"HRM inside UK e-commerce firms: innovations in the 'new' economy and continuities with the 'old'."

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Abstract.
The e-commerce approach to people management (i.e. HRM) is popularly believed to be radically new, and an innovative re-writing of the 'old' rules of employment. Yet little is known about which HR practices are used by such companies, and what might explain these companies' policy selections in the realm of HR. Exploratory survey data based on a sample of 30 small-medium UK e-commerce firms reports use of employee involvement in decision-making, internal communication, financial participation and reward schemes, performance evaluation, training and provisions for employment security. Insights from interviews with five senior managers from the sample augment the survey data with qualitative evidence on e-commerce firms' approach to HR. The findings suggest that this approach falls somewhere between radical 'new' innovations and enduring continuities with 'old' people management techniques, and that this has parallels with the experience of small-medium enterprises generally.

Key search words: HRM, SMEs, management, e-commerce, 'new economy', UK.

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Introduction: a 'new economy', a new way of working?

Kalakota and Whinston (1997: 3) define e-commerce, or e-business,[i] as "the buying and selling of information, products and services via computer networks". Hence, we define an e-commerce firm as one that conducts its trade *primarily* through a digital infrastructure, including the Internet and related technologies. This definition adapts that of Coltman and colleagues (2000), with the word 'primarily' replacing their phrase 'in whole, or in part', since the latter covers every organisation making even minor use of the technology.

In the late 1990s few commentators could resist predicting that e-commerce and the Internet would herald a revolution in the world of work (Leadbetter, 1999; Venkatraman, 2000). One such transformation was to come from the widespread adoption of the apparently "radical" e-commerce approach to organisational design, operating principles and structures, and people management (Hoogervorst *et al.*, 2002). E-commerce firms were lauded for their "practices that support autonomy, collaboration and innovation" (Boudreau *et al*., 2001: 3), namely flatter organisational structures, "fluid and impermanent project-based" job designs (UKonlineforbusiness, 2002: 7), more informal and more inclusive decision-making, and reward schemes combining individualised and collective incentives. Yet beyond stereotypical images of "heroic teams of self-directed workers… non-hierarchical surroundings… the vague promise of bounteous rewards from stock options and a culture of overwork and burnout" (Ross, 2000), and spectacular tales of managerial excess[ii], little is known about the actual HR strategies and practices inside such firms.

Against this background of scant information our primary research objective was to conduct an exploratory study into the use made by UK e-commerce firms of a standard set of human resource management (HRM) practices, and the evolution of such firms' approach to HR over time. In examining our quantitative and qualitative data, we were interested in whether the so-called e-commerce approach to HRM is as radically new as depicted, or whether the 'change' theme has been exaggerated.

The paper proceeds as follows. We first set our study within the frameworks provided by the literature on HRM and employment relations in three relevant sectors: e-commerce firms themselves, plus small-medium enterprises (SMEs: defined as firms with less than 250 employees) and stand-alone entrepreneurial ventures, since many e-commerce firms fall into either or both of these categories.[iii] We then present the methodology and findings of our survey. Case study evidence complements the survey data with insights from senior managers within the sample on the e-commerce approach to HR. We discuss our findings in the conclusion.

HR inside small-medium enterprises and entrepreneurial firms.

In one sense, the nature of small firms' workplace relations, and HRM, is no different to larger firms' in that it is highly context-specific, shaped to a considerable extent by the particular combination of "sector, product and labour market" forces facing the firm (Ram and Edwards, 2003: 723). What ultimately materialises within this context is the product of a 'negotiated agreement' between the firm's owner, the firm's managers and the firm's employees, in a process of "mutual adjustment" (for a full discussion see Barrett and Rainnie, 2002; Ram and Edwards, 2003; Ram, 1999a, 1999b).

The overwhelming impression from the SME and entrepreneurial literatures is that within such firms this 'agreement' is typically "fluid and flexible" (Marlow, 2002), and tends to be conducted on an informal, reactive basis with a short-termist horizon (Matlay, 1999; Ram *et al.*, 2001; Wilkinson 1999). Small firms are much less structured and less professionalised in their internal processes, policies and practices than their larger counterparts, and much less likely to engage in HR planning and sophistication (Koch and McGrath, 1996). To illustrate, of 117 randomly selected American SMEs, just fifteen (12%) had an HR department (Heneman and Berkley, 1999, cited in de Kok and Uhlaner, 2001).

Several different explanations have been proposed for this 'informality' and lack of structured HRM. From within the firm, Marlow (2002) identifies the owner's "strategy for control" as a decisive influence. Owners tend to want to impose their 'stamp' and personal management style on internal matters, including the primary goal and orientation of the firm, its working conditions and policies, and the style of internal and external communication (Nooteboom, 1993), and how this is communicated to staff (Marlow and Patton, 1993). Many small firm owners profess a preference for a 'team ethos', or 'family atmosphere', or 'fraternalism' (Goss, 1991) which, they fear, might be threatened by the introduction of more formalised policies (Marlow, 2002). Indeed, Katz *et al*. (2000: 8) suggest that, in the eyes of most entrepreneurs, HR is synonymous with "bureaucracy, policies, procedures and paperwork".

Second, and importantly, HR is simply not a priority for small businesses (Wilkinson 1999: 209). Given their shortage of resources in terms of time, money, people and expertise, a typical SME manager's organisational imperatives are perceived elsewhere, in finance, production and marketing (McEvoy 1984), with 'HR' of diminished relative significance. Additionally, the infrequency with which *critical* HR-type decisions are required in firms with a small headcount – at least, according to the firm's owner(s) or manager(s) – can obviate the need for considered attention to these matters, further limiting small firms' exposure to formal HR practices (Nooteboom, 1993) and exacerbating the disinclination to invest in HR specialisation (Marlow, 2002). Models depicting the typical life-cycle of small firms (Greiner, 1998; Churchill and Lewis, 1983) note how in the start-up phase, a small headcount allows SME owners and/or managers to interact with, and monitor, most if not all employees at once and directly, again precluding the 'need' for more formalised policies. Management priorities are set as problems arise, and HR policies are adopted *ad hoc*, as required. However, as a business grows, rendering the task of management more complex, many managers acknowledge the need for more formalisation, including for people management processes (i.e. HRM), in order to meet the demands of a larger workforce and to co-ordinate its activities more effectively. Others, however, continue to resist formalisation.

