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Benefits arising from the impact of the introduction of Cisco's connected office work and accommodation style on the Audit and Risk Management Unit (ARMU) of Salford City Council.

Peter D. Paddon
peterpaddon@blueyonder.co.uk

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BENEFITS ARISING FROM THE IMPACT OF THE
INTRODUCTION OF CISCO’S CONNECTED OFFICE
WORK AND ACCOMMODATION STYLE ON THE AUDIT
AND RISK MANAGEMENT UNIT (ARMU) OF SALFORD
CITY COUNCIL.

PETER DAVID PADDON

Project submitted in part fulfilment of the Master of Business Administration

Bolton Business School
The University of Bolton – June 2009
SUMMARY

Local authorities are under ever increasing pressure to provide better quality services at less cost. They need therefore to extract more value from their assets including people and real estate. Studies of teleworking show that the productivity of workers can be increased and real estate costs reduced.

Salford City Council first explored a model from BT PLC called Agile Working but the business case did not work. Salford decided instead, to press on with a pilot implementation of a model from Cisco (the networking company) called The Cisco Connected Office. This model combines traditional teleworking concepts with a bespoke office design structure. The author’s unit (Audit and Risk Management Unit – ARMU) was selected as the pilot implementation.

This dissertation sets out to track changing work patterns, gauge employee attitudes, establish any business benefits and identify any residual barriers to maximising the success of the pilot implementation.

The pilot was planned to commence in a newly refurbished area of the main campus but unfortunately financial pressures first delayed the move and then necessitated a move to non-refurbished accommodation. Although the office areas required in the Cisco work style were provided, they were in discrete offices rather than an open plan one. The postponements resulted in a compressed settling in time during which the team could test the boundaries of the new work style and restricted the volume of test data.
The conclusions and recommendations show that staff were briefed and consulted on the new work style at an early stage but the impact of the changed accommodation was not adequately considered and staff given a full re-brief just before implementation with the result that they are confused about how the new work style is supposed to operate. Some of the managers in the unit use traditional line-of-sight management techniques but the literature tells us that coaching styles are more successful at managing remote workers.

Despite these difficulties enjoyment of work has improved, work related stress is down, staff feel less likely to look for alternative employment and also believe their productivity has improved. Less office space is in use, so cost savings should be achieved, but these are difficult to quantify due to the granularity of budgets.

The major communication and governance issues should be easy to address through a further staff briefing on how the work style should operate and training for managers on managing a remote work force.
ACKNOWLEDGEMENTS

My heartfelt thanks go to:

Everyone in the Audit and Risk Management Unit at Salford City Council who contributed to this research;

My tutor, Dr Peter Moran, for providing outstanding insight and pragmatic advice and guidance over the last few months;

My former manager, David McIlroy, who pushed me (but not quite kicking and screaming) into enrolling for the course;

My wife, Alison, for believing in me, encouraging me and not complaining about the untidy piles of books and journals in the study; and finally,

I dedicate this work to the loved one of an unknown family without whose generosity, this work would not have been completed.
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1 INTRODUCTION

ARMU has a staff compliment of 44 people providing audit, risk management and utility management services to Salford City Council (Salford), the Greater Manchester Police Authority (GMPA) and a growing number of other public sector bodies in the North West. The author manages the teams that provide audit services to the GMPA and computer audit services to Salford and other public sector bodies. The team is based in Swinton, but apart from Salford and GMPA, its customers are remotely located up to 75 miles away (see Appendix D for organisation chart).

The process of undertaking an audit requires an auditor to travel to customer premises to interview people and gather evidence for testing. Analysis of the evidence and writing of the report can be completed anywhere there is a desk to work at, with electricity to power a laptop computer e.g. customer premises, Swinton office or at the auditor’s own home.

Demand for the services of ARMU is increasing but the unit is currently located in a discrete building that has no scope to accommodate additional people. The accommodation is of poor quality being cramped, short on private space for meetings, cold in winter and hot in summer.

1.1 Strategic importance

In 2003, the U.K government commissioned Sir Peter Gershon to conduct an independent review of public sector efficiency. His report, Gershon (2004), set an agenda for improving the efficiency of service delivery by local government
at 2.5% for the years 2005-6 to 2007-8 and since then, the pressures to achieve similar savings year on year have increased. The areas identified by Gershon (ibid) as ripe for improvement include back office functions such as HR and finance. Although internal audit services are not specifically mentioned, they are traditionally considered to be part of “finance” and at Salford they are in the finance management line.

The author’s team is expected to contribute to the overall efficiency savings target and has been asked to achieve this through reducing overheads. Significant overheads include the accommodation budget, and advertising or agency fees to attract new staff. Additionally, as we make a small surplus on activities outside of Salford, the ability to win more business can provide additional income for Salford.

