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I'm OK, you're Not OK: A Study of the Alignment between HR and IT

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Abstract

While there is significant evidence to suggest that the alignment of Human Resources (HR) and Information Technology (IT) is desirable and likely to contribute positively to the realization of benefits from IT systems, there is little discussion on how to achieve alignment. This paper examines evidence from three organizations implementing ERP systems and uses a model of social alignment as a lens through which to observe the activities and actions of executives' to provide insights into how enabling and inhibiting factors impact the alignment process and who should take responsibility to ensure that the implications of the IT strategies are understood and the appropriate HR strategies applied.

Keywords: Enterprise Resource Planning systems, ERP, Human Resources, Information Technology, alignment, social alignment, strategy

INTRODUCTION

Increased productivity within modern organizations over the past two decades has largely been generated by more effective use of information technology. However, the increase in technological capability has necessitated a wide range of organisational changes particularly with the advent of ERPs (Enterprise Resource Planning Systems). These changes to process and work structures have implications for the recruitment, remuneration, reward, skill levels and general management of people. Therefore some of the greatest challenges have been associated with integrating and aligning information systems with the appropriate human resources management strategies.

While it is widely accepted that new information systems will have an impact on the management of human resources there is a significant lack of conceptual frameworks and practical guidelines to integrate all aspects of human resource management strategies with the strategic imperatives of information systems. HR and IT strategies should ideally be aligned in their competitive goals in order to maximise technology investment effectiveness.

This article examines three organizations implementing ERP systems to identify the social alignment evident between IT and HR executives. Using the social alignment framework (based on Reich & Benbasat, 2000 and revised by Dery, 2003) the factors that contribute to shared understanding are identified and discussed.

An earlier exploratory study of four major Australian firms (Dery,2003; Dery & Samson, 2004) indicated that while CIO's acknowledge the importance of human resource management issues in the development and implementation of IT projects, they take limited responsibility for identifying and resolving these issues. Human resource managers, however, have tended to limit their involvement in IT projects to a more responsive role focused largely at compliance and legislative levels with line management or dedicated project teams expected to anticipate, plan and implement the appropriate people management strategies. The short term and operationally focused perspectives of line and project management executives' tended to overlook or underestimate human resource management issues. Earlier research (Dery & Samson, 2003) suggested that there is a more strategically significant role for human resource management in the planning, implementation and management of IT projects.

This paper extends this research into the study of three additional companies each at differing phases of an ERP implementation. The previous study examined companies installing differing software. The case studies discussed in this paper were all implementing SAP, providing an opportunity to hold the technology variable constant and re-examine the validity of the social alignment framework.

BACKGROUND

There is recognition in both academic and business practitioner literature that Human Resource (HR) management issues play a major part in the realization of improved business performance from Information Technology (IT) investment (Zuboff, 1988; Peters, 1988; Keen, 1991). While there is significant evidence of intent to align HR and IT activities, firms experience difficulties in the implementation process. There is therefore a need to better understand the relationship between the strategic planning and implementation of IT and the associated management of HR to ensure that the firm has the capacity to maximize the opportunities enabled by technology innovations.

As contingency views of the role and activities of the HR and IT functions gained momentum, many management theories recognized the importance of aligning IT and HR with organization strategy to change work practices and increase productivity (Becker et.al, 2001). New theories of management and organization process re-designs suggested by Business Process Redesign (Hammer & Champy, 1993; Davenport & Short, 1990), Knowledge Management (Nonaka, 1991; Ambrosio, 2000; Pfeffer & Sutton, 2000), and Virtual organizations (Ashkenas et al., 1995), were technology driven but required significant organizational change to implement successfully. People management was frequently cited as the reason for failures in the implementation of these management theories (Ambrosio, 2000), yet to date little is known about the factors that support alignment between the organizational demands of the technology and the strategic management of people.

