

1-1-2003

The Politics of Human Resource Management in Implementing Process Innovation

Michael Zanko

University of Wollongong, mzanko@uow.edu.au

Richard Badham

University of Wollongong

Maren Schubert

Heidelberger Druckmaschinen AG, Germany

Follow this and additional works at: <https://ro.uow.edu.au/commpapers>



Part of the [Business Commons](#), and the [Social and Behavioral Sciences Commons](#)

Recommended Citation

Zanko, Michael; Badham, Richard; and Schubert, Maren: The Politics of Human Resource Management in Implementing Process Innovation 2003.
<https://ro.uow.edu.au/commpapers/875>

The Politics of Human Resource Management in Implementing Process Innovation

Abstract

This paper analyses a longitudinal case study of organizational and human resource management (HRM) dimensions in the implementation of an approach to product development (concurrent engineering (CE)) in a multinational firm engaged in defence electronics. Most aspects of managing product development in CE are linked to people management. Yet in this case, other than project team structure, prescriptive HRM dimensions of CE received little attention in the implementation process. This failure to address the 'formal' prescribed HRM issues is explained by a multilayer analysis of the play of power and political lobbying among 'stakeholders' over time: the HRM function, key groups and individual managers. The implications of the failure to understand HRM issues in such new organizational techniques are addressed.

Keywords

process, innovation, politics, resource, human, implementing, management

Disciplines

Business | Social and Behavioral Sciences

Publication Details

Zanko, M., Badham, R. & Schubert, M. (2003). The Politics of Human Resource Management in Implementing Process Innovation. In A. Brown (Eds.), Proceedings of the Australian and New Zealand Academy of Management Conference (pp. 2 December-5 December). Fremantle, Australia: Australian and New Zealand Academy of Management.

The Politics of Human Resource Management in Implementing Process Innovation

Dr Michael Zanko

*School of Management, Marketing and Employment Relations
University of Wollongong
Northfields Avenue
Australia
mzanko@uow.edu.au*

Professor Richard Badham

*School of Management, Marketing and Employment Relations
University of Wollongong
Northfields Avenue
Australia
rbadham@uow.edu.au*

Dr Maren Schubert

*Heidelberger Druckmaschinen AG
Kurfursten-Anlage 52-60
69115 Heidelberg
Germany*

Preferred Streams: K,H,P

The Politics of Human Resource Management in Implementing Process Innovation

ABSTRACT

This paper analyses a longitudinal case study of organizational and human resource management (HRM) dimensions in the implementation of an approach to product development (concurrent engineering (CE)) in a multinational firm engaged in defence electronics. Most aspects of managing product development in CE are linked to people management. Yet in this case, other than project team structure, prescriptive HRM dimensions of CE received little attention in the implementation process. This failure to address the 'formal' prescribed HRM issues is explained by a multilayer analysis of the play of power and political lobbying among 'stakeholders' over time: the HRM function, key groups and individual managers. The implications of the failure to understand HRM issues in such new organizational techniques are addressed.

Keywords: *Concurrent engineering, HRM, organizational change, politics*

INTRODUCTION

As markets become increasingly globalized, manufacturing companies have to compete not only in terms of quality and cost, but also in terms of time-to-market and innovativeness of their products. Many different product innovation approaches, practices and tools have been adopted to address this problem (Rosenau, Griffin, Castellion and Anschuetz, 1996). Concurrent Engineering (CE) is one such recent approach that seeks to achieve a balance between organizational, technological and human factors in new product development. CE aims to overcome disintegration in the product development process by realizing cross-functional integration (i.e. high level co-ordination, co-operation, communication), integration of design (i.e. product life cycle issues considered up-front), and a high level concurrence between project tasks (overlaps, parallel activities) (Haddad, 1996). However, the problematic processual and complex nature of CE implementation remains poorly understood, due to CE's ambiguous and vague conceptualization and interpretive flexibility. While the emphasis in CE research has been on technology, it has increasingly been recognized that the organizational dimension is decisive for the successful implementation. Yet, no longitudinal studies have addressed the implementation of CE from a non-technical viewpoint or analyzed the role of human resource management in this process. The CE literature - and indeed the product innovation literature generally - remains shallow with regard to the role of HRM. Where there have been explanations of the role of HRM in CE and product innovation, these have been essentially universalistic and prescriptive (Atuahene-Gima, 1996).

