

Developing and Implementing a User-Centred Intranet:
Organisational Culture, Communication and Knowledge Management

A thesis submitted to Auckland University of Technology in partial
fulfilment of the degree of Masters of Arts in Communication Studies

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Declaration

“I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the qualification of any other degree or diploma of a university or other institution of higher learning, except where due acknowledgement is made in the acknowledgements”.

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Abstract

The research recorded in this thesis tells the story of developing and implementing a user-centred intranet in the organisation where I work in a senior management position. My management support of the process led to adopting a networked model in our organisation, and also to my embracing the role of communications management.

The organisation in which I work has a high rate of change and an entrepreneurial culture which is sometimes chaotic. This challenging environment was a good testing ground for the project, which sought to explore a number of propositions affirming the value of user-centred intranets.

Developing and implementing the intranet encouraged collaboration amongst staff members. The intranet became a new channel of communication, which usefully enhanced the staff's ability to share and find out what was going on, who did what and how to contact them. My interventions as a manager, which occurred in parallel with the technological development of the intranet, led to spin-off organisational improvements such as an improved collaborative reporting system, the restructuring of the organisation manual files, and the establishment of a collaboratively-focussed full monthly staff meeting. Developing and implementing a user-centred intranet was a dynamic way to effect change in the organisation and orient it towards a networked organisational model, one which is communication rich, both collaborative and participative.

The project was driven by my belief that a user-centred emphasis in intranet design is necessary in today's knowledge-based global economy, where there is a high rate of change. The networked organisational model should be embraced as a flexible model catering for change by promoting organic and dynamic networking within an organisation. This environment is communication-rich and collaborative, and a user-centred intranet is a communication channel well suited to support this model.

A user-centred intranet should not be seen merely as an organisational artefact, but also as the a process of developing and implementing it will open up an organisation's culture, communication, and knowledge management in a participatory way. However, the degree that this will be achieved depends on a number of factors. For instance, the leaders of an

organisation need to embrace a networked organisational model, encouraging and resourcing communication management for a culture of participation and collaboration.

Chapter 1

Introduction and Background to the Project

Introduction

The purpose of this research was to explore the effects that the process of developing and implementing a user-centred intranet has had on the culture, communication and knowledge management of the organisation in which I work. The organisation is Romus College, a private provider of tertiary education. I achieved my research purpose by first, designing, prototyping and implementing the intranet, and second, by observing and responding participatively to the feedback I received during the implementation phase. I took the feedback to be an expression of the cultural imperatives of the organisation and, accordingly, tried to match functional aspects of the intranet design to the needs of organisational members.

The intranet design and implementation forms the first part of the thesis for Master of Arts. The second part of my thesis is this exegesis, which is a reflective exposition of the process and significance of the project. The exegesis records the thinking and exploration which resulted from the two roles I played in the intranet project. My first role was as the technical instigator of the project, and the second role, just as important as the first, was one a management support role. During the project, I could not avoid using my management position in parallel with my technical role, and my interventions as a senior manager are recorded as part of the intranet story. The context of this exegesis is, therefore, the technological development of the intranet project, then the reciprocal effects of the project on the wider organisation and finally, the wider context of the knowledge based and globalised economy.

While it is clear that technology is increasingly part of organisations, it is not so clear that all technological provisions are well suited to the organisations faced with integrating them into day-to-day working life (D'Aprix, 1999). It was an assumption of

this research that technology needs to suit its users or it will simply waste resources and engender frustration. Basing my work on this assumption, I therefore began from the premise that if an intranet mechanism is to be successful in enabling staff to interact in a new way, it should exist as an accepted and well-understood artefact in the organisation's culture. The use of the term 'enabling' here refers to the participative and collaborative involvement of staff in organisational decisions, and in terms of the intranet project was expressed by the user-centred emphasis of the design. A participative user-centred emphasis is a modern organisational trend (Handy, 1976), which underwrites the theoretical approach to the intranet development at Romus. For such enabling to eventuate, organisational culture, communication and knowledge management needed to be managed and integrated with technology. My participant-observer role (Agar, 1986) provided me with the means to explore the interrelation of technology and communication during this project through management intervention, staff input and by telling my own insider's point of view.

1.1 Propositions on which the work is based

Two theoretical propositions underpinned the thesis as a whole. The first proposition was that a 'user-centred' emphasis in intranet design is essential in today's knowledge based global economy, where there is a high rate of change. This raised the question of whether my organisation fitted the profile of an organisation in a knowledge-based global economy and, if so, the further implication that a user-centred emphasis was, in fact, necessary.

A post-industrial, knowledge-based economy, sometimes referred to as knowledge-economy, is decentralised because it needs to be flexible and adaptive to change. In such an environment, the implicit knowledge – that is, the know-how that workers gain through experience and the creative thinking which staff can contribute -- become a significant organisational asset. As Harding (2002) writes:

companies build, manage and extend capabilities within their firms so that the cumulative 'know-how' that develops around work becomes an asset driving high performance in its own right. (Harding, 2002, p. 4)

There are both embodied world and virtual world ways in which this know-how can be captured, and an intranet is one such virtual application. A user-centred emphasis in intranet design reflects a decentralised organisational approach, because the sharing of information becomes a collaborative practice across an organisation.

The second theoretical proposition grew from the first: that a “user-centred” intranet is not only an organisational artefact, but also, the process of developing and implementing such an intranet will open up an organisation’s culture, communication, and knowledge management in a participatory way that assists in evolving decentralisation.

D’Aprix (1999) thinks that ineffective communication processes are a negative product of the beliefs of an organisation’s leadership, mirrored in the communication system and behaviour of the organisation. According to D’Aprix, innovation management is needed over creative spaces, networks and virtual networks, to build know-how. I propose that a user-centred intranet is such a mechanism of innovation and the process of developing and implementing it will involve this kind of management innovation.

When I considered these propositions I saw the need to take into account the existing culture, communication style and knowledge management approaches of the organisation. The implementation process also required an understanding of the organisation and its leadership. It was therefore appropriate that this enquiry was undertaken from a participant-observer role. To declare my presence in the work, I was fully engaged with the project of developing and implementing the intranet, in parallel management interventions and with research exploration. It was as if there were two managers – the manager of the new technology and the organisational manager -- and I was both of them. To be explicit, on the one hand, I managed the intranet development and implementation. On the other hand, I managed the parallel and supportive change process of the organisation. This change process included changing the organisation’s reporting structure, channels of communication, and the structure and format of information stored on the network drive. My participant-observer role both enabled the process and brought change to the organisation.

1.2 Rationale for the research

I chose to undertake this research for a number of reasons. As I have said, the thesis is for my MA in communications studies. A number of the taught papers I have studied have involved exploring literature on the cultural impact and socio-political ramifications of Internet uses, philosophies of technology, and a socio-psychological critique of reality television. Another factor is that I have also been a software designer. Some years ago I became interested in the interactive potential of computers for education and developed some software for teaching English to speakers of other languages. Similarly the communicative potential of Internet-based technology has captured my imagination.

As Principal of the organisation in which the project is based, I have had significant management responsibility during the research project. I have seen first hand the ramifications of good and bad management of organisational structure and integrity, and of business growth and shrinkage. I wanted, for the sake of those I work with and my belonging with those people, to increase my understanding and to be more effective in my role and influence.

I had considerable autonomy in designing and implementing the intranet. In the process, I was able to focus on the role of communication management, collaboration and learning in our organisation. From my survey of relevant research, which is recorded in the literature review chapter, I gained an appreciation of the need to embrace a networked organisational management structure. This structure seemed most appropriate for our organisation, considering the ever-changing environment it operates in. In my management role, I had sometimes been very frustrated by the way in which informal internal networks disregarded the protocols of line management. My frustration was significantly reduced when, as part of the project, I created an organic chart showing how management networked and involved themselves in different areas of the organisation. By “organic”, I mean that the model would evolve naturally over time to reflect the reality of the organisation, and I saw this as dynamic and powerful rather than negative. It did not justify disregard for line management protocols but it explained the culture in a way that was positive. The mapping of interaction networks

tended to show that our organisational style was suited to a knowledge-based and globalised economy. Our organisation, which targets international students, needs to be flexible and to accept ongoing economic, social and political change. Such an external environment meant that Romus, like other organisations, could benefit from drawing upon the know-how and innovative potential of staff. Intranets are theoretically one mechanism for achieving increased staff involvement.

This exegesis, then, is a record of applied research. While I was working on the practical project, I was also embroiled in all the pressures of managing an organisation that was in constant change. A dispassionate observer looking at the project purely as a technological innovation, detached from on-going organisational life, might have concluded that I should have been able to implement an intranet easily, but in practice, I had to contend with issues of organisational politics in an entrepreneurial culture that imposed a degree of disorganisation, with growth in a ballooning market and with the bursting of that balloon, and with departments which sometimes did not work together. I also had to deal with the conflict which can arise between information-technology (IT) and New Media designers. The conflict stems from opposing mandates. Traditionally, a mandate of IT departments has been to control security integrity. On the other hand, new media designers seem to work to a mandate that is more creative, imaginative and marketing-based.

I also had to contend with budgetary issues. For example, if the intranet was to be stored on an external server and included a photo section, then the costs charged to the organisation by its Internet service provider would increase because of the increased traffic caused by users viewing the pictures. Allocating a staff member to revamping the organisation's manual was frustrated when they left the organisation before fully completing that project and budget restraints frustrated attempts to reallocate that task. I also had to deal with priority shifts. There were times when I needed to step out of the project in order to complete other tasks which had an urgent priority. I had to deal with different personalities, some choosing to work by organisational protocols and others choosing to work more autonomously within the organisation. The whole thesis, then, is very much an applied project, where theory is tested in a challenging 'rubber meets

the road' environment, and one in which I am both a participant and an observer. This explains why the thesis follows a case study and ethnographical approach rather than a more traditional theoretical exposition approach based on controlled data.

This exegesis could provide insights relevant for communications and New Media professionals with whom managers of the modern organisation increasingly interact. An intranet needs to 'work' for an organisation seeking to be effective in a global economy. As Heltz (2002, p. 1) says "most companies have intranets, they don't necessarily have good intranets... we need desperately to convince them to invest in the kind of networks that work." Existing literature in the field comes from external consultants and research perspectives. While the 'user-centred' trend can be seen as an evolutionary model, there is scant literature or case study material available on user-centred intranet development, implementation and uptake. The opportunity existed to explore this and to provide further insight into the issues involved.

1.3 The drive towards user-centred intranets

An intranet is technically the same as a website in terms of the technology it is built with. A company website, which provides a sales and marketing interface, often offers customer support. A website is publicly accessible with guest and membership areas. However, public access is prevented to an organisation's intranet. An intranet provides an interface accessible only by staff within an organisation. Public access can be prevented by a top level login screen or it can be prevented by being stored on an organisation's internal network, which technically disconnects it from public access. The context and functionality of an intranet is purpose-built to serve an organisation's internal needs. An intranet may include information stored in a database and access to files within an organisation's network.

For staff to be able to access an intranet they need access to a computer. Since not all staff may have such access, staff who can access an organisation's intranet may be a subset of the organisation's employees. Some staff may also be less confident when using computers and therefore may need training in order to be able to share

participatively through a user-centred intranet. If an intranet is stored on the Internet with login access, staff who are geographically dispersed can access it. This can include staff working in divisions in different regions, staff working from home and staff working off site, such as when on a marketing trip.

Since the early 1990s, intranets have moved from being internal organisational websites which centralised information and tools to enable users to manage information and interface communicatively within organisations via a browser type interface. Intranets are still evolving in customisation and interactivity, as on-line data base protocols develop. Intranet design issues have been challenged to embody organisational processes by combining the information processing capacity of information technologies and the creative and innovative capacity of staff, creating a user-centred paradigm which focuses on the participatory potential of intranets. For example, there has been an increase in the prompted and spontaneous use of forums, and in a consensus-oriented knowledge management approach, which could represent an organisation's endeavour to draw upon the imaginative and creative potential of an organization's staff. A user-centred intranet builds a complementary coexistence of staff participation and collaboration.

One of the reasons for capturing user ideas comes from Malhotra (2000), who says that rather than working along the lines of predicting market changes, businesses need to shift to a more flexible "anticipation-of-surprise" model. Anticipating surprise can be achieved by creating a "consensus-oriented view" as opposed to the view that "information in a database represents common sense or experience" and implies a particular strategy for intranet design and implementation. As Malhotra says:

in a way which facilitates the organization's self-designing...the organization's members define problems for themselves and generate their own solutions, the members would also evaluate and revise their solution-generating processes. By explicitly encouraging experimentation and rethinking of premises, it promotes reflection-in-action and creation of new knowledge.

(http://www.cio.com/archive/enterprise/091599_ic.html, 10/07/2005)

The work for this thesis was based on an exploration of the theoretical position that Malhotra (2000) expresses, showing coexistent application of intranet design and

management intervention. The ramifications of this engagement informed and guided the thesis.

1.4 The case study approach

The exegesis is written as a case study, because such an approach offers a way to record exploratory research undertaken within the story of an organisation. Many variables were investigated during the project: culture, communication, knowledge management, technical and embodied world interface, my management responsibilities, the organisation, and the organizational members involved. All these points of view create multiple sources of evidence for the iterations of the practical project. These variables form a context with its own evolving history. Drawing on Yin (1994) as my main theorist for case studies, I was guided by the following statement:

A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident...the case study enquiry copes with the technically distinctive situation in which there will be many more variables of interest than data points, and as one result relies on multiple sources of evidence, with data needing to converge in a triangulated fashion, and as another result benefits from the prior development of theoretical propositions to guide data collection and analysis. (Yin, 1994, p. 14)

Because I was in a key management role of the organisation, I was given significant latitude in undertaking the development and implementation of the intranet. While the intranet project was being implemented, parallel research was carried out into the effects the intranet was having on the organisation and the effects the organisation had on it. The story of the interfacing of technology and organisation is told so that the reader can see the validity of the data, and the difficulties of the project which was undertaken within the diverse stresses and dilemmas which face an organisation in a state of constant change.

In terms of the technological project, a prototype intranet was developed based on a literature review, rather than a brief by the organisation. The prototype was then introduced to key managers through usability testing sessions, and prototype testing

with key users. During this phase, a number of iterative technological developments occurred. The intranet was then launched by setting it up on all computers in the organisation and introduced to staff through meetings at which instructions were provided on how to log on. The introduction was supplemented with training, such as how staff could add news items and use the forum. A help file was also built into the intranet itself. All the while, engagement with the organisation meant that initiatives were taken in terms of managing the organisational culture, communication and knowledge management systems. It was, and continues to be an evolutionary endeavour, which reflects and affects the culture of the organisation.

Lea, O'Shea and Fung (1995) identify two major inadequacies in studying communication technology impacts. One inadequacy is the tendency for studies to view context as a static and stable entity and so to assume that context can be adequately measured by cross-sectional studies of media use in organisations. The other is the failure to examine the complex reciprocal interaction between context and action where social context affects and is affected by communications technology and behaviour. My project avoided both these inadequacies by collecting data as the project evolved, by involving myself in the iterative design process and parallel management intervention, and by telling the story from a participant's point of view, which maintains focus on the context of the coexistent juncture between the technology and embodied world.

Ethnographical approach to case study

Ethnography involves exploring a culture from within, aiming for an "insider view". Gregory (1983) believes that organisational cultural research should encompass the "study of participants' views about all aspects of corporate experience. These would include the work itself, the technology, the formal organisational structure, and everyday language, not only myths, stories, or special jargon" (p. 359). Gregory believes researchers who take such an approach to cultural research can discover a more accurate multicultural view. However, Schein (1993) warns that the boundaries of this ethnographical approach need to be considered. He takes the line that ethnographical research based on participant-observation is time consuming and unnecessary. He recommends instead, a clinical perspective built around interviews that allow a

researcher to discover shared assumptions. Schein's (1993, pp. 69-170) approach includes a series of encounters which he describes as "interactive clinical interviews", involving joint explorations between the investigator and various motivated informants who belong in the organisation and embody its culture.

I combined both approaches to building my case study because the thesis involved exploring the organisational culture, but I judged that it need not record great detail. The focus of my project was not to produce an organisational ethnography, but rather, to understand the culture sufficiently to establish a useful intranet. To this end, I did explore the user-centred paradigm and the degree to which this would affect certain aspects of the organisation. The simultaneous management intervention focussed on supporting design process of the intranet, rather than instigating a project specifically aimed at organisational change. The primary focus was the intranet development and design. The secondary focus was on the organisation.

1.5 The organisation of the exegesis

This introductory chapter has explained my role in the organisation and in the project and has introduced the content, reason and intention of the thesis. The project of developing and implementing the intranet became part of the context of the organisation and the research. As the story unfolds, the preliminary theoretical propositions will be addressed. By taking a case study and participant observer approach the effects of developing and implementing a user-centred, participative intranet will be explored. It has been explained how this is accomplished from a unique insider's point of view.

Chapter 2 provides an overview of the organisation. The key management personnel and strategic partners are introduced, together with some comment on the impact of the owner's entrepreneurial style. In this chapter the exegesis shows how that entrepreneurial style transposes to a number of distinctive organisational features. The organisation's place as an international educational provider in the global marketplace is also explained. All of these elements are brought together to show an organisation in a state of constant change, revolving around its response to the marketplace and its

restructuring cycles. Internal politics and staffing changes are also introduced, with a brief explanation of how they impact on the internal dynamics.

Chapter 3 contains a literature review that covers the philosophical and strategic approaches to technology. The chapter also explores some of the socio-political theories of technology that lay behind the design and implementation process and enhanced the user-centred approach to the intranet.

In chapter 4 the literature review is expanded, and the networked organisational paradigm is explored for its effects on organisational culture. This chapter provides the basis of the potential purposes of an intranet, relates it to organisational communication, and also explains the communicative, collaborative and cohesive aspects of organisational culture. Strategic management of knowledge is considered for its relevance. The chapter also covers a theoretical amalgamation of these for networked organisations.

In chapter 5, the theory and method of building the intranet is outlined. The story of the intranet is told from an insider's point of view. The chapter uses four data collection types as section headings and correlates these with the development and implementation stages. Simultaneous management engagement in relation to data collated is explained.

In chapter 6 the development stages are told as a story, and once again, an explanation of simultaneous management engagement in relation to the development process is included. The data that was collected is laid out with converging discoveries. Technical explanations are included where appropriate. Selected screenshots illustrate what the user-centred intranet has evolved into and implications are drawn taking into account the body of material covered in the previous thesis chapters. The theoretical propositions are addressed and the thesis contribution to knowledge is explained.

In chapter 7 the implications of the project are considered in specific relations to the initial thesis propositions. Conclusions are made and presented in such a way that management and communication professionals concerned with networked organisations and the coexistent issues of technological integration can benefit.

Chapter 2

The Organisation and My Role In It

Introduction

This chapter introduces the organisation and its history, and reflects on the manner in which the owner's entrepreneurial style impacts on the culture of the organisation.

The chapter also discusses the organisation's position as an international educational provider in relation to the global marketplace. In this chapter I also explain my position in the organisation and the relationship of my professional life to the research project.

Over the course of the project the college experienced a boom and bust period. I consider that this cycle of rapid growth and equally rapid decline was a valuable opportunity for the thesis project, because the intranet was challenged within a robustly-changing context.

I have been involved in this research as a participant-observer. On the one hand, as a researcher, I explored what happens when a user-centred intranet is developed and implemented and on the other hand, as a manager, I developed, implemented, and integrated the intranet into the organisation. This involved a number of management initiatives which brought change to the organisation. While the primary focus of the thesis is the intranet, secondary management intervention and day-to-day challenges are included, for they are part of the story. The combination of the two perspectives defines the research as a work which addresses the realities of a pressured workplace.

Members of the organisation who contributed to the usability testing sessions and in the interviews at the end of the project gave permission and signed off that their comments could be used for the exegesis. Copies of the final draft of the exegesis were provided so that all staff employed during the project time could read it, discuss and negotiate any part which quotes them or mentioned their role. For the purposes

of maintaining privacy and confidentiality, I have provided *noms de plume* for both the organisation name the staff members who participated.

2.1 The organisation in the global marketplace

During the last 15 years, New Zealand has been widely perceived as a politically neutral and safe destination for international education. New Zealand also has generally had a favourable exchange rate compared to competitor international educational providers such as America, Canada, England and Australia.

From its establishment, Romus Colleges has typically drawn students from Japan, South Korea, Thailand and Europe. Students from these markets sought a native-English speaking environment to study in. Over the years the market has changed, largely due to an Asian economic recession, but also because the type of student coming to New Zealand has changed. The age of students involved in language study has got lower. Before, young adults studied English language study internationally in order to gain competitive employment in their home countries. Now, as the Asian market economies mature, high school aged students travel overseas as part of study tour groups during their school holidays. Niche group markets have developed. For instance, one such niche caters for Japanese students who drop out of the education system in Japan. Rather than having their children stigmatised as failures in their own country, some Japanese parents choose send their children overseas for a second chance at education.

Another example of the niche market at Romus was the development of a department for television and film production training. This was a response to the New Zealand film industry gaining international profile, notably, through the trilogy 'Lord of the Rings' by the producer Peter Jackson. Because of the success of the Lord of the Rings, Romus' management believed there was an opportunity for to present New Zealand as a preferred destination for international students to study TV production and filmmaking.

Boom and Bust

The booming market for international students from China was a variation on this theme during the course of this project. The increase in students from China created the drive for offering business programmes at the first and second year degree levels and led to the inclusion of a business and computing department within the college. It also led to a growth in numbers of students at Romus from 100 to 1,000. Growth in Chinese domestic economy meant that an upper-middle class could realise the benefits of international education. Many Chinese students now study to degree completion in a number of Western European nations.

However, after a huge influx of Chinese into the New Zealand education system, a number of problems arose, causing a decline in enrolments. One of these was the SARS epidemic, which made it harder for Chinese students to travel. At the same time, other markets such as England, Canada streamlined their visa processes, which led to a swing in interest of Chinese students to those markets. These factors led to a dramatic drop off in Chinese students at Romus Colleges. Over the course of this project the number of students has ranged between 250 and 1,400, because of the boom and bust phenomenon in the market for international students from China.

New developments

The organisation had also been pursuing the idea of partner school arrangements in China and franchise opportunities elsewhere. During the course of the research project, I was involved in establishing two franchise schools in Auckland. To date, expansion has also led to one school being established overseas. Other overseas educational delivery partnerships were being considered at the time. The idea was to diversify overseas, and establish “seeding” schools, particularly in locations where students might subsequently continue their studies at Romus Colleges in New Zealand. In terms of the thesis, these off-site initiatives developments also provided an opportunity to explore whether the intranet could be extended to include the franchise schools in Romus’ communicative networks.

2.2 An overview of the organisation

As I have already stated, the organisation which is the host of the intranet development project is Romus Colleges, an educational institution situated in

Auckland. The college was started as a language school in 1987 by the owner, Thomas Chapel, whose first endeavour in the field of international education was in 1985, when he organised and ran a Japanese tour group for English language tuition and rugby experience. Thomas provided English language tuition and organised for some of the New Zealand All Blacks to coach the students and to play rugby with them. Thomas's entrepreneurial style pervades the school to this day. Romus Colleges presently provides education for international students in the areas of English for Speakers of Other Languages (ESOL), business studies at the first and second year degree levels, teacher training for ESOL (TESOL) and studies in applied film and television production. Consequently there are four departments in the school.

Key management personnel

Two of the longest serving personnel are Charles Dowie, in the position of Marketing Manager, and me as Principal. We have both been with the college from its establishment. Together with Thomas, we are entrepreneurs and have all attempted start up businesses, though it is Thomas who created and maintains Romus Colleges, the business that we all work for today. We all explore areas for development and growth, and tend to work with enthusiasm when we are picking up ideas and building them into the framework of the college. The consequence of having three entrepreneurial managers at the top of the organisation makes the internal environment at Romus as turbulent as the external environment and means it is open to rapid change.

On top of this entrepreneurial culture we each bring a particular emphasis. Thomas drives the financial impetus and accountability, Charles generates marketing impetus and activity and as the Principal, I emphasise organisational strategy, project management and cohesion. I was responsible for project managing the development and establishment of each of the departments and the educational programmes within them. In other words, Thomas does the deals, I make the product and Charles sells it.

Strategic partners

Romus also has two strategic partners - Trinity College, London, and Victoria University of Technology, Melbourne. Trinity College is our partner in offering the

teacher training (TESOL) programme, providing moderation and certification. Victoria University of Technology, Melbourne provides the content for the business studies at the first and second year degree levels. They also moderate the programme and provide certification and guaranteed cross credits and transfer arrangements for students wishing to transfer to degree programmes within the faculty of Business and Law of the Victoria University of Technology, Melbourne.

The owner and president

Thomas Chapel's influence affects the organisational culture most significantly. He is the President of the College. Thomas is an entrepreneur. This means he is often developing new business ideas.

Virtanen (1997) suggests the following multidimensional definition of entrepreneurship with specific emphasis on the entrepreneur as the main actor in the process:

Entrepreneurship is a dynamic process created and managed by an individual (the entrepreneur), which strives to exploit economic innovation to create new value in the market. An entrepreneur is a person who has entrepreneurial mind with a strong need for achievement.
(Virtanen, 1997, p.6)

Entrepreneurs, as Virtanen (1997) says, feel compelled to do their own thing in their own way, needing the freedom to choose and to act according to their own perception. Thomas displays this characteristic of entrepreneurs. As with many entrepreneurs, he is not shy of working on multiple business ideas simultaneously. Romus is influenced by the international education market, and in an effort to maximise market share, has engaged with a number of external agents. One of Thomas' strategies has been to invite key external agents to take up important roles within the organisation, providing credibility for those agents. However because of their lack of experience in educational management and different management styles, the agents' internal involvement has the negative affect of decoupling established working protocols. On the other hand, Thomas does listen to key management personnel and will endorse entrepreneurial ideas for adapting or introducing new product and new marketing approaches and initiatives.

The ensuing changing environment within Romus means that a degree of drama and disorganization exists. In entrepreneurial fashion, Thomas is not troubled by the ambiguity and uncertainty that this fast pace of change brings. Particularly during tough business periods, Thomas will involve himself in every aspect of the organization. When resources are scarce, his attention is on what is essential to maintaining viability, which means his attention is not as focused on procedures as much as outcomes. Some staff feel that changes should be processed in a more organized fashion, but that is not the way things are done at Romus.

Romus is organic. Issues of delegating authority are sometimes compromised because staff work across departmental boundaries. Typically, staff are involved in many varied aspects of the organisation. There are established line management protocols, but entrepreneurial culture tends to resist structure and control. Thomas's direct approach leads him to seek information directly from its source, often bypassing the structured chains of authority and responsibility, which can lead to managers feeling undercut, particularly in cases where there is a lack of communication as well. Authority exists more when staff work proactively, accepting unceasing role positioning as a result of organic changes. From this perspective, managers are able to work as an enthusiastic team. There is drama, there is fluid professional structure, and there is vibrancy.

Thomas has a very approachable and affable manner. He is open to criticism and will adjust his position, not so much on issues but on how his management staff deal with them. Because of Thomas' approachability, staff may bring their concerns directly to him in order to gain immediate decisions. This benefit, however, has a drawback if established protocols are overlooked. It can happen that staff can take unilateral initiatives with Thomas' support, only to find through a lack of consultation and collaboration with management, that the initiatives are unrealized. Managers may have been unaware and instead have had another focus, so that resources are not available to pursue unilateral initiatives. I strongly encourage staff to network appropriately, prior to and after discussion with Thomas, but people do not always follow my ideas.

These tensions are part of the drama that exists at Romus. Sometimes the organization feels like a team game where part way through the game players and the

referee realize the game has changed. Players adjust and then it happens again. Periods of confusion meet periods of consolidation. Periods of enthusiasm follow periods of uncertainty. One staff member, on being asked to finish the sentence “Romus is like a ...” said it was like a family shop with Thomas as the owner operator. This captures the family atmosphere that exists at Romus and his entrepreneurial character. In spite of the turbulent internal environment at management level, the provision of education in the classroom has traditionally been managed well. Managers of the educational departmental are able within their departments to work relatively unencumbered by the turbulence of the upper management organisation culture.

Cultural features

As an educational organisation our culture includes certain features. It is all about people teaching and learning, and their expectations and the services we sell. It is about student welfare and educational concerns. Within the context of the programmes we run, there is a diverse group of individuals who have often travelled extensively. Within our student body there are also diverse ethnic cultures. This cultural diversity also exists within the staff. The staff is made up of people from Japan, Korea, China, South America, Eastern Europe, Philippines, England, Canada, America, and New Zealand.

My role in the culture

In a sense, I am the owner’s right hand man. As the Principal my role is varied. I maintain a facilitative style of line management for the academic departments, facilitating the resourcing for the departments, assisting in curriculum development. As well as that, I also oversee system support, student welfare, assisting in a human resources role, establishing quality assurance. I act as project manager for new developments. I tackle the demands of communication management and instigate strategic initiatives. Organisationally I drive restructuring. In the sense of the game analogy, where the game keeps changing, I work to establish what the rules could or should be and try to provide cohesion for teamwork. As I have the trust of the owner, I can significantly influence how the organisation works. I therefore provide a certain influence and position which means I can undertake various projects, including this thesis project.

The scenarios of boom and bust that I mentioned before, together with the intention of diversifying overseas, is derived from the global marketplace within which we Romus operates. Change is inevitable and influenced by many variables beyond the control of Romus Colleges. During the period of the boom, as well as developing and implementing the intranet, I was involved in restructuring the college into four departments, and the English for Speakers of Other Languages (ESOL) department into three sub-departments. The work included establishing the business Diploma department from its inception, leading a franchise implementation team for establishing two franchise schools, employing over twenty teachers from overseas, and two overseas trips to explore overseas markets for setting up schools. I also set up an academic council which meets monthly to ratify any changes and track issues. The council reports provide the impetus for a collaborative forum to establish how issues have been processed. During the time the two franchises were operating under Romus Colleges they also sent representatives to report to the council. All this took place during the intranet project.

Chinese businessman and internal politics

During the time of the boom in Chinese students, there were also times of management crisis. Thomas Chapel, the owner, leveraged access to the Chinese market through a Chinese businessman, whom he invited into a management role. However, this action brought about a series of issues with debilitating results. The Chinese partner had an Asian business management style, which was focussed on relationships, so he tended to work through staff he trusted rather than through established protocols. This meant he often worked autonomously, which in turn led to structural issues. He would generate invoices and offers of place outside of the registration department. This decoupled the registration department process. Ignored management requests to maintain a cohesive registration process meant that frustrations and resentments developed. Communication was negatively affected because staff positioned their loyalties differently.

The Chinese businessman introduced the key franchise owners and had a directorial level involvement with them. The management style issue carried over to the franchises. In one case, an independent agenda was evident and consequently affected the communication networking. This saga added to the complexities of

trying to integrate the intranet with the franchises. The Chinese businessman took over ownership of one of the franchises and left Romus. The other franchise established itself as an independent school.

The IT and New Media departments

Information Technology (IT) management traditionally provides a controlled environment for an organisation's information management. Systems administration determines the hardware and software systems for an organisation's shared network drives, mail servers, and Internet access, which requires establishing and maintaining system integrity and security protocols. In 2002, the college's IT was managed by an external consultant who was called upon from time to time, as well as by a part-time IT student who undertook maintenance tasks. The appointment of a new educational department manager, who had previous IT systems management experience, meant that a more strategic approach to our system was introduced.

New Media management encompasses developing, revamping and maintaining internal and external technologically based organisational media. These include websites, intranets and marketing media such as CD-ROM or DVD. As a discipline area, it is unlike IT in that it is driven by creativity. In the case of Romus Colleges Vaughn, the New Media specialist principally reported to the Marketing Manager and me. He also reported to the IT department for matters where website and intranet operation required system protocol settings and as a back up person for IT.

During the time of the intranet development, the New Media specialist worked in my office and also assisted with some IT maintenance tasks. I took line management responsibility over the position because I have a software design and development background and because I play a strategic role in the organisation. I worked with him closely on the development on the intranet because our shared skills were required.

Cohesion between the IT and New Media departments was not strong, partly because of the independent roles each played, and partly because of the pressures each department was under. The person responsible for IT was also a manager of a department and so had a range of responsibilities in the organisation. He had a very structured approach to IT problem solving, liking to consider ramifications properly

and discuss them with all parties that should have input. Pressures of work made this discussion process difficult at times. There were three IT staff he could allocate work to in the IT area but because they worked part time and also for other managers, he did not receive their undivided attention, and this created frustration. The New Media developer was one who would help out with IT issues, but mainly he reported to the Marketing Manager, myself and the owner, who would also give him independent direction. At a typical meeting between the IT Manager and the New Media developer both would discuss perspectives, but specific agreement was 'left in the air' and rather the priorities of each would affect the outcome.

Summary

This chapter is a brief overview of Romus Colleges from an insider's perspective and provides a sketch of the context in which the thesis research took place. The significant feature that has emerged from the discussion of the organisation is that it is a culture with a high tolerance of change and uncertainty. In the next chapter, I review particular concepts in published research that are relevant to the work.

Chapter 3

Philosophical and Socio-Political Perspective

Introduction

The context of the thesis is an intranet development project, within a specific organisation which is itself located within the wider context of a knowledge based and global economy. An intranet is an important tool for knowledge management in that it affects the culture and communication of an organisation. Whether that influence is positive or negative depends on the way the intranet is developed and implemented. For instance, it can be imposed as a *fait accompli*, or negotiated with organisational members so that it serves their needs and interests. I contend that a user-centred intranet is strategically important on modern organisations. Examining this contention involves exploring the theoretical perspectives surrounding the technology. This thinking is the basis of the theoretical underpinnings of the project, which are introduced in this chapter.

Organisational and technological provisions are a characteristic of modern technological societies. Technology coexists as part of an organisation's culture because we use technology as one mode of communication and knowledge management. Within this theoretical framework, one trend is that modern day organisations need the participative and creative involvement of staff. This is a response to the fast pace of change modern organisations encounter. This trend is addressed with a user-centred emphasis for the intranet. Previous research which covers the wider socio-political ramifications of digital and Internet technologies, leveraging collegial networking potential, involving staff participation, and the cultural effects of technology is also explored.

3.1 Warnings from the Philosophy of Technology

The German philosopher Heidegger devised a philosophy on the nature of technology, in relation to how people exist in the world. His essay *The Question Concerning Technology* (1949) fashions a way of thinking which he believes

provides a free relationship between people and technology. Heidegger (1949) prescribes a state of being that makes it possible for people to relate to technology by appreciating the governing scientific principles behind it. He delves into how people should deal with technology in order to remain emancipated, proposing that people need to realise that truth does not exist in the culture in which they live, but rather in a questioning and thinking attitude which they must bring to the process of existence. In his view, cultural concealment or distortion opposes emancipatory creative and free thinking. Heidegger (1949) argues that it is easy to become embroiled in the mode of learning about and managing of new technologies. By this he means an overemphasised focus on what technology does and can do, thereby losing connection with and respect for the giftedness of nature which underpins it.

The implications of Heideggerian thinking for the project at Romus focussed my wish to develop the intranet as an emancipation tool rather than one which would lock staff into rigid and unsuitable forms of interaction. It is important to me that the staff in the organisation are free-thinking individuals who are free to critique the environment in which they work. Following Heidegger, therefore, any communicative technology that is likely to enhance culture in a participative and effective way, needs to be concerned with this, implying that management intervention should not be about getting staff to use the intranet, but rather, should be focussed on how the intranet can be designed to serve effective participation. The attitude of staff in relation to the intranet should not break down the humanness of the organisation.

Feenburg (1996) says that the danger of technology is not so much its threat to human survival as the incorporation of human beings themselves into technology as mere raw materials alongside products. Feenburg (1996) offers a philosophical alternative to Heidegger (1949), taking account of what has been learned about the history and sociology of technology in recent years. As with the Internet, it is an important concern that creating new ways to communicate does not replace embodied world communications, which have greater relational ties than technology is able to create. The way things are done within the organisation needs to also be explored so that an intranet serves the needs of staff.

Whereas Heidegger (1949) and Feenburg (1996) pose warnings about the danger of being subsumed by technology, Marcuse (1964) is pessimistic and believes emancipation has already been usurped by the advancement of technological society. In Marcuse's view, the threat of disconnection for nature posited by Heidegger (1949) has become a reality: "In the medium of technology, culture, politics, and the economy merge into an omnipresent system which swallows up or repulses alternatives" (Marcuse, 1964, p. xvi). In other words, while technology purports to satisfy people's needs, in reality it becomes a totalitarian system of control.

The threat of an intranet taking over how staff relate therefore had to be kept in mind during the project. I could see how rhetoric around the project might make claims that the intranet was all about participation, yet the project could swallow up work time and face-to-face meetings that were convenient and effective before the intranet existed. Further, it could also take over how organisational knowledge was currently managed, and could stifle knowledge in such a way it would act as a disincentive for staff to creatively and participatively contribute.

Foucault (1988) focussed on the constancies of power and the self. Systems of power (p. 18) "determine the conduct of individuals and submit them to certain ends or domination." While, methods of emancipating the self:

permit individuals to effect by their own means or with the help of others a certain number of operations on their own bodies and souls, thoughts, conduct, and way of being, so as to transform themselves in order to attain a certain state of happiness, purity, wisdom, perfection, or immortality.

Foucault (Foucault, 1988, p. 18)

Foucault is concerned, like Heidegger, with how people constitute themselves in modern technological societies. He finds a consistent notion of caring for self, defined in communicative-meditative practices such as rhetoric, study, diary reading and writing, in correspondence and in dream interpretation. Foucault's focus is on a "right way" of individual verbalisation. Management intervention for the project, therefore, would need to ask staff how they are doing in the culture. When an intranet is asking people to communicate collaboratively, the feeling of belonging matters. I could see that exploration of organisational belonging and the

organisation's culture might raise critical issues which would need to be taken into account when developing a mechanism for virtual communication. In conducting the project, therefore, I needed to retain a focus on the wider values for the organisation rather than becoming over indulged in the intranet as a mechanism for solution.

3.2 Socio-political theories of technology

While the philosophical perspectives sketched above provided theoretical attitudes for me as the project manager, socio-political theories provided approaches to the technical design process. Writers such as Negroponte (1995), Winstone (1998), Anderson (1995), McChesney (1995) and Habermas (1991) focus on the wider socio-political ramifications of digital and Internet technologies. These perspectives highlight critical issues which can be applied as considerations and leverages over the design and implementation process of intranets. They show that a trend towards user-centred design ought to be beneficial. The benefits that can come from user-centred intranets include leveraging collegial networking potential, access and control of information, involving staff participation, leveraging free market potentialities, leveraging open forum discussion to affect culture, and considerations of social benefits and implications.

