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SHARING THE POWER:
KNOWLEDGE MANAGEMENT, EMPOWERMENT,
EMPLOYEE SELF SERVICE AND THE NZDF.

A thesis presented in partial fulfilment
of the requirements for the degree of
Master of Information Systems
at Massey University

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Audere Est Facere

ABSTRACT

This thesis investigated employee views of the Defence Kiosk System (DKS) through a questionnaire, and compared the results with two empowerment methodologies. These methodologies were Spreitzer and Quinn's Five Disciplines For Empowerment, and Horibe's Employee Decision Making methodology.

The DKS is the Employee Self Service (ESS) system of the New Zealand Defence Force (NZDF). The DKS is a web-based system that employees can use to access their personal records, thereby empowering employees to access their own personnel information and removing the need for them to ask human resources related questions of their administration unit. This provides the NZDF with administrative savings and accurate up to date information that can be used for Knowledge Management (KM).

The research begins with a literature review. The literature review established links between Empowerment, KM and ESS. It found that for ESS systems to provide benefits employees must be willing to use them.

A questionnaire was developed and sent to a sample of 1000 NZDF employees who had access to the DKS. The response was 350 completed and returned questionnaires, which exceeded the 180 responses required to enable the results to be generalised for the entire NZDF population.

Analysis of the questionnaire responses showed that employees believe that the DKS, as an ESS system, meets their personnel information needs and that they were willing to use the DKS.

When the results of the survey were compared with the empowerment methodologies the research supported Spreitzer and Quinn's five disciplines model, particularly the fourth and fifth disciplines. The results raised questions about the suitability of using Horibe's employee decision making methodology in the field of personnel management, especially with the advent of employee self service systems.

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1 INTRODUCTION

1.1 BACKGROUND

Employee Self Service is a recent initiative that provides employees with the ability to access information that relates directly to them. The majority of these applications are Human Resources (HR) ESS systems, which enable employees to view and often control their own personnel information. Employees are provided with electronic access to their personnel information and are responsible for keeping their information up to date.

Employee self service provides employees with access to information that they use and information that is stored about them. Access to this information is important as the information is used to make decisions. Providing employees with access to information and the authority to make decisions are central tenets for both knowledge management and empowerment (McCoy, T.J. 1996; Drucker, P.F. 1999).

The New Zealand Defence Force has developed an ESS system called the Defence Kiosk System. The DKS provides employees with access to their personnel information and the ability to change certain personnel information.

It has been claimed that ESS can provide large benefits to employers and employees. Employer benefits have been identified in a previous study of the DKS, where the system was found to provide potential savings of \$1.5 million per annum to the NZDF on an initial investment of \$30,000 (Williams, R.J. 2001).

The DKS can therefore provide a benefit to the organisation through potential savings and a knowledge base of accurate up to date information; however, any benefits are reliant upon the willingness of employees to use and update the DKS. Without employee input the information on the DKS would not be up to date and therefore the system would not be used, providing minimal benefit to the organisation and to employees. This research has solicited

employee views of the DKS in an attempt to gain an understanding of user views of the DKS and ESS systems in general. Employees were asked whether the information is useful to them and whether the DKS meets their personnel information needs, in an attempt to find out whether they would use the system.

1.2 JUSTIFICATION OF RESEARCH

Empowerment and knowledge management are both initiatives that can provide benefits to employees and organisations (Amar, A.D. 2002; Sandbulte, A. 2001). This research investigates whether ESS systems are related to knowledge management and empowerment, and whether ESS systems contribute to empowerment and knowledge management within an organisation. Previous research has shown that the DKS can provide benefits to the NZDF (for example: up to date information for knowledge management, and reduced overheads) through the provision of employee-managed information.

For the system to be successful the information has to be up to date and useful to employees, thereby encouraging them to use the system. Employee participation is therefore essential for the success of the DKS and other ESS systems. This research has therefore used the DKS as a case study for ESS systems to ask employees whether ESS systems provide benefits to employees, and whether there is an incentive for employees to keep their personnel information up to date.

1.3 RESEARCH OBJECTIVES

The research is an investigation of user views of ESS systems and whether these applications can enable employee empowerment.

