature and has not at this stage been tested empirically. This paper summarizes the development of TQM and its relationship with a number of other initiatives that have impacted on organizations recently.

The main proposition of this paper is that TQM is not 'dead' but that the principles commonly accepted as its main tenets (Boaden, 1996) are not all unique to TQM; many are also part of other organizational change initiatives, or generally accepted 'good' management practice. Therefore, the key issue is to recognize which aspects are unique to TQM, and to understand the relationship with other initiatives, thus minimizing conflict which is detrimental to successful organization change and improvement.

The development of TQM and its establishment as a field of study

TQM is commonly thought to have developed from quality control (QC) through quality assurance (QA) to TQM (Dale, 1994). Many of the concepts are traced back to the use of QC techniques in Japan after World War II, and the proponents of the approach, which was later extended to cover the whole organisation, include Deming (1982), Feigenbaum (1983) and Juran (1974). An excellent historical review is found in Dale (1994), although this tends to focus on the development of quality improvement activities rather than specifically on TQM as a term. There is no clear indication of where the term TQM was first used, and no one has claimed to have 'invented' it, unlike some other terms (e.g. Hammer (1990) and business process re-engineering (BPR)). Xu (1994) gives a useful analysis of the link between TQM and the original Japanese words used for QC, which suggests that the term TQM might actually have developed as the result of the translation of some works about QC from the original Japanese. It is interesting to note that the debate about definition of TQM has never occurred with QA or QC. Some of the confusion about terminology is discussed in Boaden (1996).

It is argued that all such initiatives have a natural life cycle (see Table 1), and if this is correct then TQM could be considered to be at stage 4 or even at stage 5 (see Binney, 1992; Kearney, 1992). An alternative approach is described by Campbell (1971):

The fads centre around the introduction of new techniques and follow a characteristic pattern. A new technique appears on the horizon and develops a large stable of advocates who first describe its 'successful' use in a number of situations. A second wave of advocates busy themselves trying out numerous modifications of the basic technique. A few empirical studies may be carried out to demonstrate that the method 'works', then the inevitable backlash sets in, and a few vocal opponents begin to criticise the usefulness of the technique, often in the absence of data. Such criticism typically has very little effect. What does have an effect is the appearance of another technique and a repetition of the same cycle.

A significant piece of work on the 'succession of management fads' has been carried out by Huczynski (1993a). He defines a management idea as a "theory, framework, model, research finding, principle, concept or anecdote that is taught to managers", and carried out research through analysis of publications to determine which were 'popular'. The ideas were divided into six categories: bureaucracy, scientific management, classical management, human relations, neo-human relations and guru theory (see later). Huczynski argues that ideas within these categories have become 'fads' (short-lived but enthusiastically pursued practices or interests) but rightly points out that 'faddism' is a characteristic not of the technique but of its purchasers. This means that the motivation of those 'consuming' the fad should be examined if it is to be fully understood—whether the motivation be organizational,

Table 1. *Five phases for any management innovation*

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- (1) Initial research and conception.
 - (2) Conversion of academic concepts into consulting-oriented products for enthusiastic mass-market promotion and consumption.
 - (3) Ideas gain corporate momentum. Negative experiences and conceptual problems begin to emerge.
 - (4) Enthusiasts begin to run out of steam. Dramatic benefits fail to emerge consistently. New competitors emerge.
 - (5) Falls into disrepute and disuse.
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competitive or individual. TQM is viewed as category of technique of solution to management fads, described as a customer-focused solution, and uniquely as “perhaps the only true innovation in management techniques in the last seventy years”.

Informal evidence about the number of conferences held and books published indicate that BPR (regarded by some as a ‘successor’ to TQM (Born, 1994)) is currently at stage 3 or 4, and may also soon fall out of favour. Holtham (in Coulson-Thomas, 1994) argues that BPR is a “success of sales and marketing of existing managerial ideas, rather than contributing new ideas”, and believes that it too will die out. Similar criticisms have been made of TQM, particularly by organizations that have tried to implement the principles and ‘failed’, although there does still appear to be a body of ‘believers’ (e.g. Zairi, 1994). There is empirical evidence to suggest that TQM is ‘dead’, or has ‘failed’ (Binney, 1992; Kearney, 1992), although other reports are more positive (Becker, 1993; Wilkinson *et al.*, 1993). Larson and Sinha (1995) cite evidence to show that: “The TQM ‘failure’ rate is estimated by various authors from 60 percent (Becker *et al.*, 1994) to two thirds (Brown, 1993; Jacob, 1993) or even up to 70% (Hutton, 1992)”.

