

**SWP 4/97 THE TRANSFER OF CULTURALLY-GROUNDED
MANAGEMENT TECHNIQUES: THE CASE OF
BUSINESS RE-ENGINEERING IN GERMANY**

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The Transfer of Culturally-Grounded Management Techniques: The Case of Business Reengineering in Germany

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ABSTRACT

Business process reengineering (BPR) continuous to sweep across Europe with fervour. The rhetoric of radical performance improvement is too great to ignore given the state of many European companies. In many cases the reengineering drive has been orchestrated by American companies either moving into Europe or implementing strategies dictated from their US base. Yet re-engineering is essentially an American concept packaged so as to appeal to that country's psyche. In this paper we examine the transfer of culturally grounded management techniques, in this case BPR, making specific reference to the German business and cultural context.

KEYWORDS: business re-engineering, managing change, culture, Germany

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The Transfer of Culturally-Grounded Management Techniques: The Case of Business Reengineering in Germany

At the beginning of this decade a management concept labelled *business reengineering*¹ appeared on the management horizon in the US, later spreading to Europe and elsewhere. This “new” concept claimed to offer the prescription for radical improvement in the dimensions of organisational efficiency, effectiveness and adaptability. In contrast to previous management approaches such as just in time (JIT), total quality management (TQM), lean production and Kaizen, which focused on particular areas of organisational performance such as time or quality, business reengineering purported to represent a very well integrated amalgam of the latest thinking in management techniques.² However, many initiatives have floundered, not so much because the concept is flawed but more so because many organisations did not appreciate the tremendous upheaval necessary to migrate from traditional vertical structures to a new process oriented architecture (Davenport and Stoddard, 1994; Peppard, 1996).

Significantly, very little research has been conducted with regard to the effects of national cultural circumstances upon the success or otherwise of reengineering projects. In reality, management theorists and practitioners often fail to take cognisance of the cultural grounding of management concepts. This paper considers the German business cultural context and assesses the extent to which German companies can assimilate the directive of reengineering. Simultaneously it is also considers whether a management prescription developed within the US business domain can be effectively transferred or exported to European countries. The paper

¹ This paper uses the terms *business reengineering* and *business process reengineering* (BPR) interchangeably.

² For a comparison of BPR with other improvement philosophies see Peppard and Rowland (1995, p. 15).

also identifies the aspects of German business and management practices which might be usefully incorporated within the reengineering paradigm.

The cultural context of management

Business reengineering, as an American concept, is essentially a product of the Anglo-Saxon Classical school of rationalised scientific management thought. In fact, most theories of organisation and many of the fundamental and underlying principles of management have emerged from under the auspices of the American-dominated Classical school. However this traditional economics-influenced school of management thought, in a detached and almost aloof manner, often views organisations as machine-like constructions without internal politics, personalities or people. Human beings are perceived as company “resources” or factors of production and managers as detached and highly rational economic agents whose attention is solely focused upon profit maximisation.

In reality, management is a rather social, political and culturally-determined process. Furthermore, business takes place in a very diverse world with a mosaic of vastly different cultures (both corporate and national) and social systems which results in a wide variety of management practices. In other words, management practice is very much embedded in, as well as determined and facilitated by, the social, economic and cultural environment in which it takes place.³ To a certain extent, the validity of a particular management theory or practice may well be limited to that theory’s country or cultural centre⁴ of origin. By the same token, it is unlikely that there can ever be a universal management theory or “one true way” to organisational design which applies with equal efficacy to all cultural and organisational contexts. Moreover, the world-wide success of Japanese and South-

³ *Business Week* recently quoted Marc Blondel, head of France’s Force Ouvrière union, which led a strike that crippled the country last autumn ‘[t]he French won’t accept to be managed in an Anglo-Saxon manner’ (Javetski *et al.*, 1996, p. 23).

⁴ In a recent book Huntington suggests that the world is divided into a number of different cultures: western, Confucian, Japanese, Islamic, Hindu, Orthodox, Latin American, African and Buddhist. He asserts that ‘[c]ulture and cultural identities ... are shaping the patterns of cohesion, disintegration and conflict in the post-cold war world ... Global politics is being reconfigured along cultural lines’ (Huntington, 1996).

Korean firms using techniques at odds with conventional management thought has drawn the generally accepted wisdom and universal validity of the hegemonic American business schools into question. Hence, it could prove a fatal mistake to simply imitate, import and apply an Anglo-Saxon management philosophy to an organisation which is based in a significantly different business culture without a clear and thorough understanding of that country's and that organisation's social, cultural and management nuances.⁵

At this juncture the reader may well question the "Americanness" of the reengineering discipline. After all, a number of European consultants and academics have conducted research and published books in this area. However, a brief survey of the concept's origins and short history will underline that business reengineering is in essence an American-created concept originally intended for use in the US business environment.

Business Reengineering: Made in USA

The concept Business Reengineering⁶ first surfaced during Massachusetts Institute of Technology's (MIT) extensive research programme *Management in the 1990s* which examined the role which IT would play in organisations in the 1990s. Simultaneously, researchers and consultants at the Index Group (now CSC Index) were conducting parallel research on the link between technology and business change. In the Summer of 1990 Thomas Davenport and James Short published a paper 'The new industrial engineering: information technology and business process redesign' in the *Sloan Management Review*. Following the success of Michael Hammer's article in the *Harvard Business Review* "Reengineering Work" and his best-seller written with co-author James Champy *Reengineering the Corporation*, the reengineering philosophy found itself very much in the focal point of American management-thinking.

⁵ For more on the culture-bound view of management see Hofstede 1980 and 1996.

⁶ In fact the MIT researchers attached the label *Business Process Redesign* to the concept.

One only has to glance through the opening pages of the original edition of Hammer and Champy's best-seller to realise that the clever marketing and rhetoric associated with the concept is tailor-made to the specific needs and characteristics of the American business culture. Reengineering is proposed as a kind of organisational vehicle used in order to emerge victorious from the competitive battle with the Japanese. Business reengineering is praised as a sort of secret formula, the American retort to Japanese concepts such as TQM, JIT and Kaizen and a means to return to former glories "the alternative is for corporate America to close its doors and go out of business. ... Reengineering isn't another imported idea from Japan" (Hammer and Champy 1993, 1-2). Furthermore, Hammer and Champy's rhetoric appeals to the old reliable American virtues and plays upon the ideals of the "American Dream" and claims that the American culture is uniquely suited to the reengineering approach.