Corporately, Salford initially explored a risk sharing partnership with BT plc to implement new ways of working that require less office space. Following a review of BT’s proposal for “Agile” working it was concluded that ARMU would pilot an in-house implementation of Cisco’s Connected Office concept, which combines teleworking with a unique office layout. Cisco claim the following benefits (Cisco (2007)):

- Reduced real estate costs
- Greater employee satisfaction
- Improved collaboration
- Accommodation of differing styles of work
Although there are potential tangible and intangible benefits from adopting Cisco’s model there are also potential problems to overcome. Reducing office space usage depends on finding other locations for the team to work from e.g. the employee’s home or the offices of a client and this may not be possible in every case. Reducing business travel costs depends on a combination of fewer and shorter journeys. If management fails to adapt to supervising a remote workforce or Salford fails to implement updated HR policies and procedures to adequately support the new workstyles, productivity may actually fall.

Potential benefits also include reduced CO2 emissions, which may help some of the wider objectives of the Council; a better work-life balance for employees; better retention of staff and improved attractiveness of the organisation to potential new employees.

One limiting factor on future growth is the difficulty in attracting new staff. Although ARMU’s pay rates compare favourably with other public sector organisations and the smaller private sector organisations in the region, they lag the larger PLC’s and pay rates available in some other regions. But relatively small amounts of business travel, a good pension scheme, benign human resources policies, flexible workstyles including the ability to work from home and good office accommodation may be a competitive advantage.
1.2 Objectives

The objectives of this research are:

1. To track the changing practice and nature of agile working patterns arising from the implementation of agile working methods into the Author’s team.
2. To develop a model which is capable of defining the business benefits which have accrued,
3. To critically review the impact on employees attitudes to work arising from agile working and
4. To identify any residual barriers to the take up of location independent working and make recommendations on whether and what policies should be changed.
2 LITERATURE REVIEW

2.1 History of Teleworking

Since the industrial revolution to the 1980’s, the factory model of production including intensive clerical work has been dominant. The economic policies associated with Margaret Thatcher and Ronald Reagan from 1979 together with the development of telecommunications technology (e.g. the Internet), and the prevailing economic situation at the time (i.e. Bailey & Kurland (2002) refer to the oil crisis) proved a catalyst for business to review costs and to find new markets and ways of working. For many organisations, the cost of accommodation (rent, rates, energy, and furniture) can be a major proportion of their total costs prompting them to look at alternative arrangements where there is a less than one to one ratio between employees and desks.

More recently, concern over the World’s changing climactic conditions has prompted governments and business to look for ways of reducing carbon emissions. Teleworking at least holds out the hope of reducing pollution caused by commuting and may bring other economic and social benefits believes this author.

Nilles et al (1976, p4) coined the term “telecommuting” in their research on whether telecommunications and computer technologies could be substituted for some percentage of urban commuter traffic to reduce commuter congestion the economic impacts of transport investment. They also attempted to identify the indirect impacts arising from such substitution including: energy, environment, and working conditions. Their studies involved the insurance and
banking industries and focussed on the economic incentives of dispersing employees from city centres, whether the technology was capable of meeting work-related communications requirements, and whether the substitution of telecommuting for commuting was effective in terms of retaining employees’ ability to perform and their willingness to do so. They developed a generalised optimisation model to analyse the “tradeoff” between telecommunications and transportation.

Whereas Nilles et al (1976) approached Teleworking from a public policy and transport perspective, Martino (1979) focussed on business efficiency, postulating that there was no real reason for many employees to be to be physically present at a central location, provided they had access to data and communication with other people. He thought telework was competitive with traditional office practices and predicted that in the future it would almost certainly be cheaper.

2.2 History of the Literature

In Huws’ (1998) review of costs and benefits for the Local Government Employers Association, she traces the literature to the early 1970’s and the oil crisis of the time. Concentrating on substituting electronic communication for travel, she thought most of the models were simplistic and did not provide realistic costing estimates. She also found that later research made some similar mistakes, analysed very small samples, and failed to take into account behaviour impacts on non-teleworkers and whether these would de-compensate for teleworkers savings.
Magazine (2001) suggests telework literature is not well developed from a scientific standpoint and that it could be categorised into three types by number of articles: a) non-research based practitioner articles, b) empirical based but scientifically limited research, and c) empirical and theoretical, research based articles published in refereed journals. She concludes that only three studies contained a sufficiently large enough sample for statistically significant conclusions to be drawn and that the most recent of these was by Loverde (1997).

The European SUSTEL project concentrated its research on the economic, social and environmental aspects of teleworking from an organisational perspective and is probably the largest study of teleworking in Europe (Bartolomeo (2004)). Tietze et al (2004) looked at issues and considerations in teleworking for a group of South Yorkshire local authorities.