It is also relevant to consider the development of TQM as an academic subject in universities and colleges throughout the Western world, although there is some debate about whether TQM is a separate academic discipline, or an integrated subject involving a number of different disciplines (Van der Wiele *et al.*, 1994). It is therefore important to develop an understanding of the relationship of TQM to other academic subjects, for both lecturers and students. Some authors have made a distinction between TQM and management theory, with TQM generally accepted to have been derived from production management rather than the social sciences, as most other management theories were (Grant *et al.*, 1994). However, these authors also argue that TQM conflicts with other contemporary ideas in management thinking, not simply ‘conventional’ management ideas, and they argue that the basic ‘economic model of the firm’ and TQM are inherently incompatible.

Grant *et al.* (1994) discuss the origins of TQM and argue that its pattern of diffusion has been quite different from other management ‘fads’. Its theoretical basis is argued as being in statistics (based around the concepts promoted by Deming among others). The main proponents of TQM in its formative stages were practitioners rather than academics, with few links to business schools, who “have not been in the vanguard of the quality movement”. TQM also has its roots in Japan, although the basic concepts were developed in the US and Europe, and can therefore be regarded as “one of the first truly global management techniques”. TQM is not based on a detailed body of theory, although such theory is beginning to emerge. Grant *et al.* (1994) argue that there is an implicit body of theory underlying TQM, with the primary goal of the firm being customer satisfaction, and a long-term convergence of the interests of shareholders, employees and customers. TQM blurs traditional boundaries of organization design and puts a central focus on the role of information, as well as focusing on the firm as “a chain of linked processes whose end point is the customer”. However, other authors regard TQM as less intellectually ‘mainstream’—Dean and Bowen (1994) assert:

Perhaps the fundamental difference between TQ and management theory is in their audiences. Whereas TQ is aimed at managers in general, theory is directed to researchers ... Given this difference in audiences, the language used in the two literatures differs substantially.

This paper discusses a number of initiatives that have been undertaken in organizations in recent years, and may have gone through similar patterns of innovation and decline in terms

of practice, while still being accepted as valid fields of academic study. Some have been considered as complementary to TQM, and others as in conflict. The rationale behind the selection of the initiatives discussed in this paper is empirical; it centres on initiatives discussed by industrial collaborators in this and other research projects, and may not be comprehensive. In particular, some of the initiatives originating from the marketing field (e.g. customer care programmes) are not discussed here. There is potential overlap with such initiatives and TQM but it does not appear to be causing as much concern to practising managers as the initiatives discussed here.

The following sections summarize each of the initiatives considered in this paper, before their relationship to TQM is discussed.

World class manufacturing

The concept of a 'world class' manufacturer is closely aligned with developments in manufacturing strategy (Hill, 1993; Schroeder *et al.*, 1986; Skinner, 1969), and a number of authors have developed this concept, often basing their models of world class performance on Japanese companies. Sometimes the term 'manufacturing excellence' is also used, and 'world class quality' is sometimes used although it does not appear to have been widely adopted. Key authors in this field include Hayes and Wheelwright (1984), Schonberger (1986), Hayes *et al.* (1988) and Roth and Miller (1988). It is argued that the resurgence in interest in manufacturing over the past 10 years is a result of increased international competitiveness. Key attributes of world class manufacturers are (Hayes *et al.*, 1988):

- becoming the best competitor;
- growing more rapidly and being more profitable than competitors;
- hiring and retaining the best people;
- developing a top-notch engineering staff;
- being able to respond quickly and decisively to changing market conditions;
- adopting a product and process engineering approach which maximizes the performance of both;
- continually improving (this is considered to be the 'ultimate test of a world class organization').

This emphasis on continuous improvement is developed by Schonberger (1986):

Today there is wide agreement ... that continual improvement in quality, cost, lead time and customer service is possible, realistic and necessary ... one more primary goal, improved flexibility, is also part of the package ... with agreement on the goals, the management challenge is reduced to speeding up the pace of improvement.

In their review of the world class manufacturing (WCM) literature, Giffi *et al.* (1990) propose a series of key operating characteristics for world class manufacturers, centred on the "concepts of total commitment and dedication to both quality and customer", i.e.

- define quality in terms of the customer's needs;
- integrate the concept of customer closeness into the organization;
- view quality from a global perspective—products, processes and services.

However, many would argue that Schonberger (1986) was the originator of the term WCM and he discusses three "dominant WCM precepts":

- Just in-time (JIT) manufacturing, based on the principle of eliminating waste and reducing batch sizes to the ultimate of one. This reduction highlights manufacturing issues such as product quality, set-up times, inventory management, etc. and forces the introduction of solutions which results in improved performance.
- Total quality control (TQC), focusing on the elimination of root causes, to produce goods right first time.
- Total productive maintenance (TPM), which emphasizes the reliability of the production process as a whole.

Schonberger then proposes a 17-point 'action agenda for manufacturing excellence' which is remarkably similar to his 'principles of TQM' (Schonberger, 1992, see Table 2) and his 'principles of operations management' (Schonberger & Knod, 1994). It is unclear what this demonstrates about Schonberger's thinking about these various topics, since he does not appear to have commented on the similarities.