From outside the firm, SMEs face greater levels of environmental uncertainty, and so informality, reactivity and short-termism may simply be borne of necessity (de Kok and Uhlaner, 2001). At the same time, compared with larger firms, SMEs face fewer of the external pressures that can compel managers to manage in certain ways, or to adopt certain HR practices. SMEs tend not to be plugged into either "advisory" or "coercive" networks (see Bacon and Hoque, 2005), including the likes of employers' associations in the former case and trade unions in the latter, and nor is employment legislation applied as stringently to SMEs (Marlow, 2002). However, market pressures tend to bear down harder on resource-poor small businesses (Ram and Edwards, 2003). Kinnie *et al* (1999) found an impetus for the formalisation of HRM stemming from the demands of SMEs' major customers for 'good' suppliers (i.e. reliable and well-managed). Customers either directly checked for the presence of certain HR practices, or satisfying their service demands indirectly necessitated changes in, for example, training and job design. This echoes Rainnie's (1989) earlier research on the effect on small firms' employment systems of the firm's status in their supply chain. Finally, Andrews and Welbourne (2000) found that even if SME managers and entrepreneurs want to make HR a priority, they "face pressures to de-emphasise their investments in people". At the time of the initial public offering of shares firms were "penalised by the investment community for making a public statement in the prospectus about how much they value their employees" (ibid: 94), or for having an HR officer in place (ibid: 98).

Interpretations of SMEs' apparent preference for informal management styles have conventionally been divided into two categories: the positive, 'small is beautiful' perspective (which stresses how minimal bureaucratic controls give rise to satisfying social relations, challenging work and greater flexibility) contrasted with the 'bleak house' scenario (which notes the near-absence of progressive HRM practices, and highlights instead the prevalence of work intensification and poor terms and conditions under authoritarian, arbitrary and unconstrained management). These two polarised characterisations are now deemed "overly simplistic and inaccurate" (Marlow, 2002: 26), in the light of the application to SMEs' workplace relations of the 'emerging negotiated agreements through mutual adjustment' thesis discussed above. Moreover, recent research has revealed not only highly heterogenous arrangements, but also rather more formalisation and sophistication than the 'bleak house' portrayal depicts (see Dex and Scheibl, 2001; Dundon *et al.*, 2001; Hornsby and Kuratko, 1990; de Kok and Uhlaner, 2001; Ram, 1999a, 1999b). The nationally representative WERS98 data notes that only 8% of UK SMEs are purely informal with no 'new management practices', and 28% have more than five (Cully *et al*., 1999: 272). One study of 560 UK SMEs found that many small business managers were "seeking to introduce more formal procedures *alongside* the informal culture and 'organic' nature of management" (Bacon *et al*., 1996: 90).

While the factors outlined above suggest reasons why small firms tend not to engage systematically with HR matters, de Kok and Uhlaner (2001: 275) are not alone in interpreting this approach as displaying a certain lack of foresight. Such foresight would seem especially pertinent in the so-called 'knowledge economy' featuring firms employing a significant proportion of highly-skilled staff (such as e-commerce enterprises). 'Information-intensive' firms might be expected to require sophisticated HR practices, particularly in the realms of career development and training and reward, for their rare and valuable employees. Indeed, using WERS98 data, Bacon and Hoque (2005) found the skill-mix of the firm's employees to be the strongest predictor overall for the adoption of more formal HRM practices inside SMEs - more so than ownership status, sector, or reliance on large customers.

Two studies inside information-intensive sectors shed light on the nature of HRM in firms comparable to our sample in terms of market pressures and workforce profile. Ram's (1999a; 1999b) studies of professional consultancies highlight how intense market pressures, and the value attached by skilled knowledge workers to their 'autonomy' on the job, combine to compel employers toward establishing fluid project-based work activities, loose systems of supervision, and *ad hoc* management/ HRM arrangements, including over pay. Yet within this seeming 'informality' residuals of hierarchy and the potential for conflict continue to exist. Ackroyd (1995) reported similar findings from his study of 16 small UK-based information technology firms (mainly software suppliers). These too tended to employ multi-skilled 'knowledge workers' with a high customer orientation and high adaptability and mobility, working in team-based operating units on a project-by-project basis, in order that they might adjust willingly to frequent changes in operational systems, organisational policies and structures, and even staffing profiles in response to developments in products and services. Organisational strategy and design tended to be derived from project requirements (Ackroyd, 1995: 147), and so the firms favoured "organic structures" and an "extreme lack of hierarchy" over more 'orthodox' organisational designs (op cit: 141, 150). However, while noting the near-absence of formality in most cases – even to the extent that it was often difficult to discern a 'managerial' function - Ackroyd did find some evidence of standardised HR practices. Teamworking, high earnings and profit-sharing, in particular, were "very common" (op cit: 147), as well as a general trend of firms' activities and policies being designed to reflect staff competencies and interests. Such arrangements, however, tended not to have been derived from any strategic reflection.

HR inside 'e-commerce firms'.

In the great majority of the books and articles on e-commerce, neither HR nor 'employee management' in general is even of peripheral interest (see Chen, 2001; Collins, 2000; Evans and Wurster 1999a, 1999b; Malone and Laubacher, 1998; Newhauser *et al.,* 2000; Timmers, 1998; Venkatraman, 2000). The specific literature emphasises instead technological concerns, marketing strategies, networking and the process of securing financial backing. Indeed, the literature tends "to portray organization-building as (at best) irrelevant or (at worst) a source of organisational drag in a world operating at 'Internet speed'" (Baron and Hannan, 2002). Wright and Dyer (2001: 24) note, however, that, while commentary in the business press rarely suggests as much, many failures among entrepreneurial e-commerce firms "clearly [come from] the inability to deal with organizational and people challenges – rather than lack of vision, great technology or even business savvy".

Evidence of the marginalisation of HR issues comes from two recent studies. Feindt *et al* (2001) acknowledged "attention to good employee relations" as one of "six common factors associated with successful growth companies" (ibid: 53), but then declined to investigate this variable further in their research. They offered no explanation for its omission, almost as though it were self-explanatory? Similarly, Finkelstein (2001) called for research into the "mistakes" made by failed e-commerce start-ups along four dimensions of business strategy - customers, capabilities, competitive advantage and internal consistency. Though each has clear implications for managing employees, he neglected the lessons that might be learned from examining firms' "mistakes" in HR and organisational design.