This paper presents the findings from an 18-month longitudinal case study of a project that sought to introduce CE into an Australian manufacturer of defence electronics. Particular attention is paid to the role of human resource management (HRM) in CE implementation, which, it was found, was rather small. One compelling explanation was found in the play of organizational power and politics around the project. The implications of this failure for understanding HRM issues involved in process innovation techniques such as CE are discussed.

CONCURRENT ENGINEERING

CE looks at product development as a "unified whole", instead as of a set of independently conducted but interdependent activities. The main focus in the CE literature is on the "design and development" component of the new product development process rather than on product strategy or new product marketing. CE focuses on people, processes and tools within the development process. Different emphases arise in the CE literature. That with an underlying engineering perspective emphasizes tools (e.g. Ranky, 1994). Processes are the focal point of the CE literature with a management perspective (e.g. Fujimoto, 1997). The CE literature with an organizational perspective focuses on all three but with people as the primary element (Haddad, 1997). While CE does not have a unanimously agreed upon and coherent definition, the establishment of high levels of cross-functional integration, design integration and concurrence are seen as the core elements by all of its proponents. Different contexts may, however, lead to modifications in the means for realizing cross-functional integration. While different cross-functional arrangements are possible, the cross-functional team is widely seen as a critical success factor for CE. Such teams can, however, vary widely along structural and processual dimensions. There have been few detailed studies reflecting the complex and problematic nature of the process.

HRM and CE

Although the role of HRM as a specialist function has not been addressed in the CE literature (Zanko et al., 1998), a number of HR issues have attracted attention that are directly concerned with cross-functional integration, such as team building, leadership, processes and performance. Most aspects of managing a CE-based new product development process are linked to people management. These range from the selection of appropriate cross-functional integration mechanisms to the selection of

supporting management and organizational arrangements. Holahan and Markham (1996) distinguish between factors relating to the organizational support for cross-functional teams and factors relating to the management of the team. The first category comprises appropriate HR policies and practices, including performance appraisal, career management, pay and promotion, as well as the organizational culture. The second includes aspects of leadership, team size, team sponsorship, team member and leader selection, team training, and team empowerment. It has been claimed that HR issues in CE "are treated broadly in isolation from other HRM activities; no account is made of the need for functional integration - where HRM program areas need to be treated and linked as a systemically related whole" (Zanko et al., 1998, p. 132). Moreover, HRM issues in the wider context of a CE integration effort have been broadly neglected. No detailed research has been conducted, for example, on the HR implications for functional areas with the establishment of cross-functional teams. The approach taken in this study reflects the view of HRM as a specialist function and organization-wide activity. This is consonant with Boxall and Purcell's (2003) contextually embedded notion of HRM that covers all workforce groups, involves line and specialist managers, incorporates a variety of management styles, and considers individual and collective aspects of work and employment.

RESEARCH DESIGN AND METHODS

The research design involved essentially a double-loop process. In the first loop, a preliminary case study was undertaken in a heavy manufacturing firm to identify and understand the issues manufacturing companies may encounter in dealing with CE, and to refine the conceptual framework for the main study. The second loop formed the main investigation (reported here) and was based on a single longitudinal processual case study of a company's sustained attempts to define and implement CE. The aim was to gather rich contextual data over time in order to grasp the dynamics of the CE change process; the process was studied over a period of 18 months.

Yin's (1989) case study framework, guided the development of the case research design. Data collection was mainly qualitative and accumulated from: participant observation, interviews with company representatives, and public and proprietary company documents. The observation program consisted of regular visits to the company over the 18 month period, totalling about 140 days, and enabled a deep insight into the daily routines and subtle organisational phenomena that shaped the CE

implementation process (Dawson, 1994, 2003). The collection of observational data was complemented by numerous formal and informal interviews with key players in the CE and change implementation.

The data were subjected to a systematic qualitative analysis following *"three concurrent flows of activity: data reduction, data display, and conclusion drawing/verification"* (Miles and Huberman, 1994, p. 10). The three independent sources of evidence (interviews, observations and documents) enabled the contextualisation, cross-check and cross-validation of data. The use of a formal case study protocol and the development of a case study database increased the reliability or replicability of the results.

