

Harnessing the Knowledge Assets of Older Workers: A Work in Progress Report

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Abstract

This paper reports part of a study that examines how to harness the knowledge assets of older workers. Five older workers, from both public and private sector organisations, were interviewed face-to-face regarding their potential contributions to other work colleagues based on their expertise on work practices. Preliminary results revealed the following set of common themes: (a) challenges in transitioning to retirement, (b) relevant and transferable skills and knowledge, (c) organisational readiness in retaining knowledge and skills and (d) the use of information technology to support knowledge sharing. The implications the findings have for future research will be discussed.

Keywords

Older workers, knowledge transfer, knowledge sharing and information technology.

1. INTRODUCTION

There will be a significant reduction in the workforce as baby boomers retire. In the US, there are an estimated 78 million baby boomers, now aged between 37 and 55. The estimated size of the demographic group known as Generation X, aged 25 to 36, is 44 million (Bell 2001). In New Zealand, the older labour force, 45 to 64 years, will grow rapidly, increasing 65% between 1996 and 2020. Over the same period, the segment of the labour force between the ages of 18 and 44 years will decrease to 11% below the 1996 base year that Statistics New Zealand uses for New Zealand labour force projections. In the UK, by 2025, 33 percent of workers will be over age 50 (The Observer, 2004). World-wide productivity and growth are predicted to decrease, as workforces decline. Global ageing will experience a sudden change around 2010, with the population of Japan shrinking, then the European Union, and even China in the following decades (The Guardian 2001).

Older workers possess a high level of knowledge, skills and experience that younger workers have not developed to the same degree, and there will be a shortage of younger workers within the next 10 years. The effects of this emerging trend are now beginning to be seen.

The demographic trend presents a two-fold problem. Firstly, organisations are faced with the problem of loss of knowledge, skills and personnel, and may not yet have effective solutions or approaches for addressing them (Shapinker 2000).

“Employers have to realise that there is a crisis developing, and they must find ways to attract qualified workers as the pool of new workers gets smaller.”

(Albrecht 2001, p 62)

Organisations will need to explore ways of retaining knowledge and personnel with a range of ages, skills and experience in the work force. Secondly, for a number of reasons, older workers do not necessarily want to move from full-time work to full retirement, as was traditionally the case. They may have accumulated insufficient funds for retirement (Connolly 2000) or they may be seeking a balance between work and life, with the opportunity to continue sharing their knowledge, and may still want the challenge associated with working (Bell 2001).

Organisations need to put in place processes and supporting IT systems to manage the retention of knowledge in the organisation when experienced workers retire, thus enabling older workers to transfer their skills, knowledge and experience as a corporate asset.

This paper describes the results from an exploratory study that identified potential for a knowledge sharing process to occur, from the viewpoint of older workers. It also identifies the role of IT in the knowledge sharing process.

The paper begins by providing a brief summary of relevant literature. The second section describes the case research method used in the study. The third section describes some key results and the final section identifies implications for future research.

2. LITERATURE REVIEW

2.1 Emerging workforce trends

There is a crisis developing, with organisations having to plan for retaining as many older workers as possible, since the available pool of workers diminishes significantly after the baby boomers have reached retirement age. Organisations need to manage their workforces on a longer planning horizon. Already, employers are recognising this and rehiring workers or offering transitional arrangements in order to delay full retirement. One advantage of this approach is that existing older workers represent a known quantity in terms of their skills and reliability (Albrecht 2001).

Because of increasing financial pressure, older workers often are not in a position to move directly into retirement once they qualify for New Zealand Superannuation from age 65. Others are not interested in a long period of retirement, wishing to reinvent themselves (Dychwald and Forsberg 2001). Having been through redundancies during the corporate restructuring of the 1980s and 1990s, they may also be comfortable with change and actively seek it. Thus, increasing numbers of older people are seeking work and retraining in order to take on new roles. According to the Cornell Retirement and Well-being Study, 44% of retirees studied have been in paid work following retirement, with the most popular reason being to work in order to stay active (Gardyn 2000). New Zealand will have to rely more on mid- and late-career workers to meet skill demands. Employers may have to create new employment patterns to retain older workers (Department of Labour (NZ) 2002). The US and other Western nations are ill prepared for ageing and an aged society. In the US and Canada, the bulk of the baby boomers are yet to retire, and there is therefore time to plan strategically for an older workforce and an ageing population. Employers also have time to recognise and focus on the rewards that older workers seek. With further economic growth expected, the labour market will tighten, and employers will find that they need to attract and compete for older workers (Salisbury 2001). Planning needs to start now, both from a government and personal perspective, in order to cope with social and lifestyle changes for older people. A failure to plan for retirement will lead to the decline of people over 65 years of age. Where workers generate earnings beyond the age of 65, this makes a significant difference to their economic independence. Those who retire in their early 60s may find that they are not adequately prepared financially.

