Why Isn't Teleworking Working?

ERLING RASMUSSEN[*] and GARETH CORBETT[**]

Abstract

Since the 1970s, employers have attempted to introduce more flexible working arrangements in their quest to improve efficiency and reduce costs. More recently, when faced with more turbulent labour markets and skills shortages, employers, unions and academics have advocated a balance between organisational and employee flexibility. Besides the extensive use of traditional flexible working arrangements – for example, part-time employment and shift work – it has been anticipated that annual hours, job sharing and teleworking would become the way of the future. Perplexingly, this has rarely eventuated. This article examines teleworking, its rationale and its failure to deliver on its initial hype. Drawing on insights from recent research as well as data from the New Zealand and International Cranet surveys of human resource management practices amongst large firms, the article explores the various theoretical and practical angles associated with teleworking. In particular, the importance of traditional management and employee attitudes is stressed.

Introduction

Flexible working practices have been a mainstay on the organisational agenda for several decades. In the initial 'flexibility debate' of the 1980s, where the Flexible Firm model and advocacy of the OECD dominated the debate, the focus was squarely on organisational efficiency and cost-cutting (Atkinson, 1984, 1985; Bruhnes, Rojot and Wasserman, 1989; Deeks and Rasmussen, 2002). The push for more flexible working practices was also associated with increased female employment participation rates, growing service sector employment and the outsourcing and off-shoring of jobs. Overall, 'flexibility' prompted a rise in atypical employment patterns and often became linked with insecure or 'precarious' work (Heckscher, 1995; Tucker, 2002) while so-called 'core employees' were frequently faced with longer hours and a more stressful working environment (Gershuny, 2000; Schor, 1991; van Wanroy, Bretherton, Considine and Buchanan, 2006).

On the other hand, flexible working practices have also been viewed in a positive light as a stepping stone to full-time, standard employment and allowing workers to balance employment and non-employment needs (Felstead and Jewson, 1999; Schmid, 1995). As stressed by Dex and Scheibl (2001) and Johnson (2004), flexible working arrangements have been heralded as a means of reconciling and balancing increased pressures of both work and family life. Furthermore, changes in labour market regulation, social welfare entitlements, taxation and suitable childcare could facilitate atypical employment patterns and ameliorate some of the drawbacks (Ginn and Arber, 1998; Rasmussen, Lind and Visser, 2004). Thus, new forms of flexible working practices – such as annual hours, job sharing, teleworking –

[*] Prof Erling Rasmussen, Auckland University of Technology; e-mail contact: erling.rasmussen@aut.ac.nz.
[**] Gareth Corbett, Research Fellow, AUT.

offered a tantalising prospect of a more genuine win-win situation for employers and employees.

With the advances in technology, the more 'traditional' methods of flexible working practices were often expected to become less widely used, as organisations would embrace new methods that took advantage of these technological opportunities. One 'modern' method that was anticipated to be embraced by the 'modern-day' workplace was the utilisation of teleworking (Huws, 1996 and 2000). For example, the UK's National Economic Development Office predicted in 1986 that between 10% and 15% of organisations in the UK would be using teleworking by 1995 (Lupton and Haynes, 2000). In enabling employees to work significant periods of their working week from home, it was anticipated, that the telephone would serve as a means for employees to cut down on the time and costs of commuting. This would enable them to improve their non-working, 'family' life (Hill et al., 2001). The benefits were also expected to impact positively on the employer by employees maintaining a high level of productivity and efficiency. Teleworking was touted by its proponents as a means of improving morale and motivation and this would, in turn, improve staff retention, whilst enabling greater staff recruitment opportunities and reducing the marginalisation of certain employment groups (for example, single parents, people with disabilities, and so on).

The article will examine teleworking and its role in organisational practices. This involves presenting the key themes of the teleworking debate, drawing on both New Zealand and comparative perspectives and alluding to significant variations in international teleworking trends. The examination is based on the extensive international and New Zealand literature on teleworking and, in particular, the paper draws on longitudinal findings from the New Zealand and International Cranet surveys of human resource management practices (Brewster, Mayrhofer and Morley, 2004; Rasmussen, O'Sullivan and Corbett, 2007; www.cranet.org). These findings are complemented with findings from secondary New Zealand data sources. The paper will overview definitional problems (including issues associated with the distinction between formal and informal teleworking practices) and the perceived benefits and drawbacks of teleworking. Then results and key trends will be presented, with an emphasis on the position of teleworking amongst other flexible working practices and how New Zealand trends fare in a comparative perspective. The paper highlights the lack of organisational 'buy in' (particularly in terms of management) and, in turn, these findings drive a discussion of why New Zealand organisations have a relatively low level of teleworking, variances across the economy and whether this could change in the future.