Social necessities and key benefits

Winston (1998) presents the case that human decision-making determines change. His examination of technological change from the telegraph to the Internet points out the characteristics of change and the sociological factors that underpin them. He considers prototypes, the defining nature of the social necessities in bringing those prototypes into public use, and the forces which push and inhibit the process of technological development. These forces, on one hand, are created by what people need socially, and on the other hand, are created by different aspects of being a competitive business. According to Winstone's line of argument, three things can evolve from a technological project: first, that the desired technology may be created; second, that technology may become redundant; and third, that spin-off technologies may develop. As a result of reading Winstone's work, I expected, then,

that the intranet development process would be evolutionary and that the outcome could be quite different from the original intention.

The social benefits of what people want significantly defines technological uptake. I started with the idea that one key benefit that the project should deliver would be to realise centralised collegial networking potential. However, according to Winstone's ideas, any user-centred design needed to reflect the user-centred activity that already existed within the organisation, so that in addition, there would need to be key benefits in spending that user-centred activity in a virtual space as opposed to real world experience. For example, there would be no benefit in having dialogue on line if the dialogue could happen in the room next door. If the cost of a phone conversation were too expensive, then on-line conversation could be beneficial, not because it on-line interaction is taking place in a better medium, but because it is cost efficient. If the online conversation has audio and video, such as webcam can offer, then it has social benefit as well, because of the personalised nature of the communication.

Winstone (1998, p. 2) argues "Western civilisation over the past three centuries has displayed...fundamental continuity ...and ... it continues to do so." He does not see any changes created by the Internet that will change the way we form ourselves socially. In discussing issues like online virtual communities, he points out that virtual worlds have no "purpose except as a sort of hobby" (p. 335). He discussed social habits like shopping and travelling in order to show that the real world involvements are much more desirable than any online counterpart. Just as people prefer real experience to vicarious experience, so too do they prefer real world communication to digital counterparts.

Boyce (1997, p. 65) comments that, "The social determinant for the up-take of technology is according to the benefits to the user", drawing parallels between digital technology and other innovations such as the up-take of the washing machine and the microwave. In all cases, the release of time is the real benefit. The aim, then, is to determine the needs the technology might satisfy and to build the technology to meet those needs. Therefore, in designing an intranet for an organisation, questions about how staff already work will be significant. Staff will need to see key benefits in extending their activity into a virtual environment before they will take up the

technology. I had to expect staff to ‘vote with their feet’ in terms of what aspects of an intranet they might use or even, whether they would use it at all.

Turkle (1998) has written extensively about psychoanalysis and culture and about the psychology of people’s relationship with technology, especially computer technology. Rather than comparing the virtual and embodied worlds for social benefits as Winstone and Boyce do, Turkle describes the two worlds as interchangeable:

We are not being so turned to the virtual and we are not going to the completely physical. We are going to learn to be between the two worlds. Already we see that when people meet virtually, they want to meet in the physical realm. Communities that begin in cyberspace start to grow in other places as well. And people who are off-line friends do more and more of their socializing on-line. It goes in both directions. (Turkle, 1998, p. 310)

In terms of the project, I could expect that the intranet would become a dominant feature on computer screens of the users, who represent all the management and administrative staff and some of the teachers. The intranet, therefore, should offer a beneficial coexistence between the embodied world and the virtual world involvements.

Along these lines, Boyce (1997, p. 59) talks of the “easy entry into others’ spaces”. Just as the Internet can make social contact in the world more accessible, so it might be the case that social connections between staff would be facilitated through the intranet. Social connection is relevant to the project, because there are four departments in the organisation and at the inception of the project, these departments were beginning to develop as separate social entities. The normal departmental social circles and the way the organisation constructs social gatherings and staff meetings could impact on how an intranet affected the social connections of staff within the organisation. One outcome of the project could be that the intranet could create some sense of “belonging” that might not otherwise have existed.

Potentialities of network digital technologies

Negroponete (1995) holds the view that technical development drives change in the way people engage with the world and with each other. He sees digital life

impacting by flattening organisations, globalising society, decentralising control, and helping to harmonise people. In terms of the project, features like forums and user-editable features were to be introduced as a potential vehicle for decentralised participation and collaboration. Because one proposition on which the thesis was based was that a user-centred design would be appropriate to the context of the Romus organisation, this decentralisation paradigm was essential. Considerations of access to and control of information, participation in internal review processes and opening of the organisation's culture to the imaginative input from a wider range of staff were therefore also contributing factors to the evolving intranet and evolving organisation.

The Net is a consequence of unleashing the power of individual creativity

Bolter (1984, p. 100) comments that "the computer is the contemporary analogue of the clock and steam engines of the previous six centuries ... we will be different people because we live with computers". Computers can be used as a form of power which can be used to sway the staff in the organisation in certain ways. When computers are connected up to a network and communicative technology is enabled this power becomes realisable.

Anderson (1995) offers an ideological perspective of a free market which is free from government interference and regulation. This is emphasized from the perspective of the users' free, unlimited and unfettered access to the Internet. This perspective is possible not because of any community, business or government will, but because the characteristics of the technology avoid measurement and control. These characteristics are explained as quite different from previously existing technologies. Individual creativity belongs to people, but that which enables this creativity is technology centred. According to Anderson, instead of people making a culture, the Net itself is responsible for defining a new creatively inspired networked communication culture.

Anderson (1995) suggests that the physical Internet system will evade centralised control by business and government influences. Though business will be able to impact significantly on the culture of the Internet, as it does in the real world, it will not be able to control the Internet to the extent that it can apply business controls in the real world.

The technology is not exactly the same for the Internet and intranets. An intranet falls within an organisation's control through the role of communication management. An intranet does provide the ability for creatively inspired communication through many nodes of communication access, but it does not evade centralised control. Unleashing the creative potential of the users should only hold true if the culture of the organisation supports creative interaction across the organisation. In designing an intranet for an organisation, questions about whether the organisation's culture encourages creativity will be significant.

Power relations of governments, organizations and users

Habermas (1994, pp. 398-404) explores the issue of the 'public spheres' where public opinion is given freedom of expression, with particular emphasis on the implications of Internet technologies and power relations of governments and public and commercial entities, explaining that the interplay of government and large-scale organizations as something that largely happens behind 'closed doors'.

Corresponding to this, he sees staged publicity as a tactic for gaining public assent. Creating other vehicles for public consent in a 'closed door' decision making culture therefore becomes a cultural theme for governments and large organizations.

In the case of educational providers, government regulatory bodies require an organizational infrastructure that enables student and staff centered involvement in the quality management systems of the organization. This requirement is expressed in the existence of external advisory groups, student councils, systems for students and staff to critique the organization and student, teacher and staff forums for evaluating the provision of education and supportive student services.

If Habermas' (1994) critique of the political forces at play is correct, then a theme of collaborative media in organizations could be that management supports media, in this case the intranet, as a tactic for giving staff the impression that their ideas are being taken into account. However, there may not be a true forum for open critique. When this idea is applied to organizations in general it can be asked whether decision making is undertaken behind 'closed doors' and whether provision for client and staff forums, including those mediated through an intranet, provide valued critique which management responds to or whether management largely ignore it. It can be expected that the stance of leadership on encouraging or excluding

participation will affect attempts to apply a user-centered approach to intranet design,

Social consequences

Another issue in intranet/Internet design is highlighted by McChesney (1995), who covers the ideological position that regulation is needed to provide services commercial corporations will not provide. He is concerned with the lack of public service over the Internet, due to its commercialisation and the lack of public involvement and the social consequences of Internet technology. There are positive and negative social consequences in relation to embodied worlds versus virtual worlds. This is a valid question to ask. If a virtual environment is created to share information and communicate, will the environment be socially and organisationally beneficial or damaging? McChesney (1995) discusses the negative social consequences in relation to parallel real world-virtual issues, asking:

Is it really so wonderful and necessary to be attached to a Communications network at all times? ... Cannot the ability of people to create their own 'community' in cyberspace have the effect of terminating a community in the general sense? (McChesney, 1995, p. 145)

I realised that I had to consider questions about negative social consequences in my design and implementation of an intranet for Romus. That would mean examining why staff took up certain features of the intranet design and ignored others. The learning about the organisation's culture throughout the project's evolutionary development might therefore be as significant a spin off as any technological gain.

Summary

This chapter explained the philosophical considerations underpinning the intranet project. The next chapter introduces the organisational form described as a networked organisation, its appropriateness as an organisational structure and the appropriateness of a user-centred intranet for such a structure.

Chapter 4

Organisational Perspectives

Introduction

This chapter is based on the contention that the intranet is strategically important to the organisation, because the cultural, communicative and knowledge management of the organisation were engaged during the project. New technology could not help by affect the organisation and be affected by it.

4.1 Networked organisations

As organizations restructure to respond to the demands of an ever-changing marketplace, there has been a growing recognition of the need for new kinds of organizational structure (Handy, 1974; DeSanctis & Fulk, 1999). The notion of networked organization is one such response. A networked organization may mean an internally networked organization, a network of several independent organizations, or an electronic network, usually inside the company.

Historical pattern of networked organisations

Sviokla (1996) argues for the existence of an historical pattern of management innovation giving rise to new business models that change the very nature of competition and determine who wins and who loses, who prospers and who does not. One such new model is that of the networked organisation.

Market demands where there is a continuous adaptation of product and services, require the ability for organisations to adapt quickly, hence the need for a flexible management structure. Sviokla (1996) describes a networked organisation model where numerous loosely linked, but separate, groups co-exist as M- and N-form structures, which have different patterns of relationships and communication paths (see Figure 4.1 following). Sviokla (1996, p. 1) maintains that “the context of the knowledge based and global economy and advances in networking technologies make the N-form structure more possible, effective—and necessary—than ever”

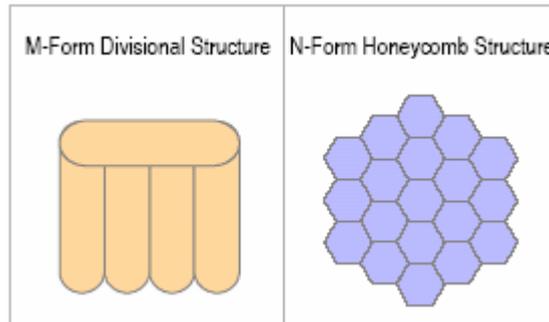


Figure 4.1 M-Form and N-Form structures

Svoikla (1996) argues that business leaders who recognize the importance of aligning expectations with technology’s capabilities are in a better position than most to prepare their companies for the future by evolving toward the N-form organization structure to improve their agility.

Networked organisations

Hesselbein, Goldsmith and Beckard (1997) remark that the industrial age over the last two hundred years was a context where demand exceeded supply. In this context, the primary goal was not to make a mistake. Rather than brilliance and innovation, the values of planning, control and discipline allowed organisations to reach the market. The social contract in existence was “obedience and diligence in exchange for security” (Hesselbein, Goldsmith and Beckard, 1997, p. 27). The social contract was partly negotiated through unionization, pay conditions and supervision. A changing historical context, which requires a flexible management structure, has altered this social contract. The demanding customer is the crucial precipitating factor in the chain reaction of change:

In this scenario the deal changes. The essence of the new deal in the modern organisation described by Hesselbein as an exchange of initiative for opportunity. Initiative is valued and required in the drive to create value for customers. Employees need to work smarter and adapt to changes in process and more flexible ways of dealing with customers. Professional development opportunities support an employees time with the company so that when they leave they will have developed professionally and in themselves. It is a more uncertain environment, but an employee can have greater opportunities to shape the way things are done. Our new role model is no longer the corporate manager but the entrepreneur. (Hesselbein, Goldsmith, & Beckard, 1997, p. 26-28)

Boundary crossing in networked organizations

Lipnack and Stamps (1994) discuss the boundary-crossing characteristics of networked organisations. Their description shows departments or units are internally networked, and form an intra-firm network. Operations and processes cross over the boundaries of departments or organizational units, and typically, operations are conducted by cross-functional teams which means that the borders of units or functions are crossed in everyday business activities. Skyrme (1999) also emphasises department and unit boundary crossing by the term links. Links are the various coordination and agreement mechanisms. In a network, high degrees of informal communications (both face-to-face and over electronic networks) achieve success where formal authority and communications in hierarchical organizations often fail. The networks operate because of two-way links and reciprocity across the links.

Skyrme (1999) summarises the types of networked organisations that exists. Metaphors for the network range from the lattice, to the spider's web, and go as far towards *Star Trek* as holonic enterprises and virtual corporations. Networked organizations, according to Skyrme (1999), can be seen to have a number of characteristics which lead to success. For instance, a networked organisation gives authority, not from a hierarchy but because of an individual's recognized knowledge and skill. People are linked more and teams operate across conventional boundaries such as departments. Both individuals and structures are adaptive to changing circumstances, with a developing sense of shared responsibility. Staff explore ways to work effectively as opposed to following processes defined by management. Job roles change and teams are created and disband as needed. These characteristics define organisations which exhibit characteristics of innovation, resilience, and self-management. (<http://www.skyrme.com/insights/1netorg.htm>, 17/08/2002)

According to Skyrme (1999), flexibility is the key to a network, recognizing that team players change and tasks change. The need for this flexibility can be explained when considering how networks fail. Skyrme (1999) observes that failure is usually due to a number of main causes. Networks that fail do not identify all the businesses stakeholders and network partners, they do not have compatible missions and goals

set, which leads to a lack of mutual commitment, and they do not have a collaborative culture. (<http://www.skyrme.com/insights/1netorg.htm>, 17/08/2002)

These causes of failure will result in organization cultures, management processes and individual mind-sets that act as major deterrents to achieving a flexible and collaborative organization. The leadership of an organisation is ultimately responsible for whether the organisation is structured for success or failure. A fundamental way for leadership to structure their organisations is to embrace the most effective organizational paradigm for success. To do so involves taking on a set of assumptions, concepts, values, and practices. D'Aprix (1999) refers to the need for leadership to grasp the networked organisation paradigm, but also to a link between that and communication:

the communication behavior of organizations is mainly a product of the most closely held assumptions and beliefs of their formal and informal leaderships. (D'Aprix, 1999, p. 5)

Communication and communication technology are also inseparable. DeSanctis & Fulk (1999, p. 26) make the point that “articulation of the interplay between technology and organisational forms requires understanding of communication technology, and the causal and reciprocal relationship between technology and form. Communication technology can affect organisational form, and new forms in turn can impact design and use of technology”. This statement makes sense of the relationship between the form of an organisation and the design of communication technology. If an organisation wants to be more collaborative, it needs collaborative technology and not technology that primarily disseminates information. There needs to be a will to create more collaboration within the organisation and technology to support it.

In relation to this research, I saw undertaking a projects to create a user-centred intranet would involve parallel management initiatives. Kounalakis, Banks and Daus (1999, p. 175) identify this management initiative as comprising of a continual restructuring and re-jigging of people within the network.

4.2 Organisational culture

Schein (1993) gave the following definition of culture:

The culture of a group can now be defined as: A pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems. (Schein, 1993, pp. 373-374)

These patterns of shared basic assumptions can be recognized in the behavioural consistencies of the way things are done; the way people perform tasks, solve problems, resolve conflicts, treat customers and treat employees. Underlying these consistencies there are informal values, and beliefs that provide parameters for how individuals and groups in an organization interact with each other and with people outside the organization. Coming to grips with a project like a user-centred intranet meant understanding the deep underlying assumptions which operate in the culture of Romus. The point of this understanding was to ensure that the process, at least, matched the culture, even if the intranet, viewed as an organisational artefact, showed some small maladaptions to the culture.

Collaboration and belonging

The demands of competitiveness lead to a high rate of change. Demand is affected by issues such as exchange rates and the economic state of different countries which affects the consumer and business behaviour and demand. The issues of belonging and collaboration of staff impact on an organisation's ability to meet these demands. Doyle (2002) explores the gap between staff with willing and enthusiastic attitudes towards the organisations they work for and those that have a passive attitude. In the report she explores some key characteristics of the modern workforce in Britain. The era of the industrial manufacturing based economy is being replaced by a post-industrial, knowledge based one. The workforce in this new economy has more part-time positions, employs more women, and requires people who are multi-skilled and flexible. Management structures are more decentralised and flattened than in a manufacturing economy. National government management of the economy is being replaced by an acceleration of the global marketplace. These changes, according to Doyle (2002), affect employee's sense of work and identity. Freer markets have increased insecurity at work and transferred risk to employees. The

world of work is perceived as more uncertain than ever before with companies, unions, and occupations pulling out of providing assurances and protective functions. The world of work is riskier – staff are in an insecure position.

Doyle (2002) says that historically the division in the workplace was between good and bad jobs, which were judged on working conditions, spiritual significance, associated class position, ownership of capital, or levels of creative input. Doyle suggests that nowadays, however, the divide is rooted in identification with work, and whether people engage with work as part of their essential being or whether people attend work merely to mark time and collect their pay sips. “For the first group, work provides esteem, purpose, fulfilment and friendship. For them community and work are one” (Doyle, 2002, p. 5).

Doyle (2002) discusses the need to create a place of ‘belonging’ for staff:

Work is a gateway to a social network, to friends, to a community. Perhaps because of increased individualism, or perhaps because of the changes globalisation has brought, many people are seeking a place, a movement, a sense of belonging to somewhere or someone. (Doyle, 2002, p. 7)

That sense of belonging can sometimes come through very personal involvements. Work provides friends and lovers. James (1998) found that 49 per cent of female respondents and 19 per cent of men made most of their friends at work. A friendly working atmosphere provides job satisfaction for social reasons as well as work satisfaction and professional development. Feeling that one belongs brings confidence as does the feeling that one is achieving successfully. “Having confidence and believing in one’s ability to do the job are essential in promoting and sustaining high performance” (Gayesh, 2000, p. 37-38).

Performance is a goal of management and so it should also be a management goal to build the confidence levels of an organisation’s staff. Gayesh (2000) brings the responsibility for a positive working environment back to the leadership of the organisation. The type of environment is the determinant of success and a sense of belonging:

A leader’s challenge is to create situations for small wins, structuring tasks in such a way that they can be broken down into manageable pieces, with each success building up the person’s sense of competence. Creating a climate

where learning is stressed and people feel comfortable making mistakes is also critical. (Kouzes & Posner, 1993, p. 166-167).

Another factor in enabling belonging is to foster communication. Kounalakis, Banks and Daus (1999) propose that employees must have their communication needs met at deeper levels before motivation kicks in. Discussion questions such as “What is my job? How am I doing? Does anyone care? How is my unit doing? Where is the company headed?” need to be addressed before employees become motivated enough to step forward and ask “How can I help?” (Kounalakis, Banks, & Daus, 1999, p. 175).

Collaboration is an important factor in organisational culture because in a networked organisation staff need more than ever to work together in teams and in collaboration with other departments. In the networked organisation, boundary crossing across departments or task groups needs to be common place for effectively managing a fast pace of change in an organisation. Failure can be predicted in organisations in which there is little interaction or collaboration among staff or between key sales staff and customers (Gayesh, 2000). Another marker for failure can be poor communication in the form of badly-written or badly-designed technical information (Gayesh, 2000). When the job on which workers is engaged becomes too complex for conventional training and manuals to cover, what is needed is some way for workers to collaborate with each other and with senior staff.

The tendency in such a situation might be for an organisation to work on improving the manuals and training. However, the solution proposed by Gayesh (2000) is to develop a new infrastructure for communication: one in which it is easy and rewarding for staff to ask questions, document problems and suggest solutions. In the example given by Gayesh (2000), an intranet site for technicians was developed to enable ongoing and quick learning and updated help. By capturing questions and problems, the staff engineers could also spot unanticipated problem areas that could be fixed in future iterations of technical work.

Doyle (2002) referred to the replacement of the industrial manufacturing-based economy with a post-industrial, knowledge based one and that one of the effects of this was a decentralisation of management structures. Heltz (2002) also highlights changes in the ways that organisations work, pointing out that at the heart of the

traditional model lies the traditional top-down organisational chart, which is based on a need-to-know model, in which information is equated with power. He illustrates the differences in characteristics of industrial economies and information economy companies as almost exact opposites, with the following table:

Industrial-Economy Characteristics	Information-Economy Characteristics
Mechanical	Organic
Authoritarian	Cooperative
Batch processing	Customization
Top-down	Participatory
Quantity	Quality
Producer-driven	Customer driven

Table 4.1 Industrial versus information-economy characteristics, from Heltz (2002, p. 41)

According to Heltz (2002), the information-economy characteristics of an organisation make the adoption of an intranet appropriate. Likewise, companies that want to retain top-down, hierarchical structures and the need-to-know approach to information management should reject the idea of an intranet because it would be ineffective, or would become merely a tool for publishing information and for generating printed policy manuals and handbooks. Heltz says that an intranet is a tool for an information-economy company. Information moves freely through the intranet and its various components (newsgroups, Web pages, e-mail and so on). No single layer of management can contain it.

The significance of this is:

In such an environment, employees who perceive that the company has provided them with the means for open, candid, timely communication will take advantage of it and speak their mind or publishes web pages...in the information-economy power emerges from effectively sharing information, not from withholding of it. (Heltz, 2002, p. 42)

Inversely, the response of a company that is not prepared to shift from industrial to information-economy thinking is generally to retaliate against violators of the rules. This would inevitably lead to the intranet falling into disuse as employees fall back on familiar channels of processing information such as conversations around the office hallways and carpools. Despite the considerable resources invested in the

intranet by management, it becomes yet another underutilised system. Intranets are therefore most appropriate where organisations have already adopted information-economy characteristics or are ready to move towards this (Heltz, 2002, p. 41).

4.3 Organisational communication

Heltz (2002) discussed the essential need for an organisation's paradigm shift to an information-economy in order for an intranet to be effective. D'Aprix (1999) also discusses the important role of an organisation's leadership and management in designing and supporting organisational communication. The way organisations communicate is for the most part based on the "closely held assumptions and beliefs" of the leadership, both formal and informal. Dysfunctional organisational cultures, therefore, will usually have dysfunctional or ineffective communication processes.

D'Aprix (1999) explains that in dysfunctional organisations, the scope of the communicator's role tends to be narrow, mainly focussing on the production and running of communication programmes that often eventuate as mere "window-dressing" (D'Aprix, 1999, p. 8). It is most likely that organisations are in different stages of the transition to an information-economy model. People run and work in organisations and their perspectives ultimately lead to whatever systems work in those organisations. People create organisations.

Heltz (2002) suggests participative and collaborative communication is essential for an organisation's survival, communication management should be highly focussed and particularly so where organisations are transitioning to an information-economy model. In terms of this research, an intranet is seen as one mechanism for potential participatory and collaborative communication. The project will make sense of the context of leadership and the role of communication management within the organisation.

Discussing the role of the communication professional, Gayeski introduces the term "capturing mindspace" as the elusive but essential resource for organisational performance. She focuses on "new ways to think about the communication profession, reframing the role and goals to management, assessing and managing the

critical flow of internal and external communication, and beginning continuous learning in an organisation” (Gayeski, 2000, p. viii). Learning organisations open up discussion about the organisation. In terms of the project, an exploration of the organisation’s culture will invite discussion and the leadership will have the opportunity to read about their discussion as recorded in the later chapters of this exegesis. Gayeski (2000) has defined the role of communication management as having a number of component parts. She says it is essential to find new ways to talk and think about organisational communication. Communication and training need to be managed so that business opportunities are taken and gaps in performance closed. Training and internal/external communication need to be integrated so that the organisation can speak with one voice, and confusing messages and information overload are avoided. Communication management, therefore, needs to design “fast, multi-way, participatory communication and collaborative systems that capture and share the crucial knowledge and opinions of every member of the organisation and its customers” (Gayeski, 2000, p. viii)

These participatory communication and collaborative systems can be addressed through an intranet. Similarly, for Heltz (2002) an intranet is a significant mechanism to facilitate participative and collaborative communication. Heltz focuses on helping organizations apply online communication capabilities to their strategic organizational communications. While Heltz consults in all aspects of organizational communication, he is particularly focused on strategic employee communications designed to achieve measurable results linked directly to organization strategies, goals and objectives – and on the application of online technology to achieve those results.

Heltz assigns the role of creating such a communicative environment to the communication managers in an organisation. Accordingly, the development and implementation of an intranet should be the responsibility of a communications manager rather than an IT manager. This responsibility shift is significant, because communications managers can focus the design and implementation so that an intranet fits into a holistic communications strategy. IT management, as previously discussed, is focussed on knowledge management and IT security. This does raise the question of technical proficiency, however, as developing and implementing an

intranet requires skills in both communications management and technology management.

Heltz (1999) suggests that rather than trying to understand network technologies, communicators should review their roles in application of these tools within their organisations. Heltz believes they should become familiar enough with the tactics of online communications to sit with a new media developer and IT supervisor. Without taking on those roles directly, they need to be able to work with these specialists in order to ensure the results of the job meet their expectations: “In the end, the communicator’s job is to orchestrate the tactical tools of communication in order to achieve a measurable result that supports or enhances the bottom-line objectives of the organisation” (Heltz, 1999, p. 155).

Heltz (1999) also lists three main roles for organisational intervention. These roles reflect an integrated approach with technology and management strategy. The three roles are:

to ensure that the organisation and its employees use online tools effectively; to integrate communication channels such as email and the internet into larger communication strategies; and to consult with others so that all online communications meet the organisation’s standards of communication excellence. (Heltz, 1999, p. 155).

Heltz (1999) sees the orchestration of the tactical tools of communication as a hands-on role involving, first, the management of the entire intranet, and second, the development and maintenance of communication-specific intranet sites (Heltz, 1999, p.160). One of Heltz’s suggestions is to establish a cross-functional intranet steering committee. Rather than decisions about the intranet being made by any one department, they should, according to Heltz, be made by a number of departmental representatives, because, “For an intranet to be effective, it must ‘belong’ to the entire organisation” (Heltz, 1999, p. 161)

In terms of this project, the tactical approach outlined above could provide a blueprint guide to how I, as a participant-observer, should undertake the project to ensure the likelihood of effectiveness. However, given the culture of the organisation, a steering committee might be difficult to put in place. I could see that in there is so much pressure in the organisation that such a resource allocation would

not be realistic and might, in fact, create resentment. It would be more realistic to recruit key staff from each department and thereby create an informal proxy committee. The intranet would not have an impact unless there is buy-in through the development and implementation stages and since I am a participative-observer in a key management position, I am in a unique position to listen to staff and to be seen to adapt the intranet after taking their input into account.

Heltz (1999) suggests that an intranet's most important function is to provide a means of communicating with employees. He suggests the communicator should manage the top level of the intranet in order to ensure that the most important news and information is kept current. Discussion groups are invaluable for building communities. The intellectual capital of the company can be expanded by company newsgroups, and employees are able to access the knowledge base of the entire company.

From the point of view of the project, ideas of forming discussion groups and news groups seemed an inspired way to develop and implement an intranet. If the intranet were to be a participative and collaborative mechanism, synergies would develop from a participative and collaborative design. However, I did feel overwhelmed at the prospect of how this could be accomplished along with the myriad of other obligations and dilemmas of the organisation within which the project was being undertaken. Such a participative approach to the design and implementation of the intranet was a difficulty, given my already busy workload. I saw this as a paradox, because at the same time I also represented buy-in from management, which influences the organisation to adapt towards a networked organisational model.

Allowing space for employee participation

The Work Foundation is an organization in the UK which works with a range of organizations and individuals who want to shape the future of the workplace. Members include private and public organizations, policy-makers and think-tanks, academics and academic organizations. The organization combines analysis of the workplace with practical experience of what makes successful organizations and exists to improve the quality of working life in the UK. They work to meet this challenge by combining the three elements of research, consultancy and advocacy.

In conducting research for the Work Foundation, Harding (2002) writes about a research project commissioned by the British government. One of the propositional themes is to explore the ways in which companies develop and extend the capabilities of employees so that the “cumulative know-how” becomes an asset which drives performance even higher. One of the factors involved is allowing employees the time and space they require so that the “innovation potential” of the organisation is furthered (Harding, 2002, p.4).

A central proposition, then, of the Work Foundation research is that people matter when it comes to achieving productivity. Harding (2002) is contending that the way in which people matter is not something that can be managed simply through Human Resource management. Innovation management is necessary and this involves providing creative spaces, network and virtual networks, as well as the building of know-how.

From the point of view of this project, these points are a reiteration of the previous discussion, taken from a Human Resources angle. The research was useful, however, inasmuch as it refocused the need for people’s know-how to be seen as a significant resource, requiring allocated space to be realised, as well as the need for the leadership of an organisation to embrace the information-economy paradigm. The paradigm shift is necessary because the enabling will require resource allocation, and resource allocation is about managing priorities from a leadership perspective. A commitment by leadership and key management to provide and allow this allocated space must be contingent on it being managed. Heltz (1999, p. 162) suggests that internal newsgroups “should be focussed on a topic that will encourage the growth of a community of employees.” Gayeski (2000, p. viii) also pleads for a management of creative space, by suggesting that one role of communication management should be to manage communications and training so that business opportunities and performance gaps are bridged to ensure a return on investment. This in turn requires the role of communications management to be allocated the necessary resource and space and is an issue for the top leadership of an organisation.

External requirements on organisations may compete for this necessary strategic management allocation. The organisation within which I work provides

international education. As such it is required to meet a number of compliance obligations which are audited by the government. Romus Colleges is also Q-Base registered through Telarc, which is an accreditation company for quality management systems. Q-Base was designed by Telarc as a simplified version of ISO9001:2000, the widely recognised international quality management systems standard. Q-Base enables implementation of basic management disciplines to assure quality of products and services.

My experience is that Telarc supports collaborative process with its auditing approach. However the government's audit requirements of private educational organisations are heavily bureaucratic. The need within the organisation to resource this mandatory requirement competes against the necessary resources allocation for communication management. In my participatory role, I would nevertheless need to strive to overcome this resourcing issue. Many of the government requirements are to encourage participative and collaborative networking, yet compliancy to these requirements needs paper trails so extensive that significant resource is required to build it. This control of how to manage participative and collaborative space focuses on the paper trail evidence rather than the effectiveness and processes of the collaboration. The conflict for resources then extends beyond the organisation's leadership but also in this case to external governmental involvement. It shows the need for government organisations to find ways to support the information-economy model, while not draining the management resources of organisations.

As a management resource for efficiency the leadership of an organisation needs to allocate budget for communication management. This provides the resource to achieve participatory and collaborative know-how. Gayeski's (2002, p. viii) goal of "providing a return on investment by bridging business opportunities and performance gaps" has not yet been addressed. McKie (2002) suggests some questions to clarify an organisation's participative and collaborative communication goals, which include:

Management knowing what they want and giving a clear brief about what they expect staff to do and how they will evaluate success – do they want new ideas or new action? How will a great idea be recognised? In what context can it be expressed? How will ideas be supported? People? Resources? Money? Time? Do they want it to happen individually or as a

team? The clearer the company/management can be about expectations of creativity, the more likely the initiative will prove successful. (McKie, 2002, p. 22)

McKie (2002) also emphasises the need for learning organisations to overcome the barrier of not talking openly or sharing knowledge. People's know-how needs to be seen as a significant resource, and this requires the leadership of an organisation to embrace the information-economy paradigm. Creative conversation involves connecting people up through networks and conversations. Organisations that want their staff to create ideas, value and relationships need to create a culture that supports it - a culture which supports people in listening and talking. There are some barriers to creating this culture because there is often a sense inside organisations that it is better not to talk.

Companies have to engage a workforce which is often unconvinced by anything their management says. They do not believe that they have jobs for life – so why stay loyal to a company that will ditch them as soon as trading conditions change? This is particularly true in the case of the lower-paid and often casual jobs, and these employees are often the key people talking to customers. There can also be a prevalent attitude that new ideas have to be guarded and protected from anyone else. (McKie, 2002, p. 11-16)

McKie (2002) also discussed the tendency for organisation to graft the collaborative concept on to their existing structures leading to a situation where little actually changes. So employees are expected to be open and honest and share their ideas, while still being talked down to. The employees take the risks, but senior people keep themselves at a distance. Culture needs to change to make creativity possible.

4.4 Knowledge management

Knowledge management is an area which starts from the information technology side of managing traditional forms of information, and integrates collaborative organisational communication with the technological mediums. Santosis & Surmacz (2001) define knowledge management as:

The process through which organizations generate value from their intellectual and knowledge-based assets. ... Most often, generating value from such assets involves sharing them among employees, departments and even with other companies in an effort to devise best practices. (Santosis &

Surmacz, 2001, <http://www.cio.com/research/knowledge/edit/kmabcs.html>, 20/11/2002

Santosis and Surmacz (2001) stress that while knowledge management is often facilitated by information technology, technology on its own does not constitute knowledge management. They differentiate between explicit and implicit knowledge management. Explicit knowledge management relates to assets such as business plans, marketing research and customer lists – generally speaking, those items which can be documented, archived and codified, often with the help of information technology. Implicit knowledge management can be defined as “tacit knowledge” or know-how. Santosis & Surmacz (2001) explain that the challenge with tacit knowledge is determining how to recognise, use and manage it. While the dissemination of this knowledge can be assisted by email, instant messaging and other technologies, identifying tacit knowledge provides the major hurdle for most organisations.

While the perspective of knowledge management acknowledges the know-how aspect of information, it maintains the obligation of disseminating top down information from management, for participative involvement of staff. One emphasis of this chapter has been on discussing the role of participative communication, but there nevertheless remains a need in organisations to disseminate centralised information. This often falls within the role of human resource management.

Nielsen (2002) believes in retaining the centralized information sharing potential of knowledge management through intranets. Nielsen points out that an intranet is simply an internal network of information. Nielsen believes that a key consideration, when developing intranets, should be the contribution of intranets to productivity improvement. Information needs to be simple, clear and easy to find. The objective is not to publish manuals, best practice guidelines and other material exactly as they appear in print. Ultimately, the information published needs to support the employees’ roles, so people can do their job better. If people are not able to use the intranet to support what they are doing, it has failed.

Nielson’s (2002) emphasis on human resources implies that an intranet is a suitable mechanism for dissemination. In terms of this thesis, this point has a bearing, in that presently disseminated information has been managed through hard copy and a

shared common drive on the organisations network. The extent that an intranet can be employed for information dissemination will be one facet of the projects discovery.

Neilson (2002) summarises that the best intranets “emphasize interactive design and standardized navigation, and feature collaboration tools and content management systems” (<http://www.useit.com/alertbox/>, 12/11/2002).

This suggests that top down knowledge, such as that disseminated by a human resources department, should be the foundation of collaboration and that collaboration should be utilized to feed into the regeneration of disseminated information. The ramification of this view is that human resources and communications managers should be working as a team to achieve this.

According to Harding (2002, p. 4) there are five areas which are central in achieving high organisational performance. These are markets, shareholders, stakeholders, human resources, and innovation management. These areas cross over human resources and communications management areas and so could define some working relations between the two areas. Development of such working relations between these disciplines goes beyond the scope that can be achieved during the project. However, it can provide one model for achieving measurable results from participative collaboration. If human resources and communications management personnel are required in their job descriptions to demonstrate results in these areas, then resource allocation could be achieved.

BRINT Institute’s mission is to develop leading edge thinking and practice on contemporary business, information, technology and knowledge management issues, to facilitate organizational and individual performance, success and fulfilment. Its founder, Malhotra (2000, <http://www.brint.com>, 14/10/2002), says his vision for BRINT’s website site is to fill the gaps between business and technology and data and knowledge. Malhotra’s research implies a strategy for intranet design and implementation which structures an intranet in a way which facilitates the organization's self-designing. The members, not just the management of an organisation, define problems and generate solutions. They also evaluate and revise their own processes for achieving this. By creating a culture which encourages

experimentation and rethinking of premises, it promotes reflection-in-action and creation of new knowledge. Leadership's explicit support of such a collaborative culture could be achieved through human resources and communications management developing the tools and environment needed.

Summary

The section on networked organisations explored the extent of amalgamation that is possible within the organisational form described as a “networked” organisation. The form is a response to the modern context, where there is a need to be adaptive and agile in an ever changing business environment. The form allows collaboration and innovation to evolve from networked parts of the organisation. The networked organisation is a paradigm shift from the traditional paradigm, which takes a more hierarchical approach. In such a paradigm shift, everything changes. Among the characteristics are that there is more merging of the boundaries of work groups and departments, greater collaboration and communication networking, responsibility shifting to staff to take initiative for the outcome with flexibility to design their own procedures. Leadership is a key requirement for this paradigm shift to come about. An intranet could facilitate such a change, but the core culture of the organisation, which is mainly created by the leadership of an organisation, is considered the primary focus if an effective networked organisation is to evolve. Another key requirement, however, is that a networked organisation needs to be communication rich. Introducing an intranet as a way of increasing communication is considered one place to start.

Chapter 5

The Project Underway: Building the Intranet

Introduction

This chapter outlines the intranet project from the prototype stage to an established communication medium. This chapter also outlines the data collected from the organisational members during the implementation, and shows how the data collected from them influenced the development of the intranet.

One goal of the exegesis was to explore the theoretical propositions. This follows an approach suggested by Yin (1994) where a case study is structured in a way which provides credibility for the implications that emerge in the final chapter. The chapter therefore refers to the explanation of the thesis propositions.

5.1 Methodology: Participant-observer

The participant-observer approach was mandated because I work in a key management position within the organisation. The project tells an evolutionary story and I am a part of that story, because my management interventions represent an attempt to bring about change within the organisation through the project. But I also needed to observe the process and record the data in such a way that the thesis propositions are explored in an authentic and believable manner.

There are advantages and disadvantages for a participant-observer approach to organisational research. For instance, it provides certain unusual opportunities for collecting case study data. The most distinctive opportunity is the ability to gain access to events or groups that might otherwise be inaccessible to scientific investigation. It can be argued that an insider's perspective is invaluable in producing an accurate portrayal of a case study phenomenon. Also the opportunities to manipulate events can be seen as a benefit in testing the boundaries of the propositions. One difficulty in such an approach for someone in my position in the organisation is that there can be issues of power with subordinates whose opinion is

being sought. I overcame this difficulty by allowing for anonymous feedback, and also by stressing that opinion had to be honest if the intranet was to serve the organisation successfully.

Gregory (1983), Becker (1958) and Yin (1994) raise a number of other potential biases of the participant-observer role under the following categories: participant observer conflicts, questioning and interpreting interference, responsiveness to contradicting evidence, and relying on theoretical propositions. On bias and researcher conflict, Gregory (1983) warns of the tendency to take for granted one's personal cultural view and to evaluate others' behaviour in terms of it. Another threat is that participant observer researchers can escalate their commitment to a project and lose the ability to critique it objectively. If these biases are present, research misunderstandings and conflicts occur.