As skills become scarcer, organisations will need to seek older workers to meet the shortage. A challenge that will face employers will be the need to get young and older workers to team together in a productive and harmonious way (Challenger 2000). A future trend may be for entrepreneurial older people to team up with technology savvy younger people to develop new products and services, combining the skills and experience of older workers with the technical know-how of recent graduates.

Older managers, chief executives and senior staff will be in demand for their reliability and experience, with organisations recognising their track record and the lower requirement for training, through more attractive remuneration.

2.2 Knowledge assets of older workers

Older workers can be resilient, having experienced the stresses of the 1980s and 1990s corporate environment, having the responsibilities of the sandwich generation, caring for ageing parents and having children later than the previous generation (Bell 2001, Platt 2001).

Baby boomers are the largest sector of the population, but they are also the segment where a significant amount of institutional knowledge resides. They have time on their hands, they have good health compared with past generations, and they have knowledge that is a valuable asset to organisations. They need to find ways of channelling these assets. They have capabilities to mentor other workers, and through this role, build a sense of security, be motivated in meaningful work and enjoy challenge and growth.

Employers need to address the threat of loss of institutional knowledge, given that by 2005, over 50% of workers will be over the age of 40 (Fellows 2001). Baby boomers have valuable knowledge that their younger and less experienced colleagues may not have developed. It is therefore important for employers to implement processes for retaining and embedding into organisations the knowledge that older workers possess. This includes knowledge of how technology, business processes and systems have evolved in the organisation, and knowledge about the organisation's markets and customer relationships (Rappaport 2001). They also hold valuable information and knowledge of key industry players and resources, and tacit knowledge about the company's culture, politics and norms. Another important aspect of organisational knowledge is that older workers have a range of experience that has been built up from lessons learned over time. This leads to a meaningful understanding and perspective on why the organisation functions the way it does, and why certain tactics or approaches would be appropriate.

There will be specific areas where older workers will have unique skills that are no longer learned. For example, Hilson (2001) and Goodridge and McGee (2002) refer to a severe shortage of mainframe applications programming skills and workers experienced in legacy applications. These skills may no longer be taught and younger workers are not interested in learning them, preferring new technologies such as Java programming and web-based design and development. However, such applications often require interfaces to legacy or mainframe applications. Mainframe related skills are therefore required for as long as customers have no compelling reason to migrate from mainframe computing.

Older workers tend to have well-developed communication skills, knowledge, a sense of loyalty and good work ethics (Bell 2001, Bolch 2000, Albrecht 2001) and are creative (Wellner 2002, Dychwald and Forsberg 2001). According to Bell, there are changes in the work environment such as changing ownership models in real estate, changes in industry structure and the use of technology that favour workers with maturity and experience, with a focus on challenge ahead of financial rewards.

A study of human resource consultants by the American Association of Retired Persons (AARP) revealed that older workers are valued for their knowledge, experience, good work ethics, reliability, solid performance and that they respond well in a crisis.

2.3 Knowledge sharing and transfer

Knowledge is embedded in an organisation's culture, policies and procedures, systems and documents, as well as individual employees (Alavi and Leidner 2001). This knowledge may be tacit (related to actions and experience) or explicit (articulated, documented and communicated), and reside with individuals or groups. Knowledge management is seen as a process that involves different activities: creating, storing/retrieving, transferring and applying knowledge (Alavi and Leidner). Similarly, Wiig (1999) refers to a process of knowledge development, capture, transformation, transfer and application.