Defining Telework

In general terms, teleworking is easily understood: it is related to an employee being able to work away from the office (often from home) with a connection to the office via some kind of telecommunication. However, there are still considerable definitional problems when one seeks a precise understanding of teleworking. As Kowalski and Swanson (2005: 1) comment:

> Some may use the terms telecommuting and teleworking interchangeably to describe employees that work away from the office, while others may define telecommuting more narrowly as only working from home. Still others describe remote work arrangements as hoteling, flexiplace, or virtual workplaces.

With the advances in technology, facilitators of teleworking now include facsimile, SMS messaging, and some of the more widely used methods of email. Given the availability and cost-effective nature of these technological options, this should have significant positive implications with regard to the adoption of teleworking practices. It should also broaden the variety of working arrangements and what could be done under the label of teleworking.

In this paper, we will use a generally applied definition which has been coined by Telework, an organisation specialising in the delivery of telework solutions to organisations:

> …work from a distance although it has many forms and many labels, including working from home, remote access, remote work, Mobilise, e-Work, telecommuting, and more (England, 2006: 1).

Hence, there appears to be an uncertainty as to whether teleworking is narrowly prescribed as working from home or whether the definition covers more 'satellite' based and mobile situations, spanning any type of work away from the office and covering an array of activities and technological means. The blurred definitional boundaries of the term has significant research implications as it becomes difficult to measure the exact extent of teleworking and national and comparative measures have been found to be unreliable.

A particular issue has been the distinction between *formal and informal teleworking*. It has been documented by several researchers – for example, Lupton and Haynes (2000), Murray, Murray and Cornford, (1997) and Perez, Sanchez and Carnicer (2003 and 2007) – that teleworking, when perceived by management as being '*informal*', was more commonly accepted and used as a temporary means of providing flexibility. Lupton and Haynes (2000) found that 73% of firms participating in their study acknowledged they had 'informal' teleworkers. However, informality opens for measurement problems: "the amount of people working in this manner and the extent to which they did so was not apparent" (Lupton and Haynes, 2000: 326).

Besides measurement issues, there is also a major problem concerning the effectiveness and efficiency of informal teleworking. Murray et al. (1997) found that the failure to gain the support of senior management resulted in the unofficial system not reaching its full potential. Likewise, Lupton and Haynes (2000: 326) have highlighted that informal teleworking fails to "allow any space related benefits to be utilised", and, without a necessary level of network support, employees may be unavailable to others (including clients, customers, other employees and wider stakeholders). There can also be significant negative consequences for the involved teleworkers as inadequate training, planning of work schedules and office set-up can create safety and health issues. Thus, informal teleworking can be associated with the negative reputation of teleworking and management resistance to allowing formalised teleworking can facilitate sub-standard forms of teleworking.

Benefits and Drawbacks

Underling the initial drive to promote teleworking was the notion that the perceived benefits appeared to be endless, especially in relation to workplace productivity and job satisfaction. There was also the perceived ability of teleworking to increase flexibility for both the organisation and employee. The literature has pointed to several reasons why teleworking should be improving organisational and financial success. The C. Grantham Institute in the US has estimated that for every $1 spent on teleworking equipment, a $2 improvement in productivity is gained (Clement, 2007). These associated benefits are in contrast to more 'traditional' productivity enhancing methods of team working and internal networking. As Igbaria and Guimaraes (1999) have stressed, studies have identified that 'teleworkers' on the whole have an overall higher level of job satisfaction and have greater commitment to the organisation in which they work compared to non-teleworkers. Furthermore, Perez, Sanchez and Carnicer (2003) found in their study that 82% of participant organisations recorded positive productivity gains when they adopted teleworking arrangements.

In New Zealand, the New Zealand Business Council for Sustainable Development has calculated that if organisations comprising of 100 or more staff had 20% of their employees working from home (in a teleworking arrangement) 2.5 days per week, the organisation could potentially save as much as $100,000NZ per annum. The strong financial gains would be a result of space savings, improved productivity, staff retention and a reduction in electricity consumption of at least 10%.