CASE STUDY

Popgun Industries and CE Context

The case study focused on a medium-sized company, originally established in New South Wales, Australia in the 1950s. Since 1990, the company, referred to as Popgun Industries, has operated as a wholly owned subsidiary of a European multinational enterprise. It designs, develops, manufactures and supports complex electronic systems, particularly command and control, surveillance and electronic equipment, defence and government communication systems and air traffic control systems. All system development projects at the beginning of the case study were marked by time and budget blowouts. The company identified a need to restructure its traditional design and development process in order to sustain and strengthen its market position. Six individual projects were set up under the umbrella of Popgun's Time Optimized Processes (TOP) program that had been initiated by its European parent. CE was recommended as a promising approach because of its potential to increase the timeliness and quality of development projects. Eight months following its inception, the CE Project Team proposed its CE "solution set", which was applied to a CE Pilot Project. Four months later, the CE Project Team and senior management resolved the CE Project's way ahead and agreed the next steps in the CE implementation process.

Other projects and initiatives also touched on issues that were important for the introduction of CE, in particular the Organizational and Cultural Change Project (OCC). With its emphasis on teamwork and the design and implementation of innovation-oriented HRM policies and practices, the OCC project

was a potential partner for the CE project. Co-operation between the two projects, however, did not occur.

HRM in Popgun Industries

The appointment of the current HR Manager into an essentially “clerk of works” role (Tyson and Fell, 1986) led to a long-term restriction of the department's scope and influence on organizational processes. It was in the Technical Managing Director's (TMD) power to change this situation, but he did not. Instead, the TMD subsumed responsibility for more strategic aspects of HRM.

The HR Department had low status. There were nine staff, none of whom had a bachelor or masters degree in personnel or HRM. It had a short-term planning horizon, a low level of discretion and was subservient to line management. The department showed no aspiration to move toward a change-maker role, nor did it emphasise a strategic pursuit in personnel matters. The department did not even meet limited expectations of change project leaders and managers regarding its contribution to certain HRM issues within the change program. The individual areas of HRM and HRM practices were not interrelated and did not form a systematic whole.

HRM was increasingly viewed by the management team as a shared responsibility of senior management, line managers, employees and teams and yet internal surveys identified it as one of the weakest managerial areas and showed that most managers in Popgun Industries largely underestimated its complexity and difficulty. Consequently, the company provided various training sessions on HRM and related issues, and stimulated a continuous discussion of various HR topics.

CE in Popgun Industries

According to the Business Administration Manager of the Engineering Department, senior management classified the CE Project as a "first priority", in comparison to the OCC Project, which was rated a "second priority". In reality, the CE Project was not treated as such in terms of senior management commitment. The initial CE project team comprised five, then six members, including the team leader. The team members represented only a few downstream and upstream functions and all members had a technical background. They were mostly junior employees or contractors. The team members worked part-time on the project and were not collocated. Work on the project was not widely viewed as rewarding by its team members. CE got “the most support from the least powerful people in

the Executive Committee” according to a CE Project Team member.

The CE Project Leader was a systems engineer who reinforced the team's technical emphasis. He concentrated on tools, techniques and procedures. Little emphasis was given to the organizational and HRM implications of CE, though other team members repeatedly raised issues such as common goal setting, open discussions, good communication and information processes, or recognition. This was also reflected in his (authoritarian) leadership style. He treated team members as subordinates and did not develop them appropriately. He dominated the team and did not easily delegate responsibility. He sidelined people who held a different view from him, both within the team and with external project partners.

The CE project that was eventually selected, was not an ideal case to trial the CE concept. The project was already at a stage where the conceptual design was mostly completed. Thus, the "CE solution set" could not be fully applied, particularly in terms of initial team-building, common goal setting or formulating a team charter. After one year, the CE Project Team concluded that the outcome of the project was rather modest.

Although the CE Project Team started to grasp the relevance of HRM for CE towards the end of the main data collection, it made no attempt to align them. The nature of CE as a management "fad", notably its interpretive flexibility, may have further contributed to its limited success. Different groups and individuals still had diverse understandings of CE. Significantly, insufficient attention was paid to the organizational politics involved in CE implementation. Support for the proposed changes was not effectively mobilized, nor was any opposition neutralized by either the CE Project Team or the project sponsor, the Engineering Director.