The 'small is beautiful' and 'bleak house' caricatures both surface in this literature. Around the time of the e-commerce boom, the stand-alone operations in particular were felt to embody the 'small is beautiful' ideal of dynamic, creative, free-form styles of collegial working. By contrast, Frank (2001) dissects the exuberant accounts of 'dotcom' firms' supposedly revolutionary new 'e-management' approach, noting the 'bleak house' lack of employee benefits, the chronic culture of overwork and the hostility toward employees joining a trade union (Ross, 2000).

Among the few to conduct empirical research into HR-related matters inside e-commerce firms Horner-Long and Schoenberg (2002) compared the value attached to certain leadership attributes in a sample split evenly between e-commerce firms and 'traditional' companies. They found commonalities, but the 'e-leaders' valued risk-taking, networking, project management and technical knowledge more than their traditional counterparts, and seemed less concerned with honesty and collaboration (ibid: 616) - a curious finding, perhaps, for a sector popularly assumed to be reliant upon close working relationships. The authors speculated whether these differences might be related to leadership priorities at different stages of a firm's life-cycle (ibid: 618).

The Stanford Project on Emerging Companies (SPEC) has tracked the evolution of organisational designs, business strategies and employment practices in about 200 'high-technology start-ups' in Silicon Valley over several years.[iv] The resulting model (Baron and Hannan, 2002) posits five HR strategies: 'engineering', 'star', 'commitment', 'bureaucracy' and 'autocracy', plus 'aberrant' to describe hybrid forms. Categorisation is based on three factors: employees' primary attachment (whether to love, work, or money), management's main co-ordination method (whether through peer pressure, rules and procedures, or supervision) and the key selection criteria (whether skills for tasks, for long-term potential, or for cultural fit). Of interest for this study is that SPEC considered the 'engineering' model to be the default option for start-ups: employees' attachment to challenging work, peer group control, and skill-based selection.

Kanter (2001) drew on findings from her 'Global E-Culture Survey' of self-selecting respondents from 785 organizations, plus 300 interviews inside 80 firms and 24 in-depth case studies to identify four key strategic and organizational implications of e-commerce: treating strategy formulation as "improvisational theater" (in essence, encouraging innovation), nurturing networks of partners, turning organizations into 'communities' and creating a culture that attracts and retains the best talent. The latter two have clear implications for HR, principally through fostering employees' commitment to the firm. The more successful 'pacesetter' e-commerce firms are more collaborative than the 'laggards', and are professionally run like an "integrated community" (Kanter, 2001: 67-68), including giving employees challenging responsibilities and facilitating their discretion and creativity, delegating decision-making powers based on superior knowledge rather than rank, developing inter-departmental collaboration and cohesive and warm working relations, and addressing issues of work-life balance.

Wright and Dyer (2001) interviewed managers from both the line and HR inside seven e-commerce firms about their 'people issues'. Their resulting model for 'e-commerce HR' is based on six broad objectives: attaining employee autonomy with accountability; forging common purpose; achieving contextual clarity; promoting personal growth; developing mutual support, and providing commensurate returns to employees. This 'architecture' is designed to attract, develop, retain and reward "proactive, adaptive and generative" employees who work in project teams and engage in continuous learning and innovation in order to realise the firm's three strategic objectives: sensing the market, mobilising a rapid response and embedding organisational learning. The policies they recommend include a clear corporate vision, continuous information sharing, attitude surveys, supporting employee (self-) development, establishing *ad hoc* project teams, fair process in employee relations matters, a healthy work-life balance, managing employment security expectations and layoffs sensitively, flexible benefits and, finally, broad-banding and use of performance bonuses in reward schemes.

What is interesting about these three prescriptions for 'e-commerce HRM' is how closely the lists resemble many of the 'best practice bundles' that are often recommended to *all* companies, regardless of sector.[v] In the manner of HRM prescriptions, then, there seems little differentiation between the e-commerce sector from others. Only 'work-life balance' seems to attract greater attention in the HR checklists for e-commerce firms.

In sum, then, prioritised attention to HR matters in any formalised sense is a rarity among SMEs and entrepreneurial ventures in general, and among e-commerce firms. For the latter literature to pay people management little heed is odd however, given the sector's reliance on attracting, retaining and motivating highly-skilled employees, and HRM's potential value in this regard. We set out in our research to address this gap in the literature.

Methodology.

Acknowledging the dearth of previous studies in this sector, and following Bacon *et al*'s (1996) study of UK SMEs, we sought insights from both a quantitative survey and qualitative case studies from within the sample. 225 UK-owned and UK-based e-commerce companies, identified randomly from specialist and general business magazines, and on-line databases, were contacted by telephone and by letter between March 2001 and July 2001, and the manager responsible for HR/ personnel issues was invited to complete a questionnaire and take part in follow-up interviews. The questionnaire comprised sections asking for personal information about the respondent and general characteristics of the firm and the workplace. It then continued with questions – derived from the wording in the 'WERS98' survey source books (Cully *et al.,* 1998; 1999) - about the use made of a group of standard HR policies and practices (including employee involvement in decision-making, internal communication, financial participation and reward, performance appraisal, training and provisions for employment security). The unit of analysis was at the level of the firm.

37 companies submitted useable responses (a response rate of 17%).[vi] For this paper we concentrate only on those firms defined as SMEs (n=30; response rate: 13%). This comparatively

low response rate is common for research into SMEs (see Koch and McGrath, 1996; Daniels *et al*., 2002; de Kok and Uhlaner, 2001), and is rather good for a sector that tends to dismiss almost all invitations to participate in research. Nevertheless, the low response rate, the small final sample, and the fact that our respondents were self-selecting, and predominantly drawn from management grades (non-response bias and social desirability bias respectively), mean that care should be taken when interpreting the results. We make no claims for our data set to be representative of UK e-commerce firms.

Table 1: Sample characteristics of sample of 30 UK e-commerce firms.