At a time when the workforce is dwindling with the post-baby boom generation, there is a demand to capture and transfer the knowledge assets held by older workers before they retire. From a competitive viewpoint, knowledge is "emerging as one of the more strategic, although invisible, assets for organizations" (Kakabadse, Kouzmin & Kakabadse 2001). With the quick pace of organisational change, knowledge may be current only for a short time, and organisations need to enable faster organisational and personal learning through more effective knowledge transfer methods between knowledge workers. (Wiig 1999). Operational knowledge, ie knowledge on business processes needs to be captured effectively when employees depart, so that organisations do not lose large amounts of knowledge, particularly tacit knowledge which needs to be transformed into shared or explicit knowledge, or what Wiig calls structured intellectual capital for the benefit of the organisation.

UK research indicates that there are few studies on how those seeking to acquire knowledge interact with repositories of knowledge (Connell, Klein, Loebbecke and Powell 2001). The transfer of knowledge may be person-to-person (expert to mentor) or from system to person, through the use of support tools such as decision support systems, knowledge bases and corporate intranets. The right motivation also needs to exist for knowledge transfer to be successful (Kalling 2003), and this may need to be managed by the organization, so that there are structures and processes in place that meet the need to retain knowledge within the organization.

There are different frameworks for organisations to encourage groups and individuals to swap or share knowledge as part of the organisational culture. Encouraging effective and knowledge sharing behaviour requires collaboration and support in a non-political environment, such as voluntary learning communities, knowledge networks or communities of practice (Gongla and Rizzuto 2001). Membership of these communities can continue after an employee has left an organisation, and such ongoing links can enable the retiree to remain contactable for mentoring where this is appropriate. These communities provide an environment and

motivation for knowledge transfer and may decrease the level of institutional knowledge that is lost on retirement or resignation.

A common challenge is that when employees leave an organisation, it is difficult for both parties to determine what valuable information the employee has, who will benefit from transferred knowledge, and what type of knowledge it is. In terms of codifying knowledge (Ruggles 1997), a possible approach is to determine what types of knowledge are useful to capture back into the organisation. Process knowledge and factual knowledge are more easily defined but of lesser value to the business. However, catalogue knowledge (knowing where to find knowledge) and cultural knowledge (the knowledge about how to achieve results in the organisation culturally and politically) may consist of high value tacit knowledge that can be codified and made available to other groups. There are also other methods of ascertaining what an employee knows and what might be of interest to others, such as the use of concept maps as a means of modelling knowledge in a diagrammatic way (Gaines and Shaw, undated).

One possible model for viewing knowledge transfer is suggested by Gupta and Govindarajan (2000; cited in Alavi and Leidner 2001, p. 120). In this model, the five elements of knowledge transfer, or knowledge flows, are the perceived value of the source unit's knowledge, the motivational disposition of the source to share knowledge, the existence and richness of transmission channels, the motivational disposition of the receiving unit to acquire knowledge from the source, and the absorptive capacity of the receiving unit to acquire, assimilate and use knowledge. Alavi and Leidner point out that most of the literature focuses on knowledge transfer channels. IT support for knowledge transfer has mainly been for impersonal and informal transfer, eg discussion databases. Formal and impersonal means are also supported through knowledge maps and corporate directories.

3. RESEARCH METHOD

3.1 Case research

The case research method was used in this study. Case research method is considered useful in situations such as this study, when the study is exploring a contemporary event, where control of subjects or events is not necessary and where there is not already an established theoretical base (Benbasat et al. 1987, Yin 1983). Case research method can also shed light on a phenomenon (process, event, person or object of interest) and has been noted for three purposes; to produce detailed descriptions of a phenomenon, develop possible explanations of it, or evaluate the phenomenon (Leedy 1997). Case research method is considered useful when a natural setting is needed and when the study is exploring a contemporary event, where control of subjects or events is not necessary and where there is not already an established theoretical base (Benbasat et al. 1987). It is considered an appropriate research method for organisational studies because of the way it uses direct observation and systematic interviewing to gather data, and in particular when "how" or "why" questions are being posed (Yin 1989, Cresswell 1994).