Table 2. *Principles of TQM*

General

- (1) Get to know the next and final customer.
- (2) Get to know the direct competition, and the world class leaders (whether competitors or not).
- (3) Dedicate to continual, rapid improvement in quality, response time, flexibility and cost.
- (4) Achieve unified purpose via extensive sharing of information and involvement in planning and implementation of change.

Design and organization

- (5) Cut the number of components or operations and number of suppliers to a few good ones.
- (6) Organize resources into a chain of customers, each chain mostly self-contained and focused on a product or customer 'family'.

Operations

- (7) Cut flow time, distance, inventory and space along the chain of resources.
- (8) Cut set-up, change-over, get-ready and start-up time.
- (9) Operate at the customer's rate of use (or a smoothed representation of it).

Human resource development

- (10) Continually invest in human resources through cross-training, education, job switching and multi-year cross-career re-assignments, and improved health, safety and security.
- (11) Develop operator-owners of products, processes and outcomes via broadened, owner reward and recognition.

Quality and process improvement

- (12) Make it easier to produce or provide the product without mishap or process variation.
- (13) Record and own quality, process and mishap data at the workplace.
- (14) Ensure that front-line associates get first chance at process improvement—before staff experts.

Accounting and control

- (15) Cut transactions and reporting; control causes and measure performance at the source, not via periodic cost reports.

Capacity

- (16) Maintain/improve present resources and human work before thinking about new equipment and automation.
- (17) Automate incrementally when process variability cannot otherwise be reduced.
- (18) Seek to have multiple workstations, machines, flow lines, cells for each product or customer family.

Marketing and sales

- (19) Market and sell your firm's increasing customer-oriented capabilities and competencies.
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'Guru theory'

This term has been borrowed from Huczynski (1993b) to describe the diverse writings which emerged during the 1980s from authors such as Tom Peters, Michael Porter (1980) and Rosabeth Moss Kanter (1985), as well as practitioners like Lee Iacocca and John Harvey-Jones. It does not refer to the so-called TQM 'gurus' in this context. The writings themselves are diverse and have not yet been recognized in management textbooks as a coherent 'school of thought', but they all draw much of their authority from the individual authors themselves. Many of these authors discuss the qualities found in the best performing (or 'excellent') companies, not simply those in the manufacturing sector. The key work in this area is probably *In Search of Excellence* (Peters & Waterman, 1983), which discusses and summarizes the characteristics of high-performing companies at the time, such as IBM and Honeywell. The main characteristics found were:

- a bias towards action;
- simple form and lean staff;
- continued contact with customers;
- productivity improvements via people;
- stress on one key business value;
- emphasis on doing what they knew best.

The lasting value of this approach has been questioned, however, since a number of the companies are no longer leaders in their field. Kanter (1992) has proposed that a new practitioner paradigm is emerging, characterized by de-bureaucratization (the end of hierarchy, prescriptive rules and predictable organizational careers), downsizing and delayering, decentralization, project-based teams and new mechanisms of coordination.

The emphasis in many of these works is on corporate culture as a source of competitive advantage. The most common definition of culture is from Schein (1985): "Organisation culture is the pattern of basic assumptions that a given group has invented, discovered or developed in learning to cope with its problems of external adaptation and internal integration". 'Culture' is seen to affect consensus, which rests on a set of common values and beliefs, flexibility and commitment (Storey & Sisson, 1993), all of which are key elements of TQM. Much of guru theory seeks to tie individuals into the values of particular corporate cultures, so that barriers to change are broken down (Ray, 1986). However, it must be stressed that this is not always regarded as a coherent field of study, but is a term developed to combine various approaches to management which are well publicized.

Continuous improvement

While it is often argued that continuous improvement (CI; or *kaizen*) is one of the fundamental principles of TQM, there are some authors who have identified it as a separate type of corporate initiative for improvement. This is justified by arguing that CI principles can be applied "in other areas such as flexibility, cost reduction, inter-firm relations and support process improvement" (Bessant *et al.*, 1994). The key Japanese author promoting CI is Imai (1986). The Japanese appear to regard *kaizen* as the umbrella concept which unites all other improvement initiatives, such as TQC, JIT and TPM. CI as a separate initiative (or process) has been promoted in the UK by a group from the Centre for Business Research at Brighton Business School, and funded by various grants, including some from the Engineering and Physical Sciences Research Council (EPSCR). This group argues that the concept of CI "has found particular application ... in the area of quality improvement, but ... can be applied to

Table 3. *Aspects of CI*

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- (1) Constantly examining what you are doing and seeing if there is a better way of doing it—implying a thorough understanding of the business, and documentation of the methods of working.
 - (2) Getting the culture of the organization in never-ending improvement mode (without implying a measured position).
 - (3) Involvement/teamwork/everyone contributing.
 - (4) Bringing a customer focus to the fore.
 - (5) Causing change in order to remain flexible in a turbulent business environment.
 - (6) Learning from your mistakes.
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Source: Developed from Hawskworth (1994).

many other divisions of business performance". The group defines CI as "a company-wide process of focused and continuous incremental innovation" (Bessant *et al.*, 1994). A recent study (Hawskworth, 1994) indicated that there were a number of aspects to CI (as reported by participants in the research); these are shown in Table 3.

