

Good life in the bleak house

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Abstract

Through the case study of an IT company we examine the literature on the development of the IT profession and industry, the notion of the psychological contract and loyalty/attachment in the IT context, and the broader literature providing a critical approach to HRM. Using this literature we pose three propositions that connect the notion of a 'bleak house' HRM environment with the loyalty/attachment and direct voice characteristics of IT professionals, to analyse our case study. An understanding is gained of how a company can operate with minimal HRM policy and strategy, however the sustainability of this approach is questioned.

Introduction

Our paper is a case study of a New Zealand owned, New Zealand run Information Technology (IT) company which we call company S. Through the case study we endeavour to draw together a body of diverse literature that highlights the unique nature of the IT profession and industry and in this context we examine the particular human resource management (HRM) practices at Company S, contrasting these with what the literature might expect would operate in a high-skilled, well-paid work environment. IT professionals represent one of the fastest growing new areas of work and occupational change, as so-called professionals they are atypical; and from an employment relations perspective there is limited study of IT organisations and their professional staff. We examine the literature around the development of the IT profession and organisation, HRM and the notion of the 'bleak house' (Sisson, 1993), the idea of the psychological contract and loyalty/attachment issues, in order to examine the growth of the company, the nature of its relations with staff and how staff have 'voice' within the company. In tracing the development of the company we note the legacy of its beginnings as a small 'family-based' company upon the lack of coherent and strategic HRM practices, and how organisational and professional culture have intersected in such a way as to allow this gap to occur.

We question whether this is a sustainable strategy for the long term.

The Information technology (IT) profession

The notion of an IT worker and indeed the IT industry is very recent, both are rapidly evolving concepts that have developed considerably since the 1990's. From its roots in the roles of systems analysts and computer programmers in the 1960s (International Standard Classification of Occupations [ISCO], 1968), the occupation developed from technician to computing professional (ISCO, 1988). Throughout the 1990s various iterations of the New Zealand Standard Classification of Occupations (NZSCO 1990, 1995, 1999) reflect the emerging range of IT professional roles. In 1990 the occupations of computer systems technician, computer systems engineer and computing services manager were all added as new titles. In 1995 computer systems engineer was changed to computer applications engineer, which encompassed roles such as web site designer/developer/administrator and web page producer. In 1999 this was extended to also include web master, and computing services manager was changed to information technology manager. Similarly the occupations of Systems Manager, Information Services Manager and Management consultant, which included information systems consulting, were added. The 1999 NZSCO also

heralded the introduction to job descriptions of the concept of the World Wide Web, and aptitude with computers & software feature more broadly in occupation job descriptions.

The number of people working in New Zealand in an IT occupation, within the IT industry, has doubled between 1991 and 2001 (Ministry of Economic Development, 2003). Combining these people with those in IT occupations outside the IT industry reveals a 70% increase overall between 1996 and 2001, to 57,249 people working in IT occupations. Computer consultancy services feature as the single largest employment area having risen from 2,409 in 1988 to 18,000 in 2002. Statistics confirm the IT industry as a 'youthful industry' in New Zealand, with nearly 80% being younger than 44 years (Ministry of Economic Development, 2003). These growth trends are seen internationally also, with high skill ICT workers the most rapidly growing component of high-skilled workers in Europe and the US (OECD, 2002).

A consortium, the World Information Technology and Services Alliance (WITSA) has been formed of 46 IT industry associations from economies around the world, representing over 90% of the world IT market. The Information Technology Association of New Zealand (ITANZ) is typical of WITSA member organisations; it is a national association of organisations involved in the development, production, marketing and support of goods and service related to the processing of information. ITANZ aims to facilitate business growth, and the size and capability of the information industry. Thus, what might be regarded as the 'professional' IT association does not impose standards on individual professionals nor police the industry, rather it focuses on improving the business climate for IT organisations.