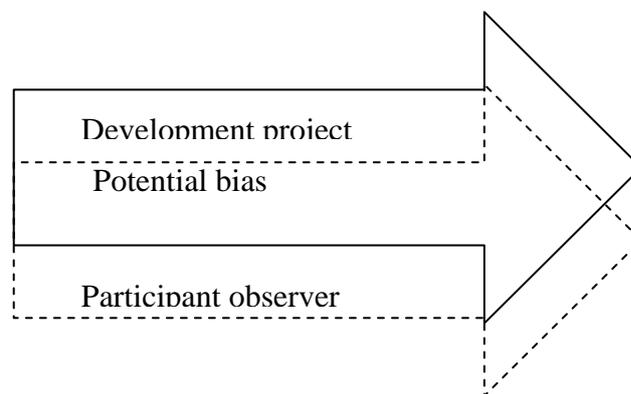


Figure 5.1 Potential bias in participant observer research

In order to avoid these biases, certain research skills are required. Yin (1994, p. 56) specifies these skills as the ability to ask good questions, the capacity to interpret the answers, and the gift of being a good listener. Researchers who use participant-observation as their methodology should also be adaptive and flexible, so that newly encountered situations can be seen as opportunities, rather than threats. I have endeavoured to tell the story of the intranet in such a way that these skills are demonstrated through my management and research roles.

Participant observer researcher

Gregory believes that obtaining an insider view uncovers a more accurate view of a cultural. The employees of an organisation will have different views, attitudes and beliefs and will create different interpretations of events. Subgroups with different

occupational, divisional, ethnic, or other cultures approach organizational interactions with their own meanings and sensemaking (Gregory, 1983, p. 359). So, because people act according to their views, their initiatives and responses are a part of the culture itself: Gregory (1983) believes that organisational cultural research should encompass the study of participants' views about the organisation they work for. These would include "the work itself, the technology, the formal organisational structure, and everyday language, not only myths, stories, or special jargon" (Gregory, 1983, p. 359). Therefore, the story of the intranet is told in a way which also demonstrates not only my own role as a in the organisation and in the research, but also the perspective of the employees who were also involved.

Schwartzman (1993) discusses how the discipline of ethnography developed from a cultural anthropological framework. In the 1930s and 1940s, ethnographers in the United States developed research techniques for organizations and industries. Agar (1986) refers to how ethnographers set out to show how social action in one world makes sense from the point of view of another. This technique, according to Agar, requires an intensive personal involvement, an abandonment of traditional scientific control; that it requires an improvisational style, to meet situations not of the researcher's making, and an ability to learn from a long series of mistakes.

In terms of the thesis, the primary task was not an exploration of the organisation's culture, but rather, an exploration of the effect of the intranet development project on the organisation's communication. However, the organisational culture had to be investigated to the extent that it was the context of the project. Cultural exploration then is a significant but not primary part of the story. From the cultural research point of view it is important to establish an appropriate data collection approach.

Schein (1993, p. 169-170) regards the participant observer ethnographical research approach as time consuming and unnecessary unless "one wants to study the culture in great detail." He recommends an alternative "clinical perspective", which involves conducting a "series of interviews with individuals and groups geared to discovering shared underlying assumptions." He describes this approach as an "interactive clinical interview" involving a series of encounters and joint explorations between the investigator and various motivated informants who live in the organisation and embody its culture. Schein's (1993) approach was adopted in

the interview stage which occurred in the revamped phase of the project. The interactive clinical interview approach provided a method and degree of observation which was manageable and which enabled the project and thesis goals to be accomplished along with the participative innovation management activities.

I have tried to express the complex interface of my dual role in the research in the diagramme below.

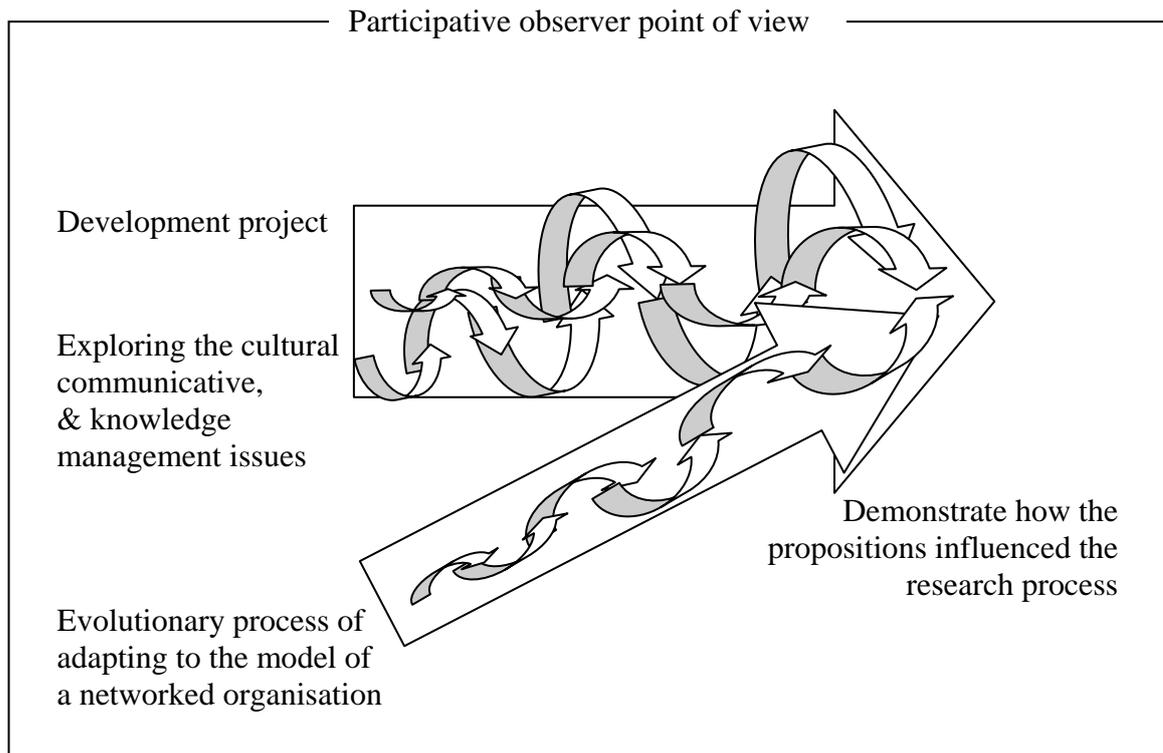


Figure 5.2 Elements involved in the thesis, showing the exploratory work of the thesis

5.2 Method

In order to fit the theory of participant observation I used particular methods of data collection in addition to the interactive clinical interview approach. The data collected were integrated with the development stages of the intranet design and implementation project.

The first development stage was the development of a prototype based on the literature review. The second stage involved usability testing sessions, in which a number of key staff tested the prototype and provided feedback data. This data helped with debugging and preliminary improvements to the interface design. The

data also helped to gain support from key staff. The third stage involved putting the intranet on the computers of key users. At this stage, staff's trial of the intranet during their work day informed further improvements and developments of the design.

Numerous iterative changes to the intranet occurred at this time and changes continued until the final stage. Although it was not considered a development stage for the intranet, taped "diary data" of periodic feedback was collected in order follow the story of the development process. The users would periodically mention issues to do with the intranet, and as a result I would often take small decisions in the evolving design process. This data shows how I responded to the development process, how staff were responding to the intranet, and how I applied management interventions.

Once the intranet seemed to be working satisfactorily for the key users, the fourth stage was to launch the intranet on all the computers in the organisation and train staff in its use. Once the intranet had been in use for enough time for staff to form opinions, I issued a questionnaire to find out how it was going and what people thought of it. I especially wanted to know how staff generally used computers, accessed files on the network and communicated in the organisation. This activity was not a development stage of the intranet either, but it was a key stage in the participant-observer role. Once the intranet had significantly evolved and had become accepted within the organisation a fifth stage was undertaken. This stage involved revamp of the intranet. During this revamp stage, I engaged in a series of interactive clinical interviews (Schein, 1993) with staff. These interviews were focussed initially on the usefulness of the intranet and later on validity of the thesis propositions.

5.2.1 Prototype development

July – Dec 2002

The prototype development involved writing the software to a stage where it could be tested for bugs and interface design issues. This was done while reviewing current literature on the subject, which inspired and guided the overall design. Kirshner's (2001) article, for example, influenced me strongly in dealing with issues

such as the need for relevancy, usefulness, updating speed and internal communication, finding out what features users want, regular updating, and informing users on new intranet changes. Key development strategies were established. One strategy was to manage the dissemination of company policies and procedures, while at the same time enabling user updating of the information. Another was to add a forum and a news page, features aimed at tapping the creative and innovative capacity of staff.

Once the prototype was developed, a number of usability testing sessions were held, which mostly helped with the debugging and interface design. Neilson's (2001) review of the designs and usability of ten intranets also informed the process. This provided knowledge of what was being done in other organisations, and why it was or was not working. Because the report was richly illustrated, it gave me an opportunity to see good intranet designs that are usually hidden behind firewalls. Themes such as letting employees update content, collaboration tools that let employees exchange information through discussion groups, and an emphasis on communication by encouraging departments to post news and other information of interest to different groups, were inspirational to the design process.

The organisation representing the winning entry of the Neilson Norman Group's



Figure 5.3 The Silverorange Intranet Homepage

intranet Design Annual (2001), Silverorange, provided an interactive demonstration of its intranet on its website. In particular the front page (above) offered a news page, for staff to contribute to. The news aspect was inspirational for the front page design of my intranet.

Technology used

To get the project off the ground, I met the Romus New Media designer and we explored the Internet looking for ideas that would apply and be appealing at Romus. We were to draw on my software experience in designing educational language learning software and web page development and on the experience of the new media designer in interactive web page design. One main concern at this stage was to select appropriate technologies to build the intranet.

The Silverorange company was contacted with the idea of purchasing the source code and redesigning modules. The cost for this was prohibitive. Other intranet packages available online were very standard and would not have enabled us to evolve our own model. A design strategy was therefore formulated which would, for the prototype development, involve us using the following software resources:

- Authorware Professional (AP), from Macromedia (Researcher)
- An add-on to AP, called WebFX, from MEDIA shoppe (Researcher)
- An add-on to AP, called Buddy API, from Magic Modules (Researcher)
- UltraDev, from Macromedia (New Media Developer)
- Flash, from Macromedia (New Media Developer)
- Intranet Design Annual (2001), Silverorange, provided an interactive demonstration
- iTab software (iTab Pro QuickNavBar Type II) from IMINT.com
- WordConverter, from SoftInterface, Inc. (Researcher)

Authorware Professional (AP) was used to make the frame within which the intranet works and to collect and build information on the organisation's quality manual files. Using an add-on called WebFX, live online content is viewable within this window. Another add-on called Buddy API accesses Windows operation system functionality. Two other tools worked in sync with this platform; WordConverter for external auto-conversion of Word and Excel files to HTML format and iTab for auto-building a quality manual sub-menu interface. UltraDev was used for developing the online

interactive elements, such as the news page and the forum. Flash was used for some aspects of graphic design and menu building. Free source code to help in building the HTML/ASP based side of the intranet was gleaned from various developer sources on the Net.

The AP software using the Buddy API add-on collected the information on the contents of two folders, where the organisations manual files are kept. It then created a parallel folder and sub-folder structure and sent commands to the WordConverter program to auto-convert all the Word and Excel manual files to HTML copies, storing them into the parallel folder and sub-folder structure. The record of that was stored to a text file. When the intranet is started, the text file is read by the iTab software auto-creating an updated menu system for the manuals. This sub-menu needed to be auto-built like this so that it included any new or updated files.

By using this approach we were able to explore the options of moving an auto-updating HTML version of the organisations manuals onto the Intranet. While this explains the authoring processes from a technical perspective, the project was evolving and the final revamp culled out the auto-generating menu system for reasons which are explained in this and the following chapter.

The Proposal

In June 2002, a proposal was put to the organisation and agreement was given from the owner of the organisation to proceed. The main concerns of the owner were how it would work on the company's network and issues of usage costs. The proposal was set out in a 10 page document with information under the following headings:

- Introduction
- History of intranets
- Design considerations include
- Pertinent points from the market leaders
- Issues for getting staff to use an intranet
- Other strategic issues
- Reflections on the best intranets
- Intranet checklist

- Project management timeline
- Preliminary design dated 14 June
- Success measurements, acceptance.

Each of these sections was concluded with an agreement scale and a space for comment. The owner was positive about the user-centred approach, although he felt unable to comment on many of the aspects at this initial stage. Following the meeting where agreement was given to proceed, I made some entries in the taped diary:

From the taped diary dated 10 July, 2002

There was some discussion of how an intranet would work on the company's network. Did it work on each computer or did it use the Internet? What effect would it have on the Internet Service Provider's (ISP) usage costing? There was therefore clarification and discussion on how we would be setting up databases with the organisations ISP. Also that significant increase in usage cost was not expected.

From the taped diary dated 10 July, 2002

There was discussion on the use of the company operational manuals. The company had problems in getting department managers to refer to them and update them as necessary. The owner was interested in whether the Intranet could fix this. It was explained that the Intranet would endeavour to incorporate easy reference to the manuals.

As a result, the following agreement was added into the proposal, thereby giving me the rights to publish the development story and research data:

While completion of the project requires a working copy to be located on the Romus' ISP server, a backup copy of all software code and source files, with documentation will be provided to Romus Colleges on CD-R. The Project Designer will retain copy write of the development story and research data for the purpose of future publication. Any screen shots used for future publication, will have any confidential data extracted prior to publishing. Any future publication would likely refer to the true identity of Romus Colleges and respect professional confidentiality.

The diary reflections recorded above demonstrate a starting point for the development to proceed. The approach and implications were covered in the proposal. However, there was no discussion on these points. Discussion related to how it might affect the budget and whether it could fix a problem the organisation had with the under use of its manuals. In chapter 2 on the organisation, the strategy

of an entrepreneurial organisation was summarised as being the owner himself. The strategy of an entrepreneur is the entrepreneur. In this sense I did not expect any great strategic awareness from the owner of how the project might impact on the participative and collaborative culture of the organisation. The position was more one of support of me as a key manager to undertake the project. By this stage the intranet prototype development was underway. We had got as far as designing a rudimentary menu. This screen shot, which included notes on the prototype approach, was included in the proposal.

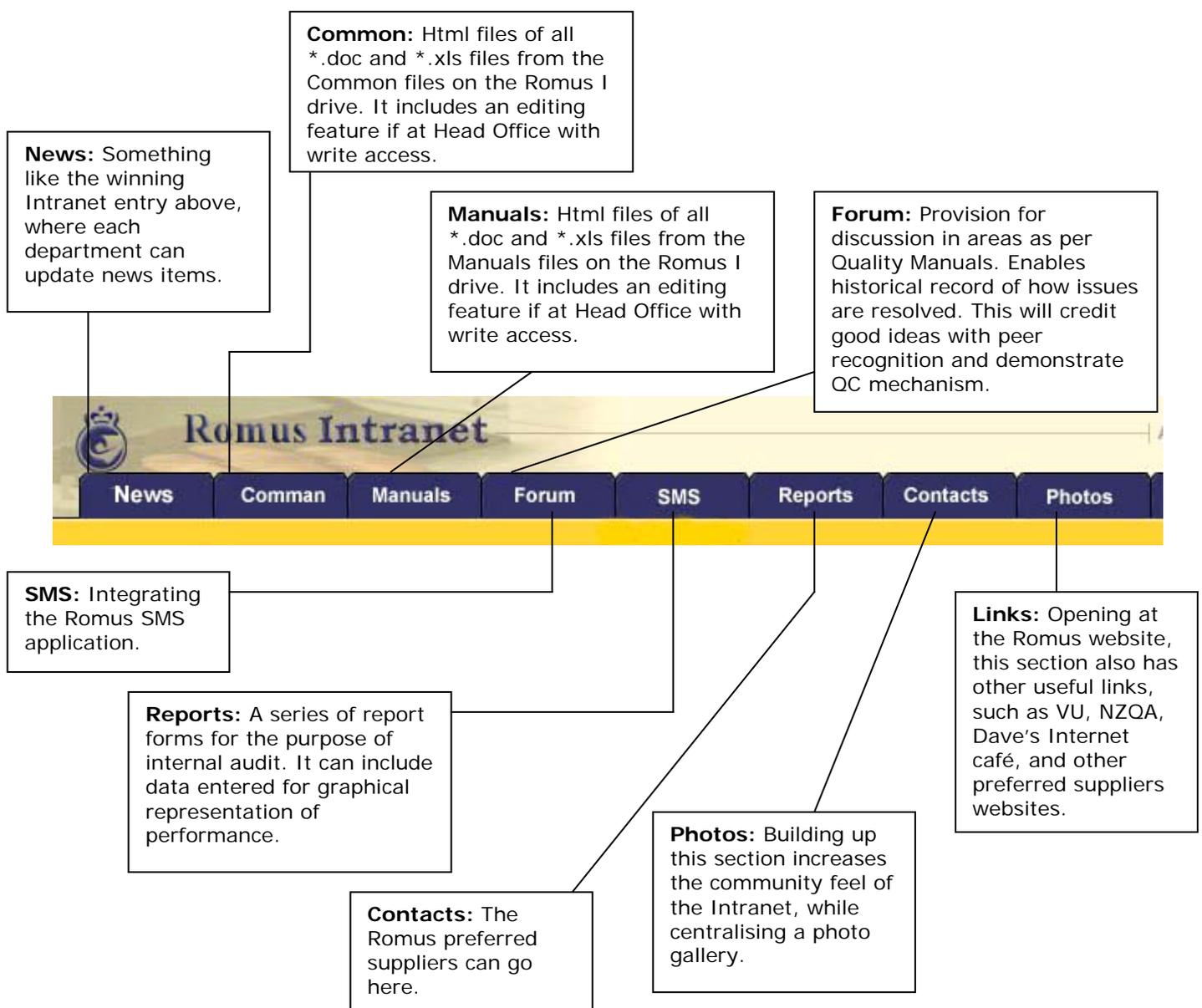


Figure 5.4 Rudimentary menu.

A project management time line was included in the proposal. However, the time line for the project far exceeded the proposed dates. A tick has been put next to the items completed by November 2002. The intention was to complete the remaining items over the course of the following 6-12 months. This was partly achieved but hampered due to work pressures and other work priorities overwhelming the project. My ability to drive the integration process of the intranet usage became refocused again near the beginning of March 2004.

June 2002	July	August	September	October	November
	Define menu selections and basic design	<input checked="" type="checkbox"/>			
	Explore ASP code options	<input checked="" type="checkbox"/>			
	Apply design considerations		<input checked="" type="checkbox"/>		
	Build menu and key task functionality		<input checked="" type="checkbox"/>		
	Launch Intranet	Interaction (improve design)	Interaction (improve design)	Interaction (improve design)	Interaction (improve design)
	Make poll on front page and collect poll data	<input checked="" type="checkbox"/> Remake poll on front page and collect poll data	<input checked="" type="checkbox"/> Remake poll on front page and collect poll data	Remake poll on front page and collect poll data	Remake poll on front page and collect poll data
	Help Heads to think up news items	<input checked="" type="checkbox"/>	Training session for heads to enter news items	<input checked="" type="checkbox"/>	
	Help Key users to think up improvement ideas	<input checked="" type="checkbox"/>	Training session on entering improvement ideas	Meet with key users to show how their feedback has shaped content	

	Help Key users to think up items for forum entry	<input checked="" type="checkbox"/>		Training session on using forum	<input checked="" type="checkbox"/>	Meet with key users to show how their forum input has been responded to and impacted on work practice	
User testing for core task (adding news items)	<input checked="" type="checkbox"/>	User testing for core task (adding news items) User goal focus		User testing for core task (accessing policy information) User goal focus		User testing for core task (using forum) User goal focus	User testing for core task (entering contact and personal details) User goal focus
	Check and remove impediments for departments to keep their information live and dynamic						
				Apply Intranet checklist			
					Survey management and re-grade proposal agreement scales	Present final report to Management Team Meeting	

Figure 5.5 Project management plan

During the development process there was a checking in with key staff to build buy-in and enthusiasm.

From the taped diary dated 2 August, 2002

I have grabbed some key people to have a look at what we were doing. ... The effect of this is to give them the opportunity to ... make a few comments, and sometimes it was just about creating enthusiasm for the idea. ... We would give them a quick demo of parts of what we were developing.

Another comment, which reiterated this tactic from the taped diary dated 10 July, 2002

I suppose as a developer, the question is, you see people and you say to yourself, "They're key", so it's good to show them and get them to buy in,

perhaps more than others. You sort of select who you think needs to be enthused.

It became clear during the development stage that there needed to be a parallel management intervention in the organisation to centralise the way folders were ordered on the shared network drive, and create and maintain some rules for standardisation. From the taped diary dated 8 August, 2002

In this company, some people who do that make huge mistakes like duplicating files by doing a copy and then putting a folder in another place, where they think, it is an improvement. What they have done is duplicated files so that two people, or groups of people in the organization are accessing different files and they maybe update them and they become different. This issue, and the issue of people building sub-sub-sub folders because they think that's logical from their own point of view, raises the problem of what standards we have for our file systems. If the organization, as in this one, doesn't have that controlled ... it creates a problem in terms of our intranet ... because we have allocated with agreement with the I.T. Manager, folders - one called common and the other called manuals. This is where the files will be turned into HTML files and the file structure duplicated with the HTML files on the intranet. Therefore a systematic policy on where files are kept and where they are ordered needs to exist. It all affects the benefit of what an intranet can offer. The intranet must offer something that is significantly better than any other way of doing it. So it requires management involvement at this level of the company.

The organisation had been incurring dramatic growth and this was felt the most in the ESOL department where numbers increased from 200 to 1,000 during this stage of the project. As the organisation grew the communicative culture was changing. The ESOL teachers in particular felt cut off from management and that they did not know what was happening in the company. From the taped diary dated 28 August, 2002

At the moment the teaching staff are concerned about not getting information and about some holes in the school systems, so whilst the intranet is not up and running it's a good time to present some information to the teachers about what the intranet is going to look like. I took some screen shots just before release, of the news page and some of the forum and made some hand outs, which I took to an ESOL department staff meeting. ... I thought it was one way of satisfying the stress that the staff are under and also getting them on board in terms of the idea ... teachers will be able to put some comments on the forum, which a quality control person can be responsible for checking and can make sure that the issues raised on the forum are drawn to conclusions and built into the systems and policies of the school in a proper way. And secondly, the news page and front page is run in a certain way that people in the organization can get information out to others.

At this time restructuring was being undertaken. I was concerned about how records were being kept and that there needed to be more centralised control of this. I looked to the intranet as being a potential mechanism for this. Two particular areas of concern were those of student welfare and reporting by the ESOL department management team.

Knowledge management (manuals)

As well as the issue of centralising the way folders are ordered on the shared drive and standardisation rules, intervention was needed to review and update the company's manuals themselves. They had largely fallen out of use. Any such intervention was going to take into account how they might be moved from hard copy to computer accessible files. After attending an external workshop on manual writing I recorded some ideas on this subject. From the taped diary dated 12 August, 2002

An intranet is a disseminator of information, and often of company manuals. ... One significant benefit would be to make the quality manuals more available and accessible, through the intranet, and to ensure they are up to date. So therefore, in this case at Romus Colleges, the issue of reviewing the quality of the manuals becomes a parallel management activity of developing the intranet. A number of issues are:

1. One of the purposes of this intranet can be to encourage staff at the head office to easily access and easily update the original quality manual files.
2. I will need to review the existing manuals along the lines of how they are structured ... so that when they are viewed on line they become user friendly
3. The pitch of language is another consideration. Was the language in the manuals pitched to the particular levels of the readers? So that is something we are considering, also simplifying language is logical for content on an intranet.
4. The manuals need to be written to incorporate the differences of other Romus' campuses to avoid resentment against head office.
5. Another point is made, to never take for granted that other people will know what is in the quality manuals. Therefore one has to consider how that can be taken on as an issue.
6. Another point when considering simplifying documentation, especially when we are going to simplify the documentation, is the risk of not documenting any particular procedure.

My management intervention on this was to recruit a staff member to work on it as a project. The strategy was to check all files on the shared network drive for what might be duplicate policies and visit each department to check through these and delete any old policies. The idea was then that we would break up the larger files into files with names that explained the content and enlist department managers to restructure the logic on how the policies, procedures and control documents were filed. We managed to accomplish the first stage of this so that duplicates were reduced to a minimum and we rebuilt the folder structure from which the files could be located. At the same time that we were doing this we tried to inform people, particularly the owner, of the changes that were being made. This project faltered because the staff member working on the project left the company after an initial resorting of the files was accomplished and a culling out of duplicate policy documents had been completed. There was no opportunity to edit the documentation as planned.

Manuals (Quality Assurance implications)

Another area of rationale for the intranet was the idea that it was necessary to centralise some functions of the organisation. This was partly driven by external factors, such as the New Zealand government's requirements for quality control and the need to keep evidential records of quality systems. One response to this requirement was to see whether the intranet could be a mechanism for submitting regular reports. Record keeping became a development goal for the scope of the intranet as well as a strategic management initiative for the organisation. From the taped diary dated 12 August, 2002:

This is a note about a meeting about the New Zealand Qualification Authority (NZQA) and the various quality control moderating mechanisms across the school, which require certain things to happen, especially in terms of quality control and storage of evidences. A point was made that it was interesting how many people didn't know about these areas ... So I think that raises the issue of the degree that ... an intranet ... is partly or to some degree a tool of quality control ... people in the organization needs to understand the quality control mechanisms that they are obliged to follow, due to external registration requirements.

Reporting

The Student Welfare department consisted of two full time staff. They ran orientation for students, followed up on absenteeism and took initiatives with

counselling as far as it affected practical issues such as accommodation, transport and any medical and police matters. Sometimes international students became wayward when away from their parents' influence, and parents needed to be included in discussions about student welfare. Records of Student Welfare interventions needed to be kept on the student files. However this record keeping was sporadic. Keeping these records online seemed a good idea, as from time to time other managers were contacted by agents or parents and it would be useful to be able to access at least summary details via the Intranet.

The Head of Department for the English to Speakers of Other Languages (ESOL) department was producing reports, but the senior managers did not feel these reports reflected the budgetary feedback required. Other departments were not officially reporting at all. As far as the franchises were concerned, one of my tasks was to establish reporting systems. This included the mechanisms for the reporting. I hoped to be able to manage all these reporting mechanisms via the intranet.

The screenshot below show reporting pages on the intranet. The dates of data input show that during the usability testing stage, I was also piloting these to see how effective the idea was.

The screenshot shows the 'Romus Intranet' interface. At the top, there is a navigation bar with buttons for 'News', 'Files', 'Forum', 'SMS', 'Reports' (highlighted), 'Contacts', 'Photos', and 'Links'. Below this, there are tabs for 'Newmarket campus', 'Manukau campus', and 'Henderson campus'. A secondary navigation bar contains 'Absentee warnings', 'Academic allocation', and 'Students monthly evaluation'. The main content area has a heading: 'You can insert a new absentee warning file here. After inserting it select the "Absentee Warnings" from the menu to view, edit or delete it.' Below this is a form titled 'Absentee warning' with a sub-heading 'PG - Sent to paren or guardian PC - Procedures complete for sending students home'. The form includes a 'Select campus' dropdown and a table with the following structure:

Name	Studen ID	1st warning date	PG	2d warning date	PG	3d warning date	PG	Sent home	PC
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>						

Below the table are three text areas: 'Student History (eg. refunds, course changes, on report, agreements)..', 'Counselling comment...', and 'Other comment...'. At the bottom of the form are 'Insert' and 'Reset' buttons.

Figure 5.6 Screenshot of the Student Welfare data entry reporting page.

The idea of this form was so that student welfare and discipline information could be recorded and be viewable by other management staff who need to access this information from time to time.

This shows the absentee warnings. You can edit and delete them.

Absentee warnings									
Search by Studen ID <input type="text"/> <input type="button" value="Search"/>									
PG - Sent to paren or guardian PC - Procedures complete for sending students home									
Name	Studen ID	1st warning date	PG	2d warning date	PG	3d warning date	PG	Sent home	PC
BI Shu Yang (Alan)	503323	22/8/02	N		N		N		N
Student History: 1st warning- issued on 25/7/02 for slipping attendance (71%). Absent especially the 1hr class.									
Counselling Comment:									
Other Comment:									
School: Newmarket campus Date: 16/10/2002 <input type="button" value="Edit"/> <input type="button" value="Delete"/>									
CUI Xiao Li (Sherry)	503361	24/7/02	N		N		N		N
Student History: 1st warning- issued on 15/7/02 for slipping attendance (75%). Student has been feeling unwell often. Also hadn't been told about moving her class.									

Figure 5.7 Screenshot of the Student Welfare reporting page with entries.

Academic allocation					
Newmarket Campus 16/12/2002	Total # of students	Average roll size	Average head count	Average % attendance	Comment
General English	43	10.75	7.15	71.63	
Lower levels	84	10.15	8.70	82.86	
Pre-Int, int & Acad-Int	316	10.19	7.0	68.69	
IELTS+	84	10.5	7.15	68.10	

Academic Management and Academic Admin support allocation				
	Total # of students in school	Academic Management allocation	Academic administrative support	Comment
All classes	527	4.71	29	Date as of 20/11/02

Name of person who collected data: Nathan Garton

Figure 5.8 Screenshot of the ESOL department data entry reporting page

The idea of this form was to provide student figures and show allocations of management and administrative hours allocated in relation to student numbers.



Figure 5.9 Screenshot of the ESOL department reporting page.

The idea of this page was to provide an observable record of trends in student numbers and management and administrative work allocations.

Responding to users

Prior to the usability sessions the intranet was set up on the computers of key staff. This was done on 30 August. A number of immediate issues came up, which related to the software and interface design. From the taped diary dated 30 August, 2002

The intranet takes over a certain amount of space on the computer particularly if you reduce it to the smaller window view, which jumps to the top right hand corner of the screen. We controlled the positioning of the smaller view window ... I had to move a few of the users desk top file shortcuts ... In most cases that would be ok. One senior manager had a Liverpool logo set on his desk top, and he felt unhappy that the new intranet smaller view window partly covered his Liverpool logo. I negotiated to reset his screen resolution. ... One issue came up because one of the users found out that he could take over other people's identities, because we used staff pictures for the news page. He played with this and upset one staff member. We would have to add an optional password to the add news section.

We wanted to make the intranet a feature on user's computer screens, which they could not minimise or shut down. Therefore we locked the ability for a user to close the program window. From the taped diary dated 3 September, 2002

We set up a competition with the marketing manager to see if he could crash the program by doing various things, so that helped us de-bug any stability questions. This competition drew interest from the owner ... who asked if he could access it from home. ... I sent him an e-mail with the address and password. ... We had to set up a first time pass word for the web site to unlock it. Once it has been typed a cookie (software memory file) is stored on the user's computer, so they won't be asked a second time.

It is my belief that these interventions prior to the usability session need to be quick responses. At this early stage, addressing the interests, issues and questions of the key staff was important. Any new project needed the support of key staff.

Technical emphasis

There were a number of technical issues which came up in relation to IT security settings. The issues and solutions were of a technical nature, resolved by actions taken by the intranet development team and the IT department. A point however to note is the need for cooperation between the IT and new media staff. Our focus was on communicative and knowledge management aspects of the organisation, whereas the IT departments focus is on setting up and maintaining a robust IT infrastructure and security protocols. The main boundary crossover, where we needed to cooperate, was related to how the internal network connected to the Intranet, usage and login

issues. There was also cooperation where, for the purposes of knowledge management, my interventions were to lead to changes in folder logic and user access on the shared network drive.

5.2.2 Usability testing of prototype

Nov - Dec 2002

Qualitative analysis has been defined by Babbie (1983, p.537), as “the nonnumerical examination and interpretation of observation for the purpose of discovering underlying meanings and patterns of relationships”. Qualitative analysis defines problems as looking for certain solutions or answers. It is also defined by how the subjective data is obtained. In this case, usability testing session feedback was used because at the prototype stage I wanted to get buy-in to the project by involving key staff in testing the design of the intranet. At the same time I wanted to see the users discover what did not make sense to them in terms of intuitive use, benefits of the design, and to detect any bugs. Bugs have a negative effect once software is introduced and can lead to people giving up, so it was important to discover these early on. My participant observer role allowed me to observe the group of staff testing the intranet and collate feedback from within the process. While this feedback data was focussed on the development project itself, it also provided context credibility for the other feedback data types. If the intranet were designed badly, the credibility of the whole project and exploration of the research propositions would be questionable.

The idea of usability testing sessions is partly to get people to use an intranet - overcoming people’s resistance and maximising users’ commitment. Molich (2001) has prepared a report “230 Tips and Tricks for Better Usability Testing”. Rolf Molich from Dialog Design in Denmark is a usability tester. He has collated tips from his own experience, that of acquainted professionals, online discussion forums and other Internet sources. This material provided a guide as to how to undertake the sessions.

The usability testing sessions (Nov – Dec 2002) took the form of a number of groups of staff trying out the prototype intranet. Three computers were available, so where there were more than three testers in the group, two testers would use one

workstation. They were asked to perform certain tasks and to speak out loud as to how they were finding it, their impressions, and where they were finding problems. Part of conducting these sessions was keeping a written record of the users' comments. It included a wrap-up group discussion at the end of the usability testing session. The emphasis of this feedback was on the interface design and functional bug issues. Many ideas for adapting the design were also forthcoming.

Three groups of 4-6 staff members took part in the usability testing sessions:

Group 1: The first group was made up of the senior management team covering Business, Operations, Marketing, Human Resources, Student Services, and IT. This group represented the staff I most regularly worked with, and I ran this session.

Group 2: This group was made up of the academic and management team including those from the two off-site franchises. This group represented the staff that were most regularly accountable to me in my role as Principal of the organisation. This session was run largely by my Personal Assistant. I introduced the session and reappeared near the end of the summing up stage.

Group 3: This group was made up of a mixture of operational and administrative staff who use computers for administrative purposes. My Personal Assistant ran this session.

Group 1 had a second session after some iterative alterations to the software. I ran this session. Tasks included in the the usability testing sessions were posting news items, registering on the forum, adding messages and using the calendar. Some users would dive off into other uses depending on their interest, and this was not discouraged. It was emphasised at the beginning of the sessions that the staff were not being tested, but that they were testing the software and that I would appreciate it if they vocalised what they were thinking. Because I was testing the software, they were told that we would not coach them, rather we would only assist if they got completely lost with what they were trying to do. This interlocutory approach made it easier to determine design and bug issues. During the session, notes were taken according to the categories: Problems, positive findings, suggestions from test participants, functional bugs and usage scenarios were all recorded and comments were collated onto a form. The written instructions for the person taking the sessions

was, “Interact with the participants and take notes as necessary while the task is in progress. The interaction might be as limited as reminding the participant to think aloud, or as extensive as an ongoing interview. Provide help only when it is clear that the test participant is unable to solve the task alone.” Comments from the wrap-up group discussion at the end of the usability training session were recorded according to the following categories: the three most important changes they would like to see happen, the three best things, the small things that are the most bothersome, and ideas they have for improving problems.

After the usability testing session, I met with my personal assistant and the New Media designer. At this meeting we determined the most important usability problems to address. Following this, screen shots were taken to record the iteration stages and alterations were commenced.

In the summary notes of the usability testing sessions below, a number of comments have an asterisk (*) before them. These comments demonstrate a developing awareness of how the intranet may impact the participative and collaborative culture of the organisation.

Take notes on the following:
Bugs (Functional problems)
<i>Post a news item:</i> Why not make the refresh automatic so news item comes up straight after entering it? Do the news items expire? Can it say when it will expire?
<i>Add an event to the calendar:</i> The error message when one box wasn't completed wasn't clear. Why not make the time AM or PM only rather than being so specific - do we really care about a specific time? Can't use apostrophe.
<i>Register for the forum and add a topic for discussion:</i> Why not give an instruction to enter first name only? What is a signature? I can't delete except by backspacing. The smiley option gives an error message.
Design flaws (Logical Problems)
<i>Post a news item:</i> Not sure what selecting a campus means?

<p>Where is the refresh button? Campus is spelt campuse! <i>Add an event to the calendar:</i> Why not have the category, for meeting, visit etc at the top? Why not make the order of the selections should reflect the order of information when viewing the calendar? <i>Register for the forum and add a topic for discussion:</i> Why do we have to locate New Zealand? Why not by campus? Is there a character limit on my message? Why doesn't it return to the list after I send my message? Could there be a general discussion area as well as by department?</p>
<p>Where did people get stuck (disorientated)</p>
<p><i>Post a news item:</i> One user kept trying to enter news item over the character limit? Can there be at least 4 lines? <i>Add an event to the calendar:</i> Doesn't tell you how to get out of calendar or how to view it! An event can occur over many days - not just one! What does the calendar do? Does it pre-warn? <i>Register for the forum and add a topic for discussion:</i> How do I make a new topic? How do I write a message?</p>
<p>Suggestions for improvement</p>
<p><i>Post a news item:</i> Why not make refresh automatic? * Oh, I can select another person's photo! You can write what you want and say it's someone else saying it. * How can you prevent sexist comments or defamation? <i>Add an event to the calendar:</i> Either include apostrophise or tell people they can't use them. Bypass unnecessary info. How can it be edited? What if Warwick is away! It should say who put it on and when in small type. Give persons name on calendar rather than event. <i>Register for the forum and add a topic for discussion:</i> I want the delete key to work. Would like to be able to adjust the font size. Using first name only is becoming an issue as the staff numbers increase! <i>Other:</i> The Usability session should not be live - it should be a controlled environment.</p>
<p>Positive comments</p>
<p><i>Post a news item:</i></p>

<p>Looks like a chat room.</p> <p>* Good for communicating globally.</p> <p>Good as an additional tool.</p> <p><i>Add an event to the calendar:</i></p> <p>No entries</p> <p><i>Register for the forum and add a topic for discussion:</i></p> <p>No entries</p>
<p>At the end of a session have a summary discussion to ask:</p>
<p>What are the most important changes you would like to see happen?</p>
<p><i>Post a news item:</i></p> <p>I would like to be able to update my photo.</p> <p>* It could be overused and become overwhelming.</p> <p><i>Add an event to the calendar:</i></p> <p>Would like to see the whole year, not just by month.</p> <p>Shouldn't have to choose by category.</p> <p>Should lead users through more easily.</p> <p>* Could see anonymous messages could lead to negative comments.</p> <p><i>Register for the forum and add a topic for discussion:</i></p> <p>Would like a font size option.</p> <p>Would like to be able to use the delete button.</p> <p>Would like the selections to look like MS Word as much as possible.</p>
<p>What impressed you the most?</p>
<p><i>Post a news item:</i></p> <p>Relatively user friendly, therefore no instructions needed.</p> <p>When would people check it?</p> <p><i>Add an event to the calendar:</i></p> <p>* This will work well with the franchises.</p> <p><i>Register for the forum and add a topic for discussion:</i></p> <p>Ease of use.</p> <p>* The concept of all users communicating across the organisation.</p>
<p>Think about the way you work and the way you communicate through the organisation. How do you think the Intranet serves the organisations work goals and communicative culture?</p>
<p><i>Post a news item:</i></p> <p>* Bad if it replaces face-to-face communication.</p> <p>* Good if you can't find someone.</p> <p>Suggest auto-checking censorship/auto-cut for swearwords.</p>

<p><i>Add an event to the calendar:</i></p> <ul style="list-style-type: none">* If everyone had a computer, it might be relevant.* If info about events pops up it could be good, but anyone can write about anything. <p><i>Register for the forum and add a topic for discussion:</i></p> <ul style="list-style-type: none">* Potentially valuable if people see the discussions and respond. It can be frustrating trying to get people to sit down and talk about issues.* More people across the organisation will potentially be able to understand the issues and may contribute their ideas, where otherwise they not normally do so.* As the organisation expands this will help people to feel like it's a small company.
<p>What other feature/ do you think might better serve the organisations work goals and communicative culture?</p>
<p><i>Post a news item:</i></p> <ul style="list-style-type: none">* Bad if it replaces face-to-face communication. <p>Good if you can't find someone. Suggest auto-checking censorship/auto-cut for swearwords.</p> <p><i>Add an event to the calendar:</i></p> <p>Prioritising resources for teachers is more important than this.</p> <p><i>Register for the forum and add a topic for discussion:</i></p> <p>What if you want confidentiality. Give instructions on keeping comments small.</p>

Figure 5.10 Summary notes of the Usability testing sessions.