The organisational gains are based on *assumptions* about positive employee reactions and improved employee productivity. The positive employee reactions are prompted by a better work-life balance whereby working time can be adjusted to non-work commitment. Teleworking can allow work to be tailored to family responsibilities – child care and caring for elderly or sick relatives – and/or to leisure activities. Other positive employee outcomes often mentioned are the reduction in commuting time, reducing time preparing for work, the ability to tailor work to individual biological 'clocks', and effectively manage life transitions such as moving and retirement (Department of Labour, 2006). Seen in that 'rosy light', teleworking could become an all-embracing cure: 'showing visitors around, coping with a new baby, handling illness or injury, even coping with likely or actual redundancy - telework can make it all easier' (England, 2006: 1).

In the knowledge society, it is also possible to work on interesting projects without relocating or travelling. Besides the ability to attract and retain a wider pool of employees, it is often assumed that the work situation – away from the office and its 'disturbances' – will in itself facilitate a rise in productivity.

There are also those who highlight the positive contribution that teleworking has on the wider community and environment. This is particularly important given the significant emphasis and political pressure on organisations to move towards becoming carbon neutral.

> If 5% of Auckland drivers used their cars two fewer days a week [electing to telework instead], 29,700 fewer tonnes of greenhouse gasses and pollutants would enter the atmosphere and congestion would be reduced. (Clement, 2007: 9).

International studies have pointed to similar benefits. For example, Kowalski and Swanson (2005: 1) have suggested, based on studies by the Clean Air Council (2003) and US Department of Transportation (2000), that: "Teleworking helps reduce pollution and creates a safer commuting environment with less traffic issues. It also diminishes the need for new roads and reduces gasoline consumption".

Although there are very few researchers who disagree with the possible advantages of teleworking, there is a fair amount of scepticism of whether these positive outcomes will really occur. The literature has identified several barriers or reasons why teleworking may not deliver the expected results or not be implemented at all. These reasons can be loosely grouped into three categories: technical and financial issues, organisational or managerial barriers, and employee-orientated drawbacks.

It is pertinent to acknowledge that the discussion of teleworking often assumes technological reliability. There are several reasons – including insufficient investments, lack of IT experience, staff turnover, etc. - why organisations may fail to invest or provide a technologically sound and up-to-date teleworking system. Technological reliability problems have been associated with insufficient public infrastructure, firm size and internal organisational barriers. Whatever the reasons, technological reliability can have significant drawbacks. As Clement (2007: 10) stresses: "where telework fails, for whatever reason, it is often blamed on the concept of teleworking itself – which helps give it a bad name". Still, it appears that recently technological reliability has become less of an issue in many OECD countries as technology infrastructure has matured and supply quality has increased.

While the financial cost of implementing an appropriate tele-based system is often portrayed as a major organisational barrier, a more significant barrier may be the difficulty of achieving managerial 'buy in' (as we explore further in the next section). This could be associated with a sceptical approach to the perceived benefits of teleworking.

> … the building and running cost savings that are generally anticipated were not deemed to be significant, possibly because many of the schemes in place are embryonic and involve only a limited number of employees. Generally, managers are exceptionally uneasy with the adoption of teleworking as a contemporary working practice and were deemed to be the most significant obstacle to the introduction of a teleworking scheme (Lupton and Haynes, 2000: 327).

Finally, there are also a number of negative employee issues. These include: a strong possibility for employees to feel or become isolated, their failure to separate work and home life, external distractions, and a lowered awareness of internal organisation issues, coupled with a fear of being 'out of sight and out of mind'. These drawbacks can often be seen implicitly in the recommendations surrounding teleworking such as having an office that is clearly delineated from the rest of the house, ensuring suitable office furniture, establishing clear reporting arrangements, and separating work from non-work activities (Clement, 2007; Department of Labour, 2006).

Teleworking Practices – International and New Zealand Trends

The Cranet survey is the world's most comprehensive survey of human resource management practices (for detailed information, see: Brewster et al., 2004; Rasmussen et al, 2007; www.cranet.org). The survey started in 1989, is normally conducted every 4 years, and it now covers 40 countries. The survey is based on a standardised mail survey of large organisations (in most countries that would include organisations with more than 200 employee; in New Zealand it includes organisations with more than 50 employees). In the 2005 Cranet International Report, flexible working arrangements were identified as being on the rise, with traditional methods, including overtime, shift work and part-time work being at the fore of this increase (see www.cranet.org). As the 2005 International Cranet report (2005: 34) identifies:

> In light of the futuristic discussion of the 'end of the job', it has often been expected that annualised hours, job sharing, home based working and teleworking would be come major features of working life. However, this is yet to happen.