The IT profession is very much a late 20th century and 21st century profession, not

only because of its rapid development in that time due to technological advances, but also because it is so different to our traditional notions of 'profession'. There is no Act of parliament specifically pertaining to IT professionals (unlike lawyers, medical and other health professionals, engineers, etc). There is no 'closed shop' approach to gaining membership of the profession through registration systems or anything of that nature (as there is in most professions and para-professions, eg nursing, teaching). There is no specialised Code of Ethics. There is no specific educational qualification, although latterly tertiary education providers have seen a burgeoning in the IT related courses and qualifications that they offer. Indeed the picture that emerges is one of IT as a profession in its infancy, typified by a fast growing and changing knowledge base, unfettered by the formalisations that characterise maturer professions. Not surprisingly then, these profession characteristics are often reflected in IT organisations, particularly the raft of smaller entrepreneurial, high tech, start-up companies which are in abundance not only in California's Silicon Valley but also in other countries around the globe. This paper studies the case of such an organisation in the fledging New Zealand IT industry, informed by the academic literature on HRM in IT organisations.

HRM, the IT professional and IT organisations

Two broad approaches have been taken to the study of HRM related issues in IT organisations. On the one hand researchers have looked at IT professionals as employees and attempted to identify the factors that influence their attachment to, and satisfaction with, an organisation. Alternatively, other research has focused on HRM practices in IT organisations. Both approaches are helpful in providing an understanding of effective HRM in IT organisations, they are summarised below.

A small body of academic literature has explored some of the characteristics of the IT professional, particularly in terms of their expectations of, and commitment to, the IT organisations that employ them. IT employees have tended to be portrayed as highly skilled, highly mobile and constantly seeking new technical challenges. Baron, Burton and Hannan (1996) researched the basis of IT employee attachment in high tech startup firms in Silicon Valley, California in the mid 1990s. This led them to characterise the attachment of IT employees to the organisation as being based on three factors: love, money and work. These factors were corroborated by Aguilera, Dencker, Lawler and Uen (2001).

Attachment to the organisation based on love is explained as the observed trend of founders and CEOs of small IT companies creating a 'familial' culture or environment in the organisation, which emotionally binds the employees/members of the company. An emphasis on social activities, non-typical office physical surroundings (eg couches, chill out rooms) are commonly found in these firms, as they attempt to create a sense of personal belonging. Attachment based on money is reported to be particularly prevalent amongst younger IT workers who display far greater job mobility purely to improve their earnings. Many IT employees are well paid, but this labour market does fluctuate and can lead to an element of fear (combined with love) creating attachment to a firm. Attachment to work is just that – it is attachment to the work itself or a specific project, not attachment to the organisation. Thus IT employee loyalty is found to be not so much to the organisation but to the challenges within the work. Hence commitment to a particular employer may be contingent on the work/projects provided.

In a related vein, Pare, Tremblay & Lalonde (2001) studied Canadian IT professionals in order to identify a multidimensional set of HR practices

likely to increase retention amongst IT employees. They cite Lawler's (1986) work on high involvement management, which suggested that information sharing, empowerment, competence development and reward, influence work related attitudes and behaviours. They note that for IT professionals the recognition they get from managers for good work is important, thus rewards extend beyond money to recognition practices generally (eg special vacations, awards ceremonies, tickets to entertainment). Pare et al found that IT specialists are particularly sensitive to two types of HRM practices – those to do with distributive justice and with competence development. By distributive justice they mean fair rewards for effort relative to the rewards that others making similar effort receive. Thus IT employees were less likely to quit if they perceived a high level of internal and external equity in regard to issues such as pay and benefits, performance evaluation, promotions, etc. Similarly they were less likely to leave if they perceived organisational commitment to their continuous learning and hence competence development, for example through training, coaching, job rotation, etc. Many of the IT professionals surveyed reported a willingness to remain where the work is stimulating and challenging, and chances for advancement are high, if they felt reasonably well paid (enterprise and market based pay), even if they could be paid more elsewhere (Pare et al, 2001). This provides a deeper interpretation of the 'love, money, work' factors, in which money is expanded to a notion of fair reward, and competence development through challenging work remains a paramount consideration.