The rapid development of ERPs over the past 10 years has also recognised the importance of change management programs to guide executives through the significant business process and cultural changes necessary to successfully implement and manage these large ,integrated systems (Shanks et al, 2003;Davenport,2000). With organizations generally spending in the vacinity of \$100million to design and implement an ERP system (Robey et al, 2002), they are keen to ensure that the appropriate HR strategies are applied to maximize the opportunities to reap the benefits of the system. The fact that over 60% of these projects are experiencing major cost and time over-runs with change management issues widely touted as the cause of problematic implementations (Shanks et al, 2003)) suggests that the application of strategic HR thinking is problematic in many cases.

The social alignment theory (Reich and Benbasat, 2000) provides rich insight into the understanding between IT and HR executives and provides a valuable lens through which to examine this relationship.

SOCIAL ALIGNMENT

The Reich and Benbasat(1996,2000) framework of social alignment, originally produced to examine the linkage between IT and business strategy, provides a valuable lens through which to examine the factors that influenced the understanding of executives' in the strategic alignment process. The framework was adapted (Dery,2003; Dery &Samson,2004) to examine the inter-functional alignment between IT and HR and extended to reflect these research results.

The notion of social alignment was designed to focus on executives' understanding of each others' objectives and plans, as distinct from the intellectual intent of written documents. Given the nature of functional strategies, which are not necessarily deliberate and expressed in detailed, written plans (Lederer & Mendelow, 1989) but may emerge out of the collective actions of executives' (Mintzberg, 1987), and also may not necessarily be performed by a designated department that is readily observable, (Ohmae,1982) the study of beliefs and behavior is important.

Reich and Benbasat (1996, 2000) defined the construct of alignment on two dimensions (adapted to examine the relationship between IT and HR):

- The intellectual dimension exists when the content of information technology and human resource strategies are consistent and externally valid
- The social dimension exists when IT and HR executives understand and are committed to each others plans

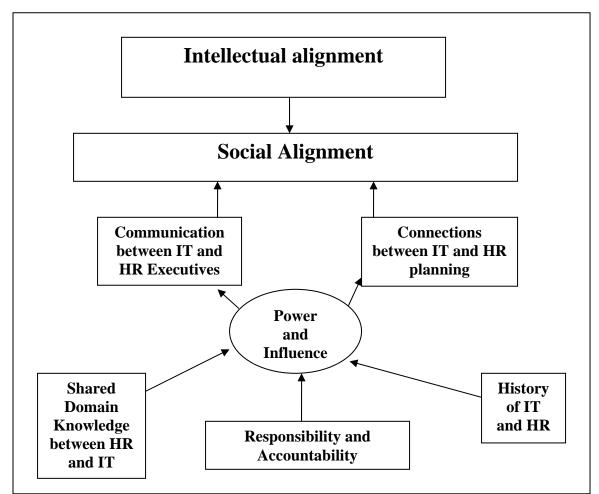


Figure 1: Proposed Framework of Analysis to create a greater understanding of the Alignment Process between HR and IT. (Dery, 2003 based on Reich & Benbasat, 2000)

Research in a series of ERP implementations in three major Australian firms has provided the opportunity to re-examine the social alignment framework holding the technology variable constant. Each of the cases studied in this paper implemented SAP. The commodification of the technology enabled these sites to be examined and results compared to provide some insight into the development, implementation and on-going management of the workplace.

Both shared knowledge and past history are well recognised bases for influence in both the IT and HR literature. Bacharach and Lawler (1980) identified these bases as expertise and personal characteristics. Specialist knowledge, or expertise, is a source of powerful influence as others turn to the specialist for knowledge that they do not possess. Thus specialist knowledge generates power based on dependence (Zuboff,1988). Personal characteristics enhance the credibility of the executive's input and enables perspectives to be swayed in the desirable direction. The characteristics connected with reputation (Bacharach and Lawler, 1980) based on past experiences are recognized as important bases for influence.