James (2004) reports much previous research focuses on relatively narrow aspects of Telework, and he set out to broaden the basis by assessing the overall relationship between telework and environmental, economic and social impacts. Siha and Monroe (2006) agree that most previous research has concentrated on the teleworkers themselves to the exclusion of organisational, technological, managerial and environmental issues.

2.3 Definition(s) of Teleworking

Hopkinson et al (2002) report one of the major problems of telework research is the lack of any universally accepted definition of teleworking, making it difficult
to quantify its extent and growth, and to compare the outcomes of different studies. Magazine (2001) agrees several descriptions have been used to describe the same phenomenon and Huws (1998, p.6) agrees teleworking:

…is defined loosely, as a facilitator of a range of new choices making it possible to tailor the time and spatial organisation of work in an almost infinite number of permutations and combinations to suit varying organisational, occupational and personal requirements.

Siha and Monroe (2006) track the number of occurrences of telework, virtual office and telecommuting appearing in literature as terms that can be used to describe location independent working. Magazine (2001) adds the additional terms: remote work and homework. Hopkinson et al (2002) mention hot-desking and hotelling, while Whittle (2005) mentions flexible working. Kowalski and Swanson (2005) found telework and telecommuting were used interchangeably and list hotelling, flexiplace and virtual workplaces as other relevant terms whilst concluding there was no commonly accepted term for remote working. They proposed the term “telework” to describe work arrangements where employees conducted some or all their work away from the main workplace.

Nilles et al (1976, p.4) do not offer a specific definition of teleworking but have the opinion that an information worker can telecommute i.e. “…perform their work, using communications and computer technologies at locations much closer to their homes than is the case now”. Giuliano (1981, p.70) defines teleworking similarly as “…the process of conducting a significant amount of information work by telecommunications.”
Siha and Monroe (2006, p.456) define teleworking as “…those opportunities that workers are given to work from home rather than reporting to a centralised office location” whilst also stating it can be “…working at a distributed work arrangement such as satellite work centres, neighbourhood work centre, flexible work arrangement and generic work offices (e.g. hotels and telework centres.)”. They also refer to workers who extend the workday after they arrive home and the mobile sales force that spend most of their day out of the office due to the nature of their job.

Haddad and Lyons (2007) concentrate on the public policy aspects of teleworking and claim that past studies of teleworking labelled individuals as teleworking or not on a particular day but they thought this too restrictive as a definition. They suggest work patterns may involve working at home for part of a day, thus teleworking may only displace rather than replace commuting.

Magazine (2001) argues that researchers have defined arbitrary boundaries in their definitions of teleworking and that the lack of standardisation creates difficulties in objectively documenting and communicating the results of testing and formulating scientific generalisations. Di Martino (2001, p.11) summarises the definitional debate “almost everyone agrees that any definition of telework should combine the notions of distance from the traditional workplace and the use of communication technologies”. Which is very close to the proposal by Magazine (2001, p.44) “Remote work occurs when an individual is working for an organisation with which that individual has an employment relationship at a location which is physically distant from that organisation.”
For the purposes of this research, “telework” will be defined as “work that takes place away from the main office with the aid of computer assisted communication” and will be treated as being synonymous with the terms telecommuting, hot-desking, agile working, and hotelling.

2.4 European Context

Citing the SIBIS project (a European-wide survey), Bartolomeo (2004) reports teleworking numbers increasing by 29% between 1999 and 2002. He believes telework would continue to increase in future and that employers, unions and the European Commission had welcomed this. Furthermore, many stakeholders had changed from hostility to a more welcoming viewpoint, if at times, still sceptical one. Ruiz and Walling (2005) confirmed the trend, reporting the number of teleworkers in the UK had grown from 921K in 1997 to 2.377M in spring 2005.

Bartolomeo (2004) also reported on the European Commission funded SUSTEL project that focus’s on the relationship between telework and sustainable development. It researched 30 case studies involving six organisations, and is probably the largest study of its kind so far he believes. Hopkinson and James (2003) claim SUSTEL showed advantages for both the employer and employee but Bartolomeo (2004) cautions that the project covered several forms of teleworking so that results may not always be fully comparable, and furthermore that teleworking is more complex than supposed. Differences between countries were also noted.
Hopkinson et al (2002), identified 15 aspects of the relationship between telework and sustainable development and categorised these in three dimensions:

<table>
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<td>Personal Wealth</td>
<td>Built Environment</td>
<td>Health</td>
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<td>Resilience</td>
<td>Safety</td>
<td>Community</td>
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Relationship between telework and sustainable development

Adapted from Hopkinson et al (2002, p.22)

Figure 2/1

James and Hopkinson (2006) in their report on teleworking at BT conclude that, overall there were mutually positive economic, social and environmental benefits for employees and organisations. Some of the economic benefits accruing to BT however, were offset by more time being worked by employees. They also cautioned that as telework becomes embedded in an organisation it becomes more difficult to conduct “before and after” (p.5) research.