"Reengineering capitalizes on the same characteristics that made Americans such great business innovators: individualism, self-reliance, a willingness to accept risk and a propensity for change. Business reengineering, unlike management philosophies that would have "us" like "them" [the Japanese], doesn't try to change the behaviour of American workers and managers. Instead, it takes advantage of American talents and unleashes American ingenuity." (Hammer and Champy 1993, pp. 2-3).

In its purest and most radical form business reengineering possesses many key features which can be clearly identified as unambiguous examples of the American-dominated classical school of management thought. In its original conceptualisation it is results oriented and hence strong on prescription yet weak on implementation (Peppard, 1996). In its 'pure' form, reengineering's key tenets included⁷:

- An emphasis upon forceful top-down change driven by an omnipotent senior executive.
- The requirement of "clean-sheet" change ignoring existing managerial, cultural and organisational circumstances.

⁷ See for example Davenport, 1993; Hammer and Champy, 1993; and Morris and Brandon, 1993.

- The blatant disregard of the wide-ranging and long term impact of change and technology on society and business practices.
- A ruthless, intolerant approach to employee resistance.⁸
- A revolutionary, aggressive almost violent tone is closely associated with the evangelical rhetoric of many proponents.
- The patent neglect of the human implications of radical organisational change.

Hence, business reengineering's applicability to Germany certainly cannot be assumed or taken for granted given this strong emphasis on "Americanism". In fact, given its cultural origins, in the worst case scenario it could conceivably be the case that only American corporations are in a position to reap the full rewards from business reengineering⁹. It is in this context that the authors wish to analyse business reengineering's applicability to the German business environment, a business culture which is sufficiently different to the American in order to justify this undertaking. The paper will attempt to determine to what extent and in what form this American concept can be best (if at all) transferred to the German business environment. A brief overview of German management's traditional attitude to foreign management techniques would at this point be most appropriate

German Self-sufficiency

Traditionally, German management has been characterised by an extremely pragmatic and down to earth approach. A unique business system and management ethos has developed in Germany since the Second World War. One of the most striking features of this system has been its self-sufficiency and supreme confidence in its own tried-and-tested methods. Although the efficacy of American and Japanese business techniques have not always been denied by German management they are not always enthusiastically embraced by German business leaders. In fact, a report conducted by the American consulting firm Booz, Allen Hamilton concluded that

⁸ Hammer once noted that 'we shoot dissenters' when referring to possible employee resistance.

⁹ Despite the reported success of reengineering, and there are many, US companies have also had problems implementing reengineering programmes

“Germans simply do not have a strong concept of management” (quoted in Lawrence, 1980).

Hence, German managers have traditionally been sceptical and extremely discerning in their appraisal of “foreign” management techniques.¹⁰ Perhaps they have even been culpable of reinforcing the “not invented here” syndrome. Hence, German managers have, for the most part, only used imported management techniques where the advantages of these methods can be successfully brought to fruition in their particular business environment (Lawrence 1980).

A sceptical audience turned receptive listeners

Why then has the reengineering wave swept across Germany with virtually the same fervour and vivacity which took American boardrooms by storm?¹¹ Essentially it is the convergence of a number of key movements which converted the traditionally sceptical German management audience into more receptive listeners for reengineering’s rhetoric.¹²

An outdated business and economic system?

In recent years the German economic and business system has increasingly become the target of a barrage of criticism and disapproval. Against a backdrop of competitiveness and structural problems, soaring production costs and economic stagnation the applicability of Germany’s social-market economics system (*Soziale Marktwirtschaft*) to the present global business environment has been the subject of intense debate. Although this debate is essentially taking place at the policy-making and macro-level, it does underline that perhaps all is not well with *Modell*

¹⁰ For example, a study in the electronics industry in Germany found that, compared to their international competitors, systematic quality measurements such as Taguchi, Quality Function Deployment or Value Analysis are carried out less than half as often (Cimento *et al.*, 1993).

¹¹ We estimate that the worldwide BPR consulting market will grow from \$5.0bn in 1996 to \$7.3bn in 1998.

¹² There has of course been debate in Germany about the merits or otherwise of reengineering. See, for example, Gatermann, 1994; Kemp, 1994; Kieser, 1995; Nippa and Picot, 1994; and Osterloh and Frost, 1994.

Deutschland and its *Soziale Marktwirtschaft*.¹³ One consequence of the *Soziale Marktwirtschaft* has been the profound impact which the resultant high labour costs are having on the competitiveness of German companies. Many have chosen to leave Germany, moving production to the lower labour cost locations of Asia. Interestingly, Mercedes-Benz no longer advertises its products as 'Made in Germany' but as 'Made by Mercedes-Benz'. This situation has naturally created an increased openness to foreign management techniques and concepts. Business reengineering, although American, has offered renewed hope and encouragement to despairing managers in Germany, particularly with the rhetoric laden promise of substantial performance improvement.

The effects of reunification

Another driver of change has been the consequence of reunification, which have been widespread, affecting both the former west and east parts of the country. It too has served to push up general production costs as the cost of reunification has had to be borne, with the old west *Länder* effectively subsidising the former east. Massive subsidies paid by west Germans have meant higher taxes, higher interest rates, a bigger budget deficit and, therefore, a less competitive economy than they would otherwise have had. Currency union and the rapid rise in wages towards west German levels, at a much faster rate than productivity, made east German industry instantly uncompetitive. It is this very situation which has often led individual employers and their workers to circumvent national pay agreements and strike deals at a local level to preserve jobs.

A mindset change

The original success of the economic miracle or *Wirtschaftswunder* in the decades after the Second World War has created a mindset which is slowly being dismantled as reality strikes home. Much of the wealth in Germany today is derived from industries where it is no longer competitive. For example, a best practice survey in electronics companies carried out by management consultants McKinsey found that not only was overall productivity (the value added per employee) of some German

¹³ *The Economist* noted recently that Germany's social-market system 'is in worse shape than it looks' (May 4th, 1996, p. 19).

companies in the survey as little as half that of the most successful businesses, but the gap in their relative 'innovation productivity' was even wider (Cimento *et al.*, 1993). In the emerging 'knowledge sector' it is particularly weak. The banking industry, a corner stone of the economy, is in turmoil with heavyweights from the City of London and Wall Street muscling in on privatisations and mergers. Leading financial institutions such as Deutsche Bank can no longer rely on collecting fat fees from thousands of large and mid-sized companies by acting as their personal lender or *Hausbank*.