A list of 'success factors' for CI is presented by Bessant *et al.* (1994). These are not dissimilar to those proposed for many other aspects of organizational change, and TQM in particular. CI needs:

- a clear strategic framework;
- an underlying supportive culture;
- managing as a process;
- managing strategically;
- an enabling infrastructure;
- a supporting toolkit.

Business process re-engineering

The advent of business process re-engineering (BPR) as a formal concept is commonly traced back to the seminal work of Hammer (1990), now developed as a book (Hammer & Champy, 1993). They provided the following definition: "Reengineering is the fundamental thinking and redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service and speed". The concepts are undoubtedly developed from the roots of scientific management (Taylor, 1903), but there are clear links to both the quality movement, in particular Juran (1964), and systems theorists such as Beer (1981). The concepts presented by Juran (1964) and those proposed by the group technology proponents such as Burbidge are remarkably similar to those now accepted as BPR, although this has not been acknowledged by Hammer and Champy (1993). It may be that the economic climate of the 1960s, with full employment and post-war economic growth, was not as receptive to such ideas as today's climate of survival and constraint. Systems theory was widely documented but impractical; applications were not always successful and it therefore got a bad name among practising managers. Born (1994) argues that while quality management approaches are valid and can show significant organizational and financial benefit, the length of time required for them to show a significant bottom-line return (quoted as 3 or 4 years) made them unattractive, and caused managers to question whether there was another approach that could give faster returns and significant cost savings. Thus, BPR was developed as a "grand concept for radical change in an organisation, based upon total redesign of an organisation's processes, and taking into account the full power of modern technology". Holtham's argument that the concepts underlying BPR are

Table 4. *Principles of BPR*

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- (1) Focus on end customers externally.
 - (2) Give customers a single point of contact.
 - (3) Focus on harnessing more of the potential of people internally, and applying it to activities which deliver value to customers.
 - (4) Accessibility of resources is more important than physical location.
 - (5) Encourage learning and development by building creative working environments.
 - (6) Think and execute as much activity as possible horizontally.
 - (7) Remove non-value added activities, undertake parallel activities, speed up response and development times.
 - (8) Concentrate on outputs rather than inputs.
 - (9) Give priority to the delivery of value rather than the maintenance of management control.
 - (10) Network relate people and activities.
 - (11) Move discretion and authority closer to the customer.
 - (12) Encourage involvement and participation.
 - (13) Ensure people are equipped, motivated and empowered to do what is expected of them.
 - (14) Wherever possible, people should assume responsibility for managing and controlling themselves.
 - (15) Work should be broadened without sacrificing depth of expertise in strategic areas.
 - (16) Avoid over-sophistication.
 - (17) Keep the number of core processes to a minimum.
 - (18) Build learning, renewal and short feedback loops into processes.
 - (19) Ensure that continuous improvement is built into implemented solutions.
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Source: Condensed from Coulson-Thomas (1994).

not new might not be supported by all BPR enthusiasts, but he describes the concept as having ‘resonance’ (Grint, 1993). “They have coined a phrase which seems to strike a chord with managers across the world ... they have packaged and presented already existing concepts in a way that stimulates the interest of managers”.

BPR is contrasted with process simplification, in that it is considered to involve radical change, led by a vision, involving new frameworks and technology and changes in behaviour and attitudes. The commonly accepted principles of BPR are shown in Table 4, although there are many other versions of definition depending on which source is used.

Human resource management

The development of human resource management (HRM) as a discipline has its roots in both industrial relations and personnel management. Industrial relations has traditionally been regarded as concerned with collective labour issues, while personnel management was concerned with policies and practices directed towards the individual employee (Storey & Sisson, 1993). However, this distinction is becoming more difficult to maintain with the trend during the 1980s to the individualization of employee relations and the marginalization of trade union relations. HRM began to emerge in Britain in the late 1980s, developed from a set of ideas and practices used in the US, which can be viewed as ‘Americanization’ of Japanese methods. HRM has in some senses developed from personnel management, but is claimed to have both a ‘soft’ and a ‘hard’ face:

The hard aspect places emphasis on the idea of resource—that is, something to be used dispassionately and in a calculative, formally rational manner. The soft usage lays emphasis on the term human, thus conjuring up echoes of the human relations movement and a stress on employee development, group relations and constructive supervision (Storey & Sisson, 1993).