Di Martino (2001, p.23) agrees mutually positive outcomes are possible, pointing out that providing telework is introduced appropriately, benefits may accrue to society, employees and employers the so-called “win, win, win scenario”.
2.5 Local Authority Context

Sir Peter Gershon’s review (2004) of the scope for efficiency savings across all public expenditure suggests Local Authorities find 2.5% year on year efficiency gains. Huws (1998) reports some authorities can save up to 50% of office space through teleworking combined with major corporate reorganisation.

Reporting a number of benefits accruing to both employers and employees Huws (1998) cautions, there are both initial and ongoing costs to be taken into account as well as social dis-benefits to employees. Overall, the greatest benefits were likely to be delivered when teleworking was implemented following an organisation wide strategic review.

Researching homeworking in U.K. local authorities, Tietze et al (2004) defined three types: full time, recurrent (i.e. working 1 day a fortnight from home) and episodic (i.e. informal, occasional working from home). They identify drivers from the local authorities and employees viewpoints i.e. from the employer’s perspective: resolution of some office space and resource issues; improved delivery of services; environmental benefits from reduced travel; improved recruitment and retention; and increased productivity. Clarke (2005) agrees employer’s motivations are likely to include recruitment and retention. Hopkinson and James (2002) identify increased productivity and reduced absenteeism albeit from a small sample.

From the employees perspective Tietze et al (2004) identify: reduced travel cost, improved work-life balance and the opportunity to balance caring
responsibilities as reported drivers. Hopkinson and James (2002) report social inclusion benefits, improved job satisfaction and motivation.

Summarising the evidence, this author believes the experience of teleworking in a local authority context is positive overall and can make significant contributions not only to efficiency but also the social lives of employees and the communities they serve.

### 2.6 Potential Benefits

#### 2.6.1 Economics

In spite of a survey of company heads believing that home workers were less productive and using working from home as an excuse for time off (Mohamed (2005)), empirical evidence from DuBrin, cited by Siha and Monroe (2006), reports an increase in the productivity of home-based teleworkers (but this was largely from structured repetitive work). They conclude careful selection of jobs and teleworkers would mitigate concerns over productivity. James and Hopkinson (2006) note people in their study felt more productive and thought that their work style was a contributing factor but their sample contained a high proportion of managers (88%). These studies indicate that the chances of increasing productivity are improved through careful selection of teleworkers and the roles they perform.

#### 2.6.2 Communication

Duxbury and Neufield (1999) conclude telework changes the communication dynamic within organisations. Informal communication is less frequent and
there is more reliance on formal structured opportunities for communicating. Kowalski and Swanson (2005) point out informal communication’s importance in making employees feel part of the organisation. Davenport and Pearlson (1998) state something intangible is lost in communication between colleagues when geographically dispersed teams no longer have the opportunity to meet face to face to work on their tasks and it becomes difficult to create successful team environments. Some organisations they say, have tried to combat this through use of groupware tools (software that helps groups of people collaborate on common tasks). But, this they say, is unlikely to provide solutions to all the problems.

Managers, say Kowalski and Swanson (2005), should attempt to reduce the social isolation of teleworkers, by organising regular employee meetings, news bulletins and social events. Other key measures for better communication include explicit training in the use of groupware, objective setting, processes for handling conflict resolution between colleagues and the development of coaching rather than supervisory roles say Davenport and Pearlson (1998).

<table>
<thead>
<tr>
<th>Public</th>
<th>Costs</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start-up</td>
<td>Marketing / training development, Evaluation</td>
<td>None</td>
</tr>
<tr>
<td>On-going</td>
<td>Ongoing marketing/training, Latent demand realisation, Urban sprawl</td>
<td>Travel reduction, Emission reduction, Improved highway safety, Increased economic development, Increased neighbourhood safety</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Private</th>
<th>Costs</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start-up</td>
<td>Planning, Marketing/training, Equipment</td>
<td>None</td>
</tr>
<tr>
<td>Ongoing</td>
<td>Internal programme administration, Marketing/recruitment, Training, Equipment maintenance/ replacement less salvage, Communication, Decreased workplace interaction/immediate access, Security of data</td>
<td>Space cost savings (office and parking), Recruitment (access to best talent and broader labour markets), Improved retention, Increased productivity (Less absenteeism, Less sick leave, Longer hours, Fewer distractions (greater productivity per hour)), Improved customer service, Disaster recovery, Public relations, Compliance with air quality/trip regulations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Individual</th>
<th>Costs</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start-up</td>
<td>Equipment, Software, Stress to perform</td>
<td>None</td>
</tr>
<tr>
<td>Ongoing</td>
<td>Communications costs, Utility costs, Space costs, Decreased workplace interaction, Loss of support services, Loss of boundary between work and home</td>
<td>Travel/time stress savings, Travel cost savings, Other cost savings, Personal flexibility, Reduced work-related stress, Ability to get more/better work done, Ability to work while mobility limited or physically distant workplace, More time with family</td>
</tr>
</tbody>
</table>