The globalisation of management

The increasingly international nature of the management "profession" has led to a more open-minded approach to techniques and methods used in other countries. The fact that many managers in large corporations tend to spend significant portions of their career on international assignments has fostered a cross-cultural exchange of ideas and business philosophies.¹⁴ Essentially, this international skills-transfer and cross-fertilisation of opinions certainly facilitates the communication and import of other management philosophies. With experience in the US and in fast-growing Asian markets, returning managers have come to view their home country's business practices as backward (Templeman *et al.*, 1996a).

America: the role-model for European managers?

American companies have been arriving in Europe since the late 1980s ostensibly to get inside "Fortress Europe". With them they have also brought new management practices which, coupled with the changing business climate in Europe, has prompted European companies and governments to take a hard look at their underlying competitiveness (Javetski *et al.*, 1996). The dominant position of American-owned practices in Germany's DM 10 Billion management consultancy market has ensured that business reengineering concepts have been swiftly and effectively marketed and distributed in German management circles. Perhaps the pre-eminence of American think-tanks (nine of the top ten consultancy firms in Germany

¹⁴ For example, Gerhard Schulmeyer, the CEO of Siemens Nixdorf is MIT-trained with over 20 years of managerial experience in the US and according to *Fortune* magazine is introducing 'American-style management methods ... to reinvent Siemens Nixdorf as an American Style company' (Evans, 1996).

are American in origin¹⁵ has prevented the emergence of reengineering concepts specifically tailored to the German business culture. This new-found popularity of American techniques is also reflected in the German business press where Americanisms such as 'lean management', 'target costing', and 'shareholder value' abound.

The Essence of Business Reengineering

It must be pointed out that our understanding of reengineering and what it entails has developed as preliminary speculations are giving way to emerging research results, reality is dismissing myths while practice and greater understanding are advancing the boundaries.¹⁶ Notwithstanding the original conceptualisation of business reengineering, a rigorous analytical assessment of the concept reveals that today the discipline essentially consists of eight key principles or core elements:

- A radical approach to performance improvement.
- A clear top-down approach to the management and communication of change.
- A process-oriented view of the organisational.
- A strong emphasis upon customer-orientation.
- A progressive approach to the optimum management of human resources.
- The need for new reward systems.
- A paradigm of the manager as an inspirational leader.
- An appreciation of the key role fulfilled by IT in facilitating organisational change.

Below, the applicability and relevance of these core tenets are analysed in the specific context of the German organisational and business cultural environment.

Radical change management in Germany?

¹⁵ Figures taken from *Wirtschaftswoche* 9th November, 1995.

¹⁶ For a perspective on the 'broadening visions' of reengineering see Peppard (1996).

Much of the charm and attraction of business reengineering has been based upon the rhetoric-laden evangelical promise of radical and revolutionary improvements in organisational performance.¹⁷ Certainly with any promise of radical returns the associated risk is likely to be correspondingly large and in retrospect much of this promise was found to be vastly overstated. Hence business reengineering and the management of change is, in the transitional period, associated with much uncertainty and a significant degree of risk. Many initiatives have actually floundered or failed to deliver the expected benefits. Certainly, the German management system does not lend itself to rapid and revolutionary organisational transformation, and a more incremental and evolutionary approach to change is required. This resistance to rapid change is due to both institutional and psychological constraints and barriers.

In a range of cross-cultural studies German managers are portrayed as far more risk-averse than their American counterparts (Hofstede 1984, 122). In many ways the strength of the co-determination system, the emphasis upon formal rules and procedures in Hofstede's so called "well-oiled machine" - the archetypal German organisation - and the lengthy training periods are all manifestations of this risk avoidance. This deep-seated desire for stability and security undoubtedly does not facilitate speedy organisational change and may in fact render gradual and incremental organisational change the only option. In fact, one critic (Tixier 1994, 13) states that it is an "arduous task" to prepare mindsets for change in Germany. The problems and difficulties encountered in any change management environment, which can be an extremely threatening and disconcerting experience for employees, is magnified in Germany.

Significantly, one American manager who successfully reengineered his business identifies the conservatism and resistance to change as the most significant barrier to successful business reengineering in Germany (quoted in Gatermann, 1994). According to a number of German management consultants the majority of

¹⁷ Eccles and Nohria (1992) argue that rhetoric is not incidental to the production of phenomena to which the concept of reality is readily ascribed. The inextricable links between language and action are very often guided by rhetoric.

unsuccessful projects can be accounted for by resistance on the part of the employees and in particular middle management (Stroetmann *et al*, 1994, 79-80).

At first sight, it may well appear that the democratic and participatory industrial democracy model of co-determination is ill-suited to business reengineering. Certainly in larger organisations it can lead to a protracted and difficult decision-making and a lengthy planning process which may initially slow down the change initiative (Warner and Campbell 1993, 94). On the other hand, it does lead to a much more effective and reliable implementation phase since any decision made at board level generally receives a broad base of company-wide support (Lane 1989, 237; Wächter 1992, 33). A number of studies (Murphy 1994, 203; Stroetmann 1994; Picot and Franck 1994, 236) suggest that reengineering programmes in German companies take a little longer than the norm to initiate due to the necessary consensus building but generally run very smoothly thereafter. Hammer himself also praises the not insignificant advantages offered by the system of co-determination (quoted in Behrens and Groothuis 1994, 73).

In order to reengineer German enterprises successfully, managers and employees must learn how to deal with change as well as how to promote and encourage change and transformation. They must also exploit the established system of co-determination as an effective vehicle for a conflict-free and considered transformation process.

Top-down or Bottom-Up?

Closely associated with the revolutionary rhetoric of the American reengineering movement is the view that an exclusive top-down orientation is crucial to the achievement of radical organisational change. However in the relatively collective-oriented Germany business culture any change and transformation project requires a broad base of company-wide support. In the light of the powerful German unions and the well-developed system of co-determination (*Mitbestimmung*)

management and works councils¹⁸ (*Betriebsräte*) must work together in close co-operation. For this reason the dictator-like, all-powerful leader, as envisaged by Hammer and Champy would be best replaced by a clever and canny negotiator who is also willing to encourage bottom-up communication flows.

In any case, the traditional and forceful top-down approach generally fails to gain employee acceptance and encourage sufficient identification with the project's goals among employees. These shortcomings of the classical top-down approach are recognised by many leading German executives. Siemens chairman von Pierer admits "I do not thoroughly agree with Mr Hammer's radical theory - our employees are not neutrons but human beings and dialogue is of crucial importance" (quoted in Behrens and Groothuis 1994, 69; authors translation). Von Pierer's Siemens colleague Dr. Franz agrees "what we now need is a bottom up movement and a change in behaviours and attitudes which can only be generated from the base of the organisation." (quoted in *Schmalenbach Telegramm*; authors translation).