A formal definition of HRM appears difficult to find, with most authors acknowledging that its development has been complex and unclear. However, there are some key features of the approach that are particularly important in considering its interface with TQM. One of the central features of HRM is that it involves a more strategic approach to the management of people than personnel management or industrial relations. However, this move to being 'strategic' is often regarded as unproblematic by managers, simply requiring a greater degree of will. Many of the issues relating to the integration of TQM and strategy also apply to HRM, and the evidence is that there is a lack of strategy in most UK human resource and industrial relations (IR) functions (Marginson *et al.*, 1988) and a record of comparative failure. The reason for this is that it is often very difficult to find out what the strategy of an organisation actually is, and the assumption that strategy is developed by a process of logical choice between options is also questionable (Mintzberg, 1994). The conclusion is drawn by many authors that claims for the existence of strategic HRM are false—because the assumptions behind it were simplistic and did not reflect the reality of organizational change and strategy development:

Most of the academic research has shown wide gaps between the theory of HRM and the practice (Storey, 1989).

Few organisations appeared to have achieved full-blown HRM, most companies adopting a rather more ad hoc approaches (Wilkinson, 1994).

Although the failure of HRM in practice could cast doubts on its validity, it is still important to examine the relationship between TQM and HRM, not least because there is a body of literature developing which addresses this issue. TQM is now at least mentioned in most HRM texts, and taught on many HRM courses. A distinction needs to be made at this stage between the impact of TQM on HRM practices and the commonalities which they share in terms of principles. The former is well addressed by Wilkinson (1994), and other authors who believe that HRM professionals are actually threatened by TQM and therefore should attempt to understand it and incorporate it into their model of management (Giles & Williams, 1991). Bowen and Lawler (1992) state that TQM provides HRM departments with a "golden opportunity ... Quality can be the 'business issue' that truly brings senior managers and HRM execs together to move from *just* HRM to *strategic* HRM". They describe how the HRM department can be redesigned to fit TQM principles. HRM then focuses on the organization rather than the job, support for group rather than individual performance, egalitarianism rather than hierarchy, change rather than stability, and participation rather than command and control. All these are seen as major changes in emphasis for the 'traditional' HRM function.

Storey (1992) provides a useful comparison of IR with HRM which, although too detailed to reproduce in full here, lists features of HRM which are remarkably similar to those often attributed to TQM (see Table 5).

Hill (1991) provided a favourable perspective on TQM in reporting that it can be viewed as "an influential and effective paradigm for flexible organisations", but more recent evidence is less optimistic about TQM. Much of the evidence suggests that it is the 'people' factors that cause the problems, so that TQM is seen to have been less successful than envisaged (Dale, 1991; Witcher & Wilkinson, 1990). Factors include lack of commitment from management at all levels, lack of resources for change, and a failure to motivate and involve employees, as well as infrastructural issues of short-termism, occupational specialization and industrial relations issues. It seems that the future of industrial relations and personnel management in the light of more recent trends like TQM is unclear. TQM has been called

Table 5. *Features of HRM*

Dimension	HRM
<i>Beliefs and assumptions</i>	
(2) Rules	'Can do' outlook
(3) Guide to management action	'Business need'/flexibility/commitment
(4) Behaviour referent	Values/mission
(5) Managerial task <i>vis-à-vis</i> labour	Nurturing
(6) Nature of relations	Unitarist
(7) Conflict	De-emphasized
<i>Strategic aspects</i>	
(9) Key relations	Business–customer
(10) Initiatives	Integrated
(11) Corporate plan	Central
(12) Speed of decision	Fast
<i>Line management</i>	
(13) Management role	Transformational leadership
(14) Key managers	General/business/line managers
(15) Prized management skills	Facilitation
<i>Key levers</i>	
(18) Pay	Performance-related: few, if any, grades
(19) Conditions	Harmonization
(22) Communication	Increased flow/direct
(23) Job design	Teamwork
(24) Conflict handling	Manage climate and culture
(25) Training and development	Learning companies

Source: Storey (1992).

a new paradigm (Hill, 1991), and if this is the case, then Storey and Sisson (1993) make an important comment:

What is less clear at this stage is the extent to which this new paradigm can be embedded and sustained without calling upon the more traditional elements of HR and IR practice. Or will its success depend on displacement of these former practices?

While the evidence on the 'success' of TQM is less than encouraging, it is clear that, if implemented according to its main principles, it will involve a transformation of most Western management practices. HR experts argue that while such 'transformational' skills are lacking, more traditional HR and IR skills "will be at a premium for a long time to come" (Storey & Sisson, 1993). The need for such skills is reinforced by Schonberger (1994), who maintains that both TQM and BPR require extensive changes in HRM. The changes are needed in the areas of people and their roles, performance recognition and pay, the role and resources of the HRM function, and corporate decision-making and strategy.