RESEARCH QUESTIONS AND APPROACH

One of the main claims of ERP proponents is that these systems make it possible to embed best practice in organizations across a variety of business functions (Davenport,2000). There are, however, relatively few empirical studies that document the nature of these changes. This article examines the implementation and on-going management of ERP systems and analyses the social alignment between IT and HR in this process. It would be reasonable to anticipate that a cross-functional, organization-wide system such as an ERP would be more likely to generate a degree of alignment both due to the integrated nature of the system and also because of the widespread organizational change that is frequently anticipated as a response to the ERP (Shanks et al, 2003). These systems typically generate significant changes to business processes and organizations generally anticipate spending at least another 15-20% of software costs (Robey et al ,2002) on change management, training and other implementation issues. Therefore with such a wealth of people management issues on the table it would be reasonable to consider that HR would play a significant role in association with IT to maximizing potential benefits from the ERP.

In this context this article seeks to examine the social alignment between IT and HR executives to gain an understanding of the enablers and inhibitors to that process. Current indicators suggest that HR and IT tend to align their activities with the requirements of the business strategy assuming that this will automatically bring them into step inter-functionally. Evidence in (Dery, 2003; Dery & Samson, 2004) suggests that this is not enough. Without a systemic approach to generating alignment between IT and HR there seem to be few natural processes that require the two to communicate other than when the organization implements an integrated IT system such as an ERP, or more particularly the HRIS module. The process of designing, implementing and managing an ERP is difficult and requires functions to work more closely together as processes are redesigned. A lack of communication and understanding between IT and HR often makes the crucial alignment of their tasks difficult and there is a tendency for each to abrogate responsibility for problems to each other (ie: I'm OK, you're not OK).

The article examines these questions by focusing on three case studies of large Australian organizations that have recently implemented or upgraded SAP, the market leading ERP system. Cases were drawn from a larger study examining the organisational impacts of ERPs that was conducted across five major companies over 12 months in 2004-5. Three organizations were selected for this analysis on the basis that they had both similarities and differences that indicated that cross case analysis might provide some meaningful insights. All three companies were implementing SAP and each company had considerable investment in HR and therefore placed strategic importance on the HR module. The cases vary in a number of important respects including industry and motive for the ERP investment. Given the commodified nature of the technology and the overall HR focus of these three companies we might expect to see similar responses within the HR departments to the design, implementation on on-going support for the ERP. Motive for the ERP implementation should have little impact on the strategic contribution potential for HR according to the findings of Lawler and Mohrman (2002) and you would not anticipate industry variation given the ERP promise of facilitating organizational best practice.

Data was gathered using semi-structured one hour interviews with the HR and IT managers responsible for the SAP implementation in each case. In addition organizational members from a range of senior management to the shop floor were selected and interviewed to gain some understanding of how the ERP impacted on the organisation. The SAP project manager was also interviewed in each site bringing the total interviews across the three cases to 22.

The interviews were taped and transcribed. The transcripts were subsequently analysed using cross-case analysis tools (Miles and Huberman, 1984) to analyse each of the social alignment constructs across the three cases. Each construct in the social alignment framework was operationalised using the same frameworks as the author's previous research to maintain consistency (see Dery, 2003). These constructs are summarized in the following sections. While there was a degree of focus on gathering evidence to meet the operational criteria this was not the primary focus of the interviews and thus a range of additional material was gathered which subsequently provided valuable input into ERP specific

factors and other emergent influences that may effect HR/IT alignment. This evidence was triangulated with written documentation, workplace observations and other published organizational background material.