Business Benefits and Cost of Teleworking
Figure 2/2
2.6.3 Management

Wells (2001) ponders why telework has not seen an even greater take up given the potential advantages. Reasons could include management reliance on deep-rooted line-of-sight supervision styles, lack of training and conflicting evidence about the impact on profitability. Barriers to employees choosing to take up telework include costs (James (2004)), lack of space (Huws (1998)), and isolation (Campbell and Barned (2007), James (2004), Huws (1998) and Nilles (1976)).

Kowalski and Swanson (2005) identify three critical success factors for teleworking i.e. communication, support and trust of which the most important is trust. A culture based on trust they say, requires a rethink of what it means to be working and a critical component of trust is a results based performance management system. Managers must trust employees to do the job and employees must trust managers to treat them equitably. Huws (1998) goes further; suggesting a fundamental change in management style and workplace culture is necessary when teleworking is introduced. To effectively manage a dispersed workforce it is no longer possible to rely on “over-the-shoulder supervision”, “ad hoc methods of monitoring the work”, or “subjective judgements of how well any given worker is performing” (p. 50) she adds. Bolletino (1977) cited in Lamond (2000) expresses the view that coaching rather than policing is a more suitable style for supervising employees.

Huws (1998, p.50) recommends a systematic management approach where staff work to
... clear, mutually-agreed targets, with regular milestones for monitoring purposes; performance indicators are explicit, fair and transparent to all parties concerned; and a relationship of mutual trust prevails between manager and subordinate.

The best chance of success is in organisations where there is already an ethos of management by results but Schein (2004) cautions that culture is the most difficult organisational attribute to change.

Ilozor et al (2001) agree management communication strategies are important and can also have a positive impact on employee satisfaction. Kowalski and Swanson (2005, citing Staples (2001)), point out that research has shown that trust is positively associated with perceptions of good performance and job satisfaction whilst being negatively associated with stress.

Davenport & Pearlson (1998) report some companies doubling productivity but they also caution many teleworkers are managers or professionals whose productivity is assessed only subjectively. James and Hopkinson (2006) also found high proportions of managers and other professionals in the groups they studied.

Teleworkers often benefit from the latest technology and this can also be a major influence on productivity. Additionally, firms may adopt teleworking as part of a general re-engineering of business practice (Davenport & Pearlson (1998)). Indeed, Campbell and Barned (2007) argue the overall effectiveness of telework depends on business process re-design together with organisational governance mechanisms, availability of appropriate supporting technology, and a supportive culture. Furthermore, employee support is dependent on their
attitude, the scope for business processes to perform the task at hand and support mechanisms to limit feelings of isolation. Wells (2001, citing Pritchard (1995)) believes that one way to mitigate against negative impacts on employee-supervisor relationships is to create written teleworking programme guidelines and provide training to managers on managing a remote workforce.

2.6.4 Personal wealth

Huws (1998) points out that the costs to the employee of working from home include providing a workspace e.g. a room, and that many studies recommend setting aside a dedicated work room. A study from 1995 she says, estimates the cost of an extra room at “£17,500 - about an extra £175 a month on a typical mortgage” (p. 36). She also notes that some employers give an allowance to home workers but this rarely exceeds £50 per month. James (2004) cites one Italian employer in his sample paying an allowance to teleworkers and adds that employee costs also include home energy consumption.

Nilles et al (1976) relate benefits accruing to teleworkers from reduced commuting time and costs as depending on a number of variables, including the home to office distance, the number of days spent away from the office and the form of transport normally used. Hopkinson and James (2001) calculate car driver savings of 186 miles per week, and train miles of 202 miles per week. But Huws (1998), James (2004) and Nilles (1976) agree that the issue of compensatory social travel undertaken to combat the feeling of isolation experienced through working alone also needs to be taken into account.
Employers should also ensure that HR policies do not encourage unnecessary car travel through schemes that include mandatory minimum mileages (James 2004)).

James (2004), Pye, Tyler and Cartwright (1974) cited by Huws (1998), note the potential for teleworkers to relocate home to a more distant location in which case the savings on daily commuting would be offset by increased journey times for both work-related and non-work-related travel. Although not having a negative effect on job satisfaction, James (2004) notes that some employees report an increase in working hours without financial recompense.