Comparison with TQM

This section discusses the various initiatives outlined in the previous sections and compares them with TQM. One attempt to discuss the common principles of TQM and WCM has been proposed by Greatbanks (1993), who points out that the distinction is difficult to define, because both are philosophies of management rather than techniques:

Whilst both TQM and WCM are management led, the ultimate success of each depends entirely on the involvement of people and hence, in this sense, can be identified as cultural issues. Each emphasises the role of continual improvement as a method and measure of progression.

He argues that the focus of WCM is by definition within the manufacturing environment: “the continual refinement and development of the manufacturing function i.e. its facilities, systems and people, so as to have the capability to compete successfully with direct competitors on a worldwide basis”. In contrast, TQM is seen as a philosophy that can be developed in any type of organization, with its fundamentals emanating from the senior management function, so that shop floor employees are “virtually powerless regarding the implementation of most TQM concepts”. While this does appear to contradict the principle of total involvement, it is true that the top-down approach is often cited as a key principle of TQM. Greatbanks concludes by proposing that it is logical to describe WCM as a “subset of TQM which is entirely devoted to the manufacturing function of the organisation”. Certainly, TQM is rarely discussed in WCM literature, apart from Schonberger’s (1986) contribution, where it is regarded as a specific set of activities rather than the wider set of principles for management which now appears to be the more common understanding. This may be because most of the key WCM literature stems from the early 1980s, when the TQM literature and the field itself were not very well developed. The focus on product quality found in the WCM literature reflects the general understanding of quality issues at the time.

Comparison of TQM and guru theory is complicated by the fact that TQM itself is considered to be part of this new paradigm by some authors (Dean & Bowen, 1994). Kanter judges TQM as “a way station on the road to more complete restructuring of corporate strategy and organisational form” (Kanter, 1989). Some authors would regard TQM as a subset of the “culture” movement. Hill (1991) observes that ‘quality’ is much the same as ‘excellence’ in the current management jargon. Some of the ‘gurus’ have been claimed as writers on TQM (EFQM, 1994), but they did not mention the term and in some cases it is questionable whether they would wish to be associated with it. In general, this overlap has not been widely discussed, and this lack of consideration supports the view that TQM is another management fad.

The difference between CI and TQM is more documented. Most of those interviewed by Hawsworth (1994) were unsure about the distinction, with a large number using the terms interchangeably. However, there was a view that the ‘total’ part of TQM might imply that TQM is something finite that can be ‘achieved’, rather than a continuous process. Moreover, TQM had strong product quality associations in many organizations, and was seen as being only concerning people with ‘quality’ in their job title, whereas CI was seen to be something related to the whole organization. These views suggest a misunderstanding of the nature of TQM, and it may be that CI has developed as a term for what is actually TQM (if the basic principles of TQM detailed in Boaden (1996) are accepted). Some people had reservations about both terms, preferring to ‘get on with the job’, and it was pointed out that CI might be preferred because “you can’t say that you don’t want to do it”; i.e. it is a fundamental principle that is difficult to argue with. An alternative view is that TQM may be regarded as the aim of quality improvement, and CI the means of making progress towards it, via incremental rather than large step-change improvement (this view has been presented in informal discussions with Barrie Dale). CI may be merely one of the principles of TQM (Boaden, 1995; Dean & Bowen, 1994; Hill & Wilkinson, 1995).

The relationship between TQM and BPR is subject to considerable academic debate at present. The key difference between TQM and BPR approaches is considered by many to be

the contrast between incremental improvement (as advocated by TQM) and revolution or breakthrough improvement via a step change in performance. However, this distinction is complicated by the fact that some TQM experts talk in terms of breakthrough improvement too (Juran, 1964)—often as a result of benchmarking initiatives. This purist view of BPR is not, however, reflected in all the literature, some of which does not advocate radical change of behaviour and attitudes. Some advocates of BPR also recommend the concept of CI, used between radical step changes. TQM is seen as being more concerned with incremental improvement within an agreed framework, and may not consider the whole process, although the customer–supplier relationship is a key feature. The link with well established concepts of group technology does not appear to have been appreciated. Hammer and Champy (1993) claim that TQM works with existing processes, while re-engineering creates new processes that are simpler and more effective. However, Wilkinson and Hill (1995) claim that: “the BPR movement simply fails to understand what it has criticised. TQM is about improving processes ... and process reengineering is one of the standard improvement tools”. Many tools and techniques commonly associated with TQM are used in BPR, particularly those associated with teamworking. The key difference (according to Coulson-Thomas, 1994) is that BPR focuses primarily on the external customer, and at times would regard focus on internal customers as a distraction, whereas TQM is regarded as giving equal emphasis to all types of customer. Born (1994) rightly points out that reality is more complex than many BPR authors admit, and that BPR is not really an alternative to TQM; customers are looking for cost reductions, but also quality and customer service, and so both approaches are necessary. BPR gives a great deal of importance to information flows and communication, often assisted by technology, in a way which TQM does not. It may also be that BPR proponents are criticizing the practice of TQM rather than TQM itself, and in particular organizations that have only achieved ‘partial’ TQM (Wilkinson & Hill, 1995). It appears from anecdotal evidence that BPR may have been more readily applied in service organizations than TQM.