	Percentage	Frequency
Size:		
0-9 employees	37	11
10-49 employees	30	9
50-250 employees	33	10
Age:		
Less than two years old	33	10
2-4 years old	40	12
More than 4 years old	27	8
E-commerce sector:		
Business-to-business (B2B)	67	20
Business-to-consumer (B2C)	40	12
New technology suppliers	13	4
Other	7	2
Affiliation to, or ownership by, another organisation:		
Yes (i.e. a ‘small multiple’)	17	5
No (i.e. a stand-alone independent enterprise)	83	25

More than four-fifths were stand-alone operations, the remainder being ‘small multiples’ (i.e part of larger enterprises), and most were very small: two-thirds employed fewer than 50. Twelve firms conformed to the WERS98 survey definition of a ‘small business’, namely 10-99 employees (Cully *et al*., 1999: 251). The firms were also overwhelmingly young. The mean lifetime was 38 months.

Respondents’ jobs ranged from CEO, founder or partner to senior managers (in, for example, HR, Finance, Business Development, ‘Talent’ and Operations) down to HR officer level. All were permanent employees, and almost all had been hired on a full-time basis. Most (n=24) had been working for the firm for less than two years; seven for less than a year.

HR practices in UK e-commerce firms: results.

Although we conducted multiple statistical analyses, the bulk of the results failed to show significant differences or correlations between sub-groups and variables. This is likely a consequence of the small sample size. Our findings are therefore exploratory and confined here to descriptive profiles (i.e. frequencies and percentages). Instead we discuss the findings in the light of previous research into SMEs. While methods, definitions and research questions differ, comparisons can nevertheless be made for interest. Table 2 provides an overall summary of selected people management practices in our sample, compared – where figures have been published – with data from the nationally representative WERS98 sample of small businesses.

Table 2 – The presence of people management practices in 30 UK e-commerce firms, compared with published WERS98 data for all UK SMEs and all UK workplaces (%)

	E-commerce firms (N=30)	All UK SME businesses: WERS98 data (N=250)	All UK workplaces: WERS98 data
General			
Personnel specialist on site	47	9	30
Trade union recognition	0	12 (7 if owner present at work)	45
Consultation and communication: principles			
Employees are encouraged to provide feedback on the company's performance and decisions	90	-	-
Future business plans and changes are communicated to all employees	90	-	-
Decisions affecting employees are taken in consultation with these employees	69	-	-
Senior managers are best placed to make decisions about the workplace	57	74	-
Consultation and communication: practices			
Joint consultative committee	33	17 (9% with working owner)	28
Dedicated problem-solving groups (i.e. quality circles, etc)	30	23 (17% with working owner)	42
Informal consultation as and when required	77	-	-
Staff attitude survey in the last five years	7	-	45
Suggestion scheme	7	30 (workplaces)	33
Regular meetings with the whole workforce present	63	44	48
Regular team or departmental briefings	47 (71% weekly)		57 (31% weekly)
Internal newsletter/ bulletins (incl. email; Intranet)	47	17 (>25 staff) 9 (<25 staff)	50
Transmission down the management chain	30	32 (>25 staff: 42)	60
Noticeboards	13		
Financial participation and reward			
Share options for non-managerial grades	63	1	25 (private-sector workplaces)
Share options for managerial grades	70	-	-

Continued overleaf…

Table 2 continued – The presence of people management practices in 30 UK e-commerce firms, compared with published WERS98 data for all UK SMEs and all UK workplaces (%)

Profit-related bonus/ profit-sharing scheme for non-managerial grades	53	20 (58% for small multiples)	47 (private-sector workplaces)
Profit-related bonus/ profit-sharing scheme for managerial grades	66	-	-
Individual performance-related pay for non-managerial grades	40	13 * (29% for small multiples)	11
Individual performance-related pay for managerial grades	37	-	-
Group-based performance-related pay for non-managerial grades	23	13 * (29% for small multiples)	-
Group-based performance-related pay for managerial grades	33	-	-
Formal performance appraisal for non-managerial grades	57	32	56
Formal employment security/ redundancies policy	10	-	14
Most employees receive five days' training a year	50	17	-

Notes: Five point scales (ranging from 'strongly agree' to 'strongly disagree') were used for all items covered in the column referring to our sample, except the section on consultation and communication practices. The Likert-scale items were then re-coded where 'strongly agree' and 'agree' indicated a 'Yes', and all other responses indicated a 'No' (i.e. recoding '1' for the former, and '0' for the latter). While we acknowledge that for some of the questions a dichotomous 'yes/no' scale might have been more appropriate, we retained the Likert-scale format for uniformity, and we do not believe that the findings would have been significantly different as a consequence. For the section on consultation and communication practices the respondent was asked to tick the practices used by the firm. 'Yes' and 'No' were used for all items in the WERS98 data. The WERS98 data for SMEs refers to small businesses (i.e. independent stand-alone ventures) only, except where stated.

All of the WERS98 data come from two published sources (Cully *et al.*, 1998; 1999) and not from the original dataset. Some data is not reported in these two sources, hence the gaps in the comparative analysis.

* WERS98 data appears to make no distinction between the two schemes.

Personnel specialist on-site.

In the light of our literature review, we did not expect to find many Personnel/HR specialists in our sample. Instead, almost half (n=14) claimed to employ, in the words of the item, "a Personnel specialist who is specifically responsible for employment relations issues". This proportion is almost five times that found nationally among small firms, 91% of whom do not have a Personnel specialist (Cully *et al*., 1999: 257), and is even considerably more than the figure for *all* UK workplaces.

Trade union presence.

Nor did we expect to find a trade union presence in our sample. Indeed, none of the 30 firms recognised a trade union, and none felt that their business could "benefit from recognising a trade union", although eight expressed a certain ambivalence (ticking "neither agree nor disagree"). WERS98 found unions recognised by 7% of small businesses with a working owner, and 25% of small multiples (Cully *et al*., 1999: 265).

Consultation and communication with employees.

Indications from Table 2 are that the *principle* of consulting and communicating with staff about important business matters is one with which all but a few e-commerce companies are comfortable, although the responses to the statement that "senior managers are best placed to make decisions about the workplace" nevertheless suggest that decision-making probably remains 'top-down' in most cases, and employee input might be rather modest. This is a common attitude found in small businesses, of course (Wilkinson, 1999), although our sample seems more inclined toward inclusive consultation and decision-making than SME counterparts in other sectors (Cully *et al*., 1999: 257).