Knowledge management (manuals)

During the usability testing sessions we were still developing features such as the manual file access. This was to take some time and involved parallel intervention with the way the organisation handled its filing and accessibility to manuals – policies, procedures and control documents. As referred in this chapter, some work had been achieved on resorting of the files and the culling out of duplicate policy documents. No editing had been done however, because the initial staff member recruited for that task had left the company.

The organisation had had manuals written by a consultant five years before. Most of these had fallen into misuse or had never been used in the first place. The Administration manual was the only manual being referred to regularly and updated and this was done by the owner. Many of the policies, procedures and template documents had changed, but were not stored in a common area. Part of the issue

with this was that the manuals had been developed by an external consultant, which meant that there was never really commitment from the staff to use them. Another was that the manuals were written for ISO9002 accreditation, which tended to employ a more industrial-based model on manualising, one which wasn't really suitable to more service orientated industries, such as international education. The organisation exists in a fast changing environment, so there is a high level of change. With the work pressures that flow on from that, changing and updating the manuals and ensuring that all staff followed them seemed a daunting task.

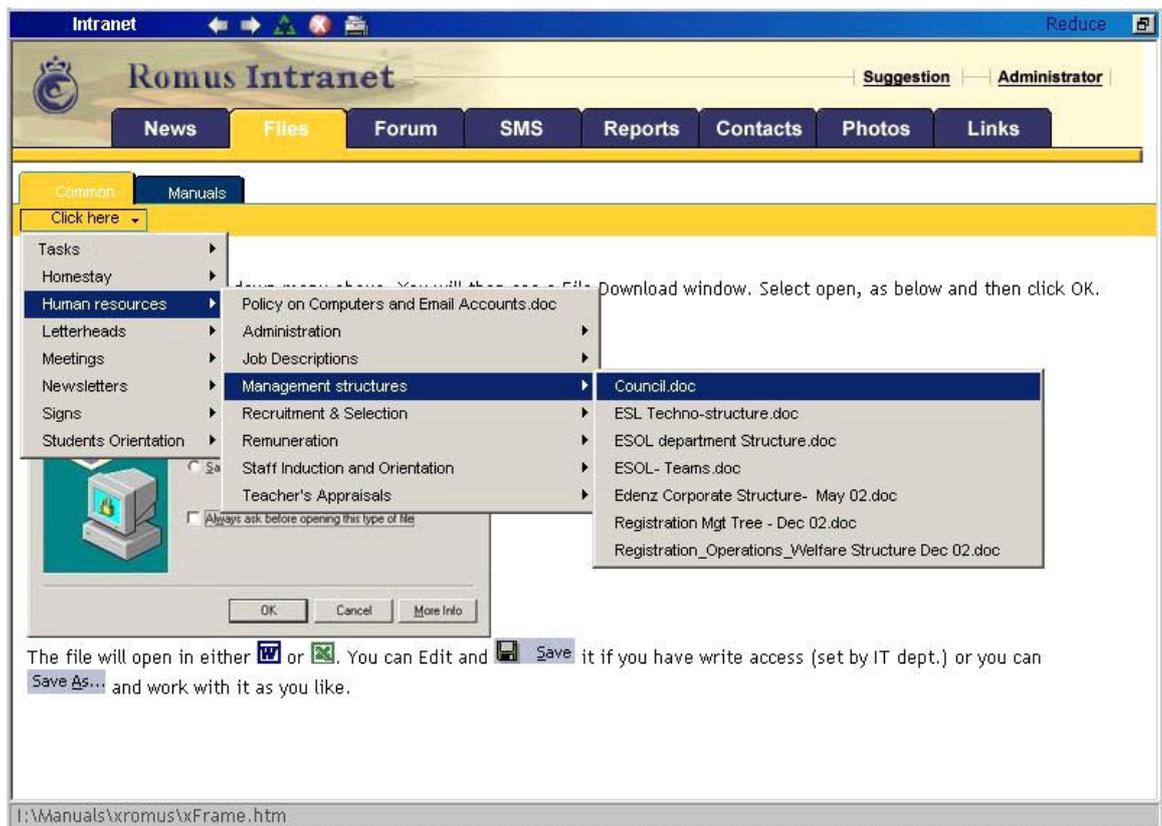


Figure 5.11 Screenshot of the intranet after the Usability Testing Sessions.

Technical emphasis

I had been writing the software that would make these files accessible via the intranet. The intention was to change the way the organisation accessed manualised information. Rather than opening a paper based manual, they would theoretically be able to access it via their computers and that access would be made easy because of the way the intranet filing system would provide an auto-updating menu of the files.

At the same time I wanted to see these files available to the franchises, which were at other geographical locations. Therefore I was making the software so that a parallel

html version of all the files was generated at the start of each day and that the intranet menu would, by recognising whether the user was at the Head office site or elsewhere, enable the franchise staff to read the html version. The staff at head office would, by recognition that they were at HO, be provided the same menu but when the files opened they would be the original word and excel files, and these could be edited and updated depending on their logon write permissions.

Another minor intervention was that some work was being done by one department on educational courseware. I instructed that they do this by way of keeping to a standard template approach. In this way I hoped that the courseware material could be made accessible via the intranet in the future.

This example demonstrates how I was beginning to consider things that were being done in the organisation in terms of whether it could be integrated into a wider networked organisational model. What I considered to be a dynamic approach to managing the manual files was culled from the design in the final revamp. The story of this is covered in the next chapter. In the evolving story of the intranet design and changing and evolving organisation this example shows how the boundaries of what could be possible explored and tested within the real context of an organisation.

5.2.3 Prototype testing with key users

Jan – Nov 03

The prototype testing involved setting up the intranet on a number of key user's computers. These people were selected primarily because they were considered to be in close relation to me and therefore were amenable to supporting the project. The group included the owner of the college, the marketing manager, the operations manager, the student welfare manager, the human resource manager, the academic manager of one of the franchises, and an academic manager of one of the larger departments. These staff were chosen because I was most directly involved with them in my day to day work, and because of our strong ties, I felt they would be most supportive and therefore be patient with any debugging that was necessary. Once the intranet was set up on their computers they began to provide periodic feedback.

The techniques was to randomly show them how to use different features. I did this rather than setup training sessions for two reasons. Firstly, they had already attended the usability sessions, and secondly, I hoped that the interface design was intuitive enough that it could be worked out without assistance and they would discover how it worked and the benefits.

The idea of linking pictures of staff to any news items posted was successful. Staff like the idea that their photo is displayed with their news items on everyone's computer. From the taped diary dated 18 September, 2002

I went out to one of the franchises, which is just about to open, and put the intranet on the Manager's computer and also the Director of Studies and showed both of them, how to add a news item in. This seems to be a very successful way of introducing the intranet, because people simply like to see their photo, and with their own news item. ... they get quite excited, that if they put a news item there with their photo, it actually comes up on other peoples computers. Technically it doesn't seem surprising, but people are surprised by it. They see a new way of communicating... it's a really good way to introduce people into this concept to start getting them on board.

One of the franchises had made complaints about a lack of communication and support. ... it will be very interesting to see whether the intranet will be a mechanism of support.

Communication management

I was responsible for communications with and support of the franchises. There were a number of management strategies related to that, such as the franchise key staff reporting to a management meeting once a month at head office, setting up lines of communication for staff support across the campuses, setting up a professional development regime. My role did not involve business communication, which was handles at owner level an executive assistant.

I viewed the intranet as one mechanism for fulfilling some of my management responsibilities, specifically because of its potential as a communication channel and as a medium for disseminating manual information and forms, and also for recording reporting data. Since the management activity for establishing the franchises was undertaken at the same time as the intranet was being developed and implemented, questions of about how it supported communication and possibly file sharing and online reporting were in the forefront of my mind. I was exploring the degree that the intranet would factor into the strategic equation.

Feelings of belonging

One question has been whether the intranet would influence the culture of the organisation and one aspect of that is the feeling of belonging that it may enhance.

From the taped diary dated 26 September, 2002:

A key person was in discussion with me about the politics of the organization. The discussion covered the communicative politics and belonging issues that have to do with the franchises that we have just started. Comments were made ... about the success of the management interventions during the start up of the franchises. There was a perceived feeling of belonging and pride amongst the staff. The same comment was made about the intranet, how it gave people who were using it a feeling of togetherness.

In terms of the project, the indication that the intranet, along with management intervention, was building a feeling of belonging is significant. From my perspective, I recognise that staff need to communicate with each other. Mechanisms need to be created to encourage communication, so the feeling of belonging can be enhanced. The fast pace of change in the organisation induces stress, and that stress is exacerbated if people are not working positively together. If a feeling of belonging is nurtured, then staff will work better together.

5.2.4 Taped diary of periodic feedback

Recorded feedback about the intranet was collected periodically. I also recorded any relevant response either for adapting or debugging the intranet or of management interventions to support the project. The data reflected the coexistence of how people did things in the organisation and how the technology based virtual mechanisms related to that. It reflected how the intranet was being shaped according to the organisational structure and culture. Using this unstructured approach meant I was not imposing a theory or presupposition about what to expect. There were no formulated questions. The participants would provide feedback on the basis of trying to help me get the intranet working in a useful way in the organisation.

Once the intranet was debugged and some user interface alterations were complete, it was launched within the organisation by installing it on every computer. A number of initial set-up issues were solved and several training sessions organised. The intranet was not launched for all the staff at the franchises, but only installed on the

academic and centre managers' computers. This was because the franchises were semi-independent and it was therefore appropriate that these key managers try it out without any requirement on the franchise owners. At this stage, the product was still considered an evolving project rather than an item of proven benefit for the franchises.

During and following these stages, there was sporadic feedback of a various kinds. In general, staff were very helpful and I appreciated their input. Sometimes this input would occur as staff approached me about problems or ideas for improvement. Sometimes comments would be made in the course of day-to-day business. When this happened, I might respond by promising to take certain action or that I would look into it, and this sometimes led to impromptu meetings. I kept a record of these meetings and my comments about the feedback. I kept a tape recorder in my office and would record these events as data for the exegesis. For each recording, I would state the date, explain the event and any responses or planned action.

5.2.5 Launching and training for all users

Aug – Nov 03

Rolling out the Intranet

The prototype went through a number of iterations and the software was debugged based on feedback from the usability session, as well as comments from the five stakeholders who had the prototype installed. The intranet was then ready to roll out to all the computers in the organisation. All management and administrative staff in the organisation have a computer and teachers have shared access to a computer.

Technical emphasis

We set up all computers so that on start up the intranet would automatically start and take up space over their desktop. This was accomplished by a script written by the IT personnel. However, we needed to see that each user, after logging on, completed the 'intranet logon'. When the tick 'Remember me' checkbox was ticked, a cookie was put on the computer so that the next time the user logged on it would go directly to the intranet main page. This login requirement was needed because the intranet was residing on the Internet, and it provides a firewall preventing unauthenticated access.

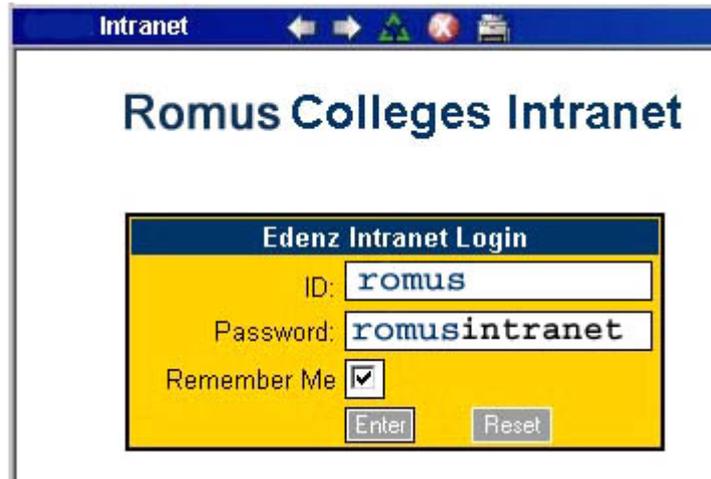


Figure 5.12 Login screen.

The login system was, however, an issue in that when staff logged on to another computer besides their usual one, they needed to log in again. This is because of the way Windows works, by storing user profiles on each physical computer. Teachers often shared computers so it had the effect that teachers were not using the intranet. Once staff logged in they were presented with the intranet interface. This was achieved in May 2003.

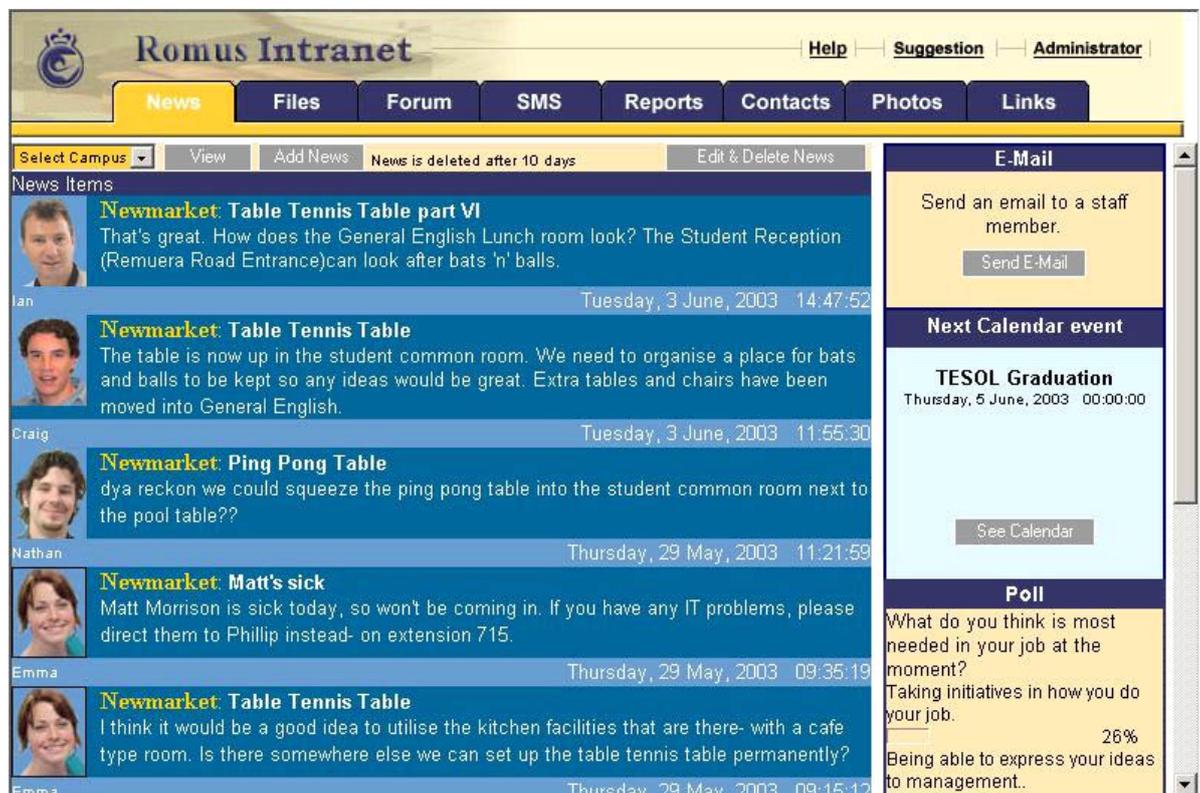


Figure 5.13 Screenshot May 2003

There was the typical Window “Minimise button”  in the top right of the Intranet. If the users clicked it with their mouse it would minimise to the screen below and visa-versa.



Figure 5.14 Screenshot of the minimised screen

This minimised screen drew some complaint over a period of time, and it was culled so that the main intranet window minimised in the normal Windows way.

Communications, management and culture

From the organisational communication perspective, introducing the intranet would entail integrating existing forms of communications and making people aware of how the intranet could be one of the organisation’s communication channels. From the taped diary dated 24 September, 2002

The newsletter that exists in an organization is just one way that news is dispersed, just on checking the latest newsletter, there were some items in it, like for example the Christmas breaks, so I picked up on that and sent an e-mail to the marketing department saying could you put those dates into the calendar. This is an example of encouraging people who are communicating with one system to begin to appreciate the intranet as another communication channel.

Another point from the communicative perspective is how the interactivity of the intranet medium may reflect the communications culture of the organisation. From the taped diary dated 24 September, 2002:

There is a fair bit of banter on the news page ... One staff members posted an item saying “Hey come on guys stop using this for banter.” Now that didn't have to come from me, it was a self regulating thing, very interesting to see the office communication, sort of that friendly culture of Romus a bit of banter going onto the intranet as well, and even a bit of a self censoring from the staff - wouldn't want to stop that, just watch it.

At this point the News page on the intranet was establishing its own communicative culture. There was a mixture of official news flashes and social information reflecting the friendly atmosphere which exists in the company. The following screen shot reflects this trend.

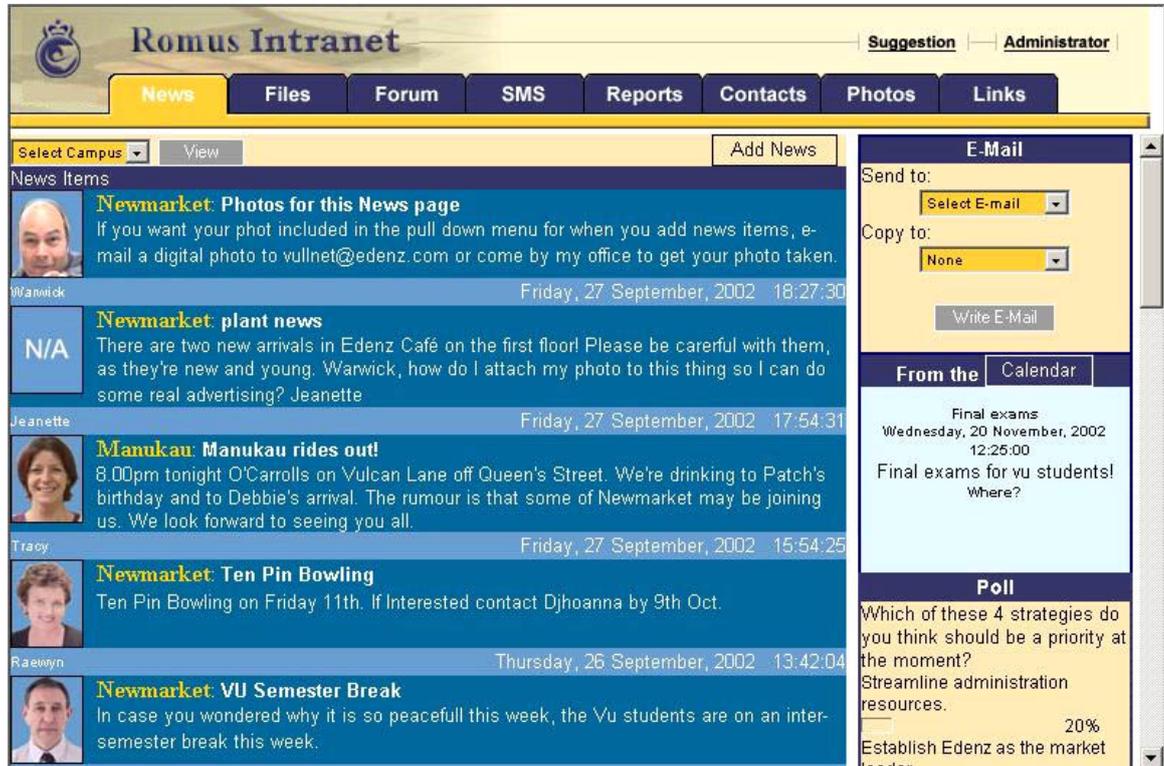


Figure 5.15 Screenshot of the intranet September 2002.

Another management intervention was to ensure there were enough computers for teacher access and to post instructions above the teachers computers on how to log in, post news, and use the forum. The intranet and this setup and instructional information was also presented at a monthly teachers meeting.

In line with the introduction of the forum, a number of topics for discussion had been set up on the forum. One of the usability testing sessions had focussed on entering discussion threads into the forum. The idea was that this would encourage others to do the same.

Training sessions and intranet uptake

The first training that was undertaken was to visit staff and show them how to enter an item on the news page (see News tab). There were no access restrictions and the user's photo would come up with their message. This training was on a one-to-one

basis and it was done casually as I encountered staff in the organisation. From this point, staff began to use the news page.

As explained above, the franchise schools were rather tenuous in their association with my part of the organisation, and as a first strategy we installed the intranet on the top managers' computers and on the academic manager's computers. I was in contact with these people directly and therefore had a working relationship with them for taking this initiative. The top managers had been involved with my franchise implementation team and been trained at the College and the academic manager's had been employed at the Colleges head office campus prior to taking up their positions with the franchises. Because of the internal politics associated with these franchises, I doubted whether the intranet would catch on, beyond these key staff. The ramifications of the politics, would likely impinge on staff loyalty and communicative connection.

For the forum (see Form tab) I co-opted a student, Alice, who was doing part-time work, to run a training session. The owner had asked me to involve Alice in some kind of project. I intended to supervise the process. She organised a meeting for a group of approximately six trainees, made up of operational staff, registration and administrative staff. They brain stormed ideas for improving their work systems and we were to train them in registering on the intranet forum. The plan was that they then add their comments on the forum and I would see that some action was pursued and feedback provided via the forum. Unfortunately we encountered bugs in the software at this point and had to postpone this stage of the training, and Alice went back to full time study before the training session could be reconvened. In the meantime, other business priorities pulled my attention away from this endeavour.

Later on, in early 2004, when the organisation was less fractured, there was another training attempt involving my personal assistant, the quality assurance manager and with a new forum. This proved, however, to lack impetus, mainly because we were finding that the culture of the organisation was such that non assertive staff generally felt they were not listened to. The general entrepreneurial culture of the organisation listened to staff that were more assertive in showing initiative. These staff could make themselves heard without the need for an intranet. Other staff, who were less assertive, saw little reason to contribute ideas that they felt would not be taken

seriously. This issue was to spur me on to take management interventions to redress the concern that we were not including staff as we should. For example, we began to organise monthly full staff meeting, and rotate opportunities for staff, not normally given the opportunity, to talk about what their department or area was up to. I came to see this intervention as falling under the role of communication management.

Technical emphasis

The College's Student Management System (see SMS tab) enables student registration details to be stored. I simply met with staff that used the SMS in their normal course of work and showed them how they could access the SMS through the intranet. The SMS works via the internet in a similar way to the intranet. Data is stored with an external Internet service provider, using a data base on their server. The College pays a licence fee to an external contractor to manage the software and its upgrades. It was clear at that point that the intranet was providing no real advantage for users who accessed the SMS. They were used to accessing it with their Internet Explorer browser and continued to do so.

The reporting that was envisaged for the intranet (see Reports tab) was initially set up for two areas of the college. One area was to keep a record of student welfare data and the other was to record the number of students in the ESOL department and the management and administrative staff hours allocated to run the programme. The first data was entered on November 2003. The idea was to incorporate accountability feedback according to historically proven reporting requirements.

For the ESOL management team, I organised a training session to explain the principles behind the intranet system. The goals were based on agreed teacher, management and administrative staffing allocations according to student numbers, which reflected fair resourcing and provided for budgetary accountability. It was explained to the ESOL management team that they were able to make their own staffing decisions based on the goals, as long as they would complete the report on a monthly basis and that the programme leader would explain the report to the owner once the data had been entered. The report was printable. At the same time, I trained the owner on how to access the Report area of the intranet.

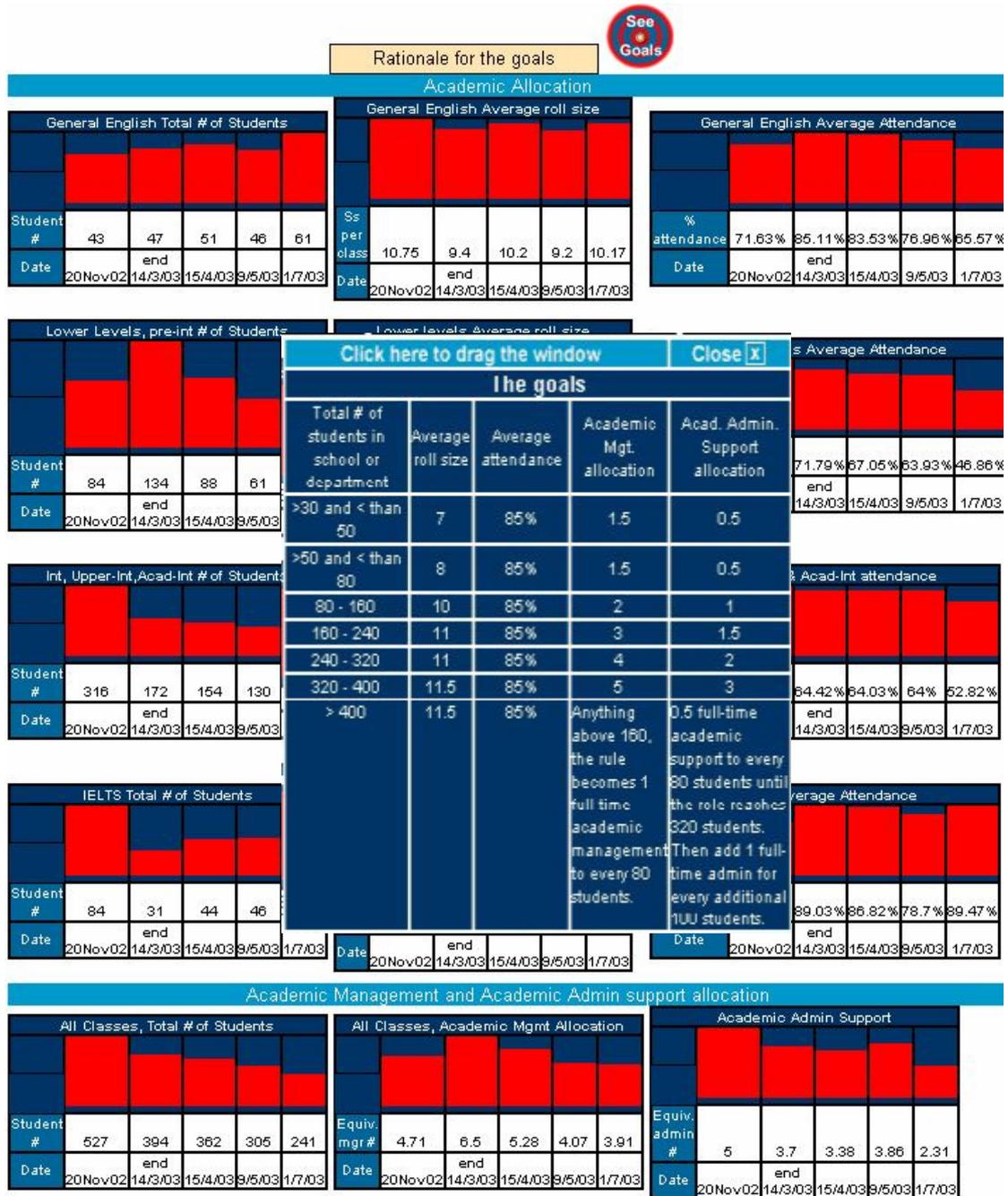


Figure 5.16 Screenshot of the Academic Allocation report by January 2003.

After training the ESOL management team about the system and how to enter their data, there was also the question of what parallel management activity should happen to see the system incorporated operationally. From the taped diary dated 22 April, 2003:

About the report procedure for the intranet - just following up on the process. The data has been entered. Just to double check with the administrative person who collated the data ... to check that...the guy responsible for the academic area for which the report represents ... to give a report to Thomas

the owner, thus trying to move this process into the realm of normal culture – a system of monthly accountability. I am nurturing that through and there is a data inadequacy where the student data is taken off the SMS and that is 2 weeks old, so I am going to have to check on that side of the system so the data is true.

ESOL, however, represented only one of the departments of the College and efforts to create the same system for other departments were not realised. Because the ESOL department experienced a boom in student numbers, this process and procedure worked for a period. However, the boom was over a year later, with a massive drop in staffing in that department. Significant integration of sub-departments and layoffs meant that the system as described fell into misuse. When an organisation has a high rate of change, it impacts on changes in the way the reporting systems work. We could not keep up with the pace of change necessary to manage reporting through an intranet engaged system.

The contacts page on the intranet (see Contacts tab) was designed to replace an existing spreadsheet which contained staff details. Staff could edit their own details with managers being able to add new staff and change the position and ‘Contact about’ details. Although I trained the owner and some management staff in updating

Photo	Name	Contact about	Email	Phone or DDI	Ext.	Edit
	Adrian Bateman Programme Coordinator	Intermediate and Academic Intermediate levels. I also manage the social activities programme for these levels.	adrian@edenz.com		736	Edit
	After Hours Phone mailbox				760	Edit
	Bruce Rushbrook Operations Assistant	Anything related to operations. Also looking after the library.	woodnart@tra.co.nz	025 511 233	706	Edit
	Carine Besse Programme Coordinator	Intermediate and Academic intermediate levels shared with Adrian. Also I run the IELTS+ department.	carinebesse@hotmail.com		736	Edit
	Caroline Lewis GAP Volunteer	Book exchange, ESOL tapes and other admin support. line manged by Willem.	reception@edenz.com		761	Edit
	Catherine Zhang EIT executive		jinming@edenz.com		708	Edit
	Ceidrik Heward Screen Arts Director	Screen Arts Course, video & film production.	info@nzfilmacademy.com	920 5931	764	Edit
	Chris Dowie Marketing Manager	Course information, marketing, Staff Newsletter, Youth Programme and strategic oversight of Screen Arts programme.	chris@edenz.com	920 5922	722	Edit
	Claire Cameron Marketing Assistant	Assisting marketing department.				Edit

Figure 5.17 Screenshot of the Contacts page.

this page, Thomas continued to use the Excel spreadsheet that had been operating for some time. Effectively these two systems have remained side-by-side to date.

However, there has been a general trend over time for staff to lean towards using the intranet contacts page.

One aspect of the development of this contacts page was its relevance for the franchise schools, and the ways in which they wanted to be connected with staff at the main campus, who were working in similar fields. From the taped diary dated 28 November, 2002:

On going out to one of the franchises and discussing the communication and support issues it became evident that they don't want so much one person working as an intermediary. They preferred to be put in touch with their colleagues at the other schools. At that time the contacts page did not include enough information, so consequently we decided to adapt the page to add a section of what to contact people for. We also added an edit button to make it possible for staff to change certain details themselves.

The photos page on the intranet (see Photos tab) was designed to provide a communicative belonging. The idea was to put photos into sub-folder sections and a menu system would self-generate. I hoped that staff would find their way there. Also if it was to succeed we would need to take up to date pictures and upload them for the intranet on a regular basis. I was without assistance for some time and was overrun with the pressures of a boom period of operation and stress from internal politics. The job priorities meant that my focus was diverted from maintaining operational updating of photos or of training staff in this area. In 2004, a part time worker in the marketing department had taken numerous pictures around the organisation and stored them for access, but he had devised his own system for this. After they left the organisation I located the pictures on the network drive and incorporated them on the photo page of the intranet. This situation, where staff members undertook a task and devised their own system without any real collaboration, was endemic in the organisation.

The links page on the intranet (see Links tab) was designed to provide an alternative to common links where staff normally used their Internet Explorer browsers. It seemed we created little interest with this feature as staff preferred to use their Internet Explorer browsers to access links of interest to them.

Communication management

Once the intranet had been introduced a number of initiatives were required which came under the general role of communication management. Up until this time there had not been a specified role in the company. One activity of communication management was to keep channels of communication open and this included any mechanisms for those channels. From the taped diary dated 23 January, 2003:

The intranet new media developer pointed out that not many people had been using the intranet in the New Year. For example, people were using their diaries rather than the calendar. We asked ourselves how we could create significant advantage for staff to refer to the intranet calendar. Perhaps we could get it to automatically send out reminders - useful perhaps. We realised that unless we did that and offer it as a feature it was going to be hard to convince people to use the calendar.

One of the franchises commented that there were no news items. We realised that the New Year was going to be an opportunity to form habits and so we put some news up as a prompt. Another activity of communication management that was becoming clear was that of recruiting key staff to assist with communication networking. From the taped diary dated 18 February, 2003 a simple comment reiterates this theme.

Trudy was asking how to use the forum. We need to try to get back to people like this because they are an asset.

The staff that were providing feedback and supporting the intranet were important because they had bought into the idea. They appreciated that communication was strategically worthwhile and should be encouraged.

Another activity for communication management was ensuring that staff had access to the intranet as one channel of communication. The first part to this was to ensure staff could access a computer and the second was to ensure they could access the intranet on it. If this was not achieved then some staff could be locked out of the intranet communications channel. When teachers did not have primary access to computers, computers were set up in the teachers' room so they could easily access the intranet. From the taped diary dated 18 February, 2003:

One of the supporters pointed out that the intranet had not yet been installed on the computers for the Business and Computing department.

Similarly we needed to look at how the intranet started up with its log on screen and overcome any barriers where staff were getting stuck at this point. From the taped diary dated 17 March, 2003:

Jason is feeding us information on how people in the Business and Computing department were responding to the intranet. When people logged on to their computers they were confronted with the login screen for the intranet. Because in many cases they had lost the instructions they were simply minimizing the logon window. We needed to resolve this. The reason we have the log on in the first place is because it protects the organisation from hackers. ... We went through the organization and unlocked any that needed a password. However, sometimes there were two users logging in to one computer and so we did another sweep the following day.

Another activity of the communication management role is to ensure that information is up to date. From the taped diary dated 17 March, 2003:

Jason pointed out that news deleted every 30 days makes the news too old. They wanted the time reduced. Staff were getting sick of seeing old news and likewise staff that put news on don't like to feel people were getting bored seeing their news item. ... We changed it to 10 days before news was auto-deleted.

Another activity of the communication management role is training. Where there is any technical medium, training is required. This is exacerbated where user participation is required. From the taped diary dated 7 April, 2003:

We are working on news and contacts page issues. We are trying to make a print version of the contacts page better than the old system. We are making it so that the photos also print so if it is stuck on the side of a computer you can see the photo of everybody. We are also adding features so users can edit and delete themselves. In the case of news we will let everyone edit and delete. In the case of the contacts page we will let managers do it. We will need to train the managers how to do it, except for photos – our function will be to do that because it is too technical to expect them to do that.

There were numerous other training points, because we were trying to get staff to generate content rather than create it ourselves. The training was beginning to pay off. The first breakthrough was when we noticed that the idea of staff adding their own news caught on. From the taped diary dated 9 April, 2003:

Double people are putting news items on than had been trained!

From the taped diary dated 26 March, 2003:

The next training meeting on report forms is scheduled, so I can show the ESOL management team how they can complete the report and how their responsibility relates to it.

From the taped diary dated 31 March, 2003:

There was a training session with owner on the intranet, going through how to put news on again, how to access the ESOL report feedback as part of the intranet and about the calendar part. He had some points on bugs he had noticed and so we are working on those straight away.

The extent that staff were using it was beginning to be incorporated into the communication culture, as can be seen from the taped diary dated 10 April, 2003:

Won another person over - another person has made a comment that "I used to use it - took it for granted - now I think it is good. And I am going to miss it".

The last comment was because they were leaving the company.

Another activity of communication management is to see that staff feel a part of the culture - that they feel included in the communication. People do not have to be a part of every bit of communication. They need to feel connected in a way that they feel they have something to contribute or need to know. From the taped diary dated 10 April, 2003:

The discussion we are having is about the difference between managements use and teacher use of the intranet. Do teachers feel they are part of the organization? ... We think they would be more interested in the forum than in adding news items. We thought to ... add a button so teachers can send email even if they do not have an email account. At the moment staff have email but not teachers. By adding this features all the features are available to teachers.

We are also making it so anyone can add themselves to the contacts page. They may not want to but it means they can include themselves if they wish. We did this because ... although ... the admin staff do not need the teachers on a phone list, if the teacher wants to be on the list - lets make an open system where anyone can be included.

We hoped that key staff we were recruiting to assist with communication networking could help us to get the forum going, thereby connecting people up. Another role of communication management that was becoming clear was that of recruiting key people to assist in ways in which we could create staff discussion for the improvement of the organisations services. Setting up staff training days might be a

way of handling this. I recruited a part-time staff member to look into this as a project. From the taped diary dated 1 April, 2003:

Alice who works part time was asked to work with me on taking initiatives in creating communication activities. We discussed what strategies and tasks we could come up with to improve customer/client contact for successful encounters. We wanted bottom up staff involvement. The approach was for Alice to go to the key managers of departments and ask for time to run brainstorming session with staff groups. ... In terms of the intranet we would create discussion based on issues which are faced by them at the point of contact with customer and clients. We would then train staff and carry these discussions on to the forum.

The forum though did not show much promise. We hadn't yet got over the hurdle of training people how to register and there were a few bugs because of how the company firewall was working in relation to the forum. Governing the work pressures there seemed too much effort required and there was no pressing need in the organisation for this kind of discussion forum. This lack of inertia shows, from the taped diary dated 15 June, 2003:

Bruce had been shown how to use the forum, but it wasn't coming off, because the person I was using for training in this area disappeared out of the company. This person had been only part-time. She had now got tied up in her studies and had not been seen for some time. Bruce said, "Hey, what's happening. Some people had looked at the forum and there was nothing happening - there were no messages". Bruce has just taken over the library so I have just made a new forum section called library. Bruce is again one of these key people who are supporting the trials of the Intranet. These people are behind you. ... and it is really good to support these people.

Another idea to try and get something out of the forum was to make a section for staff to make comments about the Student Management System (SMS). Since a third party developer was responsible for it there tended to be ongoing criticism of the needs we had for the software to suit our purposes and the developer to willingly make these changes. From the taped diary dated 16 July, 2003:

I met with Jonathan the 3rd party developer of the SMS system. I mentioned the idea that I could get the users to put their ideas on the forum of the intranet and that he could also access it because the forum is online. What I am going to do is email him and ask him to introduce himself on the SMS part of the forum. Then go to the people in the company who do use the SMS and ask them to add suggestions for changes.