3.2 Data collection and analysis

Five participants were interviewed in this study (see Appendix 1 for a brief summary of their background). Each interview took about one hour. Four interviews were recorded on audio-tapes and written notes were taken during the fifth interview. The audio-tapes were immediately transcribed so that key points were noted and themes and ideas teased out prior to the next interview. All interview notes and transcriptions were returned to the participants for checking and validation.

Data analysis was conducted simultaneously with data collection. Open coding was conducted by assigning codes and labels in the margins of the transcriptions and they were often a summary of a section of data that was considered to be important to the study. Basically, the data analysis involved reviewing the interview material, drawing common themes and summarising the findings of the interviews.

4. FINDINGS

Although the personal background and organisational contexts of participants were varied, the data revealed the following set of common themes: (a) challenges in transitioning to retirement, (b) relevant and transferable skills and knowledge, (c) organisational readiness in retaining knowledge and skills and (d) the use of information technology to support knowledge sharing. The details of each theme are discussed in the next few sections.

4.1 Challenges in transitioning to retirement

Participants' understanding of the concept of transitioning was that a worker reduces their working effort or hours over a period of time, rather retiring directly from full-time employment.

There are some challenges in knowing how to handle the transition in terms of taking a reduced role or responsibility in the workplace, while maintaining family relationships. While a part-time role could mean less work-related stress, there is also certain amount of stimulation to be gained from working and having knowledge associated with a role. This would have to be replaced by other means. It would also be important in reducing to part-time work, to ensure that work is handed over to others in an effective manner, then to respect that they may handle the role differently, according to their style and skills. There could be challenges in still meeting the core requirements of the job, while spending fewer hours at work, and dealing with a reduced income.

There could be a challenge in enabling employers to benefit from knowledge transfer, with knowledge that other less experienced staff do not have. Also, the retiree may not be aware of what knowledge is useful to the organisation, or of no value – "I don't know what I know". This is the converse of Davenport and Prusak's (1998) discussion on organisations needing to "know what you know". If organisations understand their processes for acquiring and maintaining their knowledge assets, this may assist with identifying what areas of workers' knowledge, skills and experience it is important to retain when they leave the organisation. Huber (1991; cited in Alavi and Leidner 2001) suggests that organisations also have weak systems for locating and retrieving knowledge that resides in them.

Transitioning to retirement, rather than retiring suddenly, also means that families have an opportunity to adapt and adjust to a retiree who has had a long career suddenly not setting off to work any longer.

4.2 Transferable skills and knowledge

In exploring the types of skills, experience and knowledge that could be useful to transfer back to the organisation, we found there were some uncertainty in this area, with some people not having considered this question before.

A key theme from the interviews is that a certain amount of knowledge and experience acquired over the timeframe of a career is re-useable, and there were examples of individuals who had learned from workplace or industry changes and events over the years, using their knowledge as similar events occurred many years later. The point was also made that it is difficult to identify knowledge or skills being re-useable at the time they are acquired. In fact, older workers may have skills that are time-consuming to transfer to less experienced staff. If these skills are required quickly, the workers themselves may still be accessible and available to complete the work while at the same time training others. The year 2000 business problem was cited as an example of such a scenario. Goodridge and McGee (2002, pp. 48) refer to "the unique skills that each generation can bring to the workplace can make a stronger team" due to complementary skills. Challenger (2000) observes that mixed teams are required to maintain growth due to the skill shortage.

Thus, there is a significant issue in identifying firstly what is valuable knowledge to an organisation, then finding a way to capture and use it, both from the organisation's and the individual's point of view.

Experience, wisdom and personal communication skills were discussed by several participants as being important, as business success ultimately relies on the ability to get the best out of people in terms of performance, getting the right information from people to achieve results as a manager, and in serving the needs of customers. If these skills can be taught and retained in an organisation, this would lead to a more successful business. Where businesses have achieved a high level of automation and driven down the per transaction cost, this has usually been achieved through simple processes to meet the needs of 80% of customers. These processes are not information-rich and staff who provide high-volume customer services are trained to handle a narrow range of needs.

Older workers with pre-automation experience usually hold the valuable knowledge that is associated with serving the other 20% of customers who have special needs but are likely to be high value customers. An example of this is the banking industry, where one participant noted that the bank manager no longer knows his customers personally, due to automation and changed business models. According to Fellowes (2001), "employees with longevity and tenure know about lessons learned on the job, often painfully and over a protracted period of time." (pp. 62-63).