The first objective is to establish a link between Employee Self Service, Empowerment and Knowledge Management. As a part of this objective

empowerment methodologies needed to be identified to measure the findings of the research against.

The second objective is to gather employee views on employee self service using the DKS as an example of an ESS system. Employees were sent surveys in an attempt to find out whether the information held on the DKS is useful to them, whether the DKS meets their personnel information needs, and whether they would use the system. The responses were analysed to ascertain whether employees want access and control over their personnel information, and whether they think that ESS systems are a suitable method for gaining access and control over their personnel information.

Thirdly the results of the survey are compared with the empowerment methodologies to ascertain whether the research results confirm the assertions of the methodologies.

1.4 PROBLEMS AND LIMITATIONS OF THE STUDY

1.4.1 SCOPE OF THE RESEARCH

This research was to be a comparison of previous research, presenting and contrasting the benefits of employee self service to the organisation with the benefits to employees. The direction of the research was changed to narrow the focus to exclude the previous research and to delve deeper into employee responses, focussing on empowerment and whether employees felt empowered and would use the DKS. Knowledge management still plays an important part in ESS systems and is discussed, however the research is predominantly interested in employee views and employee empowerment. This change of direction occurred after the surveys had been sent, meaning that the fit could have been better had they been designed with the new focus in mind.

If the research were done again the survey would be more specifically focussed on a narrower scope, providing in-depth information. More time would have been spent defining the survey and analysis tools.

1.4.2 CONSTRAINTS

The NZDF has been extremely supportive of this research, with assistance offered by Personnel Branch, Corporate Applications, the Atlas Manager and the Defence Computer Services Bureau. This assistance has been invaluable, however there have been a few issues that have taken time to resolve, including:

- The web server crashed for several hours in the week the surveys were sent, limiting the number of responses received.
- The organisation and the research had different objectives for the analysis, causing additional analysis to be undertaken.
- The NZDF approval process for the thesis.

1.4.3 LIMITATIONS ON GENERALISATION OF RESULTS

The military environment is structured and highly regulated, which may limit the ability to generalise these results to other organisations. The civilian respondents are public servants who may also provide different results than their private sector counterparts.

The Management Information System (MIS) which tracks system usage, based on usage of the DKS and other systems, was used to select the user sample. The MIS system did not show all employees, only those who have access to NZDF networks. This is acceptable for this research within the NZDF, as to use the DKS employees need to have access to the NZDF networks. This may limit the ability to generalise the results for groups that are not computer literate.

1.5 RESEARCH QUESTIONS

If employees do not use the DKS then it will fail, and will not provide empowerment or facilitate knowledge management. To ascertain whether employees will use the system, the research asked the following questions:

- Is access to personnel information important to employees?
- Do employees want access and control over their personnel information?
- Would employees use a personal computer to access and change personnel information?
- Can ESS systems meet the personnel information needs of employees?
- What type of personnel information is important to employees?

Employees were asked these questions through a variety of survey questions that were grouped into hypotheses. The responses to these hypotheses and survey questions were then utilised to answer the research questions listed above.

1.6 ORGANISATION OF THESIS

The thesis is divided into five sections, these are:

- Literature Review.
- Survey Methodology.
- Survey Research.
- Analysis.
- Conclusions And Recommendations.

1.6.1 LITERATURE REVIEW

The literature review will explore the areas of knowledge management, empowerment and ESS systems to provide a background into each area and to establish links between them. The findings of the literature review will be used to build a case for conducting the research. Academic models were identified and presented for testing against the results of the analysis. An overview of the literature review is presented in Figure 1.1.