This focus on traditional methods has meant that modern arrangements, such as teleworking[i] have been somewhat overlooked. Lupton and Haynes (2000) comment that the introduction of teleworking practices remain somewhat elusive. The 1997 British Labour Force survey highlighted that only 4% of UK organisations were actively using (in a formal manner) teleworking as a means of flexible working practice (Lupton and Haynes, 2000).

Table 1 identifies – based on Cranet results - significant usage of teleworking practices being present in the USA, with over half of responding organisations (55 percent) stating that they use teleworking in at least some capacity of their operation. However, it must be noted that the vast majority of this usage involves 10 percent or less of all employees. Additionally, Table 1 shows that teleworking has gained some prominence in the Nordic countries (in particular Norway and Iceland). As noted before, even in the 'high-scoring' countries, teleworking seldom involves more than a tiny fraction of all employees.

Table 1: Proportion of organisations and their workforces involved in teleworking

Countries	Not Used	0-5%	6-10%	11-20%	21-50%	50%+
New Zealand	81	15	2	1	1	1
UK	80	16	3	1	0	0
Germany	56	38	2	1	2	1
Sweden	55	35	5	2	1	2
Denmark	61	31	4	1	2	1
Netherlands	59	29	7	2	2	1
Slovakia	55	30	9	2	2	2
Norway	40	48	5	4	3	0
Iceland	52	31	13	2	1	1
USA	45	37	10	3	2	3

Source: Rasmussen et al. 2007

Comparatively speaking, based on the international Cranet findings, New Zealand is not too dissimilar to that of the UK. Both countries appear to struggle to move away from traditional practices, with teleworking only being used significantly by around 15% of the participating organisations and then teleworking is only covering less than 5% of the organisation's employees. The New Zealand figure appears to be supported by other studies that identify approximately "3 percent of the New Zealand workforce are believed to work from home" (Clement, 2007: 9). It is often the same companies that re-appear in various media stories about teleworking in New Zealand. These are companies which are frequently in the IT industry – IBM, SAP and local IT consultancies – and thus, have a clear interest and advantage in supporting teleworking. While public sector organisations have developed teleworking strategies they have yet to take a leadership role by introducing teleworking on a comprehensive basis.

The extent to which teleworking has failed to be adopted in New Zealand is shown in Table 2. Compared to the traditional arrangements, teleworking is significantly under-utilised, and so are the other 'modern' forms of flexible working practices (annual hours and compressed working week). Instead Table 2 shows how traditional arrangements – part-time work, casual and temporary employment, overtime, and fixed-term contract – are frequently used in most organisations and they often cover a considerable proportion of the organisation's employees.

Table 2: Flexible Working Practices in New Zealand – proportion of organisations and coverage of their workforce (N=270 organisations)

	Not Used	0-5%	6-10%	11-20%	21-50%	50%+
Weekend hours	27.0%	24.4%	14.8%	9.6%	11.5%	12.6%
Shift work	33.8%	13.6%	10.3%	8.5%	14.3%	19.5%
Overtime	15.6%	21.1%	15.2%	15.2%	18.9%	14.1%
Annual hours contract	75.2%	6.9%	3.4%	1.9%	3.4%	9.2%
Part-time work	6.6%	43.2%	20.3%	15.5%	7.4%	7.0%
Job sharing	62.7%	34.7%	1.1%	0.4%	0.7%	0.4%
Flexi-time	43.7%	24.8%	8.9%	7.4%	4.4%	10.7%
Temporary/casual	11.9%	52.2%	24.1%	8.5%	2.2%	1.1%
Fixed-term contract	20.1%	56.5%	14.9%	5.9%	1.1%	1.5%
Homebased work	86.5%	12.8%	0.4%	-	0.4%	-
Teleworking	80.6%	14.8%	1.5%	1.1%	1.1%	0.8%
Compressed working week	79.0%	15.6%	2.7%	1.1%	-	1.5%

Source: Rasmussen et al. 2007.