Analysis of the Cases

The three cases examined include: a global bank based in Australia (BankCo), a major food and beverage manufacturer (FoodCo) and a large multi-national oil company with a US parent (OilCo). Each organization had a differing motive for introducing SAP and the HR function in each case assumed differing positions. The results from the ERP implementation varied significantly in each case and while it would not be prudent to suggest any causation effect from the HR/IT alignment, it is however valuable to look at the different ways in which social alignment is observed in each organization and then reflect on how this might have impacted the organisations' views of the success or otherwise of the project. The cases are summarized as follows:

- **BankCo** had already been through one false start in its ERP implementation. The first attempt at a world-wide "big bang" approach to implementation has been disastrous and was subsequently abandoned after the project had exceeded both budget and deliverable timing targets. The consultancy firm was disengaged and the decision taken to pursue the project in a smaller, off-shore market but with all the costs and infrastructure ownership and investment remaining with the parent company. An SAP project team was established that included representatives from both IT(parent and local) and HR (local with parent company input) to design and implement the system. HR lead the "go-live" with the HRIS module linked with a number of required systems to provide valuable financial data and also played a major role in the change management processes for the rest of the organization as the ERP system rolled out across all functions. Despite some resistance early on particularly by middle management, the system is generally regarded by the senior executives of BankCo as a success and the lessons learned have been applied to the roll-out in the parent organization which is currently underway.
- **FoodCo** by contrast has quite a different story to tell. HR management opted out of the SAP implementation from the commencement of the project. They had preferred the PeopleSoft option in the selection process and once overruled determined that there was little value for HR in SAP and thus opted to remain with their spreadsheet based systems. As a consequence there was no representative from HR on the SAP project team and HR took a responsive role when called on for advice on individual cases. HR responses to requests for involvement were typically personality dependent and there was no systemic role for HR executives in the project. Change management was managed by the project team with very close working relationship with both the consulting company and the vendor. Despite an SAP award-winning implementation, levels of non-compliance and "work-arounds" have risen substantially and the system is now viewed with a very mixed level of enthusiasm across the organization. While some executives believe that there have been significant benefits, others have experienced significant difficulties in using the system and feel that it has been substantially compromised by the failure to include modules such as the HRIS and the warehouse distribution system.
- **OilCo** were in the process of upgrading from SAP r3 to SAP 4.1 after a disastrous first round of implementations. SAP was a "dirty word" in OilCo and lacked support across most of the functions in the organization. HR had not been involved in the first ERP project team and the HRIS module was abandoned after the project ran significantly over time and budget. The project team responsible for the second upgrade , however, were using lessons learned from the initial implementation and lead by an ex-HR executive were involving the HR team as a integral part of the project. HR were charged with the responsibility of making significant organizational changes and to drive these new processes and roles into the organization using the SAP system. The upgrade phase was being completed in direct partnership with SAP with no additional consultant input following lessons learned from the initial implementation where

OilCo felt that their had been insufficient benefit and that the limited knowledge transfer had been detrimental to long term compliance and acceptance of the system.

Intellectual Alignment between HR and IT

The nature of the implementation of an organization-wide SAP implementation implies intent to align activities across functional groups. This is critical to realize the benefits of shared data and the ability to automatically update information. Processes are documented from end to end across functional boundaries making it critical for executives to collaborate across functional areas of responsibilities and to align functional strategies. Thus the nature of the SAP software made it possible to assume intended or intellectual alignment in all cases. The critical issue therefore was to gain an understanding of social alignment or HR executives' understanding of the implications of the ERP software for the management of people across the organisation.

Social Alignment between HR and IT

The detailed methods for collecting and assessing data for each factor identified in the social alignment framework can be found in Dery (2003) and Dery and Samson (2004) and were used in the data collection and analysis of these cases. They have been summarized in the following analysis. In addition evidence not captured under the framework categories was collected and emerged in the analysis to add further insight into the alignment process between HR and IT.