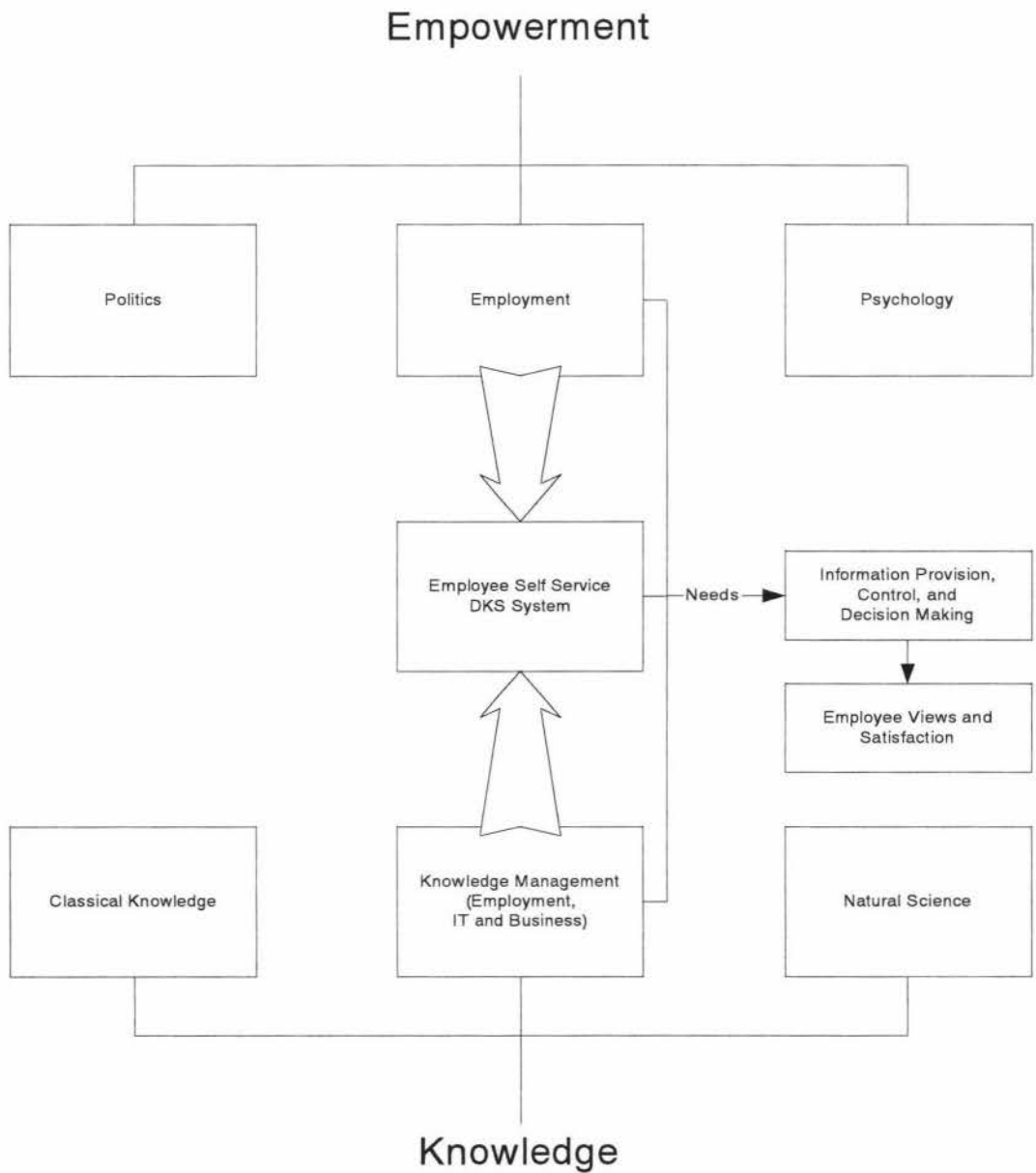


Figure 1.1 Literature Review

1.6.2 SURVEY METHODOLOGY

The survey methodology section states how the research was conducted outlining the research method and survey methodology. The research method component defines the analysis methods selected, states how the information gathering was conducted and what statistical analysis tools were utilised. The survey methodology component discusses the information

needs, outlines the questionnaire production and associated approval process.

1.6.3 SURVEY RESEARCH

The survey research section discusses the environment, introduces the questions and presents the framework that the results will be measured against. The NZDF operating environment is introduced, along with the groups who will be sent the survey. The survey questions are then presented to show what the responses will be based upon. Finally the hypotheses that the responses will be measured against are presented.

1.6.4 ANALYSIS

The analysis section presents the results of the analysis from the survey responses using the methods and statistical tests outlined in Section 1.6.2 above.

1.6.5 CONCLUSIONS AND RECOMMENDATIONS

The results of the analysis were collated and conclusions drawn from the findings. These conclusions are then compared with the empowerment methodologies and the findings presented. Recommendations and suggestions for further research follow the conclusions.