Some participants referred to the valuable skills as being specialised knowledge. An example of this related to the mechanisms that drive the share market and interest rate trends, the understanding of complex formulae for

calculations and when a financial institution should react to these changes. Some older workers also have a strategic perspective on business and a reasonable understanding of external factors that shape business.

Some participants stressed that older people need to capitalise on what they've learned, as there are business opportunities for those who still want to be involved in business. In a formal sense, older people contract with organisations and use their skills to complete work of a specific nature, while training others (Dychtwald and Forsberg 2001). This may occur in a project team where the recent retiree could provide skills that are complementary to the skills of other team members, while working on the project. Older workers may move into new areas of business and extend their skills further. Zuckerman (2000) described older workers who packaged their knowledge and experience in new ways to develop web-based businesses. Challenger (2000) notes that older people possess business acumen and predicts a trend of retiree entrepreneurs.

In the area of general skills, some participants discussed the opportunity to mentor younger and less experienced workers to perform more effectively within an organisation, in terms of developing writing skills, managing in an office environment on a daily basis and being adaptable to business change. St-Amour (2001) refers to older workers being more motivated and having overall better work skills than their younger colleagues. There was a recognition that organisations need to ensure in their knowledge management and succession planning processes, that employees who leave can transfer their knowledge to the organisation. In particular, training another person to fill their role so that those who leave are not irreplaceable. The training for the new person should also include unwritten knowledge, as well as standards, processes and protocols.

Knowledge about how an organisation interacts with the external world, stakeholders and communities is also valuable. If there are effective methods and processes for consultation, communication and facilitation with these stakeholder groups, i.e. relationship management (Rappaport 2001), then these are skills that should be retained in the organisation. In some cases, this aspect of an organisational role or process may have evolved due to the particular skill set, proficiencies (such as networking skills) and experience of the incumbent. Because it is often difficult to find the same combination of skills in another employee, it is even more important to pass on this knowledge in a written form. This can be supplemented with mentoring and support, depending on the needs of the employee taking on the role of the retiree.

There are also opportunities in the broader community to transfer their skills and experience to younger people such as those seeking work experience. There are also opportunities for swapping skills and resources, where older workers may transfer their skills and knowledge to others on a voluntary basis, in return for some other type of assistance that may be required, eg providing IT advice in return for help with voluntary work. Platt (2001, p26) states that "baby boomers represent the largest segment of US workers, but over-represent in the levels of skills and knowledge."

4.3 Organisational readiness in retaining knowledge and skills

During the interviews, several participants pointed out that in order for knowledge transfer to take place, the organisation has to perceive an opportunity for this to happen. Most businesses have not formally addressed the growing trend for workers to leave the labour force in stages (Rappaport 2001). While participants would like to believe that organisations would see opportunities, this depends on the organisation's preparedness, and whether it has processes in place to facilitate knowledge sharing. Often there is a lack of formal processes within organisations, with business managers being responsible for facilitating knowledge transfer.

Before embarking on change processes and systems implementation for knowledge management and decision support systems to support knowledge transfer, there is an opportunity for organizations to identify a strategic value proposition for knowledge transfer (O'Dell and Grayson 1999). The use of technology needs to be considered alongside other enablers such as a supportive culture, infrastructure such as knowledge management services, and mechanisms for measuring progress and benefits.

The study confirmed that in every opportunity for knowledge and skills transfer, there needs to be a recipient for the knowledge, who recognises the need for professional development and wishes to learn from an older worker or someone in a more senior role. Organisations need to make connections between older workers and those who want or need to build new skills. They have to be able to access older workers, especially if they have left the organisation.

In an environment of low staff turnover, knowledge sharing is easier and less costly, especially where staff have developed career paths within a single organisation (Albrecht 2001). Where senior staff are recruited externally and do not remain in the organisation long, means additional effort is required to retain their knowledge when they leave. There is also an issue in that as organisations downsize and become smaller, they also lose the ability and capacity to rebuild that knowledge.

There appears to be a new trend emerging for organisations to re-introduce or reinforce graduate recruitment and training programmes, so that new employees can gain a better understanding across a range of business areas and how they are supported by information technology.