Senior management in Germany has traditionally worked with, rather than against, trade unions which have a powerful and legally enshrined role in policy-making in the larger companies. Numerous studies also support the view that Germany's long-standing co-determination system can be used as a means to build consensus-oriented momentum rather than perceived as an impediment to change and transformation. This system encourages the use of a participative or bottom-up approach from which mutual trust and commitment are generated. It is only within the framework of this communicative, consensual climate that an effective, reliable and long-lasting transformation can occur. The findings of the COBRA study also indicate that Germany's system of co-determination represents the EU's most participative framework and the labour management relations most suited to reengineering and the effective management of change.

Although recognising the benefits which can be gained from operating with the system of *Mitbestimmung* is of prime importance, significant developments are

¹⁸ An EU directive has mandated that all large corporations must have works councils in place by 1999.

currently taking place with regard to labour management relations in Germany. An emerging trend towards flexibility in the labour market, tax breaks and deregulation has been accompanied by a decline in union membership and their perceived power. Moreover, Klaus Zwickel, head of Germany's most powerful union IG Metall, has recently acknowledged that future contracts will have to offer more flexibility at company level).¹⁹ If this realignment in the power of organised labour continues without the wholesale dismantling of the co-determination system and any ensuing chaos, the bargaining position of business leaders seeking organisational change can only be strengthened.

The German experience therefore suggests that a pure top-down approach is unrealistic, too scientific, and short-sighted and is unlikely to result in gaining widespread acceptance. Building consensus at the outset, while often a slow and laborious process, is more likely to result in a successful project in the long-term. In this situation the role of the traditional charismatic leader driving the project in a dictator like fashion is replaced by someone who is a negotiator and willing to both encourage and listen to bottom up communication flows.

Legacy of Process Orientation

Of prime importance to the reengineering discipline is the strict focus upon the organisation's key value-creating processes which generally transcend organisational as well as traditional functional boundaries. This process orientation, so central to business reengineering, is certainly not a concept totally new or alien to German management. A number of German management and organisation scholars including Nordsieck (1968), Küpper (1982), Gaitandes (1983) and Picot (1989) have, throughout the years, espoused the benefits in terms of organisational efficiency and effectiveness which can be achieved by the adoption of a process-oriented view of the organisational architecture. In fact, a casual observer could easily conclude that the process orientation of business reengineering originates from the German concept of "*Ablauforganisation*".

¹⁹ See *The Economist* 27th January, 1996.

On a less theoretical level, these principles seem to have entered mainstream management practice as indicated by a number of empirical studies. For example, German firms are traditionally less functional and hence more task- (i.e. process) oriented than comparable British enterprises (Campbell, 1989, 13). Furthermore, German companies, by international standards are low on horizontal and vertical differentiation and have a relatively flat hierarchical structure (Lawrence 1980, 54). Also Peters' (1992) observations on German mid-sized companies allude to their obsession with achieving an excellent operating harmony between the organisational structure and key processes and thereby ignoring the Fordist-type ruthless division of labour. Significantly, some observers cite gradual improvement of production processes as one of the key success factors of German industry (Wächter, 1992, 335; Simon, 1992, 116). Furthermore, the proliferation of TQM, continuous improvement and Kaizen projects in the past ten years must certainly have heightened the awareness of process orientation in Germany even further. However, a recent McKinsey study of German electronic firms indicates that many of these enterprises are setting less challenging targets than their main competitors (Kluge *et al.*, 1996).

In short, the existence of a process orientation can only serve to enhance the success of BPR projects. Perhaps the ambitious goal setting of BPR can supplement the continuous improvement style of the process orientation currently employed in German industry.

Predominance of product focus/ lack of customer orientation

A prime consequence of the process orientation is a focus on delivering the maximum value to the target customer. German products are however world-renowned for their high quality design and technological superiority rather than subservience to customer needs. This is certainly closely related to the unusually high percentage of individuals from engineering backgrounds occupying senior management positions and the unusually high percentage of turnover spent on research and development. This obsession with engineering excellence does however sometimes lead to German firms losing sight of market requirements and future

market trends. Hence German companies have often been criticised of “overengineering” their products (Hickson and Pugh 1995, 99; Kluge *et al*, 1996, 147; Simon 1992, 123; Randlesome 1990, 2; 1994, 187; Warner and Campbell, 1993, 93; Stroetmann *et al*, 1994, 79). The term “overengineering” essentially refers to the design of technically superior yet over-elaborate and over-sophisticated products at an excessive price premium.²⁰ This rather naive practice can of course be extremely self-damaging in areas where demand is extremely price sensitive. In short, many German companies seem to believe that if their product is technically proficient it will virtually sell itself.²¹

Moreover, many German companies, although highly proficient in the areas of sales, promotion and the provision of after-sales-service, often lack developed marketing skills (quoted in Lawrence 1980, 94). Particularly in the small and mid-sized enterprises or *Mittelstand*, formal market research into customer requirements is often neglected in favour of advertising and distribution. In fact, many of these companies do not employ full-time marketing specialists or have their own marketing departments (Hickson and Pugh 1995, 99). Many even rely upon outdated and highly illogical pricing strategies such as the Cost-plus pricing method (Simon 1992, 122). Furthermore, according to a study by a German consultancy, marketing specialists often fail to communicate effectively customer requirements to their colleagues in other departments such as R&D and production.²² In fact, only one in seven German firms encourages significant customer contributions to product development. Moreover, according to two independent studies of German reengineering projects, a large number of programmes failed due to the lack of focus on current customer needs (Picot and Böhme 1994, 233; *Wirtschaftswoche* 22.5.1995). Significantly, in only five of the twenty seven surveyed projects were customers directly involved in the programme-planning.

²⁰ Womack and Jones (1996) note that during their research, doubts which they often registered regarding proposed products were often countered with claims that “the customer will want it once we explain it”, while recent product failures were often explained away as instances where “the customers weren’t sophisticated enough to grasp the merits of the product” (p. 17).

²¹ Mr. Michael Fuchs, the president of Germany’s wholesale and foreign trade association, recently said that German companies are losing lucrative niche markets because the Internet has made it easier to compare prices and so was increasing competition (*Financial Times*, March 27th, 1996).

²² See *Wirtschaftswoche* 4th May 1995.

Business reengineering, with its strong customer orientation is, for this reason, perhaps badly needed in Germany order to eliminate these deficiencies. By the same token, the danger which a lack of customer orientation can lead to should equally be recognised by any would-be reengineers.