Knowledge management

For the Files location (see Files tab) a self generating menu creates links to the files in two folders on the common drive – Common and Manuals. The manual folder is where policies, procedures and control documents are located. The Common folder is where commonly referred to documents, such as job description and pay policies and other Human Resource material, is located.

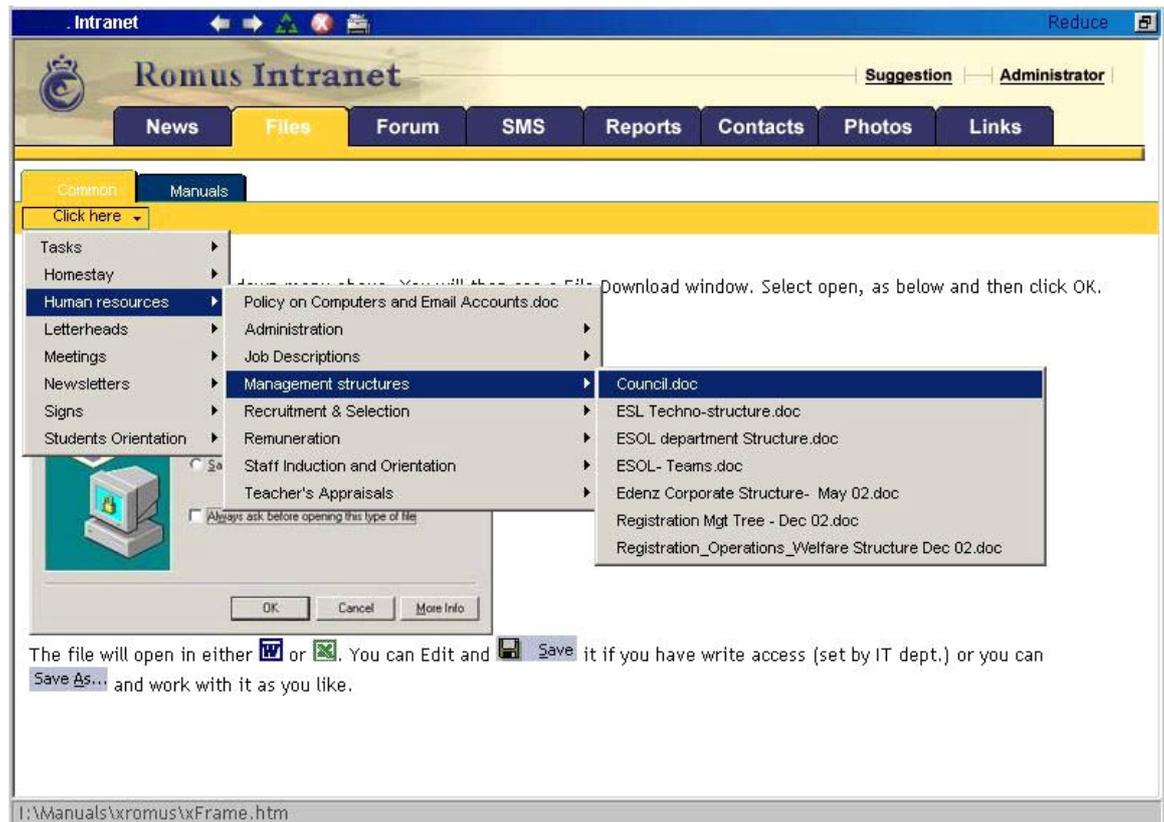


Figure 5.18 Screenshot of the Files page

The idea was to make these documents more accessible to staff in the organisation. In order to do this I undertook discussions with all departments and established the filing conventions of the two main folders called Common and Manuals.

Historically the organisation had manuals developed by an outside consultant and these were formatted along the lines of ISO 2000 conventions. The ISO 2000 model was based on quality control documentation for a production environment. This meant that historically, the organisation's documentation was overly cumbersome and had fallen out of use apart from one manual which the President used. While these manuals contained many useful policies, procedures and control documents,

they did not represent the way the company was working in 2003. As Principal, I was responsible for re-structuring these manuals in line with our current practices.

I allocated the task to one of our administration staff to go through the documentations with each department head. This eliminated many duplicate versions and determined which sections were still relevant. The manuals existed in hard copy and one intervention was to break these up into named sections so that they were more accessible via the computer interface. This re-sorting of our manuals was undertaken at the same time as the development of the self generating intranet menu. Staff were being reminded of the presence of these documents.

However, we were still far from creating a system whereby the manuals would become active documents for the organisation. One problem was that departments worked mainly in their department folders and so did not naturally refer to the manuals folder on the shared drive. It seemed more appropriate to break up the manuals from a centralised location and put them into each department's folder. Arriving at this conclusion meant the idea of making the files more accessible through the intranet was becoming redundant. Putting the manual files into each department's folder achieved knowledge management better than the intranet interface idea.

These endeavours as management interventions illustrate how the development of the intranet generated activity which as a 'spin-off' was significant for the knowledge management of the organisation. The efforts created a learning curve in the organisation on the placement of files according to an agreed system. Rather than training staff to access files via the intranet the endeavour led to better knowledge management within the organisation.

Since I was trying to construct the intranet along the lines of user-centeredness, there was a parallel strategy to try and get departments to create their own manuals. From the taped diary dated 7 & 11 May, 2003:

I have developed a text on how to write manuals – sort of a hyper linking system using Word. And so I will take it to Julie, who I have heard has been reshuffling files. I then met with a couple of other key staff on developing manuals to try and get a consistent system.

I then conducted a training session for managers and staff likely to be involved in manual writing. This was to try to encourage changes in how we develop manuals according to a consistent format. The other part of the training session is to familiarise key staff with Romus filing systems and conventions.

Exploring knowledge management ideas

Other ideas were explored in terms of how we could record various activities. One example of this was student evaluations, which are forms we ask students to complete in order to see how they evaluate the services provided, much like a customer services survey. I asked myself how we might manage this knowledge and whether the intranet could be used for this. While this idea has not been taken up, the intranet is a mechanism that could be used for such things. In this case, there would need to be a project to redesign the student evaluation forms for each department and then to set up and monitor the system. Because of work pressures, this has not been considered further. However, it is a good example as to how the intranet can be developed to manage the knowledge gained within the organisation. From the taped diary dated 17 December, 2002:

There was a discussion with the IT developer about whether we could handle student evaluations on line. We discussed whether there was a way of doing this so that it was significantly better than how we were presently handling it. Previous reports produced following by collation of student evaluations were time consuming. These reports included graphs as a way of summarising the findings. We discussed setting up an on line student evaluation form. Once the data was recorded on a data base, we could then use the Internet to automatically create graphs, thus reducing the time that was presently involved.

The purpose of the reports is to provide feedback to management so that they are aware and initiatives can be taken to improve the services and facilities.

At the moment the student evaluation forms are completed by students and the forms are kept on a desk. Maybe as a bundle it moves around a department, where staff are supposed to look for critical issues. Overall, there is no organised way of ensuring improvements are made to the organisation. It would be extra over what people normally have to do to survive. It is the sort of thing that gets overlooked regularly. ... we would still need to get student to fill the paper based form out and so it would still require someone to enter the data. ...if we have the mechanism we can look at different ways students can do it.

5.2.6 Questionnaire

The Quality Assurance Questionnaire which was issued in December 2003 provided data on computer use and knowledge management via the organisation's computer system. Babbie (1983, p537) defines a questionnaire as "the numerical representation and manipulation of observations for the purpose of describing and explaining the phenomena that those observations reflect". I wanted to gain information on how hard knowledge management was working in the organisation in order to consider the potential benefits of melding systems into the intranet design. Questions were asked about the intranet and other aspects of knowledge management through the medium of the organisations computer system. The results were collated onto three sheets of a spreadsheet. Sheet one was collated findings most relevant to the intranet and the other two sheets were general overall findings on how staff used the shared drive. These results were used to inform ourselves for ongoing knowledge management initiatives.

During the stages of evaluation and revamping the intranet (Dec 03) the benefits of certain features and lack of benefits of others were becoming evident both to the users and to me. But the intranet was not a stand alone mechanism. By now a number of management interventions had been undertaken. Over this period the organisation had experienced significant growth and had been restructured into different departments. With this change came issues of quality control across the organisation, mainly to establish systems which worked according to governing principals and procedures of the organisation. A number of departments did things differently without reference to any centralised effort. A Quality Assurance manager was employed to assist me in managing these issues.

A questionnaire was developed and sent out. The questionnaire elicited information on how users used their computers, whether this was in line with our quality management system, and if there were changes they would like. This included the intranet, shared and personal storage on the computer network, working documents (templates and/or forms), filing systems, manuals, and resources. The questionnaire was administered by the Quality Assurance manager throughout the organisation and collated on 4/2/04. Staff were asked if they used the intranet, what areas were most

helpful to them, which areas they would like to see improved, and how, and any general comments they would like to make on the intranet and its use at Romus.

The other questions that were asked fell into the categories of staff computer usage and storage of data and work done by accessing files from the shared drive. Staff were asked about ease of locating necessary working documents and hard copies, and about their practices of creating, updating and revising working documents, filing practice and conventions. They were asked about training in and use of company manuals, access to them and whether they were in fact referred to. These questions were relevant to the project because there were some aspects of the intranet, which were directly affected by these knowledge management issues. A “Files” tab on the intranet enabled the users to access the manual files on the shared drive. The idea was to make these files more accessible to staff via the intranet, whereas previously most staff were unaware of where the soft copies of policy, procedure and control documents were stored.

The questionnaire was comprised of the following questions:

1. Do you use the Intranet?
2. What areas are most helpful to you?
3. Which of these areas would you like to see improved and how?
4. Any general comments on the Intranet and its use at Romus?
5. Do you have a dedicated computer?
6. How much of your work is done on computer?
7. Is your departmental area clearly defined on the I drive?
8. Is access to all necessary areas available to you?
9. Is the set-up of the I drive supportive for your work requirements?
10. Approximately how much of your work is done on the I drive?
11. Is it easy to find the necessary working documents?
12. Are all these working documents filed in an easily accessible folder?
13. Have you come across multiple copies/updates of documents in your area?
14. Have you yourself updated or revised any working documents recently?
15. Have you created any working documents recently?
17. Where do you file copies of internal documents such as:

18. Where do you file copies of external documents such as:
19. If you file softcopies, were you ever inducted on how/where to file
20. If you file copies on your H drive, can you explain the rationale?
21. If hardcopies, where are these folders kept?
22. Would a filing convention, and possibly a workshop on this, be helpful?
23. When you started working at Romus, were you:
24. Do you know where the manual for your area is located (hard and/or soft copy)?
25. Do you have easy access to it?
26. Which statement would be true for you?
27. If you have developed your own procedures...
28. Any comments on the helpfulness, accessibility and usage of present
29. What are the main resources for your job?
30. Do you have access to sufficient resources to fulfill your job requirements?
31. Any additional resources you feel you need/would help?

From the findings most relevant to the Intranet:

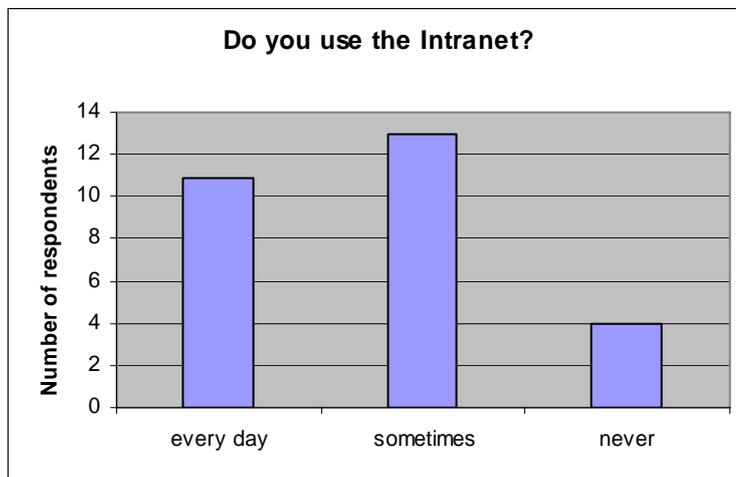


Figure 5.18.1 Use of the intranet.

This was a good level of interest also from the graph below it could be seen that most of the intranet usage was in the 'news' section, which is on the front page, and also 'contacts' and 'photos'. This shows an interest in the people focussed and communicative aspects of the intranet.

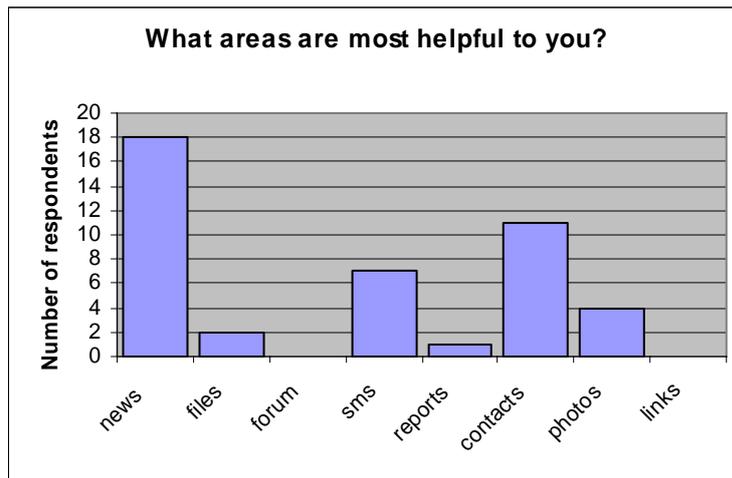


Figure 5.18.2 Areas most helpful.

Which of these areas would you like to see improved and how?

- More (longer) access to the internet.
- More news.
- I don't have a password for SMS. X2.
- I find it quicker to go to files on the I drive.
- It needs to be updated more regularly.

Any general comments on the Intranet and its use at Romus?

- Never use it, prefer face to face contact.
- It's a good idea but few seem to use it.
- Could ads be posted for students via a co-ordinator? eg flat wanted, cars for sale, etc.
- It's a very good medium, easy to use and should be used more widely by staff.
- I find it useful to post news, but it's difficult when not everyone checks it.
- I don't know how to use anything else except 'news'.
- I've tried to email other staff but am not registered.
- I am not aware of any other applications except 'News'.

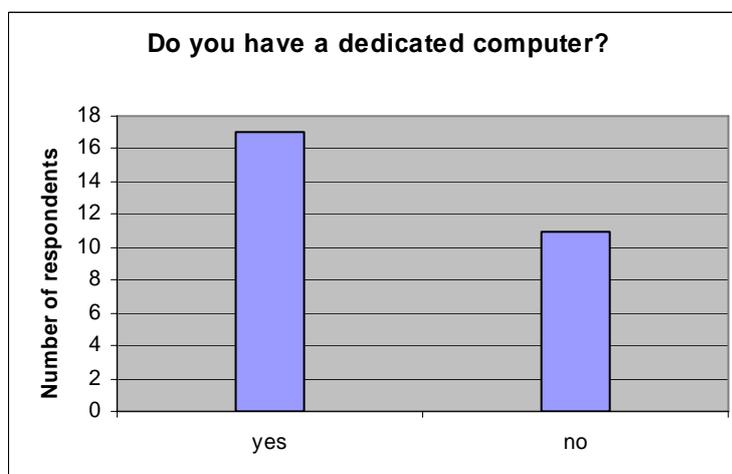


Figure 5.18.3 Dedicated computers

The fact that some staff did not have a dedicated computer raises the issue that if a sense of belonging can be achieved through an intranet, then those who do not have access or primary access cannot share in the benefit. However, that said, an intranet should only ever be one channel of communication that an organisation uses to create belonging.

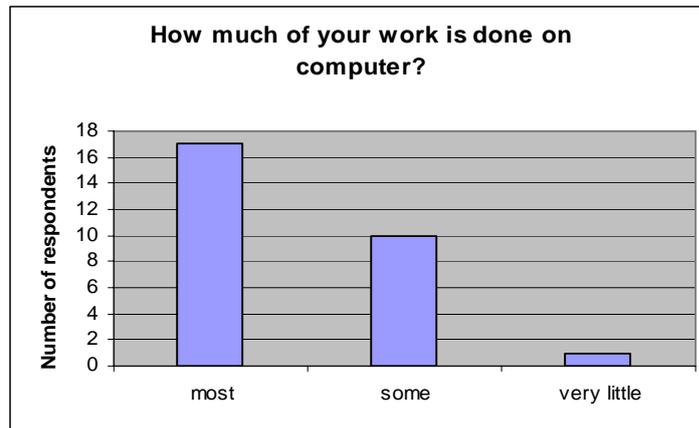


Figure 5.18.4 work done on the computer.

It is interesting how the work in an organisation is affected when the computer network is down. In the last five years the organisation has become very dependent on computers. In such an environment an integrated strategy for computer mediated communication seems appropriate. It is a useful strategy to counteract the tendency for computers to isolate people through a lack of face-to-face involvement.

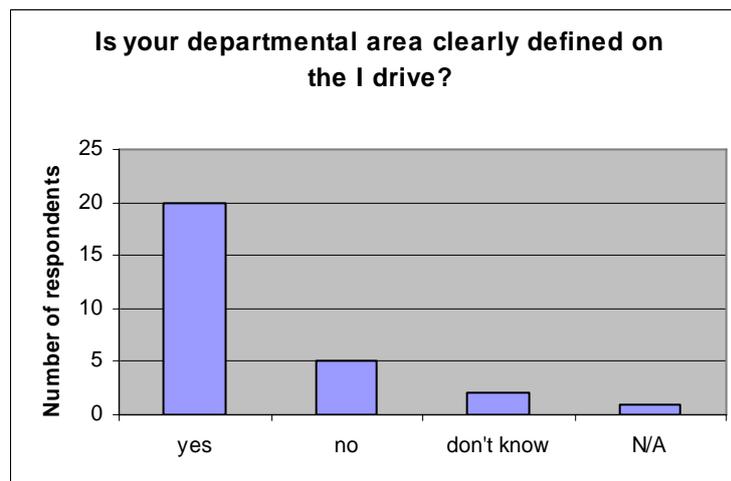


Figure 5.18.5 departmental area clearly defined on the I drive.

If no, how would you define it?

- Create a 'Registration' folder under 'Student services' Folder.

This was encouraging, because we had now renamed and resorted data on the organisation's shared drive, according to departments, as far as was possible.

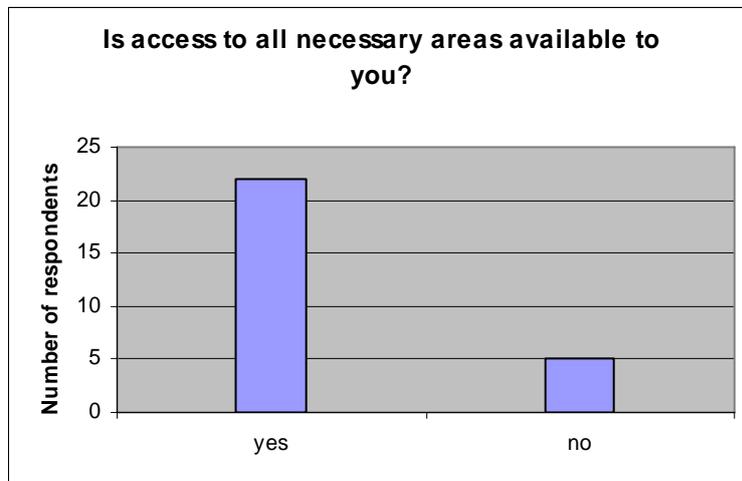


Figure 5.18.6 Available access

If no, what do you need access to and why?

- The Internet, to prepare worksheets (teacher).
- Business Centre folders, I can't save work there at present.
- Marketing
- because I do a lot of it. Need images/brochures sometimes (TESOL, Office staff).
- Finance server, to check how much H/S students pay.
- H/S manual for various admin jobs (Admin, office staff)

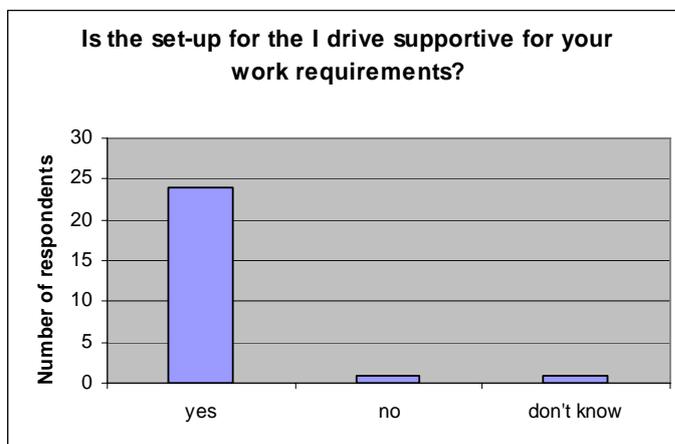


Figure 5.18.7 Support for work requirements.

Please explain:

- Yes, sharing information.
- Yes, I can access the files I need.
- I know where everything is but I need to split the files into 'Manuals' and 'TESOL' at some stage.
- They are all together at the moment.
- Yes, but it needs to be more organised, less scattered to be more efficient.
- I can't save anything on the I drive, even though would like to, because I don't have the right access. (ESOL, teacher)

On the one hand, this feedback looks positive but on the other, it does not eliminate the reality that some staff tend to work on their personal H drive and store duplicate files unnecessarily.

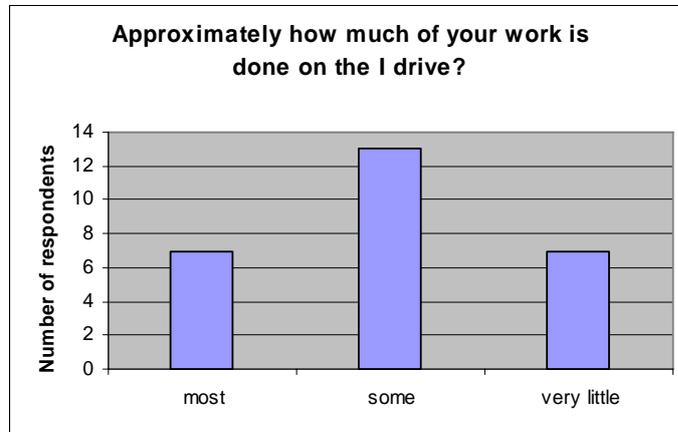


Figure 5.18.8 Amount of work on I drive.

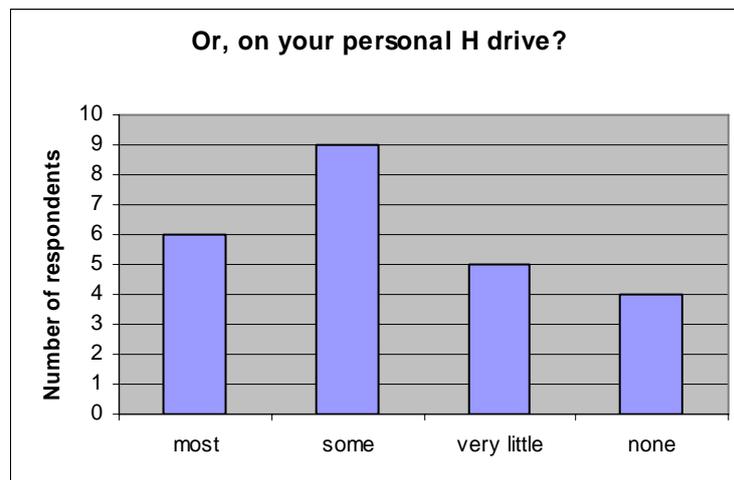


Figure 5.18.9 Amount of work on personal H drive.

If 'most' or 'some' work is done on your H drive, please explain:

- I prepare worksheets for students, supplementary activities and recipes for social activities.
- I do some admin work for the ESOL Dept. and save this work on the H drive, so I know where it is.
- Will be using the H drive more from now on. Don't have own computer so often save to disk instead.
- Checking emails.
- Class preparation.
- Privacy.
- Use 'Word' for some Japanese reports or advertisements.
- Just recently set up H drive so I am still formatting.
- Private/confidential.
- Creates problems of access when teachers are absent or leave. All work should be on common drive
- don't see any need for 'private files'.
- Development of teaching resources.
- I use the I drive for finished documents and the H drive for work in

progress. • I use the H drive for memos, to file notes, sundry/misc classroom material. I use the I drive for exams/tests/assignments and major class handouts. • It's easier because then I know where it is, and I also know that no-one will mess with it.

This reiterates that staff do not follow the organisation's protocols for example, putting new documents they are working on in the shared drive in a development folder, which exists for each department. Staff still choose to do their development work on their H drives away from possible prying eyes. The problem with this is that they tend never to move the files back to the shared drive. This tendency raises the question of whether private drives should be provided at all.

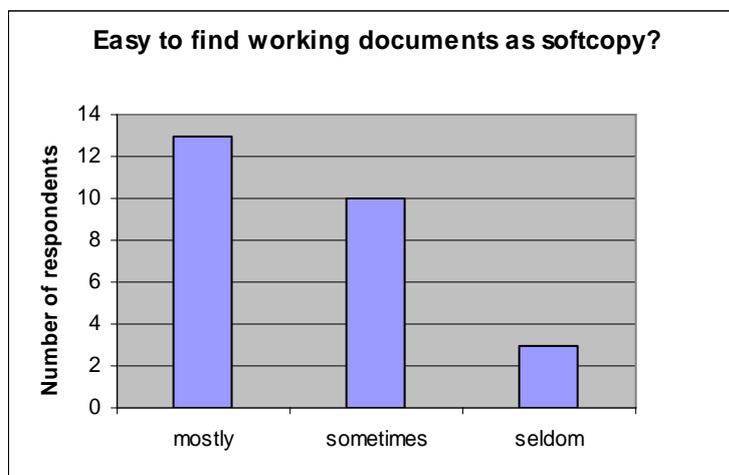


Figure 5.18.10 Ease of finding working documents.

There is a mixture of reasons for duplicate files. In some cases it is because they have not looked for them or their predecessor did not tell them they existed. Re-inventing the wheel seems an epidemic of the organisation. This has to do with a constantly changing environment, where management simply do not take care to update documents as things change. Soon the documents fall out of use and then the tendency is to create new documents to meet immediate needs. This results in a constant drop off of awareness of policies and procedures. This tendency then reflects to hard copy documents, which may be on shelves but never referred to.

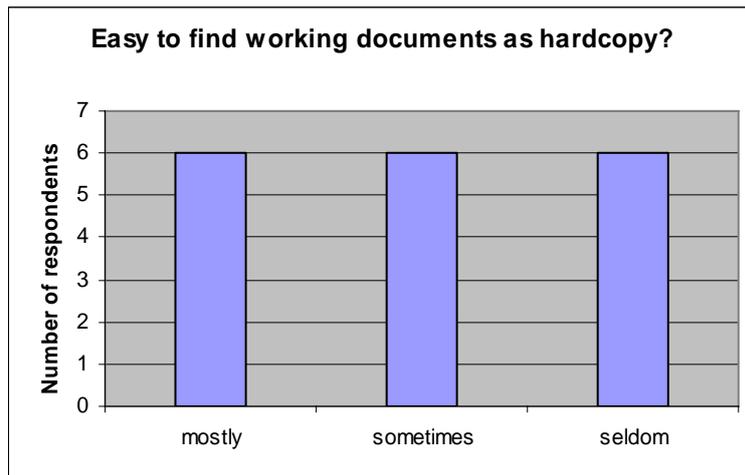


Figure 5.18.11 Ease of finding documents as hardcopy.

Any comments?

- I have to get someone to help me find the softcopy.
- SomeThomases hardcopy masters are not available.
- I just save copies on my H drive because I waste too much time trying to find on the I drive.
- Some titles/names of documents are confusing and should be renamed.
- I haven't needed hard copies.

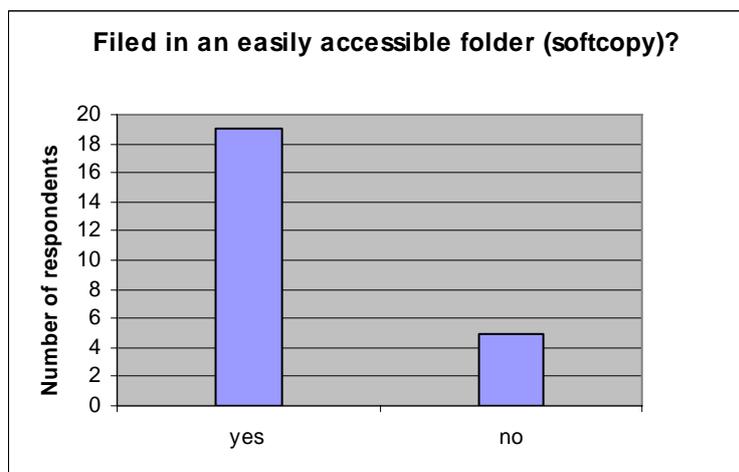


Figure 5.18.12 Ease of soft copy accessibility.

This looks positive, but it is likely the respondents are thinking about the documents which they have created or which they use on a regular basis. They naturally do not think of what is not accessible because they do not know what that is.

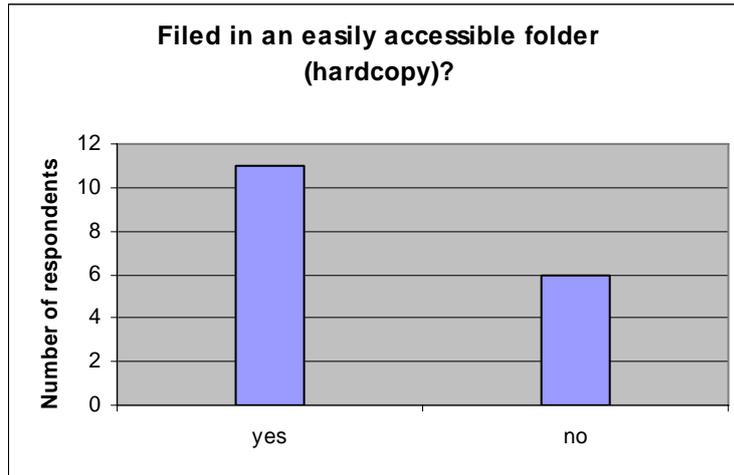


Figure 5.18.13 Ease of access to hardcopy folder.

If no, do you know the reason?

- Softcopy, I don't know about it (ESOL, teacher).
- Some commonly used documents in the I drive are protected and cannot be accessed, such as Fee Schedule' (Admin, office staff).
- They are being sorted on my H drive.
- The computer I use is used by many other people so I usually save my work on a floppy disk.
- Most hard copies are not necessary. X2.

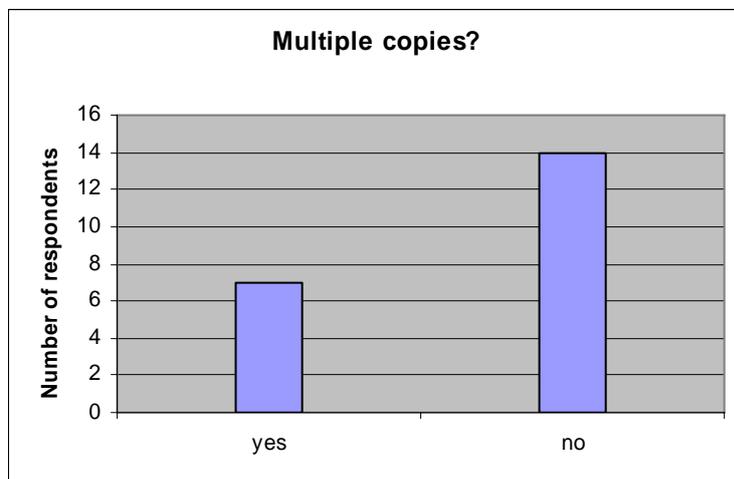


Figure 5.18.14 Multiple copies or updates of documents in your area.

If yes, how have you handled this?

- Deleted the old.
- Usually dates are marked in the filename or check the file modified date.
- Listing so I can have them sorted to old files.
- Latest revision date.
- H drive - working copies only kept until final versions complete.

This response reiterates that multiple copies are being created. The comments on how people handle this may be by only two of the six respondents. Respondents who say they do not come across duplicate files may not do so because they are only concerned with files they work with and they do not open other files which could be related and then find duplicate material.

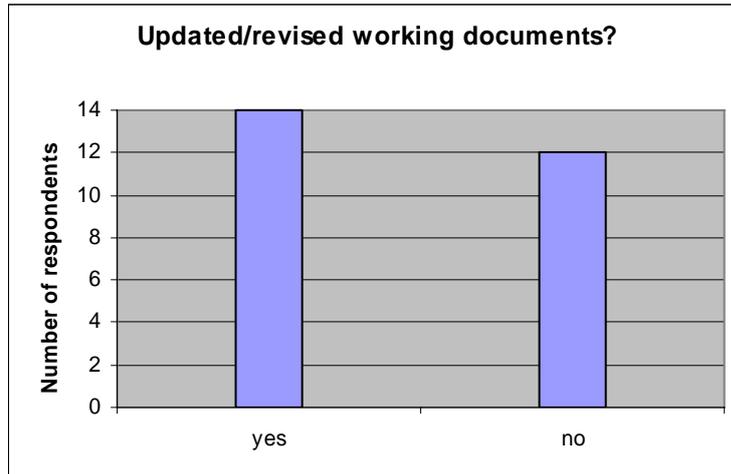


Figure 5.18.15 Updating or revising of working documents recently.

This indicates that the respondents in the 'no' column are duplicating files and the respondents in the 'yes' column are fixing them up. This would be humorous if they were the same files, but the results more likely demonstrate behaviour within different departments and work areas.

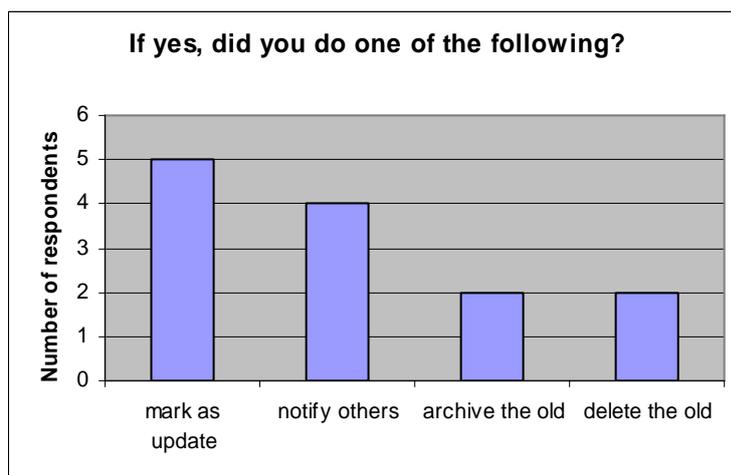


Figure 5.18.16 Protocol for updating.

If you mark an update, how did you do this?

- Dated it as I saved it.
- Marked copies.
- Created a new document.
- New version as V1, V2 etc on file name.
- Renamed - ""version 4, February"" etc.
- Updated files are generally stored in a time specific folder eg S1 2003.
- Catalogued as 'EC' document to distinguish from 'VU' sourced document.

If you notified others, whom/how?

- Co-workers x2.
- Others in department and Thomas.
- Manager .
- I didn't because the cataloguing is self evident.
- Emailed those concerned.

Any other comments on this?

- I am unable to update because it won't let me.
- I updated by overwriting the old.

X2. Someone probably should be notified. I just append the updated information at the end of the old file.

My own view is to see that there has been a positive tendency towards managing the data. This is a counteraction to file duplication.

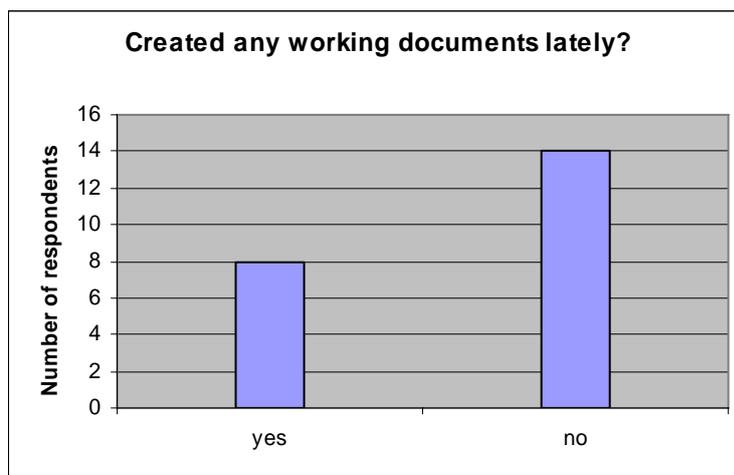


Figure 5.18.17 Creation of working documents.

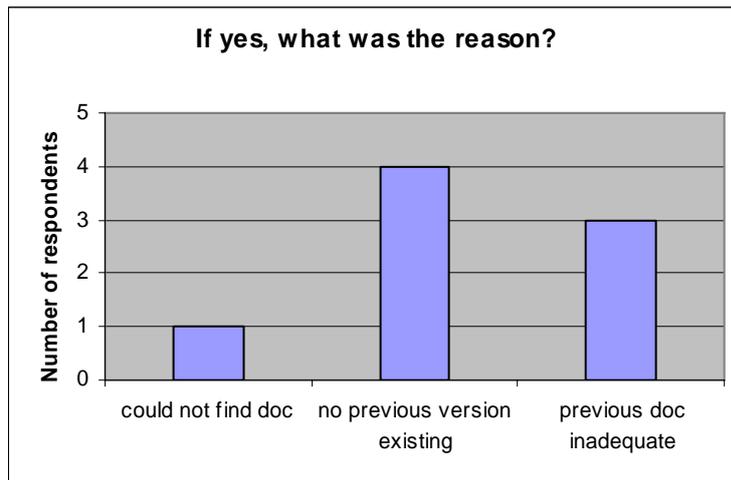


Figure 5.18.18 Reasons for creation of working documents

Any comments?

- The reason was because it needed updating.
- The previous doc was inadequate, as is common with documents from VU.