In contrast to the earlier cases there was significantly more evidence of **connections in planning** phase of the ERP implementation. Planning was operationalised using categories termed as isolated, architected, derived, integrated, or proactive. The integrated, company-wide nature of the ERP software tended to support the role of HR in OilCo and BankCo as an integrated participant in all planning phases in addition to the development of specific HRIS software to improve HR functionality and facilitate significant procedural changes. The only organization where HR took a more isolated and derived position was FoodCo where the HR Manager made a conscious decision not to implement the HR module and not to participate on the implementation management team. This seems to indicate that the potential benefits of the IT system to the HR function itself may be influencing decisions to take a more integrative position on IT project team rather than the recognized need to strategically align HR activities across the corporation to the changing requirements resulting from the IT strategy. HR did still appear to be taking more of responsive (derived) position on the ERP team in all other aspects other than those directly affecting the HR function. This issue does, however, require further investigation.

Communication is the critical criteria for alignment with little evidence that connectivity in planning is effective on its own. In the previous study communication was defined in terms of the direction(s) of dialogue and a resulting assessment made to provide insight into the degree of alignment that was evident based on the nature of the communication ie: direct, liaison, temporary task force, permanent teams, integrating roles or managerial linking roles. Other factors such as shared domain knowledge, history of implementation success were assessed to understand how these factors impacted communication between the HR and IT functions was more integrated and direct indicating that there was significant communication between the two at least in the area of designing and implementing the HRIS component of the ERP. However, in FoodCo there was less evidence of communication between IT and HR other than liaising on specialist requirements usually concerning industrial relations implications. Thus there was little evidence of IT/HR alignment from a communications perspective in FoodCo.

The assessment of **shared domain knowledge** between IT and HR was based on each executive's knowledge of the strategies and responsibilities of each others functions. Information about previous work experience and knowledge of the IT strategies and workplace implications were explored during

the course of the interviews. Evidence suggested that shared domain knowledge was significantly higher in two of these three cases, BankCo and OilCo. In the case of OilCo one of the lessons learned from the first SAP implementation was that it was critical for HR to take a leading role in assessing the impact of the changes in processes and roles, and to manage this process. However this required a more strategic response from HR and it was considered necessary to change the HR Manager in order to achieve this. The new HR Manager had considerable global experience in the oil industry and also in ERP implementations. She had lead some extensive change programs and considered herself to be "sufficiently IT literate to participate in discussions and decision-making with confidence". Similarly the HR executives in BankCo had actively participated in the SAP project from the beginning and took an active role on the project team. One of the senior HR executives was seconded to the SAP team fulltime for three years with others participating as required. This was not the case, however, in FoodCo where the HR team had very little knowledge of IT and demanded that the SAP team "reduce everything to plain English" according to the SAP Head of Change Management. The HR manager was a traditional HR professional who focused primarily on compliance and industrial relations issues. He did not participate in the SAP project and other FoodCo HR executives' responses varied according to their personal relationships in the organization and range of IT knowledge or individual desire for involvement. IT executive's knowledge of HR was typically limited and they regarded the people issues associated with the SAP implementation and management to be the domain of other management groups in the organization. These typically included HR, line management, and the consultants in BankCo and OilCo¹, and the change management team and consultants at FoodCo.

The leadership of the projects differed across the organizations. This was an issue that had been identified in earlier research (Dery & Samson, 2004) but had not been supported by the case evidence. However, it did appear to be more significant in these cases and this may be attributed to the significant investment required in ERP implementations and management. The project at BankCo was instigated and lead by the CEO and with significant Board involvement. The Board had taken an active role after the initial problematic world-wide attempt and a sub-committee had been formed to focus on the project. It was also a project that was initially based on the need to create a more strategic role for HR and thus the need to provide HR with firm-wide, timely and accurate data was critical. Thus in this case HR was committed and actively involved at the highest level with a mandate from the Board and CEO to lead the project. The project team itself was lead by a strategic planning executive. Similarly at both OilCo and FoodCo, the project had support from the CEO and senior management team. At OilCo the project team was lead by a former senior HR Director with many years of experience at OilCo and a wealth of personal knowledge of the executives that needed to be managed through the process. He was seen to be the person with the best professional and personal skills to overcome the objections and manage the project across all functional groups. He was also previously part of the senior management group and considered to be an integral part of this team for the purposes of the SAP implementation. However, at FoodCo the SAP project team reported to the Business Systems Development Manager who was an advisor to the senior management team. During the implementation phase this project was given full management support and the resources required were made available, however, once the project was completed and the consultants disengaged the system came off the senior management agenda and the long term support and compliance became problematic. This seems to indicate that leadership as a factor influencing the IT/HR alignment needs to be considered longitudinally as management focus shifts once implementation is deemed to be complete.