The Management of Human Resources

In a reengineered environment the optimum use of the company's human resources is perceived as crucial to the organisation's success. The reengineering literature stresses the need for well-educated, highly-qualified, flexible, self-motivating employees who cherish responsibility and are willing to continuously learn and supplement their skill-base. Concepts such as empowerment, teamwork and continuous learning are all at the core of the reengineering philosophy. Although it is not clear whether any pool of labour meets this utopian profile, the German work force seems well ahead of the field. The German work-force is famed for its *Fleiss* (assiduity) and efficiency and was certainly a building block of Germany's *Wirtschaftswunder*, whilst the dual system (*Das duale Ausbildungssystem*) of education has been a proverbial conveyor belt of capable workers.²³ For example, 120,000 workers gain highly respected engineering qualifications²⁴ annually (Warner and Campbell 1993, 98).

Although the German education system produces thousands of very well-qualified employees annually, it is not without fault. It could well be the case that the system is inflexible and rigid and that too much emphasis is placed upon the acquisition of formal and specialist qualifications. This system excels at producing technical and functional specialists (Randlesome 1994, 156) yet it is doubtful whether these specialists can always effectively fulfil the role of the adaptable and flexible generalist required under the business reengineering paradigm. The greatest

²³ There is some evidence that Germany's comprehensive vocational training program is unraveling (See Lowry Miller and Anhalt, 1996).

²⁴ Engineering is a protected qualification in Germany; those propounding to hold the title must have attended university or polytechnic.

weakness of the university education system probably relates to the average duration of study (five to seven years) and subsequent lack of “fast-track” university graduates.

Significantly, German workers generally already enjoy a relatively high degree of autonomy and empowerment (Lane 1989, 42). Correspondingly, the power distance between employees and management is, by international standards, quite low (Hofstede 1984, 77). Likewise, it is very much the norm to incorporate specialist and technical knowledge in line staff and workers rather than to depend upon additional staff specialists (Lawrence 1980, 50). It is in fact the creativity and autonomy of German workers which is considered one of the key success factors of Germany’s car, engineering and chemical sectors (Kern and Schumann 1987, 160). This trend is perhaps most perceptible among the *Mittelstand* (medium-sized and small companies) who value empowered and highly motivated employees as crucial to their long-term success (Simon 1992, 122).

As outlined above teamwork and co-operation within and between groups is central to the new organisational paradigm. This is, to a certain extent, surprising given that the USA is considered the most individualistic society in the world. Germany is regarded by Western standards, as a relatively collective society and certainly far less individualistic than the US (Hofstede 1991, 232).

A Cranfield School of Management study on European management style terms the German style “towards a common goal” (Myers *et al*, 1995). This is very much a reflection of German society’s preference for the pursuit of common goals by collective effort. Within German organisations effective team performance is achieved by close co-operation between members of different hierarchical levels (Wächter, 1992, 332; Smyser 1993, 71). Similarly, co-operative relationships between white and blue collar workers underline this emphasis on teamwork and collectiveness. The only weakness in this regard is the lack of well-integrated multi-functional project teams, partly due to the insufficient job rotation schemes in many German organisations (Kluge *et al.*, 1996, 146). The transition from a largely function-oriented structure to teamwork has however not been achieved without growing pains in many organisations. Many organisations including Opel and

Hewlett Packard have experienced some difficulty encouraging the concept of teamwork in their German operations (*Wirtschaftswoche*, 27.10.1994).

Despite certain shortcomings, one must conclude that all considered the talented pool of labour available to German companies is an invaluable asset. In fact, Ostermann (1991, 241), documenting the results of the MIT “*Management in the 1990s Programme*”, cites the German work-force as being an ideal base for reengineering projects.

Management Style

The profile of the ideal manager, as outlined in the business reengineering literature is that of a flexible generalist who motivates and acts as a coach, mentor, and most importantly as a powerful leader as he/she crosses traditional functional boundaries. It is however doubtful whether the typical German manager can quickly adapt to the requirements of a leader in a reengineered firm. In many ways, this notion of the manager as an inspirational leader is characteristic of the American ideal of the manager as an entrepreneur and cultural hero. In any case the concept of management as both a profession and an academic discipline is inherently American, whereas in German the term *der Manager* does not quite command the same level of respect or status. In the German cultural context, it is in fact the engineer or technical specialist who is more likely to fulfil this leadership role (Hofstede, 1993, 79). As a matter of fact the concept of a strong, forceful leader or *Führer* is not all that popular given certain historical resonances.

One should not lose sight of the fact that perhaps the highly responsible German workers do not desperately need an American-style leader to motivate them (Hofstede, 1996, 80). In Germany, “the system” is seen as being more important than the leader with the leader assuming the role as administering that system. Consequently, many German companies still have rigid management processes which can make them inflexible (Kluge *et al.*, 1996) particularly in today’s business environment

In Germany much emphasis is placed upon technical expertise, qualifications and capability and managers tend very much to be experts in their own specialist fields (Salz-Trautmann, 1994, 33; Lawrence 1980; Warner and Campbell 1993, 97). This trend is particularly noticeable among the larger organisations and *Konzerne*. In fact, the pre-eminent position of specialists such as engineers and lawyers with doctoral degrees in the top echelons of German management reflects this orientation (Warner and Campbell, 1993, 97; Ogger 1992, 134). Although the academic credentials of these individuals are not in doubt, practical business acumen and general management skills do not necessarily accompany their technical expertise. Consequently, one of German management's most vocal critics terms the captains of German industry "ivory tower academics" (Ogger 1992, 134).

Of particular interest is Waadt's study of German management, which specifically assesses the skills of German managers in light of the needs and requirements of the business reengineering philosophy. This study claims that German managers are reluctant to delegate responsibility, motivate and maximise the potential of their work-force. In agreement with the findings of many other studies, German managers rely very much upon an authority-based and, in particular paternalistic leadership style, with clear lines of responsibility and avoid conflict, risk and criticism if at all possible (Berghahn, 1985; Hofstede, 1996; Myers *et al*, 1995, 21; Vogl, 1973, 97). Once more it becomes doubtful whether German managers can deal with the risk and ambiguity inherent to the "Management by Objectives" style orientation associated with business reengineering. In general, German managers are very much activists or operators with large spans of control yet weak on task delegation which is also central to the reengineering paradigm. Waadt concludes that the deficiencies and weaknesses of German management could well endanger the potential success of reengineering projects.