Agarwal & Ferratt (1999) describe IT human resource management strategies as coherent bundles of HRM practices that tend to be based on two related dimensions: 1) the length of the employment relationship sought with the IT professional, and 2) the relative emphasis the organisation places on

concern for productivity and concern for the individual. They argue that organisations wanting to retain IT professionals for longer periods of time will have HRM practices that demonstrate higher concern for the individual (eg flexible working, social activities to build a sense of community, investment in training). Those that wish to emphasise productivity will have for instance rewards systems linked to productivity.

In summary, the literature tends to confirm an image of IT professionals committed to the challenge of the work of their profession rather than specific organisations or employers; well paid and motivated by money but not by money alone, and with a strong need for fairness in reward, opportunity for continuous professional development and stimulating work. Hence, not so far from the 'love, money and work' model of attachment suggested by Hannan et al (1996). However, this suggests that some level of sophistication of HRM systems is required in order to ensure fair rewards, tailored competency development, and a supportive culture. Although larger IT related companies are known for their sophisticated HRM (e.g., IBM, Hewlett Packard, Microsoft), what about the burgeoning numbers of small to medium size IT organisations?

IT organisations and the employment relations literature

The opportunities and growth in the IT sector lead to, and are reflected in, the number of smaller start-up IT companies. One does not necessarily expect to find HRM sophistication in smaller, more entrepreneurial start up companies. The broader organisational literature records the lack of formalisation in this type of smaller company, and the shifts towards greater structure, policy and procedure as companies grow in both staff numbers and turnover (Quinn & Cameron, 1983; Catlin & Matthews, 2001). This lack of

formalisation is particularly noted in relation to HRM practices. Recently the New Zealand government ICT taskforce report (2003) documented the growth phases of ICT companies. They noted that when a company has between 100 to 250 staff it starts developing more formalised management structures, and should be establishing HR functions (p.36). The report estimates that there are 42 ICT companies in New Zealand of this size, but that the vast majority of such companies (7,544) are sized between 1 to 100 staff and typified by informal governance and management processes. Given this, one can reasonably assume that smaller IT companies have neither sophisticated HRM practices nor established industrial relations (IR) practices. They are, potentially, what has been labelled 'bleak houses' or 'black holes' in the employment relations literature (Sisson, 1993; Guest 1995). This broader literature can be usefully applied to an examination of IT organisations, thus we turn to a brief description of the genesis of HRM and recent models.

The model of human resource management and associated practices came out of the US in the 1980's (e.g., the Harvard model of HRM, Beer, Spector, Lawrence, Quinn Mills & Walton, 1984). The HRM model was based on the assumption of HRM practice as essentially an activity of management prerogative, in which employees, unions, legislation, are merely stakeholders or situational factors to be considered and managed. The arrival of HRM ideologies in the UK, New Zealand and Australia coincided with, and supported, economic deregulation, declining union power and the introduction of managerialist approaches to state sector organisations. Over recent years a body of literature has developed, initially from the UK, that critically examines the rise of HRM in the context of the decline of collectivism/unionism and the shift in the power balance in the employment relationship, and it is this literature that

also informs our case study. The traditional model of HRM is based around the idea of organisational commitment, the 'winning of hearts and minds' of workers. It is a market driven approach, seeking to exploit advantage in innovation, quality or cost. This is quite opposite to the traditional collectivist industrial relations that had predominated in the UK for at least half a century (Sisson, 1993). In reality, however, the two approaches can be seen to take on many forms and co-exist in a variety of ways although increasingly to not exist at all.

Sisson (1993), using the UK workplace survey, WIRS3, to 'search for HRM', focuses on three broad features: individualism v collectivism, particularly in relation to pay systems; participation and involvement; and thirdly, management organisation. He finds 'fragments of HRM' are more likely to be found in union rather than non-union workplaces. The non-union workplace is characterised as a 'bleak house' rather than a HRM environment and it is more likely to have: no grievance procedures, little communication on health and safety, no communications programme, lack of employment security, and higher levels of dismissals. This is all in the context of a set of features peculiar to the UK although many in common with NZ, for example, decentralised bargaining, and a short-term approach by management.