In terms of practices, "informal consultation" on an *ad hoc* basis - unstructured and seemingly unclassifiable – proved, as expected, by far the most popular way of receiving input from employees.[vii] However, a third claimed to operate "formal joint consultative committees to share information with employees and involve them in the decision-making processes". This finding is surprising for a sector popularised as anti-bureaucracy and anti-formality. Moreover, it is almost twice the national average for small businesses, which falls to 9% where the owner is present, the likely circumstances for our sample (Cully *et al*., 1999: 267). However, it is possible that this 'industrial relations' term lost something in translation, and so some error in interpretation, including perhaps some duplication with the other more informal mechanisms, might be occurring. Our sample also made more use of dedicated problem-solving groups than small businesses nationally, particularly where the owner is present in the workplace (Cully *et al*., 1999: 262).

Each firm reported using at least one of five communication methods, in noteworthy contrast with the 13% of all small workplaces, and 22% of all small businesses, with no communication systems whatsoever (Cully *et al*., 1999: 261). Our findings echo those of Bacon and colleagues (1996: 90) who reported a marked preference among SMEs for direct forms of communication. The most frequently reported form, the "regular meeting with the whole workforce present", proved far more popular than among small businesses generally (Cully *et al*., 1999: 262). Almost half our sample held regular team briefings or departmental meetings, 71% on a weekly basis, 14% 'as and when required'. The e-commerce firms' modest reliance upon "transmission of information via the management chain" seems unusually low, although it is in line with most small businesses. This finding may be an indication of the lack of clear management structures found by Ackroyd (1995).

Financial participation.

Innovation with regard to giving employees a financial stake in the business is perhaps the policy most associated with e-commerce firms. Our findings confirm this impression. Use of all four schemes (individualised and group-based performance-related pay, profit-sharing and bonuses, and share ownership) proved far more common in our sample than the comparable WERS98 findings (Cully *et al*., 1998; 10; Cully *et al*., 1999: 261). The exceptional finding is that 19 firms (63%) offered share options to staff below management grades; 70% also offered them to managers. If our sample is representative then the extent of non-managerial share ownership in e-commerce firms is outpacing the national trend in all *private sector* workplaces by a factor of 2.5. But the starkest comparison is with small businesses, among which a negligible percentage (1%) offers share options to staff (Cully *et al*., 1999: 261). This particular finding is all the more surprising given that, although Welbourne and Andrews (2000: 912) found ESOPs to be vital to firms' post-IPO survival, despite widespread investor scepticism, we undertook our survey a year on from the NASDAQ crash in April 2000.

Remarkably, four firms applied *all four* schemes to their non-managerial employees *at the same time* (see the case studies below). A fifth did not use any, in contrast with 43% of small businesses reporting none of the schemes (Cully *et al*., 1999: 261).

Viewed together, these findings paint a striking picture of extensive financial participation among e-commerce firms. Other research provides supporting evidence for this pattern. Three-quarters of Arthur Andersen's sample (2001) operated a share option scheme "for at least some" of their employees, targeted mostly at senior managers. IRS (2001) surveyed 35 e-commerce firms and found that 66% offered share incentives to at least some staff, all but three offering them to all staff. The practice was more popular among stand-alone firms (73% of a sub-sample of 22) than among online divisions of traditional firms (54% of a sub-sample of 13). In addition, 69% applied individual merit pay to senior managers, 63% to IT and technical staff, and 57% to marketing, sales and admin employees. Just two of the IRS 35 used team- or group-based PRP.

Performance appraisal.

Formal appraisals for non-managerial employees also appeared strikingly common, given the procedure's somewhat bureaucratic reputation. WERS98 found that 32% of small workplaces conducted a formal performance appraisal for at least 60% of non-managerial employees - 66% among small multiples (Cully *et al*., 1999: 263) – but 63% of small businesses had no appraisal systems at all. Just over half of our sample (55%) also claimed to sit down with employees to discuss career and promotion opportunities.

Training.

The stereotypical view of SMEs' approach to staff training is that it is under-valued and neglected (often due to financial constraints), but if it is done, it is done so 'informally', on-the-job in an *ad hoc* manner on a case-by-case basis (CBI, 2003: 1). However, given high-tech firms' need to develop and retain skilled employees we expected greater attention to staff training than would be evident among small firms in other sectors. WERS98 defined training specifically as having been paid for by the employer and located away from the normal place of work, a distinction we did not incorporate into our question, and so any comparison must be cautiously undertaken. Half our sample claimed that "most employees receive a minimum of five days' training per year", in contrast to 12% of all UK workplaces (Cully *et al*., 1998: 10), and the 17% of small businesses who provided *some* training to most staff (Cully *et al*., 1999: 259).

Job security/ redundancy management.

Given the 'dotcom crash' of 2000, and the ongoing struggle to turn a profit for most e-commerce firms (Saunders and Cook, 2002), we were not expecting one year on to find many written policies on job/ employment security, or redundancy management. Surprisingly, however, three firms had adopted a *formal* policy (see the case studies for details of one policy). This proportion of our sample compares well with the 14% of all UK workplaces having such a policy (Cully *et al*., 1998: 10); we found no figure reported for SMEs.

Five case studies.

The survey findings indicated, somewhat surprisingly, that our sample of e-commerce firms had embraced many HR practices in a formal and even professional manner. Moreover, in many policy domains, they seemed to have done so to an extent far in excess of the national profile for small businesses. This was even more striking given that 37% were micro-businesses (less than 10 employees), and may have been too small to even need any *formalised* HR practices (see Hornsby and Kuratko, 1990: 11). We were interested to investigate further the issues signalled by our survey results, on the nature of our sample's engagement with HRM and employee management in general.

The letter attached to the survey asked if respondents would agree to take part in follow-up interviews. Of the thirteen who agreed, we ultimately secured access to five. The firms (all made anonymous) and the interviewee were:

- One of the co-founders of *'skiing-trips.com'* (a 'B2C' holiday firm)
- The CEO and founder of *'DIY-centre.com'* (a 'B2C' customer-supplier agency)
- The manager responsible for HR matters at *'most-sports.com'* (a sports website)
- One of the co-founders of *'web-voicing.com'* (a new technology supplier)
- The manager responsible for HR matters at *'build-sites.com'* (a website host and designer).

All five firms were founded in the late 1990s, around the height of the 'dotcom' frenzy, and all five are still trading in one form or another in 2005.