However, much of the apparent weaknesses in the German management style can perhaps be accounted for by the lack of interest in formal American-style management education. This is evident in the apparent absence of American-style business schools such as INSEAD or the London Business School and the relatively low rating of the MBA qualification (Randlesome, 1994, 153; Vogl, 1973, 63-64).

Moreover, the teaching style of German universities is much more theoretical-oriented than in the Anglo-Saxon world. This applies in particular to the discipline of *Betriebswirtschaftslehre* or business administration where little emphasis is placed upon the acquisition of general management skills and the development of interpersonal skills.

Fortunately, German managers are becoming increasingly aware that they should keep abreast with the latest in management development as many future managers are beginning to address this problem as they endeavour to improve and update their management style and try to acquire a broader repertoire of management and interpersonal skills (Salz-Trautmann, 1994, 33; Lane 1989, 46).²⁵ In fact, in direct reference to the challenges posed by business reengineering, the chairman of Siemens AG supervisory board Hermann Franz admitted “what we currently lack is the ability to guide the change process” (Authors translation; quoted in *Schmalenbach Telegramm*).

In this context the practical advantages of the MBA over the Doctor title are however slowly being recognised as an increasing number of ambitious German managers are currently studying for the MBA qualification abroad (Randlesome 1994, 155). Also, a small number of German academic institutions such as WHU Koblenz and the Europa Business College in Munich have recently begun to promote their own international MBA-programmes as the view of management as a distinct “profession” spreads to Germany. Apparently, the international outlook, decisiveness and task-orientation developed during an MBA programme is much more relevant to management and leadership in a reengineered organisation. One should not however lose sight of the fact that management is as much a practical craft as a science or profession and that formal qualifications such as an MBA is by no means a guarantee of effective management.²⁶

²⁵ In regard to *future* managers, a *young* manager is regarded as a tautology in Germany. A *man*-ager must have the age of a “man” and not a “boy”, not to speak of a “girl”.

²⁶ In a recent article, Henry Mintzberg quoted a recent US study which noted that those individuals referred to by their peers as being ‘good’ managers either had no qualifications at all or had Ph.Ds (Mintzberg 1996).

Two interesting examples of the new type of management style can however already be found in traditional German industry. The century-old role of the German *Meister* or factory supervisor could well serve as a role model for line managers in a reengineered environment. In an extremely flexible and multi-functional role, the *Meister* solves technical problems on the factory floor as well as dealing with a number of managerial, organisational and personnel-related responsibilities (Lane 1989, 46). Likewise many of the owner managers in the *Mittelstand* also embody exemplary management and leadership styles. These owner managers are technically highly proficient yet also spend much of their time motivating and empowering workers. Acting as true leaders they are able to obtain the maximum output from employees by imbuing a strong sense of loyalty and granting their workers much autonomy.

Reward and Promotion Systems: Inappropriate Traditions?

As a result of the renewed orientation upon value-creating processes, teamwork and customer satisfaction, innovative incentive systems become imperative. In a reengineered firm employees are to be rewarded according to their net contribution to the value creating process and not on the basis of working hours, seniority or other traditional measures. In theory, this may well result in a reduction in the earnings differential between white collar and blue collar workers. Significantly, this distinction is less noticeable in Germany than in other industrialised nations (Hickson and Pugh, 1995, 102).

However, salaries and wages are traditionally only loosely related to performance in German companies. Astonishingly, in the past it has been very difficult to fire a person with over ten years' service. In any cultural environment, it may prove difficult to introduce such a remuneration model in practice. These difficulties are accentuated in the German context given the traditional resistance to change and risk-taking. Furthermore, in order to introduce such new measures the co-operation and approval of the unions and works council (*Betriebsrat*) is invariably

required in Germany. Unfortunately, trade unions though not thoroughly uncooperative, have generally been extremely sceptical of such new reward systems. The centrally negotiated German wage agreements have traditionally been extremely inflexible (Lehner, 1992, 91; Wobbe 1992, 42) and this might make a movement to these new systems more difficult.

Similarly, Germany's traditional vertical career ladders or the so-called *Kaminkarriere*, common in hierarchical organisations, might prove difficult to reconcile with the less predictable personnel policy and promotion models with horizontal movement and job rotation as proposed by most reengineering gurus. Career planning is certainly more difficult in a reengineered environment. These difficulties are likely to be amplified by Germany's strong aversion to risk and ambiguity. Consequently, reengineered firms, pursuing this personnel policy might even have difficulties attracting the best available talent (Drumm 1995b, 12).

An increasing number of German firms have however realised that new remuneration and reward systems are required to replace the outdated and inflexible models which have dominated German industry for decades. For example, piece rates, so common in the production halls of many companies are being replaced by new reward systems which place far more emphasis upon teamwork and co-operation. A new remuneration model at Audi AG, for example, tries to reward flexible team players and encourage the acquisition of multifaceted skills by rewarding team members according to the number of different production tasks which they can master. Similarly, Opel and Porsche encourage teams which make valuable suggestions for the improvement of the production process. Significantly, many of Simon's "Hidden Champions" of the German *Mittelstand* have, for many years, had incentives in place whereby a significant portion of the financial rewards is performance-related (Simon 1992).

According to a recent study managers are also experiencing a reengineering of their pay packets. Many executives are now being rewarded with a salary premium of up to 25% for their contribution to decisive strategic projects. Similarly, board members of many of Germany's largest groups such as Daimler Benz and Deutsche

Bank are being granted stock options in an effort to forge a closer link between pay and performance.

What we are witnessing in Germany is the replacement of traditional practices of reward and promotion with more flexible and dynamic approaches which are more in line with the behavioural changes necessary to implement a reengineering programme successfully.

The implementation of business reengineering in Germany

According to a study conducted by the German consultancy Droege & Company at the beginning of 1993 75% of German enterprises wish to adopt a strict process-oriented organisational structure. However, at that point only 4% of the surveyed companies had actually initiated business reengineering-programmes (anonymous, 1993). It was however not until the following year that business reengineering concepts gradually begin to filter through to the German business press and be actively promoted by the leading American-pioneered consultancies.

A 1994 study initiated by the Department of Information Technology at the University of Berne in Switzerland established that business reengineering concepts were gradually gaining in popularity and prominence in Germany, Austria and Switzerland. Despite the fact that 18% of the surveyed IT specialists did not possess any knowledge of the concept, 39% claimed to be actively involved in the planning or implementation of business reengineering projects. Conducted a year later than the Droege & Company study these findings certainly suggest that the business reengineering bandwagon was gathering momentum at this point. Interestingly this survey also suggests that business reengineering programmes were most popular in the financial services and electronic engineering sectors.