Discussion

Both New Zealand and international organisational acceptance of teleworking practices in a formal capacity differs from original expectations. In the 1970s and 1980s, it was expected that teleworking would play a significant part in defining modern working practices. Korte and Wynne (1996) relate how many commentators believed that, by 1990, all Americans would have the opportunity to work solely from home, whilst other commentators believed that, by the year 2000, 40% of US employees would be teleworking. These optimistic estimates were not restricted to the US employment market either since in the UK, the Henley Centre for Forecasting predicted that there would be over 3 million teleworkers by 1995. A

prediction, as Korte and Wynne (1996) point out, that failed to eventuate. However, teleworking's failure to capture the attention of organisations has become more apparent as time passed.

> …the more recent estimates were made, the less optimistic they [meaning teleworking predictions] turned out to be, as authors discovered that the diffusion of telework would be by way of a rather slow but constant evolution (Korte and Wynne, 1996: 13).

While still well short of the optimistic predictions above, there are some countries where teleworking is implemented in relatively many organisations. The reasons for its lack of uptake in New Zealand and the high level of variances between New Zealand and Scandinavian and American adoption are difficult to explain. Teleworking's ability to flourish in the US has been attributed to the existence of large firms with considerable technological abilities. It has also been attributed to conditions in California, where commuters are faced with the daunting prospect of high levels of transport congestion and where there has been strong regulatory support for teleworking (State of California, 2007). Furthermore, the significant usage could also be a reaction to the geographical disbursement of the USA. With the majority of organisations operating along the Eastern Seaboard and/or West coast, it would appear that Americans have been forced to react to the geographical divide and time differences by accepting modern flexible arrangements, including teleworking. In Scandinavian countries, it is believed that the 'buy in' into teleworking may be a result of these economies being heavily reliant on the IT sector, and, in part, also a result of unfavourable weather conditions and the lengthy travel distances that some employees are confronted with on a daily basis.

The pessimistic perspectives on teleworking have instilled a certain level of bewilderment, especially amongst academics, given the promise and anticipation in which it was viewed nearly 30 years ago.

> Why teleworking has not flourished is something of a mystery, since it is often proposed as an ideal, which has the dual benefits of increased productivity and reduced cost through space savings. If this is the case, then the reasons for not implementing such a scheme must be extremely strong as they clearly fly in the face of the profit motivation of most contemporary organisations (Lupton and Haynes, 2000: 324).

For countries like New Zealand, organisational up-take on the initiative has been particularly slow when one considers how the 'distance tyranny' and its dispersed population could be countered by teleworking. There have been quite a number of initiatives from government agencies – including support of organisational 'experiments' with teleworking – and several voluntary associations have supported the diffusion of teleworking (see Department of Labour, 2006). This has had limited effect as shown by the figures presented above. There have been at least four different types of explanations for the limited use of teleworking: the prevalence of small businesses, insufficient investment, lack of government leadership and, negative attitudes of managers.

As Clement (2007) argues those organisations that have attempted to utilise teleworking appear to have failed in making teleworking work well. In looking for possible explanations of why this has been the case, Clement (2007: 9) suggests:

…the majority of New Zealand businesses are very small and losing one person out of the office may be too great a proportion of the workforce. Larger multinationals with huge workforces also have deep pockets with which to implant systems and procedures for teleworking in the first place.

The prevalence of small business is also associated with insufficient investments. This has clearly wider ramifications than just teleworking since analyses of productivity trends have highlighted the insufficient investment in productivity enhancing technology (for example, Deeks and Rasmussen, 2002; Lamm, Massey and Perry, 2007). Interestingly, it has been suggested that New Zealand organisations that have sought to invest in the teleworking philosophy, do not wish to broadcast teleworking opportunities they offer since they are afraid that job applicants with the 'wrong attitude' should target them (Clement, 2007). Although government agencies have been involved in promoting the concept of teleworking, they have foregone a more active involvement. Research by Larner (2002) has suggested that the low uptake of teleworking in New Zealand could be associated with limited leadership and investment of government departments. Finally, managerial attitudes to teleworking have been found to be hesitant or outright negative (see below). As there has been limited research on managerial attitudes, this is clearly a notion that warrants further investigation.

Managerial attitudes to teleworking are often ambivalent and sometimes directly negative. This appears to be associated with a reluctance to rely solely on output measures and instead the ability to actually 'see' the employee or a similar form of direct supervision. This has also been associated with the notion of 'presenteeism' where it is more a question of being at work than whether the employee is working efficiently. The notion of 'presenteeism' is often seen as important in firms where direct management styles are the rule but Johnson (2004) has suggested that 'presenteeism' may also explain why managers will not trust their employees to do teleworking. Likewise, an Australian-New Zealand survey of attitudes to teleworking found that many managers did not trust their employees enough to allow them to undertake teleworking (Beer, 2004).