One semi-structured interview took place between July and August 2001, and lasted between 90 and 120 minutes in length. We sought insights into the firm's approach to people management and HRM from the formation of the company onwards. We asked the interviewee how the firm had made its decisions on HR over the life-cycle of the firm, noting when each began to formulate an HR strategy, and first appointed an HR professional. We then collated descriptions of the firm's current HR function, structures and practices in the realms covered by our survey. Additional documentary evidence came from the firm's responses to our survey, plus company policies, annual reports, case studies, press releases, and media reports.

Due to space restrictions we present here brief narratives summarising each of these central themes across the five firms. Throughout we discuss the case studies' findings in the light of the literature review presented above.

The start-up phase.

From the outset, most of the entrepreneur owners wanted to start an e-commerce venture "to make money, and fast" (skiing-trips.com); "to have fun, make loads of money and learn as much as possible" (DIY-centre.com). Most wanted to operate as stand-alone ventures if possible, and all were very keen to differentiate themselves from the much-derided 'traditional' organisational philosophies, strictures and limitations found in ‘old’, ‘bricks-and-mortar’ companies.

In the initial start-up phase, none of the founders gave much thought to questions of organisational structure, and still less to people management/ HRM. Other functions’ agendas dominated and HR was simply not judged important enough to warrant considered attention. One possible explanatory factor is that many were buoyed by ample ‘incubator’ funding and venture capital support (to the tune of millions) – in contrast to SME counterparts in other sectors lacking the security of such resources.

In common with many small firms, the initial recruits came from the co-founders’ network of immediate friends. Yet, in contrast to the SPEC project’s anticipated ‘default’ selection policy for high-tech firms being based on specific skills, none of the five used competencies as essential criteria. Instead, one firm owner cited “‘culture’ compatibility and friendship”, and conceded that hiring mates had not proved an effective strategy for the long run.

Skiing-trips.com’s early experiences seem typical. The firm’s early days were recalled as “one continuous party: everyone was only doing what they liked doing and were there for fun”. The firm had no formal business strategy or even an idea for a workable corporate structure. Nobody was reporting to anybody. There were “no rules, no procedure, it was a free environment”. All business decisions, including HRM policy areas, were taken on a day-to-day basis, with an informal consensus among staff sought as far as possible. As the co-founder put it: “We had equalised ‘flat, fast decision-making’ and ‘flexible’ business with being ‘unstructured’”. The co-founders at DIY-centre.com had also sought to keep all business processes as “fluid and adaptable” as possible. Although they were *aware* that they needed an HR strategy during the start-up phase, “there was no time to sit down and create one. We couldn’t anticipate our HR needs in the future, so we didn’t come up with a strategy”.

For two firms (web-voicing.com and skiing-trips.com), the impetus for introducing some semblance of strategy and structure came from concerned external stakeholders, particularly their venture capitalist backers. With business growth and an expanded workforce, their ‘anarchic’, consensual style of decision-making had become fraught and ineffective. By contrast, we found internal catalysts for greater formalisation within the family firm build-sites.com, following the appointment of an external CEO, and at most-sports.com when a disastrous round of compulsory redundancies led to it paying greater attention to people management. The firm had secured massive financial backing upon launch and early in its life won a lucrative exclusive contract. In the exhilaration, it hired 60 extra staff on very attractive salaries. But after the contract expired, the firm struggled to sustain its impact, and was forced to make half of these recruits compulsorily redundant just months later. With no formal proccesses in place, it handled the process very badly by its own admission, and the crisis stung the surviving workforce.

The arrival of ‘HR’.

During the first two years of business none of the firms had an HR strategy, or at least not one that had been formalised or expressly articulated. At a certain growth stage however the appeal of the ‘free-style’ approach to decision-making, including for employee management, was offset by its disadvantages and more formal structures became attractive.

Once skiing-trips.com had been compelled by its backers to modify its original business strategy, “from ‘want to make it fast to cash in our stock options’… to building a brand and… wanting to be the best in every aspect of the business”, the firm started thinking for the first time about HR matters. This came one year on from inception. Eventually they deployed a ‘Star’ strategy (cf. Baron and Hannan, 2002) - employing people based on their talent and potential, then creating a working environment in which they were set challenging tasks tied to very attractive reward packages - and they implemented several HR practices to complement the new direction. Most-sports.com hired its first Personnel/HR specialist two years after inception, following its painful redundancies crisis. DIY-centre.com also first hired a specialist two years after being formed. The family owners of build-sites.com took three years to hire theirs (alongside the external CEO). Interestingly they selected a mature HR professional with experience in blue-chip companies rather than a young generalist novice. She described arriving to “an open show… there was no HR policy at all”, nor any vision or strategy for where the firm was going. At the time of the interview web-voicing.com had no HR specialist on its 24-strong payroll.

The status of the HR function.

None of the four HR specialists enjoyed ‘strategic partner’ status (cf. Ulrich’s four HR roles: 1997); all fulfilled primarily administrative roles, professionalising HR policy areas. Formulation of HR strategy and the management of organisational change remained responsibilities for the senior managers. However, the HR manager at build-sites.com is called infrequently by the Board to attend strategic meetings, mainly when ‘people’ issues arise, and most-sports.com’s HR manager – interviewed as the company was folding to be sold for a nominal sum - reported having “the freedom to implement HR policy as long as it doesn’t cost anything”.

HR policy and practice.

All five firms tended to conduct consultation with staff and organisational decision-making on an informal and irregular basis, as and when required. Most arrangements appeared to be management-dominated, with only modest scope for employees to voice their opinions and offer feedback. All five ran team briefings (typically weekly, or *ad hoc*) and general meetings with the whole workforce present. Widespread use was made of newsletters and email bulletins and office noticeboards. No formal arrangements (i.e. a joint consultative committee) were in evidence. Decision-making at skiing-trips.com, for example, bore close resemblance to a ‘traditional’ company, having mutated from the ‘all-inclusive’ near-anarchy of before toward ‘top-down’ imposition of senior managers’ judgement. However, the perceived flexibility and creativity from occasional *ad hoc* all-workforce exchanges remained valued. They also conducted staff surveys, and operated a staff suggestion scheme. DIY-centre.com had found a way of structuring its decision-making in a manner resembling joint problem-solving/ working parties. They used a system of ‘frequent workshops’, arranged informally whenever needed, and characterised by the founder as collective ‘brainstorming’. These arrangements have been used for almost all major business decisions, including the company’s re-structuring. The Board at web-voicing.com often invited an employee delegate to take part in discussions for major strategic decisions. Most-sports.com made use of dedicated problem-solving groups.