A few months later, in a third study, the business consultancy BPU and the faculty of organisation studies at the Ludwig-Maximilianer University in Munich ascertained that the profile of Reengineering concepts was extremely high among the

larger enterprises (turnover > DM 3 Billion). The findings indicate that 81% of the senior managers in the surveyed large companies claimed to be implementing reengineering principles in their businesses. Box 1 describes how some German companies have implemented some of the key principles of business reengineering.

Box 1 Case studies of re-engineering in German companies.

This box provides an overview as to how some of the key principles of the reengineering philosophy have been put into practice by certain German companies. Significantly this selection provides valuable insights into both successful as well as failed reengineering projects as well as providing an understanding of the experiences with reengineering from three different business sectors. In contrast to many euphemistically-termed reengineering projects, a rationalisation or downsizing was not the primary aim of these programmes. Naturally, no organisation implemented every single reengineering principle word for word or step for step as outlined in the reengineering cookbooks. Instead these companies used certain useful reengineering principles in order to improve their organisational performance and for the pursuit of certain strategic goals.

Reengineering Production Facilities at Porsche AG

At the beginning of the 1990s faced with rapidly changing customer requirements, increased foreign competition and world-wide recession Porsche found itself in the midst of crisis. After posting record losses in 1993 Porsche was widely touted as an acquisition target for a number of foreign competitors. In view of these difficulties Porsche decided to introduce a number of reengineering principles and concepts to its production facility in order to restore the prestigious car manufacturer to profitability and preserve its autonomy.

Applying reengineering principles

This project in many ways epitomises the need for an effective two-way communication process with both top-down and bottom-up communication flows. Initially the top management committee or *Vorstand* ensured that all senior managers were firmly committed to the project before its inception. Instead of an exclusive top-down aggressive approach, employees at all levels of the organisation were actively encouraged to participate in, and contribute to, the programme.

As a result of these communications ambitious yet attainable and realistic targets were agreed upon. The reengineering programme focused upon a small number of core production processes considered crucial to Porsche's core competencies. In accordance with the new organisational architecture Porsche established a number of PVP-Teams or Porsche Improvement (*Verbesserungs*) Process teams on the factory floor as well as task forces and project teams at management level. A prime example of the success of these multi-functional teams manifested itself in the dramatic reduction of the development cycle of the new 986 model. Multi-disciplinary teams drew upon and integrated the expertise of managers from the areas of production, purchasing, finance and marketing. Furthermore, it was acknowledged that some of the core processes transcend organisational boundaries. Hence, co-operation and communication with suppliers were increased which resulted in significant improvements in the supply process and lower sourcing costs.

As outlined above, Porsche realised that the human element is crucial to the success of any change management project. In order to empower employees for their new more challenging roles more than 17,000 man-hours were invested in employee training and development.

Significantly, Porsche did not rely solely upon business reengineering concepts for their organisational renewal. Instead Porsche successfully integrated many of the best available techniques in management practice for the transformation of their production facilities. In the planning and analysis stage an extensive benchmarking with leading Japanese car manufacturers was undertaken. Similarly, recognising that change and improvement is a continuous and on-going process rather than a once-off event, Kaizen and TQM projects began to reinforce and cement the process improvements achieved by the initial reengineering programme. This integration of different management techniques underlines that business reengineering is by no means a cure-all which can overnight restore an organisation to profitability.

Porsche's reengineering programme seems to have made an all-important contribution to the company's recovery. The company has returned to profit, largely due to savings in production costs and significant reductions in both product development and production times.

Reengineering and restructuring at Daimler Benz HQ

In January of 1993 the Daimler Benz Holding company began an all-embracing large scale reengineering project with the primary aim of achieving a long-lasting cultural transformation. This ambitious project is very significant since it is one of the few well documented reengineering projects which failed to live up to its expectations.

At that point the corporate headquarters was no longer effectively fulfilling its strategic role within the Daimler Benz group of providing the various business units with an effective service and adding value to the Daimler Benz

group. The organisation was firmly built upon functional lines with seven different layers of management and bureaucracy. It was estimated that this structure led to the corporate decision making process lasting an average of approximately nine months. This cumbersome organisational structure clearly did not suit the challenge of the 1990s.

Daimler attempted to integrate both top-down and bottom-up approaches to communication and change. Numerous forums and round table discussions were introduced in order to encourage communication between all levels of the organisation. Performance-oriented salaries were introduced and status symbols and perks abolished in order to help develop the new corporate culture. Furthermore, as part of the new entrepreneurial culture employees experienced more empowerment and middle managers were given a much broader span of control. Similarly cross-functional task forces and consulting groups were established to reinforce the cultural change.

However, in reality it emerged that the communication process was less democratic than intended which in turn resulted in the lack of broad-based company-wide support. For example, in many cases managers did not actually condone the abolition of titles, status symbols and perks. This resulted in fear and resistance which rendered the transformation of the old bureaucratic culture an intractable task. Despite the flatter hierarchical structure the deep-seated bureaucratic approach and slowness in decision making could not be significantly improved as the old Daimler culture continued to overshadow the new management structure.

During the period of study this particular reengineering project could not live up to its expected success. After one year only 3% of the programme had been completed. This underlines that business reengineering is certainly not a quick fix to organisational ills and highlights the difficult and often intractable problems which can be associated with the rapid reengineering of a deep-rooted corporate culture. Resistance and fear on the part of the risk-averse management and employees as well as the lack of a truly democratic communication process proved the greatest stumbling blocks in this project. One could equally criticise top management for its failure to provide credible leadership in the period of transformation and transition.

Siemens Nixdorf Service

Siemens Nixdorf Service which installs and maintains the computer hardware and software of its customers was still reporting healthy profits at the beginning of the 1990s. However, in view of increased foreign competition management feared the realisation of predicted losses by 1995. The aim of the following reengineering project was to reengineer the customer service process in order to optimise customer responsiveness and cost effectiveness.

Up to 1991 Siemens Nixdorf Customer Service operated with thirty different support centres scattered throughout Germany. Each centre employed

a large number of technicians and specialist service engineers. In the case of a customer problem, a technician would travel to the customer, identify the problem, return to the centre and fetch the necessary equipment and parts before actually resolving the problem. This awkward and inefficient procedure resulted in the resolution of customer requests lasting an average of two days. Only 12% of all service problems could be solved over the telephone. Furthermore, each subsidiary employed a BS 2000 mainframe specialist even though only a handful of BS 2000 enquiries were dealt with each week.