4.4 The use of information technology to support knowledge sharing

In discussing the opportunities to use IT to facilitate knowledge sharing, participants emphasised that there must be an appropriate balance between the use of tools and the person-to-person element of learning. Visual cues provided in face-to-face communication are a clear indicator of whether learner and mentor understand one another in terms of the learning process.

The types of technology used included mobile phones, electronic mail, electronic documentation, Internet access, teleconferencing and faxes. Remote access to organisational systems, tools, utilities, data and information via a high speed connection is essential for workers who work from home for part of the time. While all of the participants had an office in their organisation, some also maintained a home office, and their own company office in the central city, as well as a desk at a client's site. In some cases, participants were aware of technologies they do not personally use at present, but would be prepared to use for the purpose of knowledge transfer, or if it is required to perform a business process. They also recognised that the types of technology used to assist with knowledge transfer would depend on other factors such as the types of knowledge being transferred. Huber (2001) describes "knowledge contexts": archived codified knowledge, archived non-codified knowledge and person-to-person communications. The findings support O'Dell and Grayson's (1999) view that people share tacit knowledge, while IT better supports sharing of explicit knowledge.

In transitioning to retirement, it was also recognised that any tools that support the ability to work from home would be useful, as most participants saw this as part of the transition process. Advantages of working from home are the efficient use of time, avoiding traffic problems and reducing the need to be tied to a particular physical location for working. In one case, it was possible for a participant to work from any location, supported by a mobile phone and laptop with the ability to connect to a client's network so that his location was transparent to clients. The study participants referred to the potential value of non-codified information, ie which can be interpreted and re-used, in knowledge transfer to support the decision-making processes of other staff in the organisation. Knowledge management or decision support systems would need to provide this capability in order to effectively support knowledge transfer. Archived, codified knowledge (Huber 2001) existed in the participants' organisations to some degree, in the form of procedures, policies and process documentation.

However, all participants emphasised the need to keep in touch with colleagues by being around people in the office environment, as working remotely on a full-time basis becomes lonely. The value of maintaining networks is therefore important at a time of transition and change.

5. DISCUSSION

While there is a significant amount of literature, it is mostly in a North American setting and includes a lot of discussion on introducing the right to continue working part-time while drawing a pension. This is a more significant issue in the US than in New Zealand. None of the participants was receiving state superannuation, and it is also permissible to draw an annuity from previous employment while continuing to work elsewhere. Access to pension funds was not an issue and not mentioned as a reason not to retire.

The literature reviewed addressed workplace initiatives that would assist North American companies and authorities retain older workers and their knowledge. There is a reasonable amount of focus on the need for policies to be upgraded (recruitment, benefit incentives, training) to cater for an aging workforce. The literature cites many examples of initiatives like the establishment or strengthening of knowledge management processes and systems within organisations to capture and retain knowledge, and companies introducing phased retirement schemes to lessen the impact of losing baby boomers to retirement.

The strong impression from the interviews and discussions in the study was that individuals have taken personal responsibility for their own plans. Although there were some concerns over issues such as state-provided health services and pensions, individuals referred to putting in place their own arrangements where they thought they needed to. Most people referred to having a plan or a vision, in some cases this had been in place over a number of years and they felt they had control over achieving their goals.

Thirdly, in the discussions on knowledge transfer, it was evident that the organisations involved did not have any formal processes for knowledge transfer. There were examples given of many instances where valuable knowledge had been lost from organisations through job losses, a severe level of redundancies and failing to

have adequate handover processes where staff leave the organisation. In most cases the loss of skills and knowledge was not realised until after the event.

Because organisations did not have existing processes for sharing knowledge, mentoring or other arrangements for capturing knowledge, participants did not express strong views on how a knowledge transfer process might happen. There was some general discussion on the subject, but there was not a strong vision. The key factors were that older workers are willing to share their knowledge, provided there was an audience for it, and the knowledge was valuable to the organisation. Any process for knowledge transfer would have to meet the needs of both parties, be reviewed periodically against the original expectations, with an end point for the process.

Participants were willing to be mentors to younger or less experienced staff, providing they could add value to their roles. They were also prepared to use information technology or communications technology to support the knowledge transfer process, but only if it did not detract from the objective.