Each of the five firms demonstrated the innovations in financial participation highlighted in our survey. Build-sites.com and web-voicing.com ran all four schemes for all staff grades. While the latter had implemented appraisals to inform its pay awards, the former was finalising its policy at the time of the interview. All of skiing-trips.com’s senior managers held share options, only some non-managerial staff had been offered them. All staff received a company-wide profit-sharing bonus, and all were subject to individual performance-related pay. DIY-centre.com used group-based performance-related pay, a profit-sharing bonus and share ownership, while most-sports.com reported using profit-sharing, share ownership, and individualised performance-related pay for all staff grades. The latter was considered the "best" system for rewarding staff, the share options "useless" because the share price had plummeted. The interviewees revealed that they offered share options "because everyone else did", implying that they were seen more as a recruitment pre-requisite to off-set the attractions of rival firms than either a motivational tool or part of a performance management strategy, the two rationales identified by Lawler (2001). In other words, their popularity may be less an indicator of strategic innovation in HRM, and more a pragmatic response to the going rewards package in the sector at the time.

Finally, web-voicing.com was one of the three firms in our sample to have a written policy on employment security and redundancies (another was skiing-trips.com). Expectations were set out in transparent fashion at the recruitment stage that bonuses may be frozen, and even across-the-board cuts in pay implemented. Build-sites.com's policy was a work in progress at the time of the interview. Most-sports.com had offered employability training, and consulted with staff earlier, in its later redundancy rounds.

In sum, then, the case studies illustrate the curious mix between noteworthy innovations in HRM and a dependence upon enduring, 'traditional' methods for managing employees that had been suggested in our survey findings. We discuss the broader implications in the conclusion.

Limitations.

In addition to those pertaining to the sample profile (see Methodology), we would also highlight the occasional confusion encountered by respondents over what some items meant, evidenced by some recourse to the 'neither agree nor disagree' option. This may indicate that 'industrial relations' terms such as joint consultative committee, and even employment security, are not easily interpreted in an e-commerce context, even by HR professionals. An alternative explanation is that some HR policies are implemented in only a partial manner that falls short, in the respondent's view, of being a verifiable practice covering the whole firm (e.g. financial participation schemes offered to selected employees only).

We also readily acknowledge that we did not capture in our limited survey several potential explanatory control variables, including the owners' prior business experience; her/his exposure to, and knowledge of, HRM; the workforce's skills profile, and different funding arrangements and ownership structures.[viii]

Finally, this study applies only to SME-sized e-commerce firms, and primarily to those that are independent enterprises. Traditional 'bricks and mortar' companies moving into e-commerce face very different HR challenges - not least of which is operating simultaneously two management regimes (one for the 'old' firm; one for the 'new' e-division) - and face very different HR challenges as a consequence (see Kanter, 2001; Wright and Dyer, 2001).

Conclusions.

To reiterate, this study is exploratory in nature. Its value lies in its novelty (certainly for the UK) and the scarcity of similar studies, and – if such firms are still being formed – for the research agendas and future hypotheses that the results and analysis suggest.

We offer the following conclusions. First, the reported incidence of several standard HR practices operating firm-wide suggests that the extent of formalised people management processes in e-commerce firms may be far greater than the literatures on SMEs, entrepreneurs and e-commerce itself would have us expect. In particular, the high number of Personnel/HR specialists in our sample challenges Whiteley's (2002) assertion that HR departments "have not been popular" in e-commerce firms. The findings challenge the dominant impression of small firms' preference for an 'unprofessional' approach to employee management matters, and echo the more sophisticated impression gleaned from the Bacon *et al* study (1996). They may even offer some support for the positive stereotype of e-commerce firms being more 'people-oriented' than their counterparts in other sectors. However, since we have no data on the employees' perceptions and experiences inside these firms, as recommended for SME research by Barrett and Rainnie (2002), we cannot issue a confident endorsement of the so-called 'e-commerce' approach.

Despite the apparently widespread *use* of many HR practices, we found little evidence from the case studies to suggest that e-commerce firms engage with people management or HRM in a way that could be described convincingly as 'strategic'. This determinedly 'free-form' approach to strategy formulation, including that for HRM, is enthusiastically endorsed in the e-commerce literature (e.g. Venkatraman's call (2000) for a continuous cycle of "selective experimentation"). Yet, as our literature review demonstrates, far from being a radical new approach this has long been a common trait among small start-ups (see too Marlow and Patton, 1993; Perry, 2001; O'Regan and Ghobadian, 2002). That organisational founding is "a disorderly process in which people improvise as best they can, given their situation" (Katz *et al.,* 2000: 9) was as true for firms in the 'old' economy as it is for the heroic young innovators in the 'new'.

We discerned a distinct incremental time-line of phased progress (or decline?) toward formalisation in e-commerce firms' dealing with HRM, which questions Whiteley's observation (2002) of there being "no consistent pattern in terms of development of people and integration of people management to the business in newer start-ups". Each of the five case study firms began with a 'honeymoon' phase, marked by the owners' 'default' preference for loosely structured, reactive, short-termist, informal "fraternalism". This phase of haphazard 'muddling through', punctuated on occasion by *ad hoc* policy creation as needs arose, typically lasted around a year until each firm faced an internal or external 'shock' of some kind (pressure from backers or an organisational trauma, for example). This served as an impetus toward more formalised professionalisation, even - dare we say – toward more 'bureaucratic' arrangements, in many cases leading to the appointment of the firm's first HR specialist. Indeed, our case study evidence echoes Whiteley's observation (2002) that HR departments "have been introduced only when the size of the organization became such that it was indispensable". The co-founder at one firm felt that this threshold arrived around the tenth or twelfth recruit, close to the 20 proposed previously by Roberts *et al* (1992: 255). Support for a size-threshold hypothesis is also implied in Matlay's research (1999) into the formalisation of HR policy in 6,000 UK businesses, of which 5,969 were SMEs.[ix] Again, however, several long-standing firm-growth models depict similar transformation thresholds (Churchill and Lewis, 1983; Greiner, 1998; Hanks *et al.*, 1993; Wynarczk *et al.*, 1993).