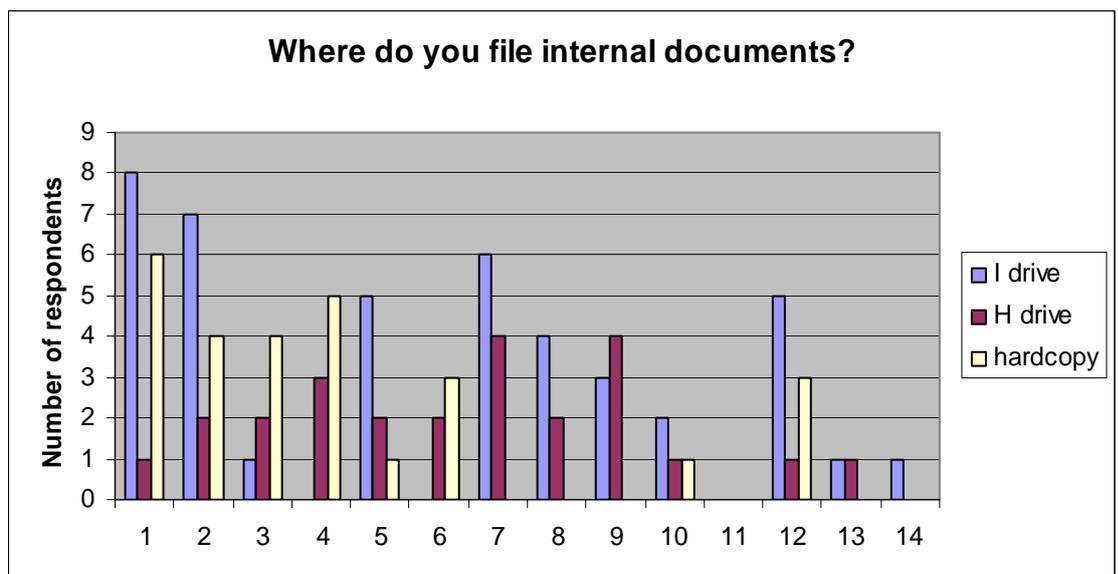


Figure 5.18.19 Location of filed internal documents.

This reflects the tendency to not have hard copies of everything. As the organisation has become increasingly computer reliant, the tendency has developed to keep some files in soft version only. This is a good trend because since there is so much change and necessary updating, hard copies easily fall out of date compared to the soft version counterpart. Relying on soft versions often becomes a more immediate way of working.

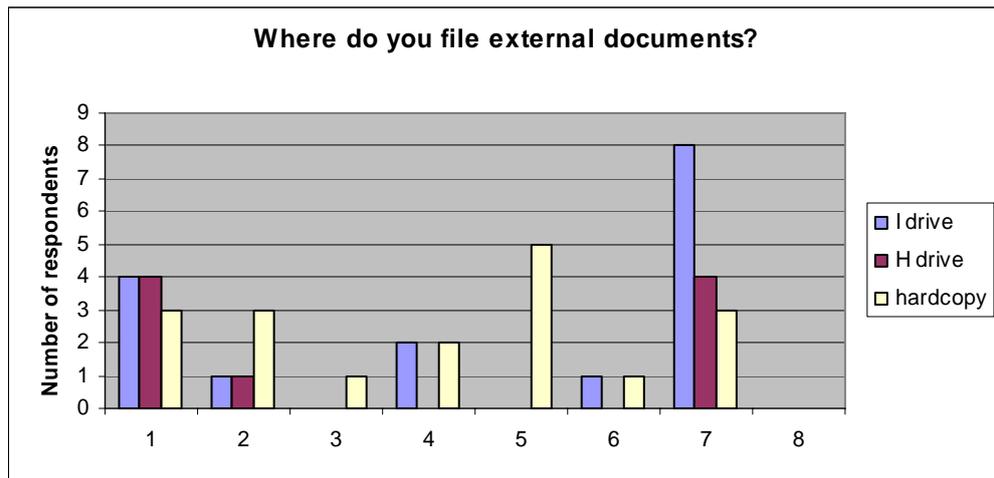


Figure 5.18.20 Location of filed external documents.

If you file softcopies, were you ever inducted on how/where to file documents, and by whom?

• Yes, Jason. • Yes, HOD. • No x10. • Can't remember. • Yes, from line manager. • No, it was left up to me. • Yes, on my H drive or 'My Documents'. • Yes, I attended a brief meeting some time ago, run by Warwick. But at the time it was not really applicable to me.

If you file copies on your H drive, can you explain the rationale?

• It's safer. • Non-essential documents with limited 'useful life' only. • Good directory structure. • I use the H drive for documents which are prepared by and used by myself eg teaching material. • I only use it for things like student testimonials. • I would be quite happy to have a personal folder on the I drive. • Don't understand the question.

Filed into one of several folders which are logically sorted. • Because I don't want someone else to change it and it will be easier to remember where I put it. • So I know where to find things that I have done. • So that I have access to it.

If hardcopies, where are these folders kept?

• In teachers' room. • On my desk. • My desk at home (teacher). • Filing cabinet, Operations Office. • In my drawer or central student file cabinet. • Marketing Dep, Chris' office. • Student Reception and Registration. • My Documents. • By my desk. • Relevantly marked folders in my office. • In H/S filing and Finance. • My office (VU department). • Teacher's office. • With VU teacher resources.

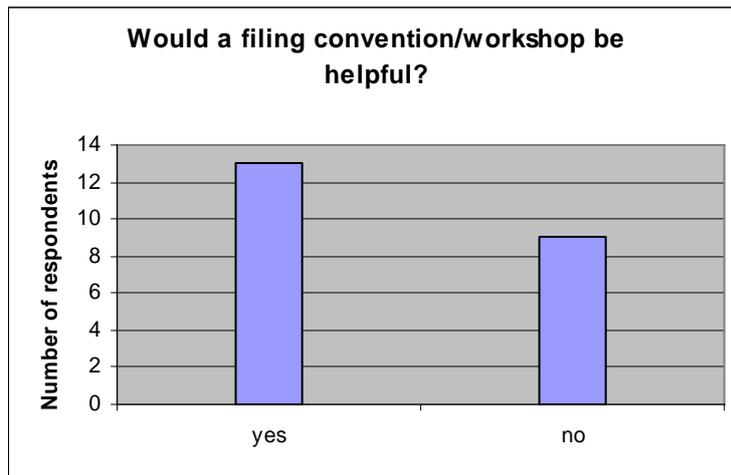


Figure 5.18.21 Perceive helpfulness of filing training.

Comments:

- A computer workshop would be good

The remaining figures indicate another trend. New staff are not inducted properly. This reflects the hectic nature of the organisation in two ways. Firstly, when a staff member leaves, there is often a reshuffle in the way work is done, because other staff may or may not be interested in the vacated role, or part of it. This reshuffle takes time and so it becomes very difficult to be clear about replacement policy. Secondly, the organisation's market is constantly shifting and there tends to be a constant restructuring and uncertainty of what resourcing is going to be allocated to any new position. Taking the two points above into account, managing turnover becomes a team effort where Human Resources, management and the owner need to progress and specify vacancies. If this is not done proactively, which is often the case, the effect is that staff, leaving positions, are not required to pass on their knowledge and systems to new employees, who are hired to overlap or partly overlap any vacated position.

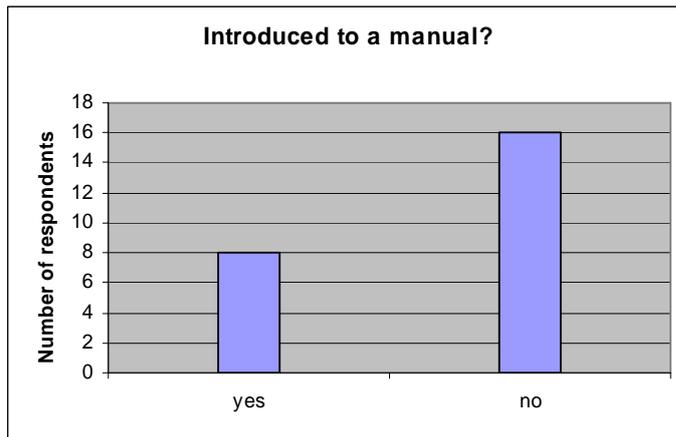


Figure 5.18.22 Induction to manuals in area of work on employment.

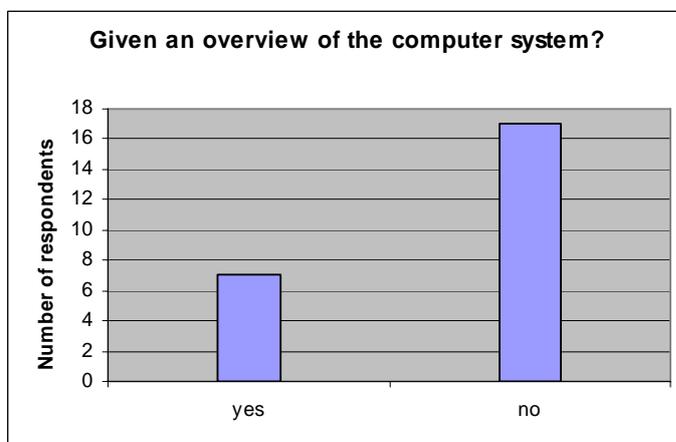


Figure 5.18.23 Induction overview of computer system.

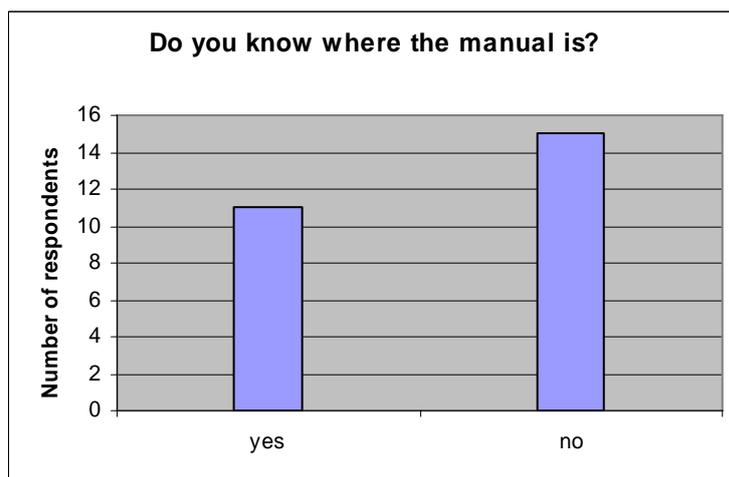


Figure 5.18.24 Awareness of manual location for your area.

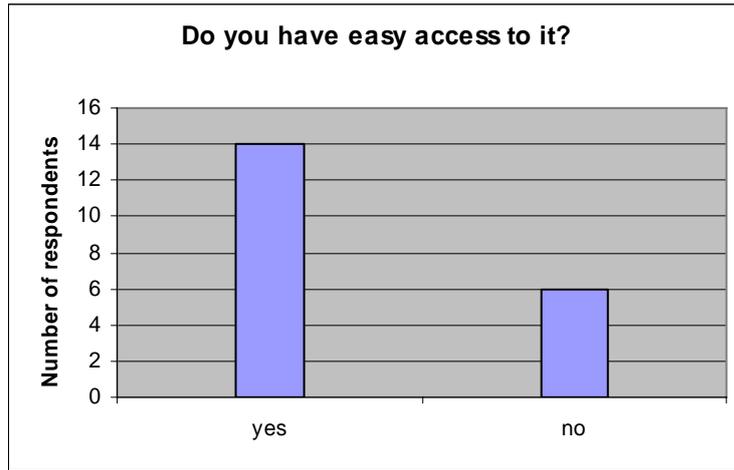


Figure 5.18.25 Ease of access to manual location for your area

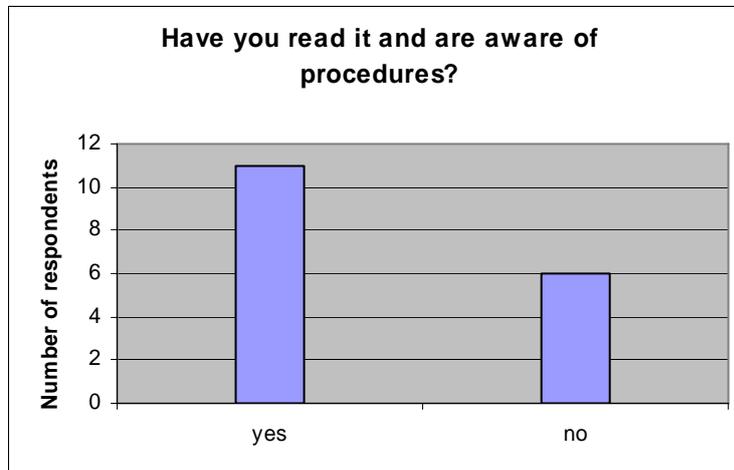


Figure 5.18.26 Reading of manual for your area and awareness of procedures.

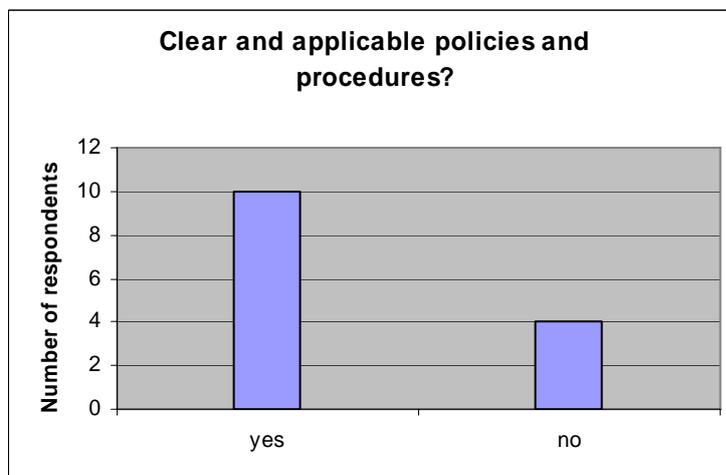


Figure 5.18.27 Where manual read, clarity and applicability of procedures.

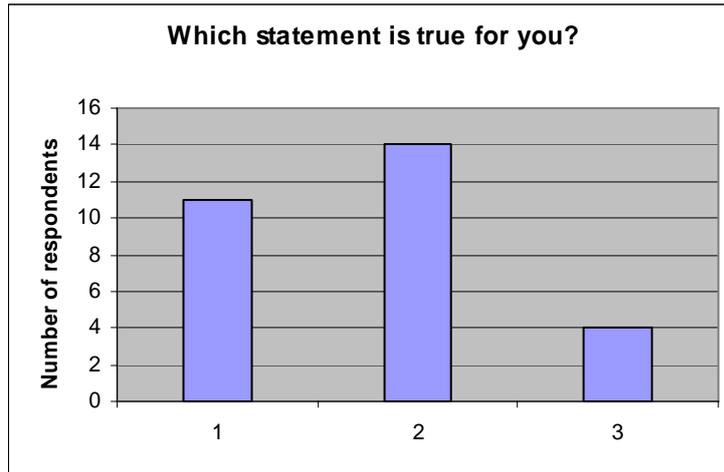


Figure 5.18.28 Practice of determining procedures.

I usually follow the procedures as described in the manual (1)

I usually do my work as explained to me by my co-worker (2)

I usually don't bother with manuals and make up my own (3)

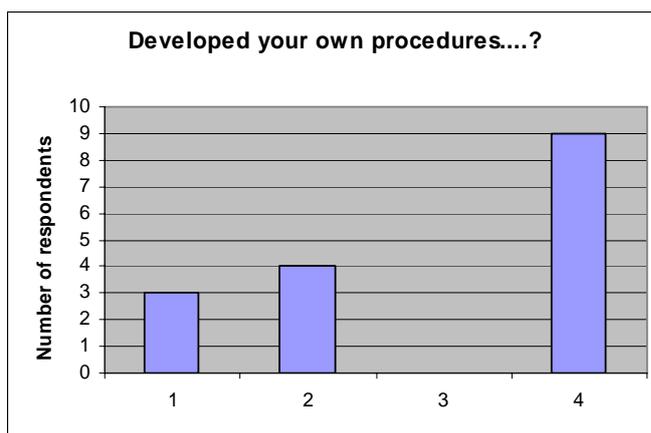


Figure 5.18.29 Development of own procedures.

are these procedures written down in a document? (1)

were they discussed with & approved by your management? (2)

have they been integrated into the official Romus 'Quality Management System'? (3)

I don't develop my own procedures. (4)

Any comments on the helpfulness, accessibility and usage of present manuals?

- We need access to a Teacher's Handbook.
- The current Registration Manual is rather out-dated.
- Too lengthy and bulky. Not well set out.
- They need reorganising and updating - general fine tuning.

What are the main resources for your job?

• office supplies x7. • books x9. • text books x2. • VU generated student manuals x2.
• VU generated exams, tests, and assignments x2. • journals. • academic books. •
internet. x3, web sites. • computers x5. • computer data. • downloads. • CDs. • sms
x2. • phone x2. • I drive. • hardcopy files. • photocopied material. • stationery. •
brochures. • web design. • notes. • resource materials in staff room. • photocopying
paper. • cards. • pens. • whiteboard.

Do you have access to sufficient resources to fulfill your job requirements?

• yes x16. • no, a bookshelf is urgently needed in the VU Teachers Room. Books are
currently kept on the floor! • no x3. • some times I have to ask my Manager about
job details or ideas (Marketing). • only one computer in the teacher's room has
access to the internet and prints; this is limiting. • resources are quite good (ESOL
teacher).

Any additional resources you feel you need/would help?

• Tuition in Powerpoint preparation and presentation (Diploma) x2. • Journals,
academic texts, textbooks, etc (Diploma). • improve SMS. • move Diploma library
closer. • internet based (Diploma). • extra books are always appreciated eg ESL
books/pictures, the latest good books. • updated ESOL books, access to the latest
ESOL teaching magazines.

Other suggestions for improvement of systems:

• Diploma students need student lockers, so that they can lock their books etc up
between classes. They could be rented out so that there would be zero cost for
Romus. • I never use the Intranet. I'd prefer a meeting or a written memo distributed
to all staff. • More time/space on the internet. While downloading for lesson plans
my internet usage seems to run out. This is frustrating and ends up meaning that I
don't use the internet much, although it is a great source of extensive and up-to-date
information and material.

Relationship management

Another aspect of the intranet is relationship management. The relationship between
the franchises soured over the first six months of 2003. Primarily this was an issue
to do with the ownership stakeholders and general bad feeling in terms of the

partnership arrangement. Franchise payments were being withheld and communications broke down completely in one case, and remained on an academic level only in the other. This naturally affected the intranet in so far as it extended to the three geographical locations, and meant that it became increasingly difficult to maintain mutually beneficial working relationships operationally. Power plays, whether for position attainment, status or for ownership are often experienced in the workplace, and can significantly affect relationships and communication. For those not directly involved in these power plays, however, there are always opportunities to strengthen relations and communications. Sometimes this will involve unofficial agreements between parties. From the taped diary dated 15 December, 2003:

... about the communication between the franchise and us ... it is also about the relationship because I notice on the Intranet there is not really communication from the other franchises sites. ... If we felt connected and integrated we would see some messages coming from the franchise campuses. ... I had a conversation with Trudy and I talked about the conflict that the organization has because of John. Trudy is caught up in this conflict because they are trying to work with us on a managed academic level. But also John gives them certain instructions. Some times on academic matters without any consultation ... So there is sort of an issue. ... [the comment goes on to explain how the issue breaks down the communication] Better communication requires encouragement from both our sides and Trudy and I have now decided to do that, within the extent of our influence. ... [the comment explains some action we took to improve cooperation between our respective homestay and social activities staff]. ... [the comment goes on to explain how there are always a mix of staff on the spectrum of being willing to cooperate on a collegial level and that this would reflect on the Intranet].

5.2.7 Interviews

An additional data set was collected through a series of interviews, the focus being the culture of the organisation and the impact and value of the intranet. There were two waves of interviews. The first wave interviewed staff individually. The second wave reframed the questions to more directly enquire into the thesis propositions.

This qualitative approach kept on the one hand a focus to know whether the intranet was achieving its purpose and on the other hand whether the purpose was proving to be valued by the users. I wanted to identify whether the users thought it was enhancing or affecting organisational culture and communication, and also whether it was managing workplace knowledge in any useful way. Schein's (1993)

interactive clinical interview approach was employed, using a tentative open question approach. I explored and enunciated ideas from interview to interview.

Before asking any interview questions I would read this statement:

Before you answer any questions I will briefly go over what the Intranet was trying to achieve. In some areas it may be a failure and in other areas it may be effective. You may have some ideas about its effectiveness or lack of, which I would like to hear for two reasons. Firstly I will consider your ideas along with others in order to simplify or redesign the Intranet to make it more effective. Secondly your input will be helpful for the writing of my thesis. For these reasons I encourage you to be as frank as you wish. If the Intranet is to be valuable in the future its design flaws will need to be addressed.

I would then brief the interviewees on what the intranet was trying to achieve. This was that the idea behind the intranet was to create a participative mechanism for communication and knowledge management, and that the intranet as a mechanism might help centralise the organisation in these areas along with my parallel management interventions.

On grasping the issues that need to be studied it is important to always keep in mind the theoretical propositions. Yin (1994, p. 58) states, "The main way of staying on target, of course, is to understand the purpose of the case study investigation in the first place."

As the intranet project developed, the thesis questions were in threat of being outweighed by questions related to the evolving nature of the intranet and its effectiveness in binding together communication and knowledge management. While data was emerging which addressed the thesis propositions, there needed to be some more drawing out of opinions which directly addressed the thesis propositions.

I believed that changes to the intranet were well known to certain key staff and that, having seen the intranet develop over time, they were now able to articulate their own opinions on the thesis propositions. It was not until they had seen what I was trying to do with the intranet and with my interventions as a result of their feedback, that they could understand the thesis propositions. Consequently a number of questions were added to the interview questions, which were used in a group interview on June 2004. The questions were preceded by some concept explanations related to the thesis propositions.

Yin (1994) explains the legitimacy of adapting the interview questions. On readjusting questions, Yin explains how within a case study context there is a certain exponential development of how or what questions are asked, because listening leads to response and adaptation. As Yin states:

The specific information that may become relevant to a case study is not readily predictable...if you are the type of person for whom one tentatively answer immediately leads to a whole host of new questions, and if these questions eventually aggregate to some significant inquiry about how or why the world works as it does, you are likely to be a good asker of questions. (Yin, 1994, pp. 56-57)

On adaptiveness and flexibility of the interview process, Yin (1994) also sees validity in changing procedures or a plan of enquiry as a case study evolves. Since a good listener would naturally pursue unexpected dimensions if they are relevant, so might an original data collection strategy change. He puts it this way: “The skilled investigator must remember the original purpose of the investigation but then be willing to change procedures or plans if unanticipated events occur” (Yin, 1994, p. 57)

The questions for the first wave of interviews were:

Q1 The intranet has attempted to do certain thing...what is your understanding of those things and how successful has it been in achieving that?

Q2 A number of staff use the news page of the Intranet. Do you think the mix and content of these messages says anything about the Romus culture? (Eg. Do we value social mingling of staff, do we believe the clients or administrative tasks are more important, do we assume that hearing about changes can come from different quarters?)

Q3 What is working on the Intranet and do you have any ideas about why this is?

Q4 What is not working on the Intranet and do you have any ideas about why this is?

Q5 why do you think some people never use the Intranet?

Q6 What would you cut out of the Intranet?

Q7 What would you add to the Intranet?

Q8 How would you continue the sentence “Our organisation is like a” Can you see any bearing between what you said and the development and implementation of the Intranet?

Q9 “Organisational communication” is about the way we communicate at Romus. It’s about how we communicate from the top down, between departments and with each other in general. Can you think of any communication issues that might have affected the development and implementation of the Intranet?

Q10 “Organisational culture” is about the way things happen at “Romus” as compared to other ways companies can work. It’s about management styles, ethnic cultural different ways of doing things and personality mixes. Can you think of any cultural factors that may have affected the development and implementation of the Intranet?

Q11 Do you see the Intranet offering any better ways of interacting than exists otherwise?

Q12 How could I as the developer and implementer done a better job?

Q13 As the developer what values, biases assumptions or goals do you think I have had?

Q14 Another person that I interviewed said that.... do you agree with that?

Q15 Is there anything else you would like to add?

The questions for the second wave of interviews were grouped to provide focussed data for the thesis questions:

Influence of the wider business context

Romus exists in a knowledge based and global economy, where issues such as exchange rate, International competition and our entrepreneurial culture mean we have a high rate of change and adaptation. Characteristics found in companies operating in this economy include organic, cooperative, participatory, quality led and customer driven.

Q1 Do you think any of these characteristics apply to Romus and/or what characteristics would you attribute to Romus?

As a theoretical response to the influence of the wider business context, the intranet has attempted to be participatory- to get staff and management to provide content. The News, Calendar and Contacts pages have been designed for user input.

Q2 Do you think this participatory emphasis is a good idea and why or why not?

Culture of Romus: Intranet implications

Organisational culture is about the way things happen at “Romus” as compared to other ways companies can work. It’s about management styles, ethnic and cultural different ways of doing things and personality mixes. It is about the unwritten rules.

Q3 Can you think of any cultural factors that may have affected the development and implementation of the Intranet?

The Intranet development and implementation process has involved some management interventions by Warwick. He has been trying to get participative involvement and to use the Intranet to bring cohesion in areas such as communications and knowledge management (manuals). Attempts at getting reporting to work through the Intranet have been made.

Q4 Do you think either the Intranet itself and/or Warwick's interventions have affected the way things are done at Romus (The Romus culture)?

Communication systems of Romus: intranet implications

It has been said (Roger D'Aprix, 1999) that an organisation's communication process reflects the leadership of that organisation. Communication processes can include any form of meeting, dissemination of information, way of handling issues, mechanisms of management and staff to communicate to each other. It is about the way we communicate from the top down, between departments and with each other in general.

Q5 How does Romus communication process reflects its leadership?

Q6 What ways do we communicate that might have impacted on or been influenced by the Intranet development and implementation?

Knowledge management of Romus: intranet implications

There are two kinds of knowledge. The first kind is the hard kind that ends up being kept somewhere. It includes any policies and procedures, SMS, reports, meeting minutes etc. The other kind is the soft knowledge that staff have about their jobs, which can often not be captured, recorded or passed on to new staff.

Q7 Do you see the Intranet as having improved our management of hard knowledge in any way?

Q8 Do you see the Intranet as having improved our management of soft knowledge in any way?

Summary

This chapter has explained the approach that was taken to data collection (user feedback) and how that was aligned to the development and implementation stages. It uses a case study approach as set within a participant observer ethnographical context. I was to drive the design and iterations of the intranet, collate the data, and manage the parallel change initiatives in the organisation toward a more collaborative and participative culture.

The evolving nature of the development project meant that feedback initially informed the interface design and functionality, later it addressed integration issues,

such as how users accessed computers and how different features were useful or otherwise in relation to how the organisation worked. In the final implementation stages, feedback increasingly addressed the issues of the culture, of the networked organisational model and collaborative and participative involvement.

The management interventions have been described, as they influenced the project. A number of spin-offs became apparent; one being that communication management has been an evolving role reaching across boundaries in the organisation. The reporting structure for the organisation was remodelled, as was the way the organisation's manuals were accessed.

One of the exciting events was when, after some training, staff started using the news page. It had caught on. In particular the way the users' photos were matched with their news items made it seem very personal.

During this multifaceted activities connected with the project, certain trends were emerging. One of these was the potential need for a communication management role in the organisation. Activity associated with this included the need to recruit staff to assist with communication networking (with supervision of user-centred activity in some cases); ensuring staff had access to the mechanisms of communication - computers and the intranet on those computers; ensuring that information was updated by users; training for technical mediums, especially where user-centred input was required; and ensuring staff felt part of the communication system as a whole.

I was finding that it is the communicative aspects of the intranet which were surviving the rigors of change and restructuring. Along with this, the evolving parallel communication management role was proving to be the most relevant management discovery.

Chapter 6

The Project Continued: Revamping the Intranet

Introduction

This chapter focuses on the theoretical propositions in reference to the revamped intranet. The story is told sequentially, interspersed with interview feedback and includes explanation of how management interventions affected the process of implementing the intranet. Likewise, the story explains how the evolving intranet impacted on the organisation. Chapter six completes the development story.

6.1 Revamped intranet: Interface and features

Dec 2003 - Dec 2004

After the intranet had been running for six months in the organisation, the staff had formed certain views of it. Staff had not been compelled to use the intranet and so the test had been whether, and to what degree, it was perceived as useful. At the same time, staff had discounted or ignored certain parts of it and they had developed opinions justifying their attitudes. I had received a range of feedback reflecting on the issues of communication. The feedback informed the basis of the revamp.

A number of screen shots of the revamped intranet are included in this chapter as a context reference. Below is the logon screen with a simplified question, which everyone in the company knows. There had been problems where staff complained at not remembering the login password. Staff can guess the logon rather than have to remember yet another password. As long as they tick the 'Remember Me' field, they will not see this message again.



Romus Colleges Intranet

To get into the Intranet answer this question

Who is the Presidents Wife: *****

Remember Me

Enter

Figure 6. 1 Login, which does not show again if the user ticks the 'Remember Me' box.

The main window is then presented on the user's desktop.

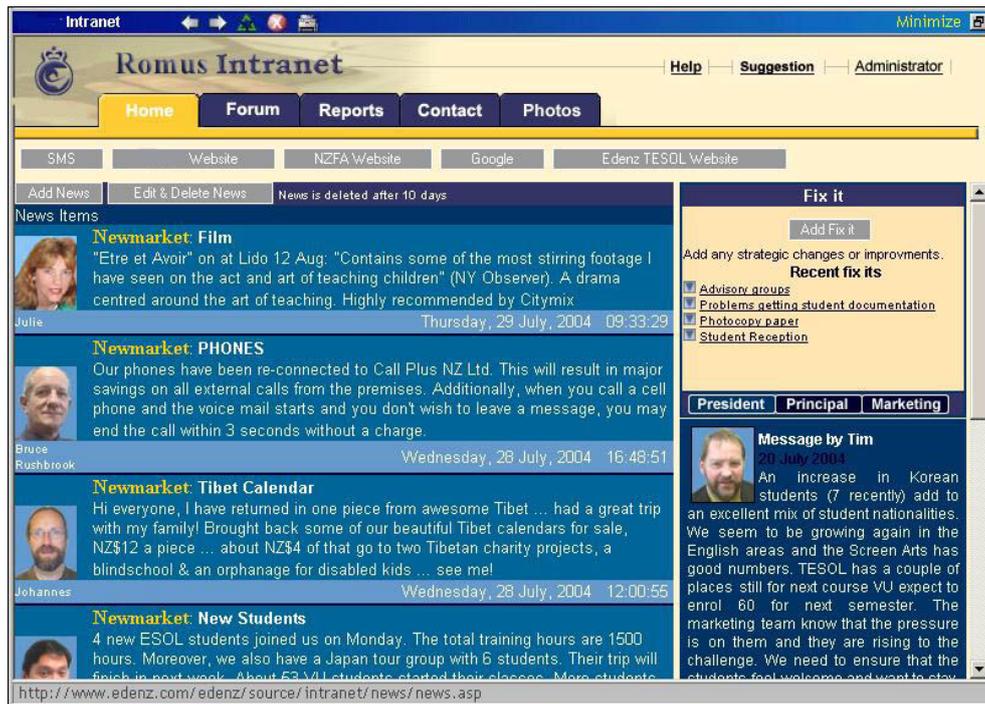


Figure 6.2 The main window

When staff click on the 'Add News' button, a window appears allowing them to enter the details, select their photo and submit it. It is then posted to the top of the list.

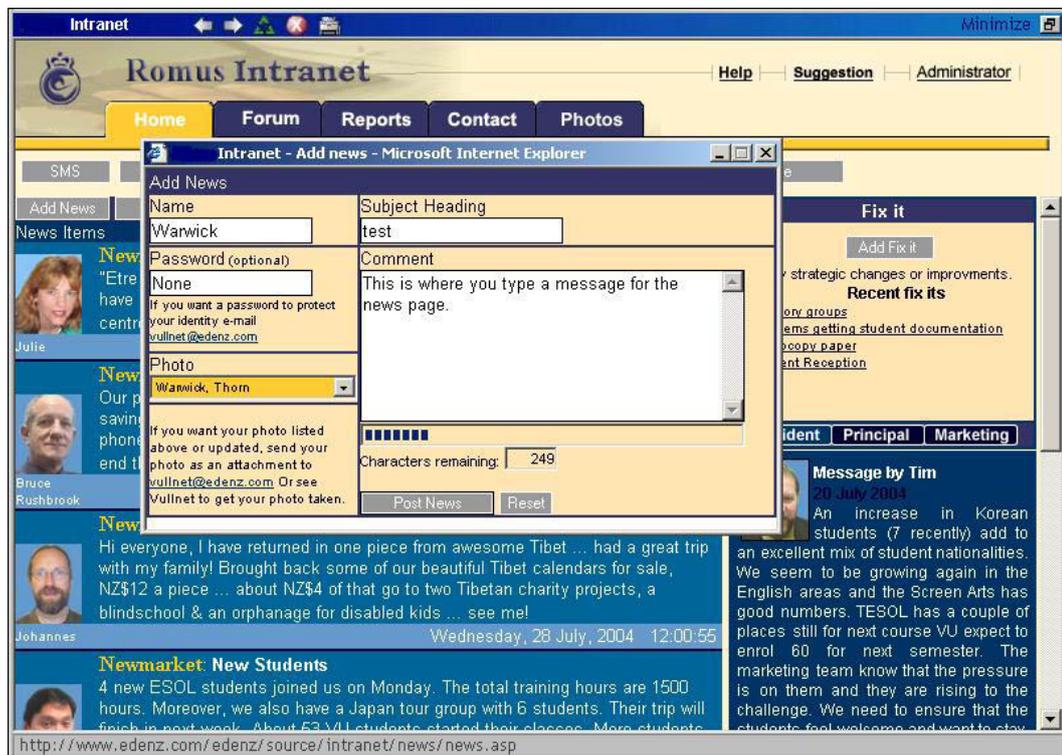


Figure 6.3 The 'Add News' form

If a staff member clicks on the ‘Add Fix it’ button, a window appears allowing them to enter the details into the problem and solution fields, select their photo and submit it.

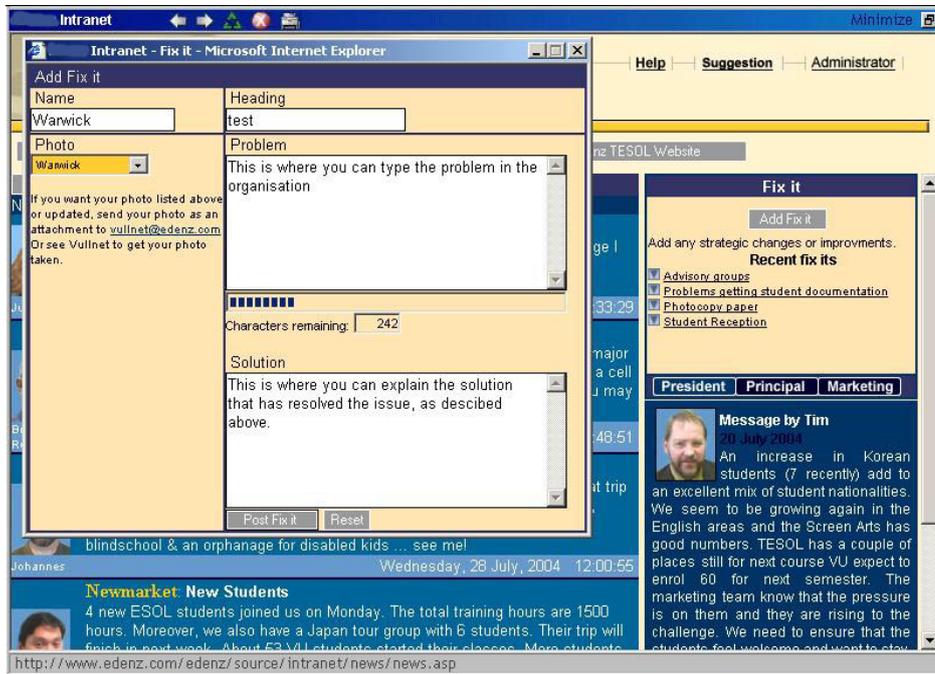


Figure 6.4 The ‘Fix it’ form.

Once a ‘Fix it’ is submitted, it is posted to the top of the list in a similar fashion to the News items. The window below shows the most recent ‘Fix it’ entry. At this stage I was making all the entries. I had the intention to involve other staff in posting their own entries. The ‘Fix it’ system is a quality assurance initiative to record and publish how the school addresses strategic organisational problems.

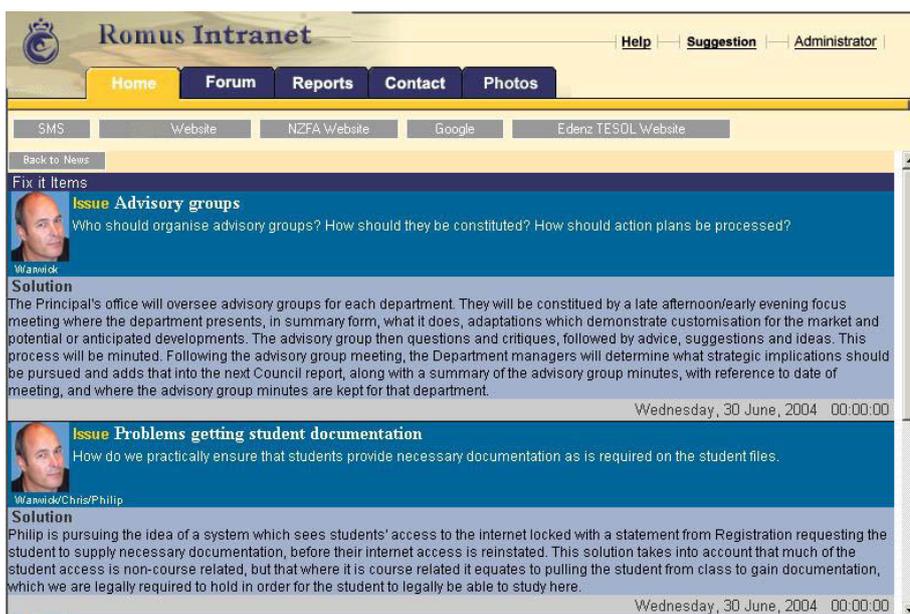


Figure 6.5 The ‘Fix it’ page.

If the President, Principal or Marketing Manager click on their picture, this window allows them to update their message to staff.