Other authors attempt to reconcile the two approaches, and according to the brochure for a recent Economist conference: “Process reengineering and quality initiatives have to be integrated and have to make bottom line sense ... organisations are using activity-based accounting to focus organisational initiative”. To attempt to integrate the two approaches by introducing a third may seem to be repeating the cycle of fads, but that is what most authors addressing the issue appear to be doing. This is consistent with Huczynski’s theory that “it seems unlikely that this process of management fad creation and replacement will ever end ... the failure of successive techniques does not appear to deter organisations from seeking new ones” (Huczynski, 1993a). Born (1994) provides an excellent review of both approaches, and proposes that they are integrated using his ‘quality process language’ approach: “capable of representing and analysing all processes within an organisation ... it also provides a basis for quality management approaches”. He views quality management as the fad of the 1980s and BPR as the fad of the 1990s. The Operations Management Association (US) has also identified a progression from TQM through BPR, and is now promoting the concept of ‘adding value’:

Total quality focused our efforts on recognizing our customers and listening to their needs. Reengineering helped us identify key processes in our businesses and to shorten our internal cycles by eliminating waste ... Now our challenge is to strengthen our competitive position and results by *creating* greater VALUE in our products and services for our customers and stakeholders.

An author who has written books on many aspects of performance improvement has

attempted to address the issue of the integration of TQM and BPR (Harrington, 1995). He acknowledges the support of Armand Feigenbaum in developing his ideas, which regard TQM as one of five methodologies competing for limited management resources. The others are total cost management (TCM), developed from activity-based costing (ABC), total productivity management (TPM), total resource management (TRM) and total technology management (TTM). He acknowledges that TQM has never been clearly defined but, having presented his own definition, he goes on to blend the improvement methodologies together into 'total improvement management' (TIM), which considers the aspects of direction, basic concepts, delivery processes, organizational impact, and rewards and recognition from each of the constituent methodologies. It appears that many consultants are attempting to address the issues of definition and interaction between different methodologies simply by defining yet another term, which they can then sell as a new approach, rather than attempting to simplify the existing confusion. It seems as if these new developments may become just another 'fad'. BPR is certainly increasingly regarded as a fad that is past its prime (Hall *et al.*, 1993; Willmott, 1994).

Commonality between HRM and TQM principles has not been given as much attention as the impact of TQM on HRM. Wilkinson states that:

Both emphasise commitment, self-control and trust and have views on employees drawn from McGregor's Theory Y—a view that workers are, if given responsibility, likely to be well motivated and committed, and hence identify with company goals.

Unitarism (the assumption that the organization comprises a set of people with a single set of values, loyalty and with management's 'right to manage' unquestioned) is a common assumption in both approaches, although it is ignored in many texts on TQM (Wilkinson, 1994). Some authors have indicated the importance of HRM issues in TQM, and survey data (Shetty & Buller, 1990) indicated that from 615 senior US executives surveyed, employee motivation was rated by 85% as highly effective in improving quality. Other highly weighted factors included change in corporate culture (82%), employee education (74%) and process control (53%). Willmott and Wilkinson (1995) compare TQM and HRM on the basis of 'faith and politics' and quote Noon (1992) discussing HRM:

Belief in HRM is ... based ... on faith. The HRM prophets guide the way to business improvement, harmonious employee relations, customer care and societal well-being: the promised land for advanced industrial societies. Those who like the message and have faith, follow.

It is argued by many that a similar 'faith' is needed if TQM is to be implemented.

Conclusions

In this section the main principles and practices of TQM developed in Boaden (1996) are presented and their relationship to the initiatives discussed in this paper is explored. Table 6 summarizes these relationships, which are discussed in more detail here.