Guest (1995) expands on this further, examining the concept of 'dual commitment', posing a framework of a 4-part model as a basis for analysing trends in IR and HRM. He describes the first approach as 'New realism', having a high emphasis on both HRM and IR. Unions are entrenched, but product market imperatives mean an emphasis on productivity and competitiveness. The second typology is 'Traditional collectivism', IR but no HRM, following a pluralist approach. The third is 'Individualised HR', high priority to HRM, no IR, many highly successful large

companies use such an approach, e.g., IBM. Fourth is described as the 'Black hole', that is, no HRM and no IR. This is said to occur in the context of declining unionisation and collectivism, and lack of union recognition at new workplaces. The environment for workers in these workplaces is often bleak and insecure.

Guest and Conway (1999) look more closely at the 'black hole', so called because it's 'defined by what is not rather than what it is'. Based on a survey of 1000 workers they find that workers in organisations practising 'new realism' (HRM and IR) report much more positive experiences and positive attitudes than those in 'black hole' organisations. However delving further they discover that not everyone working in the 'black hole' organisations had a negative experience and that what mattered was the 'psychological contract' and the worker's perception of the fairness of management, even in the absence of any innovative HRM practices (Guest & Conway, 1999). The psychological contract is defined as 'a set of unwritten reciprocal expectations between an individual employee and the organisation' (Schein, 1978). Guest and Conway (1999) also found that HRM practices, rather than union presence, were the explanation for experiences and attitudes and therefore a critical factor. Drawing on this literature one could suggest that smaller and thus less formalised IT organisations may fall into the category of low HRM and low IR "black hole" organisations. However, if those organisations have IT professional staff who conform to the 'love, money, work' factors, then maybe the psychological contract is particularly salient in making unsophisticated HRM & IR environments work, or at least mitigating any negative impact they might have.

Psychological contract & loyalty

There is a growing literature addressing the concept of the psychological contract

(Millward & Brewerton, 2000; Rousseau, 1989, 1995). Most recently Guest & Conway (2002) report their study of employer perspectives on the psychological contract (that canvassed senior HRM practitioners), that showed the types of promises or implied promises perceived to be included in the psychological contract were: training & development, safe working environment, feedback on performance, fair treatment, interesting work, not making unreasonable demands of employees, recognition for innovative ideas, etc. The reciprocation from the employee is loyalty, commitment to the work and the company. Not surprisingly, they report that HRM practices and communication mechanisms (particularly at the time of recruitment) are positively associated with the successful management of the psychological contract from the employers' perspective.

From another perspective, Luchak (2003) examines whether different forms of loyalty or attachment to an organization are related to different expressions of employee voice. He reports that employees with loyalty or attachment to the organisation based on affective commitment/emotional bond are more likely to use direct forms of voice (i.e., speaking up themselves) rather than representative voice (i.e., grievance filing, or using a union rep). However, employees with a continuance commitment to the organisation (i.e., rational, calculated, purely instrumental) are more likely to use representative forms of voice (often because they have no choice to move and are disaffected but stuck).

Hence IT professional loyalty based on 'love, money, work' implies a primarily affective commitment, and as already noted that emotional bond is often encouraged in small IT companies. So what do we find in these high skill, low HRM & IR IT environments - are they 'bleak houses/black holes', or do the value of the skills, the psychological contract

formed, and the direct voice ability of the staff mean that they get the work environment they want? Moving now to look at our case study, we pose three propositions from the literature. First that Company S displays the HRM & IR characteristics of the 'bleak house'. Second, the direct voice ability of IT professional staff mitigates for the lack of sophisticated HRM & IR practices, and third that 'love, money, work' factors impact significantly upon the organisational loyalty of IT professionals and consequently upon propositions one and two.

The case of a New Zealand IT Company

Our case study is part of a one-year interdisciplinary study of company S. The inter-disciplinary group included researchers from linguistics, management studies and HRM & IR disciplines. A multi-method approach to the case study included face to face interviews with key company staff, recording of dialogue and interactions by key staff, a focus group of employees, a questionnaire to all staff, and participant observation where one member of the research team spent a period of a week working at the reception desk and another week observing meetings and interactions. The information contained herein is based on a review of all this material, but primarily on four face to face interviews with key staff including the company founder, and the HR Manager; on the staff questionnaire which had an approx 30% return rate, and on the results of the focus group.