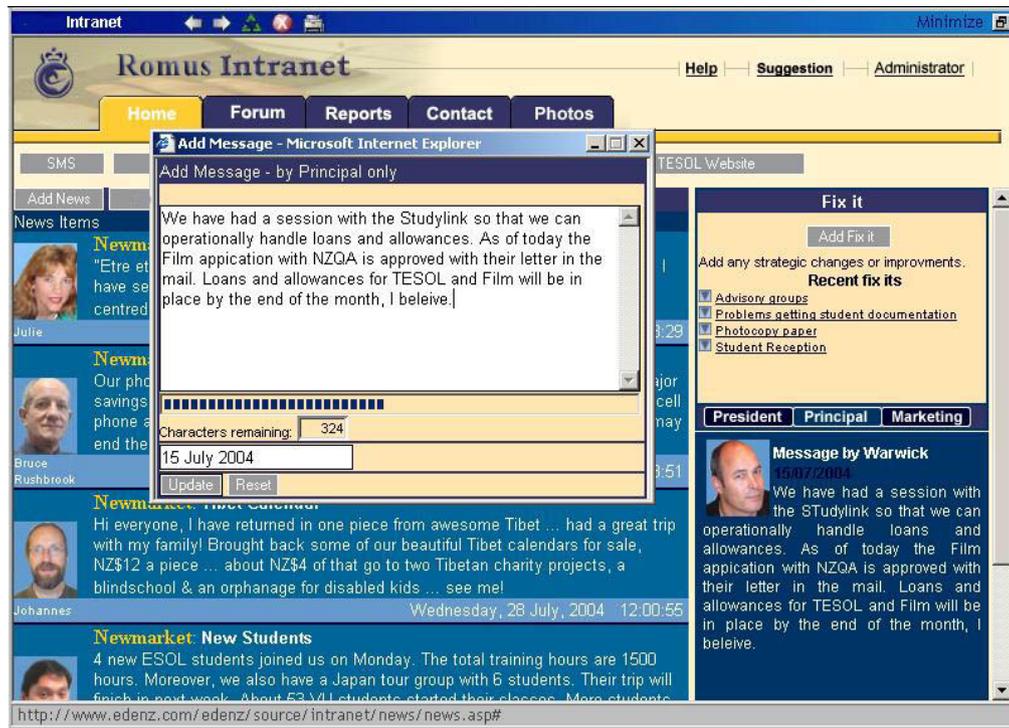


Figure 6.6 The 'Add Message' form for the President, Principal and Marketing manager.

If managers click on the 'Contacts' tab and then the 'Add Contact' button, they can add a new staff member and the details to the list.

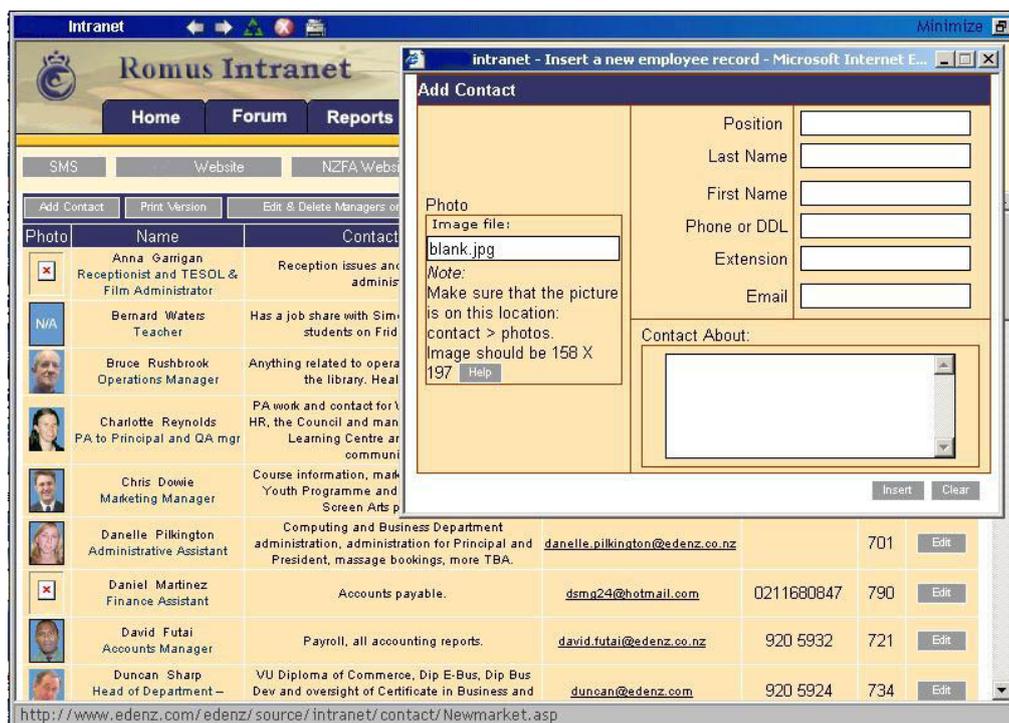


Figure 6.7 The 'Add Contact' form.

If staff members click on the 'Forum' tab it will come up, as seen below. They then need to additionally log into the forum. We standardized the login names to the ones staff normally use to log in to their computers. The password is the same for everyone, unless they nominate to change it. As discussed previously this feature was not at this time being used.

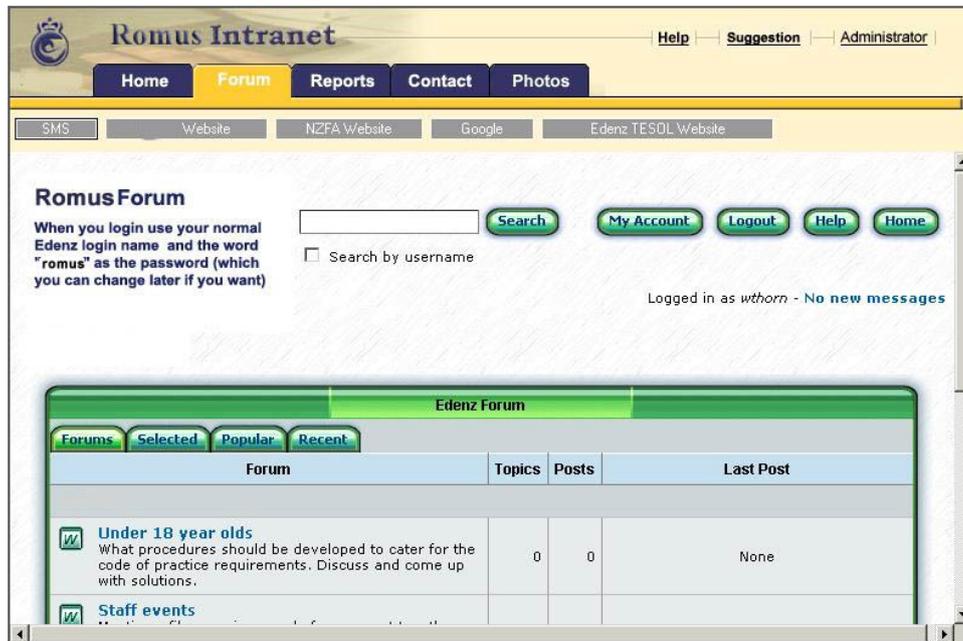


Figure 6.8 The 'Forum' page.

During the project, the organisation experienced significant growth and decline. By July 2004 management and administrative staff numbers had reduced from 50 to 25. Whereas the organisational culture had been distinctly divided into four departments, plus senior management and marketing, now staff were intermingling and networking more. Also, the franchise schools were now independent, so the need to unite staff across geographical boundaries no longer existed. The idea of using a forum for discussion was not seen as beneficial in this situation.

The benefit of a forum is that it can open up more diverse communications and it can keep a history of those communications. However, if staff feel they are able to communicate in other ways, to solve problems satisfactorily, then they will probably not use the forum. My strategy for the design process was not to be directive in its use, so when I saw little interest in the forum I accepted that the benefit was not significant enough to warrant further training. I think that minimal prodding and training should be necessary, because otherwise I would have to heavily control the

communicative practice of the organisation in connection with the intranet. The principle of user-centeredness is that the intranet should significantly improve communications compared with other communication channels. Staff would therefore use the features on the intranet that they found most advantageous. They would do this without much direction, as long as the intranet was presented to them on their desktop.

Time, and perhaps the reduction in staff numbers, indicated that a forum would not take off as a feature and would likely be removed in the future. However, for the revamp stage, the ability for staff to logon with the same logon in the same way as they did when logging on to their computers, might have proved my expectations wrong.

I have previously discussed how a new emphasis on communication management evolved during the course of the project. One task I took on was to organise a monthly staff meeting, where we would organise for different staff to talk about their jobs. This meeting format opened up a better general feeling of community within the organisation. This was also needed because there had been significant redundancies and there was the need for staff to feel they belonged during this uncertain period. In effect, the way we conducted this meeting was a spin-off from the intranet project. I do not think it made the need for the intranet forum redundant, but it certainly increased the likelihood of staff not perceiving the need for it.

The same trend, related to the size of the organisation, was true of the reports page. By July 2004, the organisation's reporting culture had evolved into a monthly council meeting where management presents reports. The reports come from all sections of the organisation, are presented by senior managers to the rest of the management team, and represent the business, marketing, academic and strategic perspectives of the organisation. Most of the reporting is done in groups to enhance collaboration. This meeting consistently gets the nod from the President as the most cost effective and efficient reporting session the organisation has. It was far better than any attempt for intranet based reporting. As a result of the improved council meeting, the reporting feature on the intranet became redundant.

The feature under the 'files' tab has been removed. This feature, as explained in the previous chapter, enabled direct access to the organisation's manuals through an auto-updating menu system. This drop down menu and sub-menu system made it easier to find files, compared to the standard Windows interface. However the Windows interface also had the advantages of providing the means to manipulate folders and files and create short cut options. The intranet method was not significantly better. The re-ordering of the filing structure was undertaken to make the intranet menu better. The improvements existed for accessing files through the Windows interface just as much as through the intranet and had the effect that staff referred to the files more and were more aware of the filing protocols. This was a spin-off benefit, but it had no effect in enticing users to the intranet file menu system.

While I was dropping the file menu system, and later the forum, from the intranet design, I was seeing its communicative aspects evolving as the lasting and worthwhile features. I believed that the more communication that happened in the organisation, the better. Communication was needed for cohesion. Some new

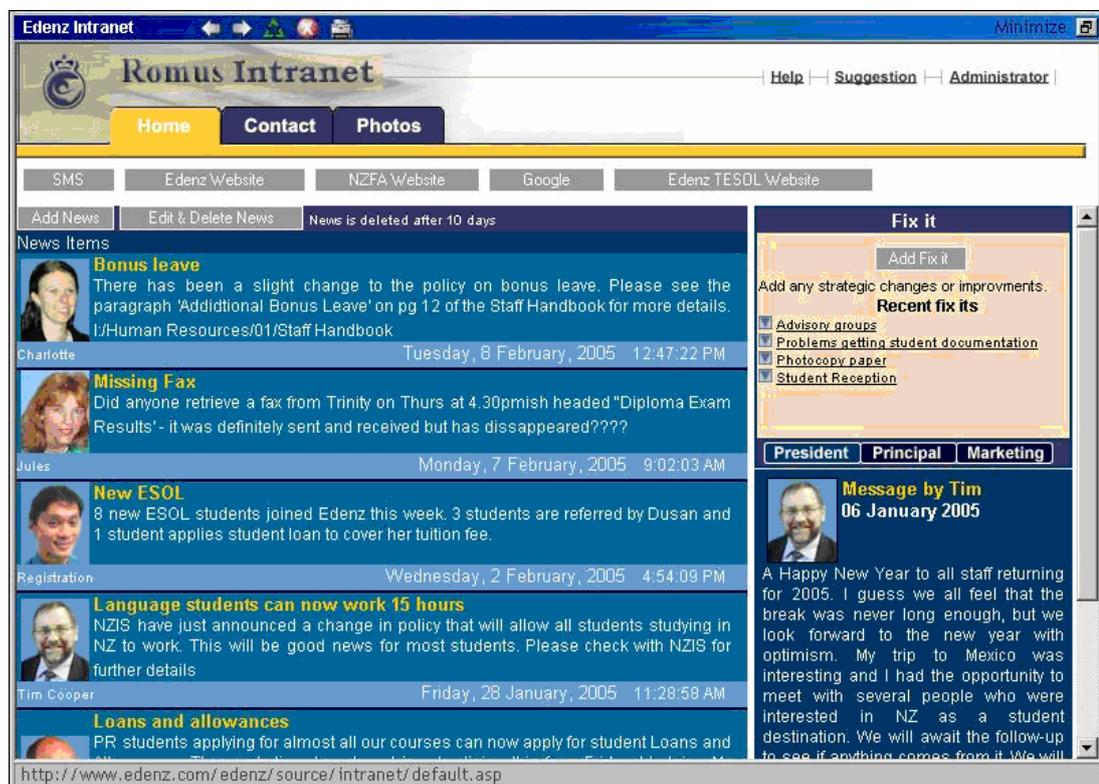


Figure 6.9 *The update by 2005*

features were added to the design as a consequence of the type of use the intranet was getting, and these enhancements effectively turned the intranet primarily into a communication mechanism. This paralleled the newly evolving role of communication management for the organisation. By the end of 2004 decisions had been made which effectively established the intranet solely as a communicative mechanism. The screenshot above in Figure 6.9 shows that only three tabs remained: Home, Contact, and Photos. These represented talking about what is going on, knowing who is doing what and how to contact them, and seeing different people and activities that were happening.

Photo	Name	Contact about	Email	Phone or DDI	Ext.	Edit
	Anna Garrigan Receptionist and TESOL & Film Administrator	Reception issues and TESOL and Film administration	anna.garrigan@edenz.co.nz		719	Edit
	Bernard Waters Teacher	Has a job share with Simon. Runs an art class for students on Friday afternoons.	bwaters@value.net.nz		756	Edit
	Bruce Rushbrook Operations Manager	Anything related to operations. Also looking after purchasing, the library, Health and Safety and .	brucer@edenz.co.nz	0274 511 233	777	Edit
N/A	Bruce Cleland Lecturer	Lecturer and academic co-ordination for the department; student welfare issues.	bruce.cleland@edenz.com		738	Edit
	Charlotte Reynolds Executive Assistant to Principal and HR Administrator	Assisting Warwick and Johannes, HR, the Council and management meetings, the Learning Centre and organisational communication.	charlotte.reynolds@edenz.co.nz		766	Edit
	Chris Dowie	Marketing for the NZFA department, and working with Warwick on QA projects.	chris@edenz.com	920 5922	722	Edit
	Daniel Martinez Finance Assistant	Accounts payable.	daniel.martinez@edenz.co.nz	021 1680847	790 / 704	Edit
	Duncan Sharp Head of Department – Computing and Business	VU Diploma of Commerce, Dip E-Bus, Dip Bus Dev and oversight of Certificate in Business and IT strategic leadership.	duncan@edenz.com	920 5924	734	Edit
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Figure 6.9 The update by 2005



Figure 6.9 *The update by 200*

These screenshots of the revamped intranet screen show the degree to which change was made after receiving user feedback. The following section discusses the thesis propositions in relation to the feedback.

6.2 Revamped intranet: Views of staff

Dec 03 – June 04

The interview data, which is collated below, also provided feedback which influenced the revamp decisions. Data from the interviews gave me an opportunity to establish in my own mind where the value of the intranet lay in terms of serving the organisation. The interview data also focused on the thesis propositions. The overall comments seemed quite disappointing, but there were also some very affirming comments. The intranet evolved, and is continuing to do so, as issues were raised and addressed, but a negative slant to the comments reflected difficulties the staff were having with systemic issues and communication in the organisation, as well as the frustrations involved in trying to develop and implement an intranet. The ‘insider’s view’ (Gregory, 1983) presented here details the conflicting realities of working in organisations and is drawn from the lived experience of the organisational members as they contended with the changes in the organisation.

Interview data

By July 2004 staff were more able to articulate their views on the intranet in terms of its ramifications on the organisation's culture, its communication and its knowledge management. The interview data, which is collated here, apart from influencing the revamp decisions, evolved to include a focus on the thesis issues. The interviews provided an evaluative feedback step that consolidated ideas on why the intranet was not working and where its value lay for the organisation.

The questions in the interviews tried to uncover the issues which underpinned endeavours to develop a user-centred intranet. This interview data consolidated a view of the organisation as a modern organisation embroiled in a knowledge-based global economy, where there is a high rate of change. The interview questions also tried to explore whether the process of developing the intranet had a radical influence on the organisations culture, communication and knowledge management in a participatory way.

This data completes the story from the point of view of the users and those involved in the project. It enables me to proceed to the final chapter where I will discuss the implications. The interviews were conducted between October 2003 and June 2004. The first data set is then presented for the period 21 October, 2003 to April 2004. The second data set, which was adapted to more directly address the thesis questions, is from interviews conducted on 6 June, 2004.

Collated comments from the interviews conducted between October 2003 and April 2004:

Q1 The intranet has attempted to do a certain thing...what is your understanding of those things and how successful has it been in achieving that?

People are using it - adding news and contacts. They don't use files. Vaughn
11 Dec 03

I understand about half of it, or am aware of about half. These have to do with enhancing communication, especially across departments. I.e. news and contacts. I believe it has been successful for those who also use/read them.
Shirley 1 March 04

Forum and contacts page not used. Contacts info is not as up to date and we use the phone list. Jane Liu 26 March 04

Got it so we can communicate with people in the organisation directly – specific to administrators of the organisation. Doesn't include what might go on a webpage to persuade our clients. Intranet is source of disseminating info to organisation and encourages and is direct. Thomas 7 April 04

These comments reflect that the communicative aspects are the ones that are being seen as useful. It reiterates the rationale for cutting out sections as discussed in the revamp section above.

Q2 A number of staff use the news page of the Intranet. Do you think the mix and content of these messages says anything about the Romus culture? (Eg. Do we value social mingling of staff, do we believe the clients or administrative tasks are more important, do we assume that hearing about changes can come from different quarters?)

News, Contacts and Poll a little. Because it's in their face – they can see it – don't have to look. Photos make it personal. Vaughn 11 Dec 03

Contacts – because it's easy to access and read. Shirley 1 March 04

Notice Board – No other way for people to know what's going on eg franchises. Jane Liu 26 March 04

Gives updated instantaneous report on staff emails and positions and telephone extensions. Another place is that we can access latest documentation. Quite good. Strength is that I can communicate with everyone instantaneously. Could be a weakness if over used or under used, so people don't bother to look could have setting so messages are taken off by date i.e. birthday notice can come off. A change of position should be on Intranet. Thomas 7 April 04

Thomas' comment on the instantaneous advantage of the intranet perhaps demonstrated the most significant benefit. We can distribute notices in many other ways but notices placed on the intranet by any staff member are instantaneously displayed on all the computers in the organisation. Thomas' point about the weakness being that it could be over used or underused is also very perceptive of the function that the news page performs. It is a live user-centred form of communication. Users either under use or overuse it, as opposed to a staff newsletter where the editor decides the appropriate amount of information. Yet this is an advantage of the intranet. It gives the users the means to establish the protocol.

Shirley's comment about how the photos make it personal has been mentioned before. This is a social benefit, as long as the photo is flattering. We did take care to take a number of pictures with a digital camera and ask staff which one they

preferred. This personal emphasis of having pictures attached to messages was deliberate for this reason and is a striking characteristic of the intranet. When someone puts a message on it, it feels like it is from a real person. This perhaps explains why the social content such as referring to birthdays or someone wanting to sell a car or find a flatmate became part of the news items from the beginning, without any prompting. This mix of social and work communication reflects the culture of the organisation. Romus is a stressful place to work at times, with its fast pace of change, but it is also a friendly place, reflecting the personality and influence of the owner and president. The answers to the question below also reiterate these comments.

Q3 what is working on the Intranet and do you have any ideas about why this is?

New people, leaving info get put on and that is important. Spin off of reorganising the I drive. Sally 21 Oct 03

Calendar: People cannot be bothered clicking to see future only good as one form of reminder. E-mail: Rather use their own Outlook, which is better. Files: Not visible. Forum: Bug, could be a training issue. SMS: Have it as favourite on Explorer. Photos: Because we haven't added links i.e. preferred with favourite. Vaughn 11 Dec 03

Most other things. People don't know how to use it or don't see its relevance. Shirley 1 March 04

The need to disseminate accurate info quickly as a non paper (electronic) level. Thomas 7 April 04

Newspage, of interest to staff. Contacts, needed. Google, guide access, but doesn't allow you to go back and forward. Jason 2 June 04

General news and communication. 1) It is on the front 2) It has obvious benefits 3) It is easy to use 4) It hasn't changed much. People are familiar. Charles 2 June 04

Don't use it sufficiently to comment much. I read/glance at general news then minimize it for rest of day. Douglas 1 June 04

News, because people check it and sometimes contribute – the photos make it interesting and the topics have wide relevance eg staff meetings. Claire 1 June 04

In addition to the points already mentioned, there are some new points that are being made here. Sally mentions the spin-off of reorganising the shared network (I) drive. This is the shared drive for the organisation. She is aware that the reorganisation of the folders on the shared drive came about as a spin-off from the intranet development. Discussion has previously covered how the intranet uptake had to do

with benefits compared with embodied world ways the organisation did things. The point is also being made here that intranet uptake is also affected by benefits of competing uses of other technological forms, such as the Windows interface and Windows tools such as Outlook Explorer for email. In the earlier iterations, a fast email feature was included on the front page of the intranet. But this was never used because staff already used Outlook Explorer and this had features which the intranet did not offer. Therefore, even if the intranet had offered a consolidated interface design, this was not beneficial enough to compete with dedicated email programmes. In such a case a user will opt to use one of the two ways to send email rather than send email through two different channels. The same issue applied to the Calendar option, which was removed in previous iterations for the same reason.

Q4 What is not working on the Intranet and do you have any ideas about why this is?

Not computer literate. Vaughn 11 Dec 03

They don't see a need for it. They don't know how to log in. They don't know how to use it. Shirley 1 March 04

Don't have skills or no computer. Jane Liu 26 March 04

Don't know. I do more likely to look for something rather than view news. Thomas 7 April 04

Guarantee that everyone is aware of the communication. Not everyone has a computer and those that do, do not all view the Intranet. Could have an option to notify private email addresses eg if someone is sick. Thomas 7 April 04

Fix it form. No training, possibly people do not understand or see the need. Manager's corner, too busy to update. Forums, no training like fix-it. Jason 2 June 04

The filing page. People know windows and maybe more comfortable using it rather than using a new system that offers few advantages. Charles 2 June 04

Only as good as the information placed on it. High reliance on humans/staff to maintain the information. Douglas 1 June 04

Everything else except perhaps the contacts list people don't see why/how it will help their job. Claire 1 June 04

My philosophy was to make the interface design so user friendly that computer literacy is not an issue. All users had different levels of computer literacy but if all users were to use the intranet it needed to be designed to the lowest common denominator. I believe the comments related to training and computer literacy have more to do with the lack of perceived benefits of areas such as the forum. In fact

there were training sessions on the forum, report area and file location feature, but they did not lead to uptake. In the case of the 'Contacts' page the comments regarding usage were more to do with the need for it to be updated in order for it to be effective. The difference was that in the case of the contacts page, staff had tried it because they could perceive the benefit, whereas with some of the other features they did not have a need to even try it. My interpretation, then, of the comments that training needed to be provided or that some staff were not computer literate enough was that it reflected more that there was no perceived benefit. This is the point that Claire makes. Douglas' comment that the news page was only as effective as the information placed on it and that it was reliant of humans addresses the issue of user-centeredness. This is exactly right, and shows that communication management is required not just to manage coexistence between embodied and virtual world practice but also to manage the communication process across the organisation.

Q5 why do you think some people never use the Intranet?

Email, SMS, Links. Vaughn 11 Dec 03

Yes, some people communicate via computer, some don't. Some people prefer face to face contact. Shirley 1 March 04

Files not necessary. Jane Liu 26 March 04

Shirley made the point that some people will choose to communicate face-to-face. This is not such a significant point because even at an embodied world meeting, some people choose to not communicate much, if at all. Some staff prefer to communicate on a face-to-face or one-to-one basis. The intranet needs to be understood as only one mechanism of communication which coexists in with other virtual and embodied world methods.

Q6 What would you cut out of the Intranet?

Nothing at this stage. Vaughn 11 Dec 03

Links. Forum, Files. Warwick's not suggesting breaking up news into sections such as social and work based. People look at who puts stuff on presently senior staff. Shirley 1 March 04

Shirley's comment about people looking at who is putting messages on the news page demonstrates how a user-centred feature requires cultural permission within the organisation for user-centred activity to really happen. It reflects the issue previously discussed that non-assertive people in the organisation are not listened to properly. The point has been made that as an entrepreneurial organisation staff tend

be listened too only if they are assertive. It is natural for staff to look at the intranet with the same understanding. It has been difficult to create a level of cultural permission in the organisation for lower level administrative staff to contribute as I had wished. To a degree, this permission can be encouraged by training all staff, so that they realise the intranet is for them to use as well as management. This issue also arises from context outside the organisation where the cultural expectation, in the experience of many employees, is that it may be better not to speak up. In this sense it is enough for the intranet to open up the organisation in the direction of participative collaborative communication. It also needs to be recognised that communication management needs to be resourced by the leadership of an organisation, and that that communicators and human resources staff have a common purpose and need to be technically savvy in order to manage an intranet resource. Such resourcing would reflect whether an organisations leadership recognised the economical benefit of collaborative communication.

Q7 What would you add to the Intranet?

Suggest front page only because people are lazy and won't go to links page i.e. number of clicks same as going to Google. Shirley 1 March 04

It is much better to have as much functionality on a front page and that having to go down a level or tabbing to another section generally means that those sections will be less visited.

Q8 How would you continue the sentence “Our organisation is like a” Can you see any bearing between what you said and the development and implementation of the Intranet?

Car engine. Intranet's trying to make engine go more smoothly like oil. Vaughn 11 Dec 03

Family. No appointments – like a family. Like a family barging in each other. Nobody knows how structure works. Jane Liu 26 March 04

Madhouse. Too many people disconnected from each other in their work, thinking they are actually doing what they are supposed to do to enhance the overall direction. Therefore a tool like the intranet is quite vital to help bring more cohesion. Jason 2 June 04

Family owned shop. People go to offices to tell people what they want rather than procedure – so we don't need to go through system therefore not useful. Jane Liu 26 March 04

Friend. We are a support and a partner to our staff. The Intranet as a partner and friend of the staff talks to the staff and we can all put into it. It is not from above – it includes support and advice. Thomas 7 April 04

River. Flow and course with change. Yes. In a relatively short time what seemed relevant with the Intranet quickly became in need of modification to meet new needs in the organisation. Frequent course changes. Charles 2 June 04

Series of semi-isolated villages, with intermittent communication between villages, at the whim of the local chiefs. Communication via the intranet is still at the whim and inclination of the “Chief” and acts as an inter-village notice board. Because it will never be possible to get people to contribute anything other than what they want to disclose, the intranet will never truly inform staff. Douglas 1 June 04

Lava lamp. No-one knows what it will do, it can move and change in all directions, some parts going fast, some going slow. Intranet is similar, and good to see it adapting to the style of the admin and management staff, (perhaps the fast bits) but not necessarily teaching staff. Claire 1 June 04

Jason’s comment about the need for cohesion for the organisation perhaps clarifies the main benefit of the intranet for the organisation. From the comments above, it can be seen that the organisation is not culturally noted for its strategically structured approach. The reasons for the organisational descriptions above can be understood because of issues relating to the high rate of change in the organisation’s internal and external environment, and also to the entrepreneurial nature of the organisation. In such an organisation, the question of how to bring about cohesion is a very challenging one, but it seems to be very much an issues. Strategies are warranted that will build cohesion and interaction. Perhaps the main positive outcome of the project is that the intranet helps build some cohesion by adding a communication channel, although its original aim was primarily opening up user-centred participation. On the other hand, it does seem to offer some user-centred participation as well, but not as strongly as I first hoped. The intranet itself is a cultural artefact and cannot be seen as isolated from the issues of communication management.

Claire also points out that the teaching staff is not necessarily included in the intranet communication channel. This is because they only have shared access to a computer and when they use it they are not concerned to communicate with staff across the organisation. In another department, the teachers each have a computer, yet they do not contribute either. They either do not see the need to contribute through the

intranet, or, perhaps, may feel they have not been given the permission to use it. The intranet enables all staff to contribute directly, but it will not achieve this where cultural ways of doing things do not support a networked organisational paradigm. The points made below reiterate this.

Q9 “Organisational communication” is about the way we communicate at Romus. It’s about how we communicate from the top down, between departments and with each other in general. Can you think of any communication issues that might have affected the development and implementation of the Intranet?

Henderson didn’t want to participate. Manukau didn’t quite feel a part maybe otherwise fine. Vaughn 11 Dec 03

People feel like only managers and or organisers should put things on the Intranet, and also that they are the only ones who need to use it. Because managers created it, but didn’t tell them it’s for them. People haven’t been told/insisted to use it. Shirley 1 March 04

Habits are stuck in what they’re used to with growth people kept doing same way no matter the size. Jane Liu 26 March 04

Most people in the company are on our network (i.e. access to computer). Therefore it is logical to use a method. We don’t meet in big group meetings every day or have a whole staff assembly every day - then that would be more suitable, but we don’t. I still meet new people that have been working here for some time. Thomas 7 April 04

Vaughn’s comment about the Henderson and Manukau franchise schools reflects the embodied world business and communicative relations. The relationship issues with the franchise organisations have been explained previously. There is a direct correlation between embodied world relations and willingness for them to use the intranet. Thomas points to the fact that if more meetings happened that would be better than intranet communication. Where there simply is not the time to have meetings, the intranet is one effective communication channel to manage some aspects of communication. The cost of running meetings is also significant and in a busy environment, can be resented when too many meetings take away from needed work time.

Q10 “Organisational culture” is about the way things happen at “Romus” as compared to other ways companies can work. It’s about management styles, cultural different ways of doing things and personality mixes. Can you think of

any cultural factors that may have affected the development and implementation of the Intranet?

Forum thing. People don't want to put too much in writing – could be because of taboo subjects i.e. there might be an agenda they're not aware of so what they say might come back on them. People do things behind closed doors, so policies not transparent agreements and what people are told may not be upheld and can be changed at whim. This lessens the buy in for open discussion because tomorrow could bring a totally different policy. People put time and effort in to solutions, but others could be working differently on the same solution. This is why people won't get hooked on the forum. Sally 21 Oct 03

Communication of events and contact details and why they are. Vaughn 11 Dec 03

Contacts: Direct dial, extension and little email link. Shirley 1 March 04

Yes. Notice board is good – nothing else to replace. Jane Liu 26 March 04

Sally makes a strong statement about the organisation's culture and why she does not expect there to be up-take of the forum. Her comments reflected disenchantment with the way she believes agendas work in the organisation and in fact she handed in her resignation not long after making this comment.

While an organisation with an entrepreneurial culture will undoubtedly have a degree of perpetual disorganisation, it is also a model suited to a networked organisation working to survive in today's market place. The organisation has developed through a series of market declines and dramatic changes. In such an organisation, I believe staff should not ask it to be different, rather should decide how to contribute to its efficiency, and in so doing, find an appropriate cultural role, and can feel a degree of belonging. In this organisation, keeping a sense of humour is essential. The culture of the organisation is not supportive on the whole of participative and collaborative communication. Staff opinions are warmly received through their assertive involvement. In such an environment the need for cohesion perhaps is of primary importance if significantly greater participative collaboration is to be achieved.

Q11 Do you see the Intranet offering any better ways of interacting than exists otherwise?

Booking system would be good. Social bits could be expanded. Sally 21 Oct 03

No. Vaughn 11 Dec 03

Q12 How could I as the developer and implementer have done a better job?

More training and encouraging people to use it face-to-face. What's missing is training. Must have face-to-face explanation. Better if it can be used as a communication channel, but ESOL management also needs to take responsibility. Issue is organisation is that people don't relay information to relevant people, without being instructed – same with info that goes on the intranet. Shirley 1 March 04 IT

More training would allow us to explore parts that we don't use. Thomas 7 April 04

It was a dilemma for me to manage the intranet project within a hectic work environment. I was not convinced that a lack of training had undercut the project. During the stages of iterations, it became evident that the benefits were not significant compared to either other embodied or technical ways of achieving the same thing. Responsive designers can decide to alter the design when user testing makes obvious that one aspect has no benefit. Everything that happens within the organisation happens in a hectic environment. More training would have helped, but the reality is that this was not possible. Yet the organisation does adapt to new procedures. The challenge for me as a developer was to make the intranet so user friendly, with immediate benefits, that uptake would happen with as little prodding as possible.

Try to find out more what people need. Eg file system not necessary. If everyone has a phone list they don't need it duplicated on the Intranet. Jane Liu 26 March 04

More research up front of what staff wanted/needed. More training. Imparting vision to staff and management. Jason 2 June 04

More preparation of staff and management prior to development. Provide examples of existing systems. Charles 2 June 04

Ask people what they want out of the Intranet, what they would find useful – preferably in a face to face discussion group type setting. Claire 1 June 04

Generally design seems to be ok. Training sessions at management level and introduction of Romus systems that required mandatory frequent use by managers might have helped. Douglas 1 June 04

From the designer's point of view it was clear during the early iterations that users did not comprehend what could be achieved through the intranet and that therefore, the process of development required a series of iterative development cycles. As the project developed, users became more able to critique the intranet. As the project also involved exploration of the cultural, communicative and knowledge aspects of

the organisation, the development story was an evolutionary process. In this sense, Charles' suggestion to prepare staff better was not possible. The dilemma of undertaking the project on top of my management responsibilities meant I did the best job I could, with the resources available. It had the advantage of gaining an insider's point of view.

Q13 As the developer what values, biases assumptions or goals do you think I have had?

Probable assumptions that it would be much easier to get people buy-in, and folk would understand the reasons/visions behind it that Romus could easily be swayed – big mistake! Jason 2 June 04

Understand the culture and its resulting characteristics, you appear to attempt to improve communication and clarify boundaries and from these two areas many of our problems stem. Charles 2 June 04

1. Assumption that all people value communication. 2. Did not distinguish between communal news and management communication when implementing system. Douglas 1 June 04

This assumption about my beliefs and agenda are correct. These comments show that the influence of the literature review did strategically influence the direction of the design.

I don't think that the forum will be used much because people are too busy and don't see the relevance. This is an area that lack of training and/or explanation of what it is why we are doing it, is evident. People will not likely use something that no one has talked to them, personally about. Claire 1 June 04

In fact there were two training sessions to try and get staff to use the forum.

Q14 Another person that I interviewed said that.... do you agree with that?

Sally's points about agenda – no don't agree because news isn't political and poll is anonymous. Vaughn 11 Dec 03

Sally's comment on decisions being made behind closed doors – in reality decisions are made sporadically – people who make decisions don't think about who's following and so they won't notice when people are off track. Thomas, will assume you know – he talks about something you know nothing about. Classic: Janice waited for him to come around to the subject again and asked for details. Whereas if you get stressed by his approach it doesn't work with him. Interest is sporadic, when interest starts changing and previous decisions are forgotten. There is an entrepreneurial disorganised – shooting from the hip approach – there is initial interest, but steady progress is not of interest. Shirley 1 March 04

As per Sally. Yes I agree with Sally's comment on decisions being made behind closed doors – but depends - it's about nothing getting done. Speaking up doesn't work because people already have their mind set on certain decisions and priorities. It's all about what Thomas wants – either you try and change his mind or your opinion isn't worth much. This is why no one has used the suggestion box. There is no process or person for Thomas to deal with things. SMS works because there is no other way. If Intranet contacts are not up to date they'll use the other phone list. Note: Sally was told to keep the non Internet phone list updated, therefore contradictory departments. Jane Liu 26 March 04

Thomas's point that the intranet communicates in ways the organisation does not favour in real life, preferring a daily meeting, aroused disagreement in some staff members.

The Intranet is not just a news page. Even if meetings are much better at communicating news – meetings shouldn't focus on news dissemination. The intranet is a communicative tool on potentially many diverse levels, recording processes, exchanges, input, much better than this perception – which underlines my belief that the intranet lacks Thomas's backing in any substance – not by ill-will but simply by not grasping its value and place in the organisation. Jason 2 June 04

Putting thoughts in writing, in public is a method that offers advantages that oral presentations at meetings do not. Public record will help clarify things for people, inform the absent and document details for future reference. Charles 2 June 04

On the other hand, some staff members agreed with Thomas's point of view:

Agree but only works for those that regularly log on. Many staff do not. Douglas 1 June 04

A lot of the news is things that are quite immediate, so would be forgotten at a weekly staff meeting, or are things that are not appropriate for a staff meeting. Eg "I lost my wallet". Therefore I think that the 'news' would still be useful even if we had weekly staff meetings. Claire 1 June 04

Apart from the variety of views expressed here, the entrepreneurial nature of the organisation is emphasised. Opinion was expressed that it would have been preferable to have had more support for the intranet from the leader of the organisation. However, from my point of view these comments illustrate common organisational frustrations. Any newly implemented system will need to overcome a lack of appreciation for its purpose. Not only does it take time for organisations to change but also, intended change rarely happens as desired. The intranet has been adopted in an evolved form which represents user choice.

Q15 Is there anything else you would like to add?

I believe in the idea, so I think it should be continued. Jason 2 June 04

The concept is good, especially in an organisation such as ours. The real benefit I expect will only come in conjunction with other developments over a longer period of time. Charles 2 June 04

We need to figure out a way to include more people in the design and implementation. Claire 1 June 04

The second set of data was gleaned from interviews conducted on 6 June, 2004. As discussed in the previous chapter, by this time I believed staff were familiar enough with what I was trying to do with the intranet and management interventions that they would be able to comment more specifically in relation to the thesis propositions. The section headings and italicised text introduces the propositional context.

Influence of the wider business context

Romus exists in a global knowledge based economy, where issues such as exchange rate, international competition and our entrepreneurial culture mean we have a high rate of change and adaptation. Characteristics found in companies operating in this economy include organic, cooperative, participatory, quality led and customer driven.

Q1 Do you think any of these characteristics apply to Romus and/or what characteristics would you attribute to Romus?

Romus is organic like a jungle, cooperative like chewing gum, participatory for folk with initiative, idea but not necessarily quality led, and again, more driven by ideas of management than proper market analysis. Jason 2 June 04

Yes. Romus has a liquid element, whereby it can encompass changes and new opportunities almost without staff realising the changes happen. Charles 2 June 04

Romus has high rate of change of direction – not so much global economy. With low tariffs etc all NZ businesses are exposed to international competition. Douglas 1 June 04

Yes, organic, cooperative, participatory; perhaps not really quality led in terms of lack of follow up on customer comments/problems. Or customer driven to be frank. Claire 1 June 04

Does the organisation fit the networked organisation paradigm? According to these comments, it does.

As a theoretical response to the influence of the wider business context, the intranet has attempted to be participatory - to get staff and management to provide content. The News, Calendar and Contacts pages have been designed for user input.

Q2 Do you think this participatory emphasis is a good idea and why or why not?

It is good only to the extent that it achieves user participation. For which more thorough training to users is required. This has not yet been accomplished at Romus, and therefore user participation is fairly minimal. Jason 2 June 04

Yes. The way and speed in which changes occur mean that communication between staff is essential if everyone is to be involved in moving forward together. Charles 2 June 04

Participation is at the less critical level – intranet does not communicate much of the wider business context’ bigger issues. Douglas 1 June 04

Yes, it’s a good idea but I worry about whether the end user, or at least some of them, were considered in the design and implementation eg it does not really encourage participation by teachers (half of our staff). Due to its design but also due to lack of training and lack of application of limited computer knowledge and skills of some staff. Claire 1 June 04

These staff affirm the idea of increased staff participation. The intranet can only be one mechanism for change in this direction. There have been many increments of direct intervention by company management to achieve a greater participative workplace, and this need is ongoing.