2.6.5 Resilience
It is generally concluded that telework has positive impacts on levels of absenteeism (James (2004), Huws (1998), Hopkinson et al (2002)) with James (2004) reporting Bradford City Council experienced an 80% reduction in absenteeism amongst teleworkers. James (2004) concludes on balance; teleworking staff are less vulnerable to disruption caused by travel problems or terrorist security alerts but they are more vulnerable to disruption due to telecommunications faults e.g. Hopkinson et al (2002) conclude that connections to corporate intranets may be more difficult to maintain and troubleshoot at home locations.

2.7 Employee Attitudes
Distinct from the legal contract of employment, Argyris first referred to the psychological contract in 1960 in terms of the relationship between employer
and employee. It has been defined as: ‘... the perceptions of the two parties, employee and employer, of what their mutual obligations are towards each other’. (CIPD 2005, p2). Rousseau (1990, p.391) provides a narrower definition due to the difficulty in defining who or what the employer is i.e. “the employee’s perception of the mutual obligations existing with their employer. She also distinguishes between "relational contracts" which implicitly depend on trust, loyalty and job security and "transactional contracts" which are based on an exchange of long hours and hard work for high pay (p.391).

Research evidence shows that, where employees believe that management have broken promises or failed to deliver on commitments, there is a negative effect on job satisfaction and commitment. What employees want is a fair reward package, career advancement, the opportunity for personal development, being associated with a respectable organisation and job satisfaction including a satisfactory work-life balance (Woodruffe (1999) cited in CIPD (2005)). A survey by Guest and Conway (2001), reports a majority of employees believing that, on the whole, changes at work made things better rather than worse, leading to higher work satisfaction and commitment and lower likelihood of employees leaving the organisation. The adoption of good employment practices maximises levels of motivation and satisfaction.

Tietze et al (2006) caution that the effect of teleworking on colleagues not teleworking should not be overlooked. Teleworkers are often professionals already enjoying higher status over non-professional office based workers and the office-based workers often find themselves answering the phone or doing
other menial tasks for teleworkers. Duxbury and Neufield (1999) also noted a reluctance of co-workers to ring teleworkers at home and managers would sometimes allocate short notice tasks to people based in, rather than out of the office. In some cases, this gave rise to jealousy and a reduced feeling of involvement in their teams. There can also be impacts on the teleworker’s household as families and friends find difficulty adjusting to new routines.

It is commonly accepted that teleworking has beneficial effects on levels of absenteeism e.g. James (2004), Clarke (2005), Gurchiek (2007)) but Magazine (2001) points out the difficulties in defining absenteeism. For example is it an absence, if an employee takes a break to deal with some personal issues but misses an important phone call? She argues it is necessary to define organisationally demanded and flexible hours of work to enable a common definition of absence.

James and Hopkinson (2006) found the majority of BT respondents reported the quality of their life was good with more teleworkers than non-teleworkers reporting their work-life balance was good. Surprisingly, it was also found that personal time saved in commuting was shared with their employer to the extent that they worked longer hours. 77% (p. 5) also thought that teleworking had positive impacts on their skills and competence but 46% (p. 5) felt isolated from colleagues, which may impact team working.
2.8 Conceptual Frameworks

Siha and Monroe (1996) conclude few authors attempt a thorough review of teleworking literature and that much of it concentrates on the individuals that telework. Their work however, also considered managers, organisations, technology and environmental issues. But Campbell and McDonald (2007, p. 814) identify a number of flaws with their model i.e.

- An organisation’s Telework may not follow a rational decision-making process and may evolve from within the organisation or emerge rapidly due to other external events such as an act of terrorism or natural disaster.
- There is a lack focus on the human challenges of increased Telework. Particularly in how management and Telework activities could be supported.
- The criteria for successful Telework adoption are not generic and may change over time and are reliant on stakeholder perspectives that are not well-defined.
- The criteria for successful Telework adoption are not generic and may change over time and are reliant on stakeholder perspectives that are not well-defined.

This author also believes that the model is uni-directional, overly simplistic, lacks focus on handling the requirements of stakeholders, and is also lacking in feedback loops.
Believing the problem of designing a teleworking conceptual framework to be difficult due to the interaction of multiple organisational configurations, social and technological structures, Campbell and McDonald (2007) designed a simple high-level framework (Figure 2/4).
The focus of this research is around Employee Attitudes, Working Patterns and Business Benefits to identify residual barriers to successful teleworking. The author believes that the interaction between changing work patterns, employee attitudes and business benefits will help to identify residual barriers to a successful teleworking program. This is represented in the model below.

Figure 2/4

Proposed conceptual framework to be used as the basis for this research

Figure 2/5
3 RESEARCH METHODOLOGY

3.1 Introduction

This chapter will discuss and analyse the advantages and disadvantages of the various methods, tools, techniques and philosophical positions used to ensure that the research design is appropriate to the topic in question with a good chance of a satisfactory outcome.