The company is now a large one by NZ standards, employing 200-250 staff in a number of locations. The majority of staff are male, a large number hold tertiary or other qualifications, and the workplace is completely non-union, all staff have individual contracts of employment. The average salary of staff at the company is high by New Zealand standards, pay is pitched at the top quartile of the market as determined by regular surveys in the

market. The pay for staff working on IT assignments (as opposed to office based admin, sales or management staff) is built on a 'base plus bonus' type arrangement, the expertise of these staff is essentially the company 'product'. Company S has undergone huge transformation in a short period of time. Founded in the early 1990's, for the first five years it had a deliberately strong 'family' culture, with around 20-30 staff. Following the recruitment of a key staff member and a plan to grow the business, company S more than doubled in size, both in staff numbers and turnover, in a two-year period. It achieved this through active recruitment of staff, and the acquisition and complete integration of two other small organisations. It has subsequently doubled in size again to its current 200-250 staff. The last two years have been a period of consolidation, following belt-tightening measures (including redundancies), after 9/11 and the downturn in the IT market. The founders, and key staff from the early days, have remained heavily involved in the management of the company. The company governance structure has developed into a full board of directors, both executive and non executive, and a major institutional shareholder has invested in the company for the past two years. An impressively flat management structure was in the process of developing more layers and formalisation as we conducted our study.

The founders report that Company S has always been actively "outward focused" on the client market. Business strategies have centred on growth and profile in the market. However, this has been at the expense of any inward focus on management structure and people management. Company S has employed a Recruitment/HR Manager since staff numbered 100. His role has been largely focused on recruitment. Interviews with key staff members (including the HR Manager), and the founders, revealed a lack of strategic HRM practices within the

company. Employees noted that "there is a perception that people management decisions are more reactive than proactive". Certainly, documented HRM policies were sparse, but on the increase in order to cope with the greater size of the company. What formalised HRM there was tended to hinge upon two distinctive practices, one the incentivised pay system for consulting staff and two the recruiting procedures. The recruitment practices dated from early in the company history and were deemed extremely successful by those within the organisation. They included a peer review process whereby staff members could vet a possible appointment on the basis of whether the potential recruit 'fitted' with the company culture and they wanted to work with him/her. The incentivised pay system meant pay was competitive within the industry but at the same time placed some of the risk of the business onto those employees who were the 'front-line' profit generators.

These two practices sat within an environment where staff generally thought of company S as a "good place to work" and there was some sense that the early values and feel of the company remained despite the obvious changes. As one manager noted "we've gone from having a small family feeling to a small corporate feel, but a lot of the culture hasn't changed". The culture, work and profile of the company was such that employees reported that "people see value in being here over and above remuneration". Communication with staff took place formally through monthly meetings and email communication, and also informally via 'open door' management and an expectation that problems would be raised and sorted out face to face. However there was also evidence that the family culture was under strain and that informal, open door management practices had their limitations. Indeed, during the time that this study was being undertaken there were attempts by the company to address this

issue by bringing in an outside consultant to develop a performance management system that was integrated into company core goals. Additionally, increased organisational size had led senior management to introduce a new layer of middle management, and a business planning process, and they were grappling with the impact of these changes.

Survey

In late 2002 a survey was sent to all staff via email. The questions covered participation and involvement, including raising grievances, at the workplace, and aimed to explore the notion of 'love, money and work' in finding out what made staff loyal. The idea of career plans was also explored through a question asking about how long staff intended to stay with the company. Seventy-six returns, a little over one third of all staff, were emailed back to the researcher. Of those who returned the survey 68% were male, 71% worked in the technical area of the company (as opposed to admin, sales or management), 90% were younger than 45 and 80% had a tertiary or post graduate qualification, making the group fairly representative of the overall company staffing profile as far as that could be ascertained. Indicative of the lack of formalisation of HRM, the company had no formal records of its demographics.