Culture of Romus: Intranet implications

Organisational culture is about the way things happen at “Romus” as compared to other ways companies can work. It’s about management styles, ethnic cultural different ways of doing things and personality mixes. It is about the unwritten rules.

Q3 Can you think of any cultural factors that may have affected the development and implementation of the Intranet?

One of the biggest reasons why the intranet has been faltering so far is the lack of a consistent culture from the top. Superficial buy-in but no commitment to focus on intranet as a design tool to form/normalize Romus culture. Jason 2 June 04

Yes. A lack of clear direction from different levels of management meant different levels of buy in existed in different departments. Charles 2 June 04

Decisions (the way things happen) occur without proper consultation and process. The internet has not altered this culture. Douglas 1 June 04

Yes, a bit of an in-club that knows what's going on, and that changes things quickly, without much communication to those on the boarders or outside. But, on the other hand, I think the Intranet has helped heaps to lessen the impact of that; aiming at top management being assisted in communicating to those below. Claire 1 June 04

I believe Claire's comment to be particularly insightful, in that because, the organisation is entrepreneurial and has a high rate of change, a mechanism that increases participation and communication provides a cohesive influence and this organisation needs cohesion.

The Intranet development and implementation process has involved some management interventions by Warwick. He has been trying to get participative involvement and to use the Intranet to bring cohesion in areas such as communications and knowledge management (manuals). Attempts at getting reporting to work through the Intranet have been made.

Q4 Do you think either the Intranet itself and/or Warwick's interventions have affected the way things are done at Romus (The Romus culture)?

Both a definite yes, though at times it seems like fighting a losing battle, given the highly diverse and entrepreneurial nature of the beast. Jason 2 June 04

It hasn't changed the culture yet. It has changed/begun to change the way things are being done, particularly in regard to communication. In future, these changes may result in changes to the company culture. Charles 2 June 04

The culture hasn't really changed, but I think the attempts at the Intranet have highlighted the difficulties with the present culture and its resulting lack of communication. Claire 1 June 04

I would not expect to change the organisation except by a process of influence. I am not the chief leader of the organisation and so I do not set the primary agenda or culture of the organisation. However, I am the manager in the organisation who brings a level of strategic and communicative cohesion. This is a key value of my role as Principal. It is realistic that managers in typical organisations can bring their own influence to bear, but the nature of working together means that culture is a negotiated dynamic.

Communication systems of Romus: Intranet implications

It has been said (Roger D'Aprix, 1999) that an organisation's communication process reflects the leadership of that organisation. Communication processes can include any form of meeting, dissemination of information, way of handling issues, mechanisms of management and staff to communicate to each other. It is about the way we communicate from the top down, between departments and with each other in general.

Q5 How does Romus communication process reflect its leadership?

Very inconsistent, sporadic, and based on a buddy system where being on the inside counts – rather than a thought out communication process on a need-to-know basis – typical for entrepreneurial organisations, but very unhealthy if continued after initial start up. Jason 2 June 04

Sporadic, occasionally brilliant, generally lacking unity and usually in varying states of disrepair. Charles 2 June 04

Romus communication is very variable in quality. Effective management requires frequent communication between the leaders, not general communication to all staff via the intranet. Douglas 1 June 04

Haphazardly, with the result that some feel included, others excluded. Hard to keep up with changing leadership direction, biases, preferences, motives. Claire 1 June 04

There is a definite feeling that the communication at Romus leads much to be desired and that the entrepreneurial culture is partly to blame. In a Quality Improvements day held in February 2005, I asked all the managers and administrative staff to draw a network diagram representing each person's informal working networks.

Following this we posted the diagrams on a wall for viewing and invited discussion on issues. The discussion of the diagrams established the reason for the networks and two key issues. First, as with most organisations, the informal networks existed so that people could get their jobs done. The discussion showed, however, that there should be a balance between line management protocols and informal working networks. If there was too much protocol, action got bogged down in red tape and tasks became too difficult to accomplish. If there was too much informal networking, however, decisions were made without proper involvement of key personnel, and everything became too disorganised. This last point, that of failing to involve the right people, was seen as a significant issue, especially in one department, where the teachers felt excluded from the culture. Discussed revealed that strong feelings existed that management had not supported teaching staff in the

right way during the previous year's boom expansion. Some resolution was reached in discussion.

The network diagrams showed how different individuals approached networking. Some staff networked in a way which reflected clear line management and protocol emphasis, while others networked in a way that showed no connection to appropriate line management. From my perspective, the diagrams clearly reflected where the major internal working issues exist in the organisation.

My objective for this training session was to raise awareness of communication, legitimise the networking propensities of the staff and to engender frank discussion of the issues involved in working through informal networks. At the beginning of the session, I introduced the concept of networked organisations and used this as a rationale for the permission I offered them to continue to work in a networked manner, with some restraints for the sake of organisational function. I hoped to encourage cooperation and personal responsibility about the way staff established their informal networks. As Principal of the organisation, I have embraced the networked organisational paradigm and will influence the organisation in that direction. With continued support from management, the potential benefit of a user-centred intranet is more likely to be realised. I do not see this as an excessive use of authority, but rather, as a legitimate management intervention aimed at suiting the organisation's style of activity to the internal and external environments in which it operates. The point that I was able to make to staff about their style of informal networking proved to be, for me, a positive spin-off from the intranet project.

Q6 What ways do we communicate that might have impacted on or been influenced by the Intranet development and implementation?

Official staff announcement made now via the intranet (though a number of staff (i.e. teachers/ESOL) will not get info this way. So far sadly not much else. Jason 2 June 04

The fact that different departments can operate in isolation for lengths of time hinders development of a centralised system, particularly without managerial support of such a system. At this time it feels like there is a real struggle within the organisation between managerial culture and the common sense of improved central communication. Charles 2 June 04

Intranet has informed the masses but not assisted management decisions. Douglas 1 June 04

The problem is that things happen so fast, and feelings and biases are hard to reflect on the intranet. The result is that the most important events and/or directions are not really covered on the Intranet, at present. Claire 1 June 04

Knowledge management of Romus: Intranet implications

There are two kinds of knowledge. The first kind is the hard kind that ends up being kept somewhere. It includes any policies and procedures, SMS, reports, meeting minutes etc. The other kind is the soft knowledge that staff have about their jobs, which can often not be captured, recorded or passed on to new staff.

Q7 Do you see the Intranet as having improved our management of hard knowledge in any way?

Sadly, not yet. Though it has the seeds of possibility, and various attempts were made. Crucial – the area of training. To my mind that has been lacking – plus hardware access for some staff teachers. Jason 2 June 04

Yes. Promoting developments and improvements in the storage and access to hard knowledge has been successful. People know where to look when something can't be found or has been moved. Charles 2 June 04

Not really, but I am very computer literate so would not need the internet to assist me in finding hard knowledge (except phone numbers). Douglas 1 June 04

Yes, gives an outlet to post up info about say, changes to staff handbook, changes in birthday policy etc. Have found it very useful in this regard. Claire 1 June 04

Q8 Do you see the Intranet as having improved our management of soft knowledge in any way?

In small measure, especially as with Q9 above, ongoing events. Again, training is missing, and the top level support/endorsement/political will to make it actually useful. Jason 2 June 04

Beginning to. The lack of detailed awareness of boundaries means that much of this soft knowledge does not lay with the source people expect hence the cracks through which the shit falls. Charles 2 June 04

Don't know of any area of intranet relating to soft knowledge. Douglas 1 June 04

No, not really. Claire 1 June 04

Potentially it was the forum that could have captured soft knowledge. However, as previously discussed the benefit for staff to use the forum was not significant enough for uptake. Staff could network in the organisation to achieve discussion on issues significant to them. The benefit of the forum would be one realised by management

in saving a history of discussion and solutions. A one-sided benefit like this was not going to be enough a reason for staff to want to use the intranet.

Conclusion

This chapter has told the story of the revamping period. Section “6.1 Revamped intranet: Interface and features” outlined the management interventions that took place during this time and how developing a council reporting system, monthly full staff meetings, and revising the manual files were effectively spin-offs related to the intranet development process and thesis exploration. I concluded that knowledge management and reporting methods needed to change to suit a hectic, ever-changing internal environment in which restructuring is frequent, and I saw that key resources, including time, might not be available for these important elements of organisational life. I perceive that this situation may not be the case in every organisation, but it certainly is at Romus, where constant change and restructuring consume human and other resources.

This chapter explained how the knowledge management feature of providing a menu system for access to shared files was competing against the windows interface staff were used to and which had additional advantages that outweighed the advantage of the new menu system. This comparison between competing systems showed how the benefits of this feature of the intranet were negligible. Nevertheless a spin-off was the re-sorting of files on the shared drive.

In the section “6.2 Revamped intranet: Views of staff” feedback were explored and these views influenced the revamp decisions. Staff comments make their views of the organisation clear, and reveal the cultural and communicative issues affecting the intranet development. These comments have shown that the communicative function of the intranet is the most significant for them. This communicative function is not so radical that it can transform an organisation, but it provides a new communication channel that brings influence to the organisation. Other spin-off benefits occurred because of the project. These spin-offs were the creation of a monthly staff meeting, which included participation of a wide range of staff, and the council meeting, which was a collaborative way of managing reporting to senior management.

Comparisons between embodied world and virtual world mechanisms had been a feature of the design and exploratory processes. The communicative and cultural benefits of the intranet were now articulated by staff, in such a way that increasingly addressed the thesis propositions.

Chapter 7

Conclusions

The intranet project recorded in this exegesis has involved developing and implementing an intranet in the educational organisation where I work as the Principal. My role in the organisation meant I had significant leeway in the degree of experimentation both with the intranet and with management interventions to support the project. The situation afforded an opportunity for the research project, which provided a robust testing ground and exploratory environment for the thesis propositions.

My intention was to develop an intranet according to a user-centred design and to test the design and implementation against the thesis propositions. The first proposition was that a user-centred emphasis in intranet design is necessary in today's knowledge based global economy, where there is a high rate of change. The second proposition was that a user-centred intranet is not only an organisational artefact, but also the process of developing and implementing it will open up an organisation's culture, communication, and knowledge management in a participatory way.

The user-centred approach was intended to coexist with a participative and collaborative workplace. The paradigm for this kind of workplace is a networked organisation. I not only embraced the paradigm of the networked organisation, I supported and sometimes adopted a communications management role.

The exegesis has been presented as a case study with the story unfolding over the course of the project (July 2002 – December 2004).

A user-centred intranet is conceived, primarily, as a device to encourage organisational cohesion by providing communication opportunities for organisations with a high rate of change in the modern knowledge economy. An intranet is a mechanism for inter-organisational communication and information transfer, and this is, perhaps, its main value. In large organisations, particularly, there may be many

benefits for staff dispersed by distance and geography. Traditionally, the focus of intranets has been to disseminate human resource communications, and design that considers and collaborates with users is significantly different from old top-down dissemination of information.

The exegesis has specified the benefits of technological mechanisms by comparing embodied world ways of doing things. For example, email has the benefit of discussing things to and fro. Doing this by email takes less time than organising meetings. However, when matters are complex, real meetings are better than email because there is more responsive opportunity and more embodied world clues to assist the communication. An intranet is one type of technological mechanism, and so when trying to realise the benefits, its potential use needs to be compared to embodied world ways of doing things as well as other technological mechanisms such as email. An intranet can have features which provide access to an organisation's manuals, policies, procedures and forms. However, these can also be accessed via the standard Windows interface in a shared internal network, so it is likely that staff who use these items will compare the merits of the two technological mechanisms and decide which gives best access for them. Designing a user-centred intranet means offering features which provide the opportunity for capturing the know-how and creative participation of staff, but it is clear from the feedback that I received that staff need to perceive the benefits of to contribute in this way. Such contributions could be valuable in today's modern workplace.

In a knowledge-based and globalised economy, the rate of organisational change is significantly increased from the industrial economy model. A networked organisational paradigm provides an appropriate paradigm and vision for organisational architecture. A user-centred intranet is suited to a networked organisation, which is necessarily communication rich, valuing collaboration and participation. Many organisations are evolving towards a networked organisational paradigm, but there is no single "right" model for a network. Obviously, different organisations develop different forms of structure and culture that enable different degrees of collaboration and participation.

A user-centred intranet may be an opportunity to open up the culture of an organisation for more collaboration and participation. It is not possible to attempt to

implement a user-centred intranet without simultaneous supportive intervention from management.

This intervention expresses itself in the architecture of the way things are done in the organisation and also defines the role of a user-centred intranet in the boundaries of Human Resources and IT. In this sense, the designer of a user-centred intranet will simultaneously be aware both of the technology involved in the design and also of real use made of the technology in the embodied world. This develops a communication for the designer that bridges the “agenda divide” between IT’s focus on security on the one hand, and the creative marketing focus of New Media on the other.

When an organisation begins to develop a user-centred intranet, the process may bring to light issues connected with the degree of genuine support a leader is prepared to give to this type of networking in the organisation. It also brings to show the attitudes employees hold towards the organisation and to using new technology. In a networked organisation, staff need to balance their adherence to established protocols of line management and to agreed guidelines with self-designed informal work networks. The balance is necessary, because imbalance leads to either degrees of disorganisation or inflexibility. A user-centred intranet opens up an organisation’s communicative culture by the process of implementing it. It brings into focus how staff in an organisation communicate and what cultural permissions exist.

Internet technology has been evolving towards a user-centred paradigm. These same technologies are used for an intranet. The interactive communicative functionality is technically enabled by the emergence of online HTML to database interactivity. This is governed by the *.asp file convention. For example, instead of an administrator downloading staff pictures, the software can be adapted so that users can upload the pictures themselves. Instead of newsletters and messages being solely created from management, all users can be given the facility to post messages.

The user-centred and interactive technology designed into an intranet can encourage cohesion, a sense of belonging, and improved communication, and the benefits of its communicative features seem to outweigh other features such as storing explicit

knowledge in the form of manuals or reporting features. This does not mean these features will not benefit the organisation, especially larger and geographically dispersed organisations, but no matter the size or geographical placement of the organisation, the communicative element is likely to be of the greatest benefit.

Implementing a user-centred intranet might be a strategy for business survival and competitiveness, because it could support the cohesiveness of the workforce. It may be one tool that helps secure an organisations existence in an ever-changing business environment.

7.1 The organisation in a knowledge based and global economy

The first proposition, that a user-centred emphasis in intranet design is necessary in today's knowledge based global economy where there is a high rate of change, required an exploration of how Romus fits within such an economy. It suggested the necessity of exploring the concept of user-centeredness.

The response of Romus to its international educational markets is to continually adapt. The owner and driving force for the organisation is an entrepreneur who drives change in order to capture business opportunities. The culture of the organisation adapts through restructuring, role changes, and informal working networks. The rate of change, together with the leadership style of the owner, can sometimes create a state of semi-disorganisation.

As an educational institute serving international students, the organisation is very much connected to the global economy, as covered in chapter 2. The business of international education is influenced by international politics, exchange rate, place in the global market, economical situation of the overseas market, and shifting educational perspectives of the overseas markets.

The organisation responds to this in an entrepreneurial way, both by developing its products and also by aligning itself with strategic partners and in some cases inviting business partners to be involved within the organisation.

Descriptions gleaned from interview data referred to the organisation as: Family, Madhouse, Friend, River, Lava lamp, and a series of semi-isolated villages. Staff

used terms such as, organic like a jungle, having a liquid element, a high rate of change of direction, cooperative, and participatory. The organisation is certainly not structured in a static way. The challenge of maintaining cohesion in such an environment is a need that clearly exists for Romus Colleges. It is a modern organisation, which has a high rate of change.

In the previous chapter, data from the interview process reiterated that Romus Colleges was, albeit imperfectly, characteristic of a company operating in a knowledge based and global economy. Jason referred to Romus as “organic like a jungle, cooperative like chewing gum, participatory for folk with initiative, idea but not necessarily quality led, and more driven by ideas of management than proper market analysis”. June emphasised the rate of change when she said “Romus has a liquid element, whereby it can encompass changes and new opportunities almost without staff realising the changes happening”. Claire said that Romus was “organic, cooperative, and participatory”. She also reiterated Jason’s point about the lack of a quality led environment in saying that Romus was “perhaps not really quality led in terms of lack of follow up on customer comments/problems, or customer driven”.

Senior managers in the organisation are also entrepreneurs. This can lead to activity which is not strategically aligned. Nevertheless the sometimes sporadic entrepreneurial culture of Romus Colleges brings an enthusiastic impetus. The entrepreneurial spirit of the owner and senior managers provides a type of cohesion of belonging for those in the organisation as long as what the senior managers are doing is passed on to staff. The intranet as a communicative mechanism added a communication channel for senior management to update staff on initiatives and developments, providing a level of cohesion.

One challenge for the organisation is to provide for the organic change, while maintaining a minimal level of structured protocols. If there are too many structured protocols participative collaboration is stifled and if there are too many self designed organic working networks then there is too much disorganisation. Cohesion is needed in this environment and the intranet has served as one mechanism for cohesion. It is a new channel of communication. The revamped intranet at Romus became communication focussed and being user-centred it invites collaboration by staff sharing what is going on, information on who is doing what and how to contact

them, and pictures of people doing what they do around the organisation. The process of developing it also provided cohesion because of spin-offs. An attempt to create a reporting system through the intranet failed, but led to a new collaborative reporting meeting. An attempt to create a menu and sub menu system to access manual files failed, but the work to improve the files themselves created a quality improvement and more staff involved in updating files. An attempt to create a forum failed, but led to a monthly staff meeting which involved a wide range of staff sharing about their work was a spin off benefit.

Networked organisations

The networked organisational paradigm suits today's knowledge based global economy, where there is a high rate of change. Embracing a networked organisation facilitates structure that is collaborative and participative, which is essential when dealing with continuous change. The intranet project acted as a vehicle for change towards a networked organisational paradigm.

Undertaking the development and implementation of an intranet has been challenged in a sometimes hectic environment. Embracing a networked organisational paradigm provided a constructive way forward for introducing and implementing required changes. In such a paradigm, communication management becomes a feature of cohesion as does any mechanism to support networking and collaborative communication. The intranet evolved to supplement the networked organisational paradigm. The design process itself was user-centred, with evolving iterations being undertaken primarily following response from users.

The first theoretical proposition is therefore affirmed. A 'user-centred' emphasis in Intranet design is necessary in today's knowledge based global economy, where there is a high rate of change. A networked organisational paradigm is a constructive way to structure for a high rate of change. The characteristics of a networked organisation are similar to the user-centred design paradigm and the process of designing and implementing the intranet provided some cohesiveness in the move toward the paradigm.

Technical issues

A networked organisation may network across geographical boundaries. This raises technical issues. The intranet development and implementation process at Romus has experimented with the server location of the intranet and its components. If the intranet is located on a server outside of the organisation it provides the greatest opportunity for flexibility of use. It can be logged on to by divisions of the organisations in different geographical locations, sales and marketing personnel on the road or on international business trips, and from home.

However, this impacts on how an organisation uses traffic heavy data such as pictures, multi-media, and manual files. This project explored an auto-conversion process for changing the organisation's manual files into HTML and moving them onto an external server. In this way staff could update manual files and they became instantaneously accessible by all staff as a read only HTML version. In order for this system to be useful the files themselves needed to be useful. This required analysing the manual filing system and attempting to cull duplicate files, create file saving and naming conventions. However, the staff had different degrees of technical ability, and controlling file naming and saving protocols proved to be unreliable. Some staff developed files on their personal rather than the shared network drive. This in itself created duplicate files. The habit of emailing files to others also leads to duplication of files. Keeping filing conventions consistent would have required centralised control of manual updates and this would have defeated the idea of involving staff in updating their own manuals. If it was ever going to be possible to maintain filing conventions a great deal of training and support would be required and Romus Colleges did not have the resources to do so.

7.2 The effect of a user-centred intranet on organisational communication

The second theoretical proposition was that:

A "user-centred" Intranet will not only act as an artefact, but also the process of developing and implementing it will open up an organisation's culture, communication, and knowledge management in a participatory way.

Having a user-centred intranet means that participative and collaborative working networks are supported with an appropriate communication channel. This is necessary in a networked organisation. Having a user-centred intranet, however, does not guarantee that participative and collaborative working networks are effectively created and managed. This, then, is the subject of this section.

I have already asserted that a user-centred intranet supports and embraces a networked organisation by facilitating structure that is collaborative and participative, thereby becoming a vehicle for change. It does this most predominantly in the area of communication, but to achieve effective change, it became clear during the project that, collaborative and participative structure needed to be created and managed by a manager of communications. The second proposition is affirmed, but on condition the process is managed. A communications manager, who embraces participative and collaborative communication, can be responsible for driving the real change. The intranet supports this change.

Communication success

The two most successful parts of the intranet were the news page and the contacts page. The news page has been very successful in terms of participation of users across the organisation contributing many kinds of information. The way pictures are attached to news items provides a personal feeling. The news page has been used for sharing both formal and informal information across the organisation, effectively becoming a main notice board for the organisation and enabling an increase in information being dispersed. Compared with other methods of communication, it has the added advantage that messages can be instantaneously posted on the computer screens of all users in the organisation. The contacts page keeps track of changing staff roles and responsibilities and how staff can be contacted. Although initially designed for managers themselves to update, it has become a process largely taken on by the communications manager. These pages talk about what is going on in the organisation, who is doing what, and how can they be contacted. As a communication channel the intranet does this significantly better than any other way. The staff in the organisation needs an easy way to know these things. It provides cohesion. Because pictures are used in both sections it works in a very personal way, and so it brings a feeling of belonging. This is another benefit of the system. Once this theme of communication became apparent some additional changes were made

after the final revamp covered in the previous chapter. There were a special message section for the senior managers and the Fix-it section was replaced with student interviews, so that staff can see what is happening for its clients.

Here is a screen shot taken on 21/06/2005 which shows these additional features.

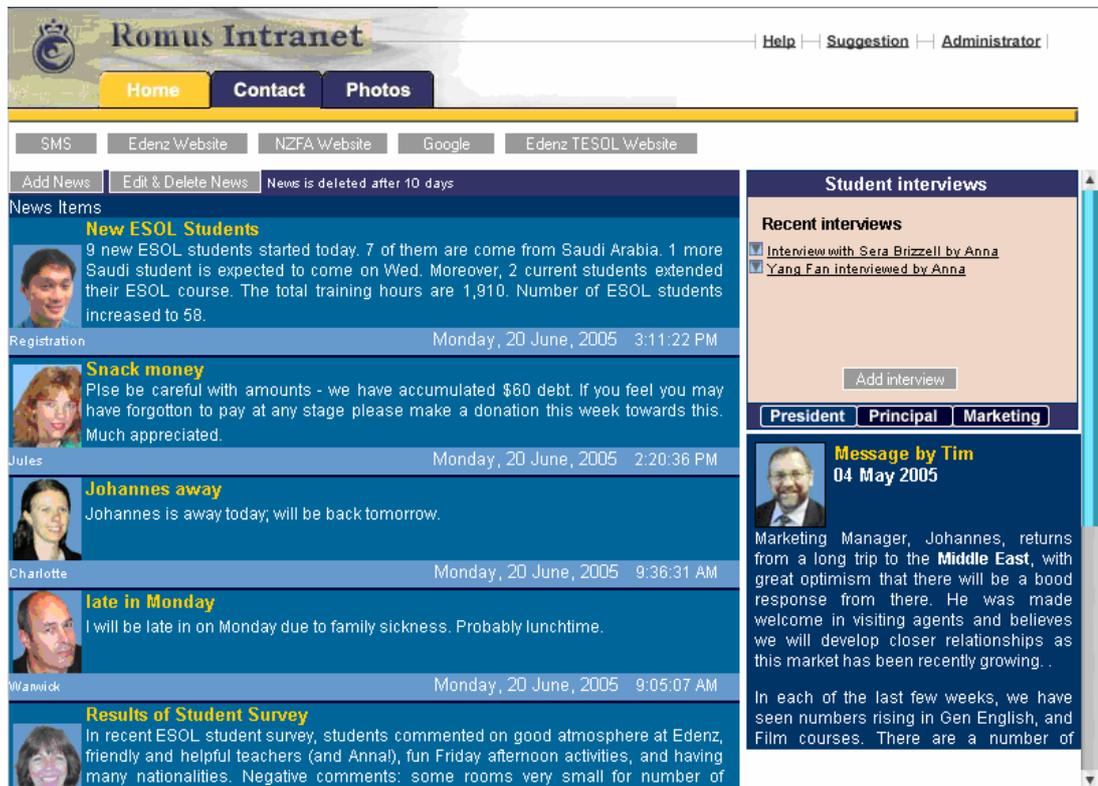


Figure 7.1 Additional features post revamp stage.

Other sections of the intranet were taken out because they were not effective. These included the file menu and sub menu system, the forum section, the calendar, and the reporting systems. When introducing technology it always has to be asked whether there is a significant benefit over other existing ways of doing the same thing. This is the reason these features did not work on the intranet. In the case of the file menu system the windows interface offered better versatility. In the case of the forum system, staff preferred to talk face-to-face. In the case of the calendar people prefer diaries that they can carry with them, in the case of the reporting systems managers in the first place prefer to control how they report and in the second place reporting face to face offers the opportunity to question. However, with most of these sections, management involvement to support the attempt to get them to work created spin off benefits. In the case of the forum we created a new monthly full staff meetings where

staff were offered the opportunity to talk about what they did. In the case of the Menu system we revamped the manuals files for the organisation and set in place some filing conventions and protocols. In the case of the report section, a new reporting system was devised where reporting was managed in a collaborative way.

The second proposition is affirmed. The intranet itself did not open up the organisations culture, communication and knowledge management, but the process of implementing a user-centre intranet did by means of the spin off benefits. By open up I mean raising an awareness of these areas and providing a means and driven process by which an organisation will change towards an effective model for business success.

In chapter 6, the issue of a lack of strategic communication from the top managers was discussed. Charles commented on “the common sense of improved central communication” with use of the intranet, and Claire reiterated other similar comments that “the attempts at the intranet have highlighted the difficulties with the present culture and its resulting lack of communication”. She felt the intranet had had a positive counteracting influence in saying “I think the intranet has helped heaps to lessen the impact of that [lack of management-led communication] aiming at top management being assisted in communicating to those below”. This illustrates that the process of developing and implementing the intranet assisted in opening up the organisation’s communication.

Providing access to the intranet

The Intranet needed to be set up and running on each computer and any login schemes needed to be working simply so as not to provoke misuse. As long as staff have primary access to a computer, then it is relatively easy to invite them to use it. Staff in an organisation with secondary access to a computer, however, are not as easily able to contribute. Because of the user-centred approach we were looking closely at the participation of staff, which would require all staff having access to the intranet. It was found that the teachers in the organisation did not have the same access to computers as other staff did, but shared secondary access to computers and therefore were somewhat disconnected from the intranet as a communication channel. The dual solution, which was pursued, was firstly to ensure all staff had at least shared access to computers. I also decided to recruit key staff in those areas

where staff shared access to computers, to be key supporters for enhancing communications. However, this did not overcome the limits of secondary access to computers, and so it was determined that other channels of communication were needed for staff without primary access to computers.

This issue illustrates the fact that there are many channels of communication in an organisation. Among them are intranets, email, notice boards, informal and formal meetings, internal newsletters. It also illustrates that an intranet is a mechanism not a management tool. It enables collaborative communication, but a person, a communications manager needs to manage all the communication channels in an organisation providing for overall cohesion and coexistence between real world and virtual modes of communication.

Technical emphasis

Technical aspects associated with the intranet affected the comfort level of staff using it. For example, we needed to change the auto-delete feature on the news page for news which was more than 10 day old. It was felt that a 'use-by' date on news was needed as staff were not comfortable with having their old news items 'in people's faces', once the items had ceased to be of interest. This action was about trying to instil a positive feel with the way the news was handled.

This illustrates the need for a communications manager to be aware of how staff find and use all channels of communication. This naturally includes the technologically driven mediums and the need for a communications manager to be involved with new media designers of organisational intranets. Along the lines of the usability testing sessions run for the development project a communications manager needs to drive critique of any system.

Training and maintaining

In today's workplace communication systems such as email require staff to be trained in the medium. Since a user-centred intranet requires more than reading top down disseminated information, users need to be able to log on and participate by entering data. This requires training. Training also included raising awareness of what people in the organisation wanted to know from each other, because the training is for collaboration, not just how to enter data.

For the intranet to continue working effectively, it must be maintained and supported, because a user-centred intranet empties of content if staff do not generate it. A communications manager needs to ensure that information is generated and up to date. For example, attention had to be paid to the intranet after the Christmas break. In other cases we noticed certain departments were not contributing at all. This is also a good test of user-centeredness. If it is dynamic and staff stop entering data it will begin to look empty, like an empty room. On the other hand, if it is staff are enthusiastically entering data in a collaborative way it will look busy, like a busy room.

7.3 The effect of a user-centred intranet on organisational culture

Organisational culture arises from the way people interact. It is the way things are done and the shared beliefs and assumptions that exist. During the development and implementation of the intranet, there has been little significant difference to the participatory nature of the organisation's culture. It has, however, provided a degree of cohesiveness. It has been encouraging to see from the taped diary dated 26 September, 2002 that there has been a perceived feeling of belonging and pride in relation to "the intranet, how it gave people who were using it a feeling of togetherness".

In describing the organisation, interviewees referred to it as a family in which no appointments were necessary, a madhouse in which too many people were disconnected, a family owned shop in which people deal directly rather than through procedure, a friend through which support is extended, a river which flows and courses with change, a series of semi-isolated villages with intermittent communication between villages at the whim of the local chiefs, and a lava lamp which can move and change in all directions and at different speeds. In a culture with these characteristics communication is a cohesive factor because it is a way to know what is going on.

D'Aprix (1999) asserts that the main dynamic of culture is the leadership. D'Aprix sees ineffective communication processes as a product of the beliefs of an organisation's leadership – mirrored in the communication system and behaviour of

the organisation. Although the culture of the organisation in which the project was undertaken is a networked organisation, the potential for full staff participation is somewhat limited, due to the owner's particular leadership style.

The forum was an attempt to foster collaboration and staff participation. While collaboration does happen without the forum, there are still a number of staff in the organisation that do not feel listened to. The lack of participation has not changed over the intranet development and implementation period. The statement has been made in this thesis that participation in the culture is extended on condition that "assertive initiative" is shown. This means that many in the organisation either are not listened to or do not believe that their participation will make any difference. On the other hand, for those that show assertive initiative, the opposite is true. They have various ways of involving themselves in change within the organisation and it is a mute point whether the intranet would make any difference to them – they can communicate and achieve change and difference in the organisation without any need for the Intranet. However, feedback from the interviews indicated that the intranet has helped the senior management to communicate more with staff about what is going on. The intranet has had a positive effect on how things are done, particularly in regard to communication.

Thus, the assertion that the process of developing and implementing a user-centred intranet will "open up" an organisation's culture has not been clearly proven. The intranet will have some affect because it will encourage a higher level of communication from the leadership and enable a higher level of communication from all staff. The comments from staff show that the organisation's culture is dominated not by an intranet but by people. Even though my role in the organisation provides the opportunity to train staff to be more participative, the owner of the organisation primarily sets the cultural tone, as he holds the majority of the power. My involvement with management interventions in developing and implementing a user-centred intranet may have influenced the culture to be more collaborative but not to be significantly more participatory. Therefore it would be more realistic to conclude that a user-centred intranet 'influences' an organisation's culture, rather than opens it up.

The importance of the role of a communications manager is clearly reiterated as far as cultural change goes. A communications manager can influence the leadership of an organisation working to link channels of communication in with organisational goals. So for example, if the leadership want to improve sales on any particular product, staff involved in the production or provision of that product can be encouraged to collaborate for improvement ideas. However, the leadership of an organisation need to embrace the networked organisational model in order to encourage such activity. Only then can dynamic cultural change be expected to occur.

7.4 The effect of a user-centred intranet on knowledge management

“Soft” knowledge or “know-how” can effectively be captured in a forum. As discussed in the literature review, Malhotra (2000) implies a knowledge management approach where the organization's members define problems for themselves and generate their own solutions. For this to be achieved through an intranet a forum would need to realise its potential. As discussed above this would be a too optimistic approach governing the organisational culture where the project was undertaken.

“Hard knowledge” refers to that which can be recorded and used for manuals or recorded in some way as intellectual capital. I created an auto-updating menu system for the intranet which accessed the manual files from the shared network drive. However, despite my best efforts I could not get this to work cohesively on the intranet. Some staff would not follow the guidelines for creating, updating and storing files on the intranet, and continued to work from the shared network drive.

I was not able to prove the robustness of a folder ordering system on the organisation’s network. This was partly because I attempted to get department managers or assigned staff to update their own manuals. In this process only some people followed the guidelines, while others would not. Only those staff who were administratively strong followed the guidelines. If the manuals had been centrally controlled I may have succeeded, although that would not be true to a networked paradigm. Furthermore, our organisation would not provide the resources to the communication manager to achieve this. If an organisation was focussed to achieve creation of manuals by the staff doing the work, I believe there would need to be a

lot of coaching to maintain consistency. Consistency is possible when one person is responsible for any job, as long as there is cooperation from staff involved. It is another thing entirely to get a group of people working to a standard without a large amount of supervision and training. When we are talking about a networked organisation we are talking about one where staff are contributing in a creative way. I cannot see how this is realistic.

Developing and implementing a user-centred intranet will open up an organisation's knowledge management in a participatory way, only on the condition that the filing structure is controlled according to guidelines and that it is robust enough when there is a high rate of change in the organisation. I believe that hard knowledge simply has to be centrally supervised in order to maintain consistency and the under resourcing for this at Romus Colleges is a fault of the organisation.

In discussing the issue of whether hard knowledge should be centralised, Nielsen (2002) focuses on retaining the centralized information sharing potential of intranets. He points out that intranets are still just an internal network of information. The auto-updating menu interface I created for the intranet was not used as there seemed no advantage to users compared with the commonly used windows interface to the shared drive. For an organisation in one location, the benefit of using an intranet for this purpose is negligible. If however, an organisation is geographically dispersed the idea of centralising hard knowledge management via an intranet makes sense, but would require resourcing for centralised control of hard knowledge to achieve it.

I have said that the guidelines for hard knowledge management need to be robust enough for change. The reporting mechanisms I designed for one department to use on the intranet worked for a time, but with the fast pace of change in the organisation, there was a restructuring of the reporting system along collaborative lines. This new system was a face-to-face event, which far outweighed the benefits of reporting through an intranet interface.

The process of developing and implementing the user-centred intranet at Romus has not opened up the knowledge management directly, but has had a spin-off benefit. The process led to an improved reporting system and a restructuring of the manual filing system and guidelines. These changes were not to be a part of the intranet, but

they were a great improvement from previously when the manuals had fallen almost completely out of use and reporting was sporadic within a chaotic culture. Many duplicate and irrelevant manual documents were culled from the system, a restructuring of the manuals and department folders on the shared drive was achieved, the communications manager took over the security access to the folders in cooperation with IT, and an internal audit requiring department managers to account for the state of department related manuals and requiring action plans for their developments was undertaken. A resorting of HR and management documents was achieved and these documents are now made available for all staff access.

Another spin-off benefit that occurred was cooperation between the IT and the communication manager. I took over the responsibility for setting security access for folders on the shared network drive. This came about because when a new staff member joins the organisation they need to be allocated to a security group, which in turn gives them certain permissions for accessing folders on the shared drive. Since my office managed human resources, we were most directly aware when staff roles were being adjusted and which areas new staff should have access to.

7.5 Contribution of this thesis to knowledge

The thesis propositions have been tested in a robust environment, where my role was that of a key manager. Significant leeway was possible with the degree of experimentation and management interventions were integrated with restructuring activities and the consequential re-jigging of related systems, such as administration, reporting and communications. During the process there was a wrestling with the issues of an organisation operating within the environment of a knowledge based and global economy and a consequential embracing of a networked paradigm.

The role of communication management surfaced as a requirement for managing a user-centred intranet and its coexistent technological applications within the context of managing communication channels. This finding is a contribution to the general field of knowledge on networked organisations. It has contributed to the role definition of communication managers and shown a number of boundary crossing activities that a communications manager would likely be involved in.

Conclusions

In the literature review it was pointed out that there was scant material available on this subject and no material with an insider's point of view so explicitly opening up the subject. The most applicable material came from consultants, who specialised in either intranets and/or communications, where they also enunciated the values of networked organisations. The findings of this thesis will be most pertinent for those working in these professional areas - the fields of intranet and/or communications consultancy. Managers involved in restructuring organisations and driving internal change (metastructuring) towards networked organisations will also gain insight from the thesis findings. Leadership can better understand the strategic importance of user-centred intranets and communication management if they wish to create a collaborative and participatory culture in today's modern business world.

For leadership and management the spin-off benefits have been highlighted. The value can be seen for resourcing a review process to redevelop and re-implement "user-centred" features into existing intranets. It provides a focus, for change for an organisation evolving into a networked organisation, for a communication manager to undertake. The process of developing and implementing the user-centred intranet at Romus Colleges was very much an action research project which evolved through development, testing and feedback cycles.

As DeSanctis & Fulk (1999) comments on the dynamic nature of this process which "support episodes of experimentation, reflection, and change in technologies and their use, so as to allow for the evolution of technological frames, work habits, and communication routines in conditions of change. (P. 133)

The networked organisation is a paradigm shift from the more hierarchical approach. Everything changes. Among the characteristics are that there is more merging of the boundaries of work groups and departments, greater collaboration and communication networking, responsibility shifting to staff to take initiative for outcomes with flexibility to design their own procedures. Leadership is a key requirement for this paradigm shift to come about. An intranet could facilitate such a change, but the core culture of the organisation, which is mainly created by the leadership of an organisation, is considered the primary focus if an effective networked organisational model is to evolve. This has been reinforced by this thesis.

But the project has shown that developing and implementing a user-centred intranet has brought the networked organisational model to the fore. Since this model is an effective model for today's business success, introducing or adapting intranets with a user-centred focus is necessary.

Sviokla (2004, p. 1) suggests that technological uptake plays a significant role in "bringing new business structures to the fore" and that since "management structures ultimately make the difference between a company that adjusts to the environment of the 21st century and those left behind" technological development and implementation has a strategic role.

7.6 Conclusion

The first proposition is affirmed. A user-centred emphasis in intranet design is necessary in today's knowledge based global economy, where there is a high rate of change. The networked organisational model should be embraced as a flexible model catering for change by promoting organic and dynamic networking within an organisation. This environment is communication rich and collaborative. A user-centred intranet is a communication channel well suited to support this model.

The second proposition is conditionally affirmed. A user-centred intranet will not only act as an artefact, but also the process of developing and implementing it will open up an organisation's culture, communication, and knowledge management in a participatory way. However, the degree that this will be achieved depends on a number of factors. The leaders of an organisation need to embrace a networked organisational model, encouraging and resourcing communication management for a culture of participation and collaboration.

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