Easterby-Smith et al (2008, p. 56) give three reasons why an understanding of philosophical research in relation to research is beneficial:

1. “…it can help clarify research designs…”

2. “…knowledge of philosophy can help the researcher to recognise which designs will work and which will not.”

3. “… it can help the researcher identify, and even create, designs that may be outside his or her past experience.”

3.2 Research Strategy

A research strategy is a general plan of how a researcher goes about answering their research questions including a rationale for methods and any constraints that apply including time and resources. It should also draw a distinction with the finer tactical detail of the research. Starting with the research philosophy and peeling away concentric layers to data collection methods at the centre, Saunders et al (2003) describe the “research process onion” (p. 83).

Johnson and Harris (2002) point out however, that any research must start with the research question and that this must drive the strategic choices about methodologies.
3.3 Research Philosophy

A research philosophy is a function of how a researcher thinks about the development of knowledge according to Saunders et al (2003). Chia (2002, p.2) goes a little further, defining it as being “… primarily concerned with rigorously establishing, regulating and improving the methods of knowledge-creation …”. Saunders et al (2003) discuss three philosophies: positivism, realism and Interpretivism but writers cannot agree common names. Collis and Hussey (2003) discuss only two terms: positivist and phenomenological whilst stating that interpretivist is a commonly used alternative for the latter. Easterby-Smith et al (2008) discuss positivism, realism and social constructionism and state their methodological implications in figure 3/1:

<table>
<thead>
<tr>
<th>Social Science Epistemologies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Positivism</strong></td>
</tr>
<tr>
<td><strong>Relativism</strong></td>
</tr>
<tr>
<td><strong>Social Constructionism</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elements of Methodologies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aims</strong></td>
</tr>
<tr>
<td>Discovery</td>
</tr>
<tr>
<td>Exposure</td>
</tr>
<tr>
<td>Invention</td>
</tr>
<tr>
<td><strong>Starting points</strong></td>
</tr>
<tr>
<td>Hypotheses</td>
</tr>
<tr>
<td>Suppositions</td>
</tr>
<tr>
<td>Meanings</td>
</tr>
<tr>
<td><strong>Designs</strong></td>
</tr>
<tr>
<td>Experiment</td>
</tr>
<tr>
<td>Triangulation</td>
</tr>
<tr>
<td>Reflexivity</td>
</tr>
<tr>
<td><strong>Techniques</strong></td>
</tr>
<tr>
<td>Measurement</td>
</tr>
<tr>
<td>Survey</td>
</tr>
<tr>
<td>Conversation</td>
</tr>
<tr>
<td><strong>Analysis/interpretation</strong></td>
</tr>
<tr>
<td>Verification/falsification</td>
</tr>
<tr>
<td>Probability</td>
</tr>
<tr>
<td>Sense-making</td>
</tr>
<tr>
<td><strong>Outcomes</strong></td>
</tr>
<tr>
<td>Causality</td>
</tr>
<tr>
<td>Correlation</td>
</tr>
<tr>
<td>Understanding</td>
</tr>
</tbody>
</table>

*Methodological implications of different epistemologies within social science*

Adapted from Easterby-Smith et al (2008, p. 63)

Figure 3/1
3.3.1 Positivism

Positivism is most often associated with research in the natural sciences where generalised laws can be measured through objective methods. Bryman and Bell (2007) outline five principles:

1. Knowledge has to be capable of being confirmed by the senses
2. The purpose of theory is to generate testable hypotheses
3. Knowledge is arrived at by gathering facts
4. Science must be conducted in a way that is objective
5. There is a clear distinction between scientific and normative statements.

However, they also point out that some authors (including Saunders et al. (2003) question whether it is appropriate to apply natural science methods to studies of management or social sciences and that it would be a mistake to treat positivism as synonymous with science due to the difficulties in applying scientific principals to the study of society. They are also concerned that “… the doctrine of positivism is extremely difficult to pin down and therefore to outline in a precise manner because it is used in a number of ways by authors.” (p. 16).

3.3.2 Interpretivism (Social Constructivism)

Interpretivism contrasts with positivism and is dependent on the view that a strategy is required that respects the differences between the natural phenomena that interest natural scientists and the subjective meaning of social interaction that interest social scientists believe Bryman and Bell (2007). Saunders et al (2003) discuss the importance of being able to infer general laws from complex, often unique, business situations but conclude that it is not of
great importance. Citing Remenyi et al (1998) they describe social constructionism as a position where it is necessary to explore the subjective meanings given by people to situations.

Easterby-Smith et al (2008) contrast the implications of positivism and social constructionism in figure 3/2 below.