In terms of principles, the analysis here shows that customer focus is an element of all the approaches analyzed, although BPR and HRM focus more on external customers. Commitment in a general sense is also a common feature, partly because all the initiatives, with the exception of guru theory, tend to be implemented as 'programmes' or specific sets of activities. While it is argued that TQM is a set of principles, its implementation is often as a series of activities which require commitment, and the top-down nature of this commitment, with managers seen to be actively leading and involved is cited in many studies as a key

Table 6. Principles and practices of TQM

	WCM	Guru theory	CI	BPR	HRM
<i>Principles</i>					
<i>Customer focus, with emphasis on the customer-supplier relationship, internally and externally</i>	Major focus	One aspect	One aspect	External customers emphasized	Key relationship externally
<i>The commitment of everyone to quality improvement, especially managers</i>	In a general sense		In a general sense	In a general sense	In a general sense
<i>The involvement of everyone within the organization in quality improvement</i>	In a general sense	In terms of culture change	One aspect		
<i>A focus on processes</i>				Main focus	
<i>CI as a philosophy</i>	Focus in some cases		Main focus		
<i>Practices</i>					
<i>Training and education considered as an investment</i>	Specific to techniques	As a general practice	Specific to techniques	For those involved in re-engineering organization	Focus on the learning organization
<i>The use of teams and teamwork</i>	As part of specific techniques, e.g. JIT	Where culture changes to Japanese style	Not a major emphasis	For those involved in re-engineering	As a principle of job design
<i>The use of appropriate tools and techniques, reviewed regularly</i>			Emphasized	As tools for the re-engineering process	
<i>Goal-setting, measurement and feedback for all aspects of the business</i>			Major focus		

Source: Boaden (1995).

'success factor' for TQM. The involvement of all employees is again something emphasized in a general sense in most approaches, but is regarded as key only by CI (and TQM). The process focus is only emphasized by BPR, and there are those who argue that "In many ways, the proponents of BPR are repackaging TQM ideas ... they have emphasised the importance of developing cross-functional approaches to the design and delivery of goods and services ... remarkably similar to the process emphasis in TQM" (Willmott & Wilkinson, 1995). CI is clearly the main focus of the CI approach, and is also mentioned in some manifestations of WCM. Its role in BPR depends on which author is to be believed—some citing it as a key facet and others regarding it as deliberately missing from BPR and one of the key differences between the two approaches. A key focus of both WCM and BPR which is not emphasized in TQM is simplification.

The analysis and comparison of practices is less straightforward because of the variety of practices included as standard by different authors. The categories in Boaden (1996) may not be complete. Training is important in all approaches, but is often specific to particular tools required to implement that approach (as with WCM, BPR and CI). The focus of training in HRM is more organization-wide, with the concept of the learning organization introduced, and the role of training in guru theory is dependent on the particular guru followed and the nature of culture change. Teamwork is used within WCM where it is part of a specific technique (e.g. JIT) and may be a part of a move towards a more Japanese style culture in some applications of guru theory. BPR uses teamwork based around re-engineering of specific processes, and HRM adopts it as a principle of job design. Tools and techniques are only emphasized in BPR and CI, and this is one of the more unusual features of TQM which demonstrates its roots in statistical methods. A formal quality management system, which is also essential for TQM, is not mentioned in other approaches, although BPR would be difficult to develop without such formalized procedures. Goal-setting is only a major focus in CI, where it is fundamental that organization and individuals understand from what basis they are improving, and when they have improved performance.

So is TQM really any different? If its fundamental principles are implemented, it certainly requires "systematic changes in management practice, including the redesign of work, the redefinition of managerial roles, the redesign of organisational structures, the leaning of new skills by employees at all levels, and the reorientation of organisational goals" (Grant *et al.*, 1994). However, many of the approaches described in this paper would also involve some if not all of these changes.

There are clearly few unique elements. A process focus is shared only with BPR, and a continuous improvement focus mainly with CI itself. This analysis shows that it is difficult to sustain a coherent distinction between CI and TQM, and it may be that CI as a set of initiatives is simply TQM by another name. The most common approach appears to be CI as one of the fundamental principles of TQM—it has not been widely adopted as a separate set of practices or approach. The diverse nature of WCM makes it difficult to draw clear conclusions, and there might be a case for WCM being regarded as the implementation of TQM principles specifically within the manufacturing environment. However, most WCM literature also includes a number of other principles more specifically focused on engineering which are not a part of TQM. The development of WCM before TQM was widely accepted and may also have affected this. There are a number of principles and practices of HRM that are found in TQM, and the two approaches have common features in terms of implementation and acceptance as valid academic schools of thought.

The TQM philosophy is regarded by some as having an "abstract and universal character" (Willmott & Wilkinson, 1995) and was certainly promulgated by some as a 'cure-all': "a unified set of principles which can guide managers through the numerous

choices [open to them] or might even make choosing unnecessary” (Huczynski, 1993b). The evidence from this paper suggests that at best TQM is an alternative focus on a common set of management principles, derived from a statistical base, and at worst simply another management fad. Irrespective of its relationship with other initiatives, some of its key elements, including quality management systems, quality management techniques and tools and teamwork, are valuable in their own right. Perhaps one way to judge whether TQM is in any way superior to other initiatives would be to consider evidence from practical application, but this raises a new set of issues which are beyond the scope of this paper. The mixed evidence of success to date indicates that methodological and empirical issues may not be clear and that there is no universal agreement.

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