Based on questionnaire responses and in-depth interviews, Scholefield (2008) found that New Zealand marketing managers expressed mixed feelings about their staff doing teleworking.[ii] While Scholefield's research findings are generally in line with other research findings her research has highlighted two interesting points. First, many managers queried the assumed productivity improvements associated with teleworking and second, older managers expressed on average more reluctance towards teleworking than younger managers. The first point relates to the mistrust and preference to direct supervision discussed above, with managers mentioning home-based distractions, technological issues and lack of office/social interactions as their reasons for doubting that productivity improvements would actually occur. The second point indicates that managerial attitudes could change over time as a younger cohort of managers' rise to power. These managers and their employees would have had – compared to their older colleagues - a totally different experience of using modern IT communication tools during their upbringing and education.

Conclusion

Despite the media 'hype' and both corporate and academic rhetoric emphasising the endless possibilities of teleworking, there are still a relatively limited number of organisations which have embraced teleworking for a major part of their workforce. The findings highlight that, in general, newer methods of flexible working practices have struggled to become accepted by employers and employees alike over the more traditional practices. There are countries, such as the USA and Scandinavian countries, where teleworking is used more. In these countries, organisations have attempted to reduce commuting time, overcome long distance problems and address employee flexibility issues. However, this has not occurred to the same degree in New Zealand, despite considerable public and individual support for teleworking. The Cranet research delivered compelling evidence that teleworking is one of several 'modern' methods of flexible working arrangements which have had limited traction. This evidence was supported by the available (but rather limited) case study research.

This paper has highlighted the complications in providing a universal definition of teleworking and distinguished between formal and informal teleworking arrangement. It was also stressed that there are several barriers or reasons why teleworking may not flourish although major benefits can be associated with teleworking. The literature points to technical and financial issues, organisational or managerial barriers, and employee-orientated drawbacks.   Furthermore, teleworking appears to be more prominently accepted in an informal capacity by management. In light of this, the way forward may be attempts to reduce managerial barriers and pursue the advantages of a more 'mixed' approach to implementing teleworking. Mixing standard office working with teleworking could counter some of the managerial and employee drawbacks identified.

While there is no doubt that the rise in teleworking has been moving at a glacier-like speed and falling below expectations, it is still likely that teleworking will increase in importance in the coming years. The organisational and employee benefits are clear and these benefits are likely to increase in the coming years as organisational agility, skill shortages, work-life balance and environmental issues come to the fore. These 'drivers' will probably advance the formal use of teleworking but they will also support more informal and 'mixed' uses of teleworking. That said, we do not expect teleworking to become one of the major flexible working practices in the foreseeable future.

Notes

[i] The 2004 New Zealand Cranet survey defines teleworking simply by stating that the practice incorporates 'workers who have permanent electronic links to a fixed workplace'
[ii] As Scholefield (2008) had a rather limited and biased sample, the research findings need to be tested further through more quantitative representative research.

References

Atkinson, J. (1984). *Emerging UK Work Patterns*. Institute of Manpower Studies, Brighton, Sussex.

Atkinson, J. (1985). *Flexibility, Uncertainty and Manpower Management*. Institute of Manpower Studies, Brighton, Sussex.

Beer, S. (2004). *Telework not trusted*. Sydney Morning Herald. http://www.smh.com.au/articles/2004/09/13/1094927496755.html?from=storyrhs (accessed 3 October 2007).

Brewster, C., Mayrhofer, W. and Morley, M. (eds.). (2004). *Human Resource Management in Europe*. Elsevier: Oxford.

Bruhnes, B., Rojot, J. and Wasserman, W. (1989). *Labour Market Flexibility: Trends in Enterprises*. OECD, Paris.

Clement, D. (2007). Working by remote control. *The New Zealand Herald*. The Business section. pp. 9-11.

Deeks, J. and Rasmussen, E. (2002). *Employment Relations in New Zealand*. Pearson Education, Auckland.

Department of Labour. (2006), *Future of Work*. (www.dol.govt.nz/futureofwork/worklife-flexible.asp) (accessed 11 November 2006).

Dex, S., and Scheibl F. (2001). Flexible and family-friendly working arrangements in SMEs: business cases. *British Journal of Industrial Relations*. 39(3): 411-431.