<table>
<thead>
<tr>
<th>The observer</th>
<th>Positivism</th>
<th>Social constructionism</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMAN INTERESTS</td>
<td>must be independent</td>
<td>is part of what is being observed</td>
</tr>
<tr>
<td>EXPLANATIONS</td>
<td>should be irrelevant</td>
<td>are the main drivers of science</td>
</tr>
<tr>
<td>RESEARCH PROGRESSES THROUGH</td>
<td>must demonstrate causality</td>
<td>aim to increase general understanding of the situation</td>
</tr>
<tr>
<td>CONCEPTS</td>
<td>hypotheses and deductions</td>
<td>gathering rich data from which ideas are induced</td>
</tr>
<tr>
<td>UNITS OF ANALYSIS</td>
<td>need to be defined so that they can be measured</td>
<td>should incorporate stakeholder perspectives</td>
</tr>
<tr>
<td>GENERALISATION THROUGH</td>
<td>statistical probability</td>
<td>may include the complexity of ‘whole’ situations</td>
</tr>
<tr>
<td>SAMPLING REQUIRES</td>
<td>large numbers selected randomly</td>
<td>small numbers of cases chosen for specific reasons</td>
</tr>
</tbody>
</table>

Contrasting implications of positivism and social constructionism

Adapted from Easterby-Smith et al (2008, p. 59)

Figure 3/2
3.3.3 Relativism

The relativist position assumes all points of view are equally valid and that all truth is relative to the individual. A variant of the relativist position is that of critical realism, which includes elements of realism but also interpretive elements too say Easterby-Smith et al (2008). It can be considered to be a conscious compromise between the extremes of positivism and social constructivism experiences they continue. Easterby-Smith et al (2008) however, believe that the relativist position is distinct with its own advantages and disadvantages.

Saunders et al (2003) do not regard one research approach as being intrinsically better than any other. Each has advantages and disadvantages and the best approach therefore depends on what the research question is. Easterby-Smith et al (2008) set these out in tabular form in figure 3/3:

<table>
<thead>
<tr>
<th></th>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Positivist</strong></td>
<td>a) Can provide wide coverage. Potentially fast and economical.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Easier to provide justification policies</td>
<td>a) Inflexible and artificial.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b) Not good for process, meanings or theory generation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c) Implications for action not obvious</td>
</tr>
<tr>
<td><strong>Relativist</strong></td>
<td>a) Accepts value of multiple data sources.</td>
<td>a) Requires large samples.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b) Cannot accommodate</td>
</tr>
<tr>
<td>Social constructionist</td>
<td>b) Enables generalisations beyond present sample.</td>
<td>institutional and cultural differences.</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td></td>
<td>c) Greater efficiency including outsourcing potential</td>
<td>c) Problems reconciling discrepant information.</td>
</tr>
<tr>
<td></td>
<td>a) Good for processes, and meanings.</td>
<td>a) Can be very time consuming.</td>
</tr>
<tr>
<td></td>
<td>b) Flexible and good for theory generation.</td>
<td>b) Analysis and interpretations are difficult.</td>
</tr>
<tr>
<td></td>
<td>c) Data collection less artificial</td>
<td>c) May not have credibility with policy makers.</td>
</tr>
</tbody>
</table>

**Strengths and weaknesses of different epistemologies**

Adapted from Easterby-Smith et al (2008, p.73)

Figure 3/3

Based on research questions one and three being interpretivist and questions two and four being positivist, the author has chosen to adopt a relativist philosophy.

### 3.4 Research Approach

It is commonly accepted (Bryman and Bell (2007), Saunders et al (2003)) that qualitative techniques are mostly appropriate to inductive / interpretivist approaches and that deductive / positivist approaches most commonly use quantitative techniques although neither are exclusively related.
Quantitative research entails the researcher knowing and asking the right questions. This is often achieved by asking members of the target sample a series of qualitative questions or by undertaking extensive literature reviews. One of the key issues is that of being able to replicate the research otherwise the ability to generalise from it is limited. Johnson and Harris (2002) refer to the difficulty of measuring a hypothetical construct if there is no definitive or objective scale to measure it against. In these circumstances, they point out the desirability of not relying on a single measure as each research method has its own particular strengths and weaknesses.

Quantitative research tends to be measurable and numerical in nature with high reliability, low validity.

Johnson and Harris (2002) caution that it is not a binary choice between quantitative and qualitative techniques but they should be viewed as being at opposite ends of a continuum. Cresswell (2003) describes this complimentary use of techniques as a mixed methods approach. Saunders et al (2003) refer to two advantages of using mixed methods research. The first is the ability to use say, semi-structured interviews to get a better feel for the subject before using a self completion questionnaire. Thus one method uses its inherent strength to support the weakness of the other with the result of improved validity or understanding. This is known as triangulation.

Qualitative research differs from quantitative research in a number of ways. Usually it is concerned more with words and meaning than numbers. Research
strategies tend to concentrate on inductive approaches