Unlike the previous case studies analysed the differentials in **power** between the HR Manager and the CIO were not significant. In the earlier research the CIO had significantly more **influence** at the management table that the HR manager, however, in these three organizations that did not appear to be the case. The HR manager in each case was considered very powerful in the organization with significant influence in the management team. At BankCo there was a major strategic focus on HR

¹ OilCo, as distinct from the other two projects did not use an outside consultant to facilitate the implementation of their ERP but worked in direct partnership with ERP. This was another critical lesson from the first implementation where they felt there had been insufficient knowledge transfer from the consultant back to OilCo and also that the inexperience of the consultants used had contributed to the negative response from the organization.

(which had been recently renamed People and Culture to disassociate it from a resource management function and create a more strategic positioning). HR executives were very influential in all decision making processes for the ERP and continued to manage priorities and processes for all future roll-outs and developments. The FoodCo HR function, while clearly taking an opposing view from that held at BankCo, was also very powerful. The fact that the HR Manager was able to opt out of SAP and disassociate HR from the ERP project completely is indicative of the powerful position of HR, however, it is interesting to note that the HR manager was unable to influence the decision to adopt SAP over PeopleSoft. This issue requires further exploration but it would seem that it is the ability for the HR Manager to influence the IT project that is more likely to be indicative of alignment rather than the general power HR has on the management team. In the case of FoodCo the HR manager's power was derived from expertise in Industrial Relations rather than his ability to deliver strategic HR input. OilCo had recognized from the first implementation team and had therefore placed HR professionals in critical positions.

Issues of **accountability** for ERP projects are often problematic for organizations and complicated by the nature of the vendor, consultant, organisition relationship (Shanks et al, 2003). Both BankCo and OilCo had a history of problematic ERP implementations where issues of accountability had been difficult to resolve. BankCo had resorted to litigation to try to sort out areas of accountability with their consulting firm in their first ERP attempt and OilCo had abandoned using consultants and were working with SAP direct in an attempt to clarify and simplify areas of responsibility and accountability. Areas of accountability for the delivery of the technology are perhaps more easily identified with ERPs as they are usually apportioned between the IT function, the vendor and the consultant. However, it less clear who is accountable for the people management issue as these responsibilities are often spread across the organization, the project group and the consultants. Again in this project it was difficult to make any significant assessment given the case data gathered. However, there did appear to be indicators of attempts to clarify areas of responsibility and create accountability. The ERP project at BankCo was required to report directly to a sub-committee of the board and both IT and HR input was required to produce those reports. This reporting was on-going as requests for further budgetary allocations were made for the Australian roll-out The project team were primarily accountable at OilCo with both IT ad HR represented. In this case HR was also responsible for organization-wide change management and thus were considered accountable (at least in part)for the people management aspects of the ERP. However, at OilCo accountability was less clear once the implementation team were disbanded and the consultants disengaged. IT maintained a crucial role in the system maintenance in partnership with SAP but given the lack of engagement of HR there was little specific accountability maintained at the people management end. Thus non-compliance, workarounds, and lack of on-going training developed unchecked until it became problematic for the operability of the system.