The survey sought to find out how these very individualised workers participated in decision making processes within their company, how they set about negotiating their pay and conditions, how they exercised 'voice' and how they felt about the company generally. At the time of the survey there was a wide-ranging review of the existing remuneration structure proceeding. A third of those responding noted they had had no involvement in this process, and a further 25% said that they were not happy with their level of involvement or simply did not wish to be involved. Almost half of all respondents

reported that at some stage in their careers with the company they had raised concerns with their employment contract, although only 2 respondents sought outside advice, the majority had raised these concerns with their immediate managers. A little over half of all respondents reported they thought the current performance assessment process could be improved.

When we began to tackle the question of loyalty some interesting findings were made. A very high 87% of all respondents reported that they 'considered themselves loyal to the company'. When asked what things would challenge this loyalty, half said a change to company culture, a further third noted that moving to an area of work they felt wasn't challenging would change their view. Only 12% noted that a change to the pay scheme would affect their feelings of loyalty, which is very low even in the context of the concurrent review of the pay system. Almost two thirds of respondents said they saw their future with the company as 'staying as long as I am happy' as opposed to having a career plan that was set out in years. The company itself describes a need to keep turnover levels of 10 –12%, as the HR Manager noted, 'two and a half years is long service in this industry, time for the gold watch'. A little over a third of those responding to the survey had 2.5 or more years' service.

Conclusion

The findings confirm our first proposition that Company S may well have been operating a 'bleak house' HRM & IR environment. There was no articulated HRM strategy, nor a significant bundle of sophisticated HRM policies and practices, and no union presence. Management seemed well aware that there were glaring gaps in company HRM practices and that these were not linked to overall business strategy. However, although management did not realise it, there was an implied HRM strategy that is evident from the case

material. This strategy was based around pay and recruitment (the only areas of developed HRM practice in Company S). Guest & Conway (2002) have noted that HRM practice particularly at the time of recruitment is important to the successful management of the psychological contract with employees. Thus, serendipitously, the well-developed recruitment procedure of Company S may establish the conditions that compensate for lack of other good HRM & IR practices.

We found through the survey that staff were not without concern for their employment arrangements but they dealt with these in an individualised context, going to their manager to resolve any issue. Indeed around some of the management of professional staff there was always the possibility of an individual taking a personal grievance but this had never occurred in the company's history. Direct voice seemed to be both encouraged by the company culture, and by management, and exercised by professional staff aware of their privileged position in the labour market. This confirms our second proposition that direct voice can mitigate the possible negative effects of a 'bleak house' HRM & IR environment.

We found an overwhelming vote of loyalty towards the company from staff. This is evidenced by the staff survey which showed loyalty had more to do with company culture, and the work that they were doing, than with pay. This confirms our third proposition. The literature on IT professionals suggested that employee loyalty was most influenced by challenging work and consequent competence development, also rewards that were clearly perceived to be fair, and the organisational culture establishing an emotional bond between employee and company. Certainly this case fits well with this portrayal of staff attachment. Employees in the case clearly indicated a change in culture or less challenging work

would seriously damage their loyalty to the company.

Company S provides an illustration of how a particular type of 'bleak house' environment can provide a good life. The ingredients are highly skilled professional staff, motivated by a ready supply of challenging work, fair rewards and a 'family' culture. The 'family' culture is an interesting control mechanism in itself, and would make a fruitful area for future research. Organisations like Company S provide a timely reminder that successful people management is not always about bureaucratic, rule bound, compliance oriented HRM policies. Such over-formalisation is generally for administrative convenience not management effectiveness, but invariably justified on the grounds of legal compliance and notions of 'best practice'. Company S did not manage HRM & IR in the traditional sense, rather they informally facilitated employment relationships between professionals and their work. However we question the sustainability of such a 'bleak house' informal strategy for the longer term in Company S. This case allowed a glimpse of an organisation at the tipping point between a small, manageable 'family' culture and a medium sized corporate. The challenge for this company, and the many other growing companies in IT, is finding the balance between complete informality and overblown bureaucracy. On the one hand complete informality in a larger company may lead to chaos, on the other hand overblown bureaucracy may lead to paralysis – both situations will lead IT professional staff to leave. Ironically the bleaker house for fast growing companies may be during that period of HRM formalisation which sacrifices key elements of 'love, money, work', direct voice, and psychological contract. This too warrants further research.