6. IMPLICATIONS AND CONCLUSION

There are a number of implications for further research. Firstly, it would be interesting to identify an organisation that recognises the need for knowledge transfer, perhaps has an awareness of needing to retain the knowledge of baby boomers and is interested in trialling a process for this. It would require some further investigation to ascertain whether there are any local organisations that have a phased retirement scheme in place.

Secondly, will a knowledge transfer process only be successful if the organisation has a perspective of knowledge? Alavi and Leidner (2001) posit that an organisation's approach to knowledge management relies on how it views knowledge. If knowledge is an object, then the focus will be on building knowledge stocks. If knowledge is a process, then the emphasis will be on knowledge creation, sharing and distribution. It would be interesting to explore the impacts of these different views on a knowledge transfer programme. Considering the implications for older workers as mentors would be interesting from this perspective.

Finally, this study has only touched on the use of tools and technology to support the knowledge transfer process. There are many more tools such as concept mapping, knowledge-based acquisition tools and collaborative communication tools that could be available to support the process. There is therefore an opportunity to explore the potential use of tools, particularly where knowledge exchange is taking place in a knowledge intensive business environment.

In conclusion, we believe this exploratory study has identified a number of issues and challenges for organisations to consider while planning for their workforce requirements in the future. It is hoped that this paper will promote identification of and discussion about the many complex issues associated with the introduction of policies for knowledge sharing between older and younger workers and the role information technology in enhancing the knowledge sharing process.

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APPENDIX 1 – PARTICIPANT PROFILES

All five participants who volunteered for interviews are over 50 years of age, and are either considering transitioning progressively from full-time work towards retirement, or have already started this process. All participants are knowledge workers who recognise the importance of knowledge as an organisational asset and the importance of its transfer to less experienced workers. They are all aware of the opportunities for organisations to use information technology and tools to support the transfer of knowledge and skills, and to support the relationship between older workers and those to whom knowledge and skills are transferred.

At the time of the research, each participant held a role with a significant reliance on knowledge, skills and expertise built up over a long, often varied, career. All participants also have interests and actively participate in their communities, with some having formal roles and responsibilities.

Participant A

This participant is a senior executive in the government sector, and had started the transition to retirement, having previously held a full-time role as Chief Executive in government. Her role relies on her unique mix of skills, experience and social capital, to manage and co-ordinate a wide range of volunteers in a process of community consultation. The objective is to ensure that government legislation and policies reflect the needs of the wider community.

Her plans for the future are to continue in this part-time, permanent role while her skills are in demand, and balancing her career with family and social activities.

Participant B

Participant B was a full-time manager responsible for managing the office of a national sporting organisation. She has had a continuous full-time career, including managing her own business, while raising a family and is now considering the transition to retirement by taking one or more part-time positions. She is considering the possibility of working from home and minimising commuting through opportunities to leverage IT. She recognises that there needs to be an appropriate balance between remote working and face-to-face communication in maintaining strong working relationships.

Since the study, this participant's organisation relocated to another city. She now has a part-time office management role with another company.

Participant C

A full-time senior executive in the banking sector, this participant holds significant product knowledge and knowledge of business logic and customer relationships, often not well reflected in IT systems. He plans to organise his working life so that he transitions to retirement progressively, as he is aware of the impacts of working full-time then retiring completely. He is interested in knowledge transfer in a way that is beneficial to all parties involved – organisations, their employees and older workers.

Participant D

The restructure of this participant's organisation, a state-owned enterprise, led him to accept redundancy and he was subsequently re-hired as a consultant for a significant project. On completion of the project, he has continued working as a contractor. His services include providing business and IT consultancy advice, and he limits this to a part-time role by choice. Since retirement, he has run his own business and achieves a satisfactory balance between work, interests and leisure. He plans to continue on this basis, reducing his workload as appropriate.

Participant E

This participant retired from the public sector and then started his own company with a business partner. Part of the company's business involves providing IT consultancy services, and he has continued in a role of part-time consultant, working on IT projects. He actively participates in knowledge sharing and mentoring in the organisation, and recognises that skills and knowledge acquired over a long period of time can be reused in the present business environment. He plans to continue managing his own business, consulting and his contributions to a number of civic and community organisations.

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