Influence of Politics on HRM Role in CE Implementation

The literature on organizational power and politics is diverse and different views exist of what constitutes power. Lukes (1974) refers to one-, two-, and three-dimensional views of power with regard to their different emphasis on the outcome and players of decision-making processes, and the occurrence of conflict. The three-dimensional view used in this analysis goes beyond the reductionism inherent in the behavioural and individualistic accounts and focus of the one- and two-dimensional views, by investigating decision- and non-decision-making power and the various, often complex and

subtle, ways of suppressing latent conflicts within a particular social context. It includes individuals as well as collectives (e.g. in the form of social forces or institutional practices) in explanations about decision-making and control over the political agenda. Decision-making and control over the political agenda (not necessarily through decisions) can take place in the form of observable (overt or covert) and latent conflict of subjective and real interests. This makes it possible to focus on the processual component of the "play of power" or as Buchanan and Badham (1999, p. 50) call it "the substantive, unavoidable and necessary shaping role of power and politics in change".

The CE implementation process and the role of HRM in Popgun Industries involved a cast of characters, i.e. different groups and individuals within the company and outside the company. The more prominent of these are discussed below.

The CE Project Team

The CE Project Leader and the CE Team members were all engineers. The team focused on technical problems (e.g. tracking requirements), and recommended technical solutions to issues like communication, co-operation and integration, while paying insufficient attention to HRM, organizational and cultural change. The CE Project Leader saw HRM issues largely as outside the purview of the CE Project (though this changed at a later stage). An illustration of non-decision-making was his suppression of the CE Project Team members' demands for change. These HR issues were not included in the minutes, agenda, project tasks or the CE Project proposals. The CE Project Leader discussed the project proposals with senior management. As they only contained issues accepted by the CE Project Leader, he acted in a gatekeeper role, and so exercised control over the agenda, keeping potential issues (e.g. future role of functional managers) out of the political process. Due to their functional engineering bias, the team lacked a vision of how a strong project organization operates.

The CE Project Team pointed to a reduction in the influence of the functions in projects and their reorientation towards a supporting role in the development process. Some functional managers refused to support the CE Team and acted to protect their territories. The CE Team did not seem to be aware (too junior in status perhaps and without relevant experience) that these individual and collective attitudes were endangering the successful implementation of CE.

Groups of Technical and Project Managers

The technical managers, including the TMD and the Directors of the technical departments, were the most powerful group in Popgun Industries because of their resources and representation on committees and their influence over the change process. They not only had the strategic decision making power, they also dominated the decision-making process in projects. Project managers were far less powerful. In different ways, a number of functional managers and Directors consciously and unconsciously undermined the implementation of CE and the HR related cross-functional and team efforts. A number of departments did not provide a functional representative for the CE team. Some technical managers and Directors did not participate in important CE meetings or training sessions nor send a representative.

The Technical Managing Director

The TMD determined the HR Department's reactive position to change. One such step was the appointment of the current 'clerk of works' HR Manager. In doing so, he restricted the HR Department's activities. The TMD justified this situation as follows: "He [the HR Manager] can't be the front-runner. He just wouldn't know, what is the sharp end of our business to succeed in the marketplace. (...) That is the sort of thing that has to come from here [points to himself]. You can't leave it to your kaufmann or your HR man or whomever." It was only following the European parent-initiated TOP Program, that the TMD showed an increased interest in HRM. Despite this, he tended to favour technical solutions to organizational problems, in contrast to, for example, face-to-face communication.

Despite the formal high priority, the TMD treated the CE Project as of secondary importance. This was reflected in the selection of the CE Project Leader and of the CE Project Team members. The CE Project Team members were mostly junior. They were allocated to the project by their respective functional managers. Though all main functions were asked to send a representative onto the CE Project Team, only three main departments responded immediately, all in engineering. Yet, the project's senior management sponsor, the Engineering Director, had little interest in it.

OCC Project Leader

Unlike the CE project leader, the OCC Project Leader was another important change agent in the

company. He had a strong impact on the CE implementation process and the role of HRM in the overall change process. He benefited from the strong favouritism on the part of the TMD. Beyond this, he was widely respected by employees and had a high reputation for getting things done and being proactive. He possessed great authority and, through his own senior management position, he had easy access to senior management, to information, and other resources.

He directly influenced the position of HRM in Popgun Industries. At the same time he sidelined potential competitors and rivals, as in the case of the HR staff and the CE Project Leader. He saw the HR Department's responsibility in hiring, firing, administration and welfare. Finally, despite his recognition of CE as cultural change and its dependence on teamwork, he did not support the CE Project.

The CE Project Leader

While the CE Project leader recognized the cross-functional team as a key to the success of CE, he largely neglected the organizational context in which the cross-functional product development teams are embedded. He focused on aspects such as team training, meetings, and team structure and did not recognize these team characteristics and activities as only part of the set of elements required to make teams effective.