Issues of accountability raise further areas of interest in these cases concerning the implementation of compliance measures. Given the integrated firm-wide nature of ERPs it is critical that the system requirements are complied with and accurate data is entered. Issues of "dirty-data" have been significant sources of concern as organizations recognize the potential problems associated with inaccurate or missing data in the system. It is, however, not entirely clear who should be responsible for managing compliance issues. Non-compliance typically manifests itself in the development or parallel systems or work-arounds that enable employees to revert to previous practices (that are believed to be easier or more accurate) or to find ways around the system that they find cumbersome or difficult to use. These cases produced significant evidence of tasks based on the need to identify non-compliance and address it. BankCo addressed non-compliance both through HR processes and the activities of functional and line management. The HR policy that was devolved to managers to execute was based on one-on-one counselling and training once non-compliance had been detected. This was particularly evident in the new e-procurement system where considerable individual counselling had been required to generate compliance with the new system. HR responded to the requirements of the system by establishing policy and an advisory role for management administration. OilCo took a much more aggressive philosophical position with HR a leading role to manage compliance. Workers developing parallel systems had been extremely problematic in the first implementation and thus HR were determined to establish system compliance in the update process. "Basically we will give people one chance to get it right, and then they will be encouraged to reconsider their role with us." explained the HR Manager. The ERP was viewed as a way of "forcing change" at OilCo and if that change meant some people no longer fitted with the organization then that was considered a good way to weed them out. FoodCo by contrast did not assign responsibility to anyone for managing and enforcing compliance and thus work-arounds and parallel systems had become commonplace and the system was failing to deliver reliable information and reporting. While this was recognized by IT and line management as problematic they did not have the tools to address non-compliance issues.

Conclusions and Implications

The evidence from prior research suggested that a non-systemic approach to aligning IT and HR leaves the relationship vulnerable and often abrogated to line management. There was significant evidence to suggest that HR management was frequently unwilling to take a management role in IT projects and IT management seldom saw their role extending beyond system development. Organizations that invested in educating both the HR manager and the CIO and support them to maximize opportunities to align their activities were more likely to gain competitive leverage from their IT investment than those who assumed that alignment would occur as a result of the general planning process and who abrogated strategic HR input for IT projects to the line (Dery & Samson, 2004).

These cases analyzing ERP implementations support these findings and have raised further issues to consider. Organizations where HR is integrated into the strategic planning and implementation process would appear to have closer levels of social alignment between the executives in HR and IT. Thus there is evidence of increased understanding of the implications of the ERP implementation and thus a more dedicated approach to managing change and responding to people management requirements. This view would tend to support that of Zuboff (1988) where those closest to the design of the system are better able to develop an understanding of the organizational consequences.

The role of the external providers is more applicable to ERP implementations and management than with other technological innovations. In each of the cases both vendor and consultant input was important to the ERP project and the responsibility for change management was the domain of consultants to varying extents. In FoodCo the consultants took responsibility for many of the people issues that would normally be expected to be the domain of the HR department and were seen to be effective partners. However, once they departed the people management processes and values seemed to lack entrenchment in the management culture and thus were not supported. Problematic relationships with consultants in both OilCo and BankCo appear to have resulted in a more pro-active response from HR and thus a more embedded long-term commitment to the ERP. The role of the consultant in the HR/IT alignment process requires further exploration.

Future research should focus on the influence of leadership and functional applicability of the technology on the ability for IT and HR to align their strategic directions. While leadership did not appear to have significant influence in the first study, it has appeared as a much more significant factor in this research providing the directives for making the alignment process more systemic and less subject to personalities. In these cases this level of focus and prioritisation made it possible for HR to take a more influential position on ERP projects. ERPs provide a rich area for research into the alignment of IT and HR because they assume inter-functional co-operation and strategic connectivity. In addition, these case studies raise the question of whether by excluding the HR module from the ERP implementation process organizations are endangering the alignment between IT and HR and therefore a longer term commitment to the people management issues required to ensure conformance with the system and thus expected returns. There is a danger that if either HR or IT operates in isolation, drawing functional lines of responsibility they will fail to realize the benefits of ERPs as they assess their roles based on functionally-based KPIs and blame each other for system inadequacies.