References

- Aguilera, R., Dencker, J., Lawler, J., and Jin Feng Uen (2001) *Should I stay or should I go? Work needs and motivators of Information technology professionals*, Global Human Resources Management Conference, Barcelona, July 2001
- Argarwal, R and Ferrat, T (1999) *Coping with labour scarcity in Information Technology: Strategies and Practices for Effective Recruitment and Retention*, Cincinnati: Pinnalfex Educational Resources.
- Beer, M., Spector, B., Lawrence, P., Quinn Mills, D and Walton, R (1984) *Managing Human Assets*, New York: Free Press.
- Baron, J., Burton, M, and Hannan, M (1996) The road taken: origins and evolution of employment systems in emerging companies, *Industrial and Corporate Change*, 5:239-276.
- Catlin, K and Matthews, J (2001) *Leading at the Speed of growth: Journey from entrepreneur to CEO*, US: CELCEE
- Guest, D (1995) Human Resource Management, trade unions and industrial relations, in Storey, J (ed) *Human Resource Management a Critical Text*, London: Routledge.
- Guest, D & Conway, N (1999) Peering into the black hole: the downside of the new employment relations in the UK, *British Journal of Industrial Relations*, 37(3): 367-389.
- Guest, D and Conway, N (2002) Communicating the psychological contract: an employer perspective, *Human Resource Management Journal*, 12(2): 22-38.
- Lawler, E (1986) *High Involvement Management*, California: Jossey-Bass.
- Luchak, A (2003) What kind of voice do loyal employees use? *British Journal of Industrial Relations*, 41(1): 115-134.
- ICT taskforce (2003) *Breaking through the barriers*, a report to the Minister for Information Technology and the Minister for Communication, New Zealand.
- International Labour Office (1969) *International Standard Classification of Occupations 1968*, Geneva.
- (1990) *International Standard Classification of Occupations 1988*, Geneva.
- ITANZ website, www.itanz.org.nz retrieved 16/9/03
- Millward, L., and Brewerton, P. (2000) Psychological contracts: employee relations for the twenty-first century?, Chapter 1 in Cooper, C.L. & Robertson, I.T. (eds) *International Review of Industrial and Organizational Psychology*, Vol 15, UK: Wiley.
- Ministry of Economic Development (2003) 'IT Employment' retrieved on 15/9/03 from www.med.govt.nz/pbt/infotech/it-stats/it-stats-2003/it-stats-2003-05.html
- OECD (2002) *Measuring the Information Economy 2002*, Paris.
- Pare, G., Tremblay, M., and Lalonde, P. (2001) *Workforce retention: What do IT employees really want?*, Proceedings of the ACM SIGCPR conference on Computer personnel research, San Diego.
- Quinn, R. E & Cameron, K (1983) Organizational Life Cycles and Shifting Criteria of Effectiveness: Some Preliminary Evidence, *Management Science*, 29(1):33- 51
- Rousseau, D.M., (1989) Psychological and Implied Contracts in organizations, *Employee Rights and Responsibilities Journal*, 2: 121-139.
- Rousseau, D.M., (1995) *Psychological Contracts in Organizations: Understanding Written and Unwritten Agreements*, London: Sage.
- Schein, E (1978) *Career Dynamics: Matching individual and organisational needs*. Reading: Addison-Wesley.
- Sisson, K (1993) In Search of HRM, *British Journal of Industrial Relations* Vol 31(2): 201-210.
- Statistics New Zealand (1992) *New Zealand Standard Classification of Occupations 1990*, Wellington.
- (1995) *New Zealand Standard Classification of Occupations 1995*, Wellington.
- (2001) *New Zealand Standard Classification of Occupations 1999*, Wellington.

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