Restructuring of Customer Service process according to reengineering principles

The ten-person redesign team reduced the number of service centres from thirty to five and introduced a regional management structure. These enlarged subsidiaries were thought to represent an optimum combination of centralisation and decentralisation of resources. The service centres are sufficiently large to combine enough expertise to deal with all customer problems. At the same time they were distributed throughout Germany in order to guarantee a speedy and flexible repair service for all customers. The servicing process became significantly faster and more efficient as in approximately 80% of the enquires an expert can diagnose the problem on the telephone and have spare parts delivered immediately.

Core Elements

Crucial to the success of this programme was the replacement of 2 hierarchical levels by a new team-oriented management structure which can react far quicker to customer needs. Furthermore, the IT-system which tracks customer service requests and supports the logistics of the new replacement part delivery system proved itself a key “enabler” of the programme. Moreover, new measurement and incentives were introduced in order to foster a customer-oriented culture which focuses upon the speedy resolution of customer problems. Of prime importance to the programme’s success was the successful synergy of a top down approach with consensus-oriented bottom up communication. Project manager, Gerhard Radkte, showed exemplary leadership qualities and persuasive powers as he relied upon open and honest communication with the whole organisation and the trade union.

As expected the initially sceptical top management board and the powerful IG Metall union mounted significant resistance until the success of a pilot project in Frankfurt convinced them of the project’s merits. After this political resistance had been overcome the project benefited from a relatively broad base of support throughout the organisation.

Customer servicing process times were reduced considerably and significant improvements in costs and profit performance were achieved. Following the successful reengineering of the Customer Service Process other American-style management techniques have been implemented in the Siemens Nixdorf group. However the group as a whole only returned to profit in 1995 following five

consecutive years of loss-making. Clearly reengineering principles are not a quick fix or patent solution for an organisation suffering from competitive disadvantage.

Source: cases compiled from various sources including business magazines, reports in newspapers, and academic journal articles.

Closing remarks

Business-engineering does have a powerful message and it is that by focusing on processes, organisations have the opportunity to significantly improve their performance. Driven by the advent of new information technologies, a myriad of new possibilities for organising work open up; in essence technology enables work to be performed in ways which are not possible manually. Yet, not only must cognisance must be taken of the wider organisational implications of adopting a process perspective but due regard must also be given to the cultural context of business and management.

This paper has examined the transferability of the concept of business reengineering in the context of the German business environment. It has established that by taking sufficient cognisance of specific cultural and organisational circumstances certain reengineering principles can be successfully applied to German enterprises. Others may need to be refined somewhat before they can be incorporated within any change programme. Table 1 maps the key elements of business reengineering against the key traits of the Germanic cultural context. If there is a lesson it is that an appreciation of the cultural subtleties is a basic requirement for the success of any change management initiative. Yet this is a lesson which should have been learned a long time ago and one which is likely to be re-learned in the future.

Reengineering is, however, by no means a panacea for organisational ills and any organisation considering implementing a business reengineering initiative must be fully aware of the likely costs, benefits and risk. In fact many successful German firms, particularly in the *Mittelstand* may have no need for reengineering in the

radical form as advocated by some.²⁷ However, using business re-engineering to cut costs alone may not be enough and in certain industries German companies do need to become more innovative (Kluge *et al.*, 1996).

The increased openness of German firms to new management techniques in recent years can only benefit German management in the long run. By the same token, German management should never relinquish its discerning and considered approach to the applicability of foreign management philosophies. New ideas and concepts can be a catalyst for question fundamental assumptions and beliefs about organisation and management. The practice of management is not static and new ideas offer potential opportunities. These should be tempered by many factors, particularly cultural context. Even at a macro level business and economic practices should be constantly re-evaluated. For example, the *Soziale Marktwirtschaft*, a cornerstone of the German economic miracle, is now coming under increasing pressure and its applicability in its current form in today's global economy is being questioned.

In the broader context, the culture-bound view of management is valid to a certain extent. However given sufficient cultural sensitivity and consideration certain management philosophies can be successfully transferred outside their own cultural birthplace. A recent paper examining BPR in China concluded that while Hammer and Champy (1993) contended that 'tradition counts for nothing' (Martinson, 1996, 49), the Confucian tradition of that country will constrain the implementation of radical reforms. The argument is that reengineering, in its "pure" form, would require an unprecedented overhaul of fundamental Chinese values.

An interesting starting point for future research would be to explore whether a transfer of management techniques in the reverse direction - from Europe to the US

²⁷ In a five-year study of mid-sized firms in Germany, the top performers had growth rates four times higher, productivity 25% greater, and return on sales three times higher than those of their weakest competitors. These leading firms produced a narrow range of products, sold to fewer customers, and had fewer suppliers. They have decentralised organisational structures, simpler and faster processes, and a more concentrated focus on R&D investment, logistics and location structure (Rommel *et al.*, 1995).

might work. Certainly many firms on the other side of the Atlantic could do far worse than analyse the strengths of the German *Mittelstand*.²⁸

Elements of BPR	Implications of conditions in Germanic context
Form of radical change/improvement	• Radical nature must be played down • Resistance to radical change / conservative values • Deep seated desire for stability and security • But Germans are becoming open-minded to new management methods • Likely protracted implementation due to co-determination
Customer focused	• General lack of customer focus • Phenomenon of 'overengineering' of products • Product rather than market orientation must be addressed
Process oriented organisation	• Legacy of process structure in German management theory • German firms in general low on horizontal and vertical differentiation and have a relatively flat hierarchical structure
Managing human resources	• Collective society with low power-distance should encourage teamwork and empowerment • Well educated work-force cherishes empowerment • Delegation of authority abounds with low power-distance
Top-down or bottom-up?	• Bottom-up approach necessary due to co-determination and strength of trade unions • Co-determination can act as a powerful vehicle for organisational change
Management profile: team leader, generalist, coach, internal consultant	• Deficiencies in German management: poor motivators, leaders and mentors • Perhaps too specialised and weak on soft skills • Deficiencies are slowly being addressed
Employee profile: flexible, cherish responsibility, self-motivating, well educated	• Prepared to undertake responsibility • Well educated and highly qualified • But is dual system too inflexible?
Reward systems (remuneration not by time but by added value) Promotion based on performance	• Problems in the form of traditional career planning and its vertical movement • Inflexible wage structure • However, performance related pay becoming popular

Table 1 Summary of key tenets of reengineering mapped against German cultural context.

²⁸ Italy also has a class of *media industria*, a network of medium-sized exporters that have been growing fast. Key attributes of these companies are specialisation and flexibility and a network of small suppliers.

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