Instead of developing strong linkages to the functions via the representatives on the CE Project Team, he dominated the team. He did not ensure all members felt included nor did he establish an agreed vision. He did not devolve responsibility and often suppressed ideas of team members in favour of his own views. In doing so, he steered his team into a direction that emphasized procedures and technical solutions.

CONCLUSIONS AND IMPLICATIONS

The results of the case study reveal that the exercise of organizational power and politics had a significant influence on the course and outcome of the CE implementation process and the limited role HRM played in it. The decisions and actions made in this process were based on a combination of understandings, past experiences, and personal assumptions and values. Key players were caught between their visions and traditions, between their practical endeavours and cultural frameworks - particularly Popgun Industries ' strong engineering culture. Along with a strong engineering culture

commonly go a technical mindset, an orientation towards technical solutions and traditionally little appreciation of HRM. The CE Project Leader could not match the power of the TMD and the OCC Project Leader. He lacked the structural power to force through valuable social and organizational objectives. He had no comprehensive vision (of what was achievable with CE) and was inexperienced in dealing with HR issues and organizational politics.

For companies considering the implementation of CE, the case study serves as a guideline to strategy formulation by directing their focus to the organizational and HRM side of the process and discussing the consequences if organizational requirements are not met. The study sensitizes CE steering committees, senior management and CE project leaders about the complexity of CE and HRM and their political nature. It draws attention to the reality that HRM is not a homogeneous monolithic phenomenon within an organization. It has been shown to be fragmented and diverse in its form and application.

Future research needs to establish whether companies with a more traditional approach to HRM pay less attention to HRM issues in conceptualization and implementation process of CE than companies with a more progressive approach.

REFERENCES

- Atuahene-Gima, K., 1996, 'The influence of innovation orientation in human resource management on new product development: the moderating role of innovation type', *Journal of Market-Focused Management*, Vol.1, pp. 87-107.
- Boxall, P. and Purcell, J., 2003, *Strategy and Human Resource Management*, Palgrave MacMillan, Basingstoke.
- Buchanan, D. and Badham, R., 1999, *Power, Politics and Organizational Change: Winning the Turf Game*, Sage, London.
- Dawson, P., 1994, *Organisational Change: A Processual Approach*, Paul Chapman Publishing, London.
- Dawson, P., 2003, *Reshaping Change: A Processual Perspective*, Routledge, London.
- Fujimoto, T., 1997, *Shortening lead time through early problem solving: A new round of capability-building competition in the auto industry*. Paper presented at the International Conference on New

Product Development and Production Networks: Learning from experiences in different industries and countries, 20-22 March, Berlin.

Haddad, C.J., 1996, 'Operationalizing the concept of concurrent engineering: A case study from the U.S. auto industry', *IEEE Transactions on Engineering Management*, Vol. 43(2), pp. 124-132.

Haddad, C.J., 1997, *Involving manufacturing in the early stages of product development: A case study from the U.S. Automobile Industry*. Paper presented at the International Conference on New Product Development and Production Networks: Learning from experiences in different industries and countries, 20-22 March, Berlin.

Holahan, P.J. and Markham, S.K., 1996, 'Factors affecting multifunctional team effectiveness', Rosenau, M.D., Griffin, A., Castellion, G.A. and Anschuetz, N.F. (eds), *The PDMA Handbook of New Product Development* (pp. 119-138), John Wiley and Sons, New York.

Lukes, S., 1974, *Power: A Radical View*, Macmillan, London.

Miles, M.B. and Huberman, A.M., 1994, *Qualitative Data Analysis: An Expanded Sourcebook* (2nd ed.), Sage, Thousand Oaks.

Ranky, P., 1994, *Concurrent/Simultaneous Engineering - Methods, Tools and Case Studies*, CIMware Ltd., Guildford.

Rosenau, M.D., Griffin, A., Castellion, G.A. and Anschuetz, N.F. (eds), 1996, *The PDMA Handbook of New Product Development*, John Wiley and Sons, New York.

Tyson, S. and Fell, A., 1986, *Evaluating the Personnel Function*, Hutchinson, London.

Yin, R.K., 1989, *Case Study Research: Design and Methods*, Sage, London.

Zanko, M., Couchman, P., Badham, R., Schubert, M. and Zainuddin Z., 1998, 'The role of human resource management in concurrent engineering approaches to product innovation: Australian and Indonesian experiences', *Human Factors and Ergonomics in Manufacturing*, Vol. 8(2), pp. 125-139.