References:

Ambrosio, J. (2000). "Knowledge Management Mistakes", Computerworld, July 3, (1), p.44.

- Ashkenas, R., Ulrich, D., Jick, T., & Kerr, S. (1995). *The Boundaryless Organisation –Breaking the Chains of Organisational Structure*, Josey Bass, San Francisco.
- Bacharach, S.B., & Lawler, E. (1981). *Power and Politics in Organisations*, Jossey Bass Inc Publishers, London.
- Becker, B. E., & Huselid, M.A. Ulrich, Dave, (2001). *The HR Scorecard; Linking People, Strategy, and Performance*, Harvard Business School Press, Boston, Massachusetts.
- Davenport & Short (1990). The New Industrial Engineering: IT and Business Process Redesign, *Sloan Management Review*, vol.31, no.4, pp.11-28
- Davenport, T. (2000). *Mission Critical: Realising the Promise of Enterprise Systems*. Harvard, MA: Harvard Business School Press.
- Dery, K.F. (2003, July). "Alignment of Human Resources and Information Technology: A Case Study of a Major Australian Bank" *Pacific Asia Conference on Information Systems*, Victoria University, Melbourne.
- Dery, K.F. (2003) "How do Organisations Align Human Resource Management with Information Technology? An Exploratory Study of Four Australian Firms.", PhD Thesis (unpublished).
- Dery, K.F. & Samson, D.A.(2004) "The Alignment of Information Technology and Human Resource Management", *Encyclopedia of Information Science and Technology*, Idea-group, USA
- Hammer, M., & Champy, J. (1993). *Re-engineering the Corporation: A Manifesto for Business Revolution*, Nicholas Brealey Publishing, London.
- Lawler E, Mohrman S. 2003. HR as a Strategic Partner: What does it take to make it Happen? *Human Resource Planning* **26**(3): 15-24
- Lederer, A.L. and Mendelow, A.L. "Coordination of Information Systems Plans with Business Plans", Journal of Management Information Systems, Fall 1989, Vol.6, No.2.
- Miles M, & Huberman M. 1984. *Qualitative Data Analysis: A sourcebook of new methods.* Sage: Thousand Oaks.
- Mintzberg, H. (1987) Crafting Strategy, Harvard Business Review, 65 (4), pp. 66-75.
- Nonaka, I. (1991) "The Knowledge-Creating Company", *Harvard Business Review*, Nov-Dec, pp. 96-104.
- Ohmae, K. (1982). The Mind of the Strategist: The Art of Japanese Business, McGraw Hill Book Company.
- Peters, T. (1988). Thriving on Chaos: A Handbook for a Management Revolution, Alfred A. Knopf, New York.
- Pfeffer, J., & Sutton, R. (2000). *The Knowing Doing Game: How Smart Companies turn Knowing into Action*, Harvard Business School Press, Boston, Massachusetts.
- Reich, B.H., & Benbasat, I. (1996, March). "Measuring the Linkage between Business and Information Technology Objectives", *MIS Quarterly*, pp. 55-81
- Reich, B.H., & Benbasat, I (2000, March). "Factors that Influence the Social Dimension of Alignment between Business and Information Technology Objectives" *MIS Quarterly*, Vol.24. No. 1, pp. 81-113.
- Robey, D., Ross, J.W., Boudreau, M. "Learning to Implement Enterprise Systems: An Exploratory Study of the Dialectics of Change" *Journal of Management Information Systems*, Vol.19, No.1, pp17-46
- Shanks, G., Seddon, P., & Willcocks, L. (Eds.). (2003). Second-Wave Enterprise Resource Planning Systems. Cambridge: Cambridge University Press.
- Zuboff, S. (1988). "In the Age of the Smart Machine: The Future of Work and Power", Basic Books, New York

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