England, B. (2006). *Telework New Zealand: What is Teleworking?*. Telework New Zealand Ltd. http://www.telework.co.nz/Whatis.htm (accessed 3rd October 2007).

Felstead, A. and Jewson, N. (1999). (eds.). *Global Trends in Flexible Labour*. Macmillan: London.

Gershuny, J. (2000). *Changing Times*. Oxford University Press: Oxford.

Ginn, J. and Arber, S. (1998). How Does Part-time Work Lead to Low Pension Income? In J, O'Reilly and C. Fagan. (eds.), *Part-time Prospects.* (pp.156-174). Routledge, London.

Heckscher, C.C. (1995), *White-collar blues: management loyalty in the age of corporate restructuring*. Basic Books: New York.

Hill, E.J., Miller, B.C., Weiner, S.P. and Colihan, J. (1998), 'Influences of the virtual office on aspects of work and work/life balance', *Personnel Psychology*, 51(3): 667-683.

Huws, U. (2000), *Equality and Telework in Europe*, European Comission, Brussels

Huws, U. (1996), *Teleworking: An Overview of the Research*, Analytica Social and Economic Research Ltd, London,

Igbaria, M. and Guimaraes, T. (1999). Exploring differences in employee turnover intentions and its determinants among telecommuters and non-telecommuters. *Journal of Management Information Systems*. 16: 147-164.

Johnson, J. (2004). Flexible working: changing the manager's role. *Management Decision*. 42(6): 721-737.

Korte, W. and Wynee, R. (1996). *Telework: Penetration, Potential and Practice in Europe*. IOS Press.

Kowalski, K.B. and Swanson, J.A. (2005). Critical Success Factors in Developing Teleworking Programmes. *Benchmarking: An International Journal.* 12(3): 236-249.

Kramar, R. and Lake, N. (1997). *International Strategic Human Resource Management*, Sydney: Macquarie University.

Lamm, F., Massey, C. and Perry, M. (2007). Is there a link between workplace health and safety and firm performance and productivity?' *New Zealand Journal of Employment Relations* 32(1): 72-86.

Larner, W. (2002). Calling capital: call centre strategies in New Brunswick and New Zealand. *Global Networks*. 2(2): 133-152.

Lupton, P. and Haynes, B. (2000). Teleworking – The Perception Reality Gap. *Facilities*. 18(7/8): 323-327.

Murray, B., Murray, C. and Cornford, D. (1997). *Corporate Teleworking Survey*. Small World Connections.

Perez, M.P., Sanchez, A.M., and Carnicer (2003). *The organizational implications of human resources managers' perception of teleworking*. University of Zaragoza, Zaragoza, Spain.

Perez, M.P., Sanchez, A.M., and Carnicer, M.P. (2007). Teleworking and workplace flexibility: a study of impact on firm performance. *University of Zaragoza, Zaragoza, Spain*.

Rasmussen, E., Lind, J. and Visser, J. (2004). Divergence in part-time work in New Zealand, Denmark and the Netherlands. *British Journal of Industrial Relations*. 42(4): 637-658.

Rasmussen, E., O'Sullivan, S., and Corbett, G. (2007). *2004 Cranet Study: Human Resource Practices in New Zealand.* Auckland University of Technology, Auckland.

Schmid, G. (1995). Is full employment still possible? Traditional Labour Markets as a New Strategy of Labour Market Policy. *Economic and Industrial Democracy*. 16: 429-456.

Scholefield, G. (2008). Managers' Perceptions of Teleworking. *Thesis*, Masters of Business, Unitec, Auckland.

Schor, J. B. (1991). *The Overworked American: The Unexpected Decline of Leisure*. Basic Books: New York.

State of California. (2007). *The State of California Telework – Telecommuting Program 1983- 21st Century*. (www.dpa.ca.gov/telework/tele_guide.pdf).

Tucker, D. (2002). *'Precarious' Non-Standard Employment – A Review of the Literature*. Report, Dept. of Labour, Wellington. www.dol.govt.nz/pdfs/PrecariousNZWorkLitReview.pdf (accessed 4 Feb. 2005).

Van Wanrooy, B., Bretherton, T., Considine, J. & Buchanan, J. (2006). *Longer and Irregular Hours: Employers, Decentralised bargaining and Working time Standards in Australia since the late 1970s*. Conference on 8 Hour Day and Beyond. RMIT University, Melbourne.