When eventually required to implement a coherent set of HR policies, the firms' owners tended to follow the tried-and-tested approach of nascent entrepreneurs from the 'old' economy who, "lacking clairvoyance, mostly reproduce common forms characteristic of the populations they enter, rather than crafting new ones" (Katz *et al.,* 2000: 9). This 'mimetic' process to HR policy selection and implementation (see DiMaggio and Powell, 1991; Paauwe and Boselie, 2002) - copying others in the same sector - would appear to be borne out by the extraordinary prevalence of employee share ownership, adopted because "everyone else" had it. Recast in this light, e-commerce innovations in HRM appear rather less radical, and instead might even seem conformist.

The process of upheaval from original foundations presents e-commerce managers with considerable problems. The partial surrender to more 'traditional' organisational forms seems to have occurred often against the will and ideals of company founders. Yet several interviewees expressed regret at not introducing more coherent organisational systems earlier. For DIY-centre.com's co-founder, it had been, in his words, the firm's "biggest mistake" to have delayed adapting its informal and all-inclusive decision-making into a more structured format. In their research among Silicon Valley start-ups Baron and Hannan (2002) also found that the founders' original HR blueprint - such as it was – exerted considerable influence on subsequent progress, and that changing strategy almost always proved disruptive.

This is perhaps the central paradox facing e-commerce managers and owners: how to keep sufficient control over organisational decision-making while upholding the dynamism, informality, inclusivity and semi-autonomous working they dearly prize, and which is believed to help retain and motivate eminently poachable employees. Ram (1999a: 27) has noted the importance to small information-intensive firms of "the manner in which autonomy is handled", while a PwC report (2001) concluded: "Without careful management of people's expectations by bosses and HR directors, dotcoms risk turning into pale imitations of old economy companies, and their staff becoming disillusioned". Yet, again, evidence for the same dilemma has been found among small firms in other sectors. Bacon and colleagues (1996: 90) conclude their study of 560 UK SMEs by noting how the challenge of introducing change in small firms is "managing the introduction of the formalisation necessary to retain management control while not destroying the informality and culture". Put simply, the delicate balancing act - between founders' idealistic aspirations and a cherished 'informality' versus the more pragmatic requirements for running an effective business - is hardly the sole province of "radical" e-commerce firms, but a perennial issue for small business managers in general. Heneman, Tansky and Camp (2000), among many, have urged further research on HRM development during entrepreneurial firms' life-cycles.

To conclude, our research has found evidence of information-intensive e-commerce firms engaging with HR innovations in line with models for the 'new' economy at the same time as displaying (often reluctant) continuities with a supposedly discredited past, and with their allegedly less dynamic counterparts in other sectors. This has led many authors to criticise the 'e-' prefix as "unnecessary, inappropriate and unhelpful. The use of such terms exaggerates the contrast between current business norms as well as simplifying the potential for innovation" (Palmer, 2002: 266). Coltman *et al* (2000: 2) may be right: "There is no such thing as e-business, there is just business and some of it is electronic".

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ENDNOTES.

[i] *The two terms co-exist in the academic literature, although neither is more precise than the other, and different authors simply have their idiosyncratic preferences. Kanter (2001: 2) reserves the term 'dotcom' for "pure Internet" companies.*

[ii] *Among the many such tales, the story of Pixelon surely stands out. The managers at this Californian new technology supplier spent three-quarters of their entire venture capital funding - $16m - on a single party for the workforce in Las Vegas at which The Who, Kiss and Tony Bennett all gave private concerts (Frank, 2001: 364).*

[iii] *We draw on a review of the SME literature in order to compare our study with existing findings in comparable firms. However, while de Kok and Uhlaner (2001) found the size of the workforce to be strongest determining influence on such firms' HRM, HRM and people management varies significantly even within this category: micro-firms employing less than 10 people have very different arrangements than larger small firms (see Matlay, 1999). Moreover, Marlow (2002: 30) has rightly questioned whether size fully captures the profile of such firms. She cites market performance and market presence as other likely determining factors. However, for comparative purposes with our sample, we rely on the broad SME literature.*

[iv] *This includes website designers, computer hardware/ software manufacturing or research firms, but also firms in sectors such as biotechnology and telecommunications, and so the sample is not strictly comparable to ours.*

[v] *To take just two such lists for illustrative purposes, Pfeffer's (1998) seven universally applicable best practices are: employment security, selective hiring, self-managing teams, high compensation contingent on organisational performance, extensive training, reduction of status differentials, and sharing information. Wood and de Menezes (1998: 491-495) operationalised 'high commitment management' as recruitment based on social skills and team working, use of problem-solving groups, widespread information briefings at several organisational levels, an attractive pay and reward scheme (including monthly and cashless pay, merit awards, profit-sharing and employee share options), training needs analysis, appraisal, and various welfare and benefit policies.*

[vi] *We secured the 37 with some difficulty. After providing a stamped addressed envelope to encourage a higher response rate, we followed up each mailing with several reminders by telephone, and later sent an electronic version of the questionnaire which could be completed directly on the Internet. 25 companies explicitly declined our invitation, and in an indication of the volatility of the e-commerce sector, 10 companies (almost 5%) had ceased trading when we contacted them just a month after the first approach.*

[vii] *If anything, its extent may be even greater, since the responses under 'Other' (5 firms: 17%) also appear to encapsulate informal means for gauging what staff think: 'daily general conversations', 'regular meetings' [the nature of which was not presumably captured by any of the options available], plus the 'intranet'.*

[viii] *Hamilton (2001) has hypothesised, without empirical testing, that variation in e-commerce firms' culture might be attributable to the different pressures and priorities imposed by different funding arrangements (e.g. self-funded operations having a more family/gang-like atmosphere than those funded by venture capitalists, and subsidiaries of larger firms being more likely to experience centrally-imposed bureaucratic systems than stand-alone operations).*

[ix] *Matlay (1999) found 'informality' to be the dominant management style in 91.5% of his sub-sample of 5,383 micro-businesses (1-9 employees); none had fully formal arrangements. 68% of the 457 small businesses (11-49 employees) were also managed informally; just 7.2% had 'formalised'. The pattern toward formalisation accompanied increases in firm size such that among Matlay's 129 medium-sized companies (50-250 employees) 24.7% retained the informal approach, but almost every remaining firm had either 'formalised' or 'professionalised' their arrangements (22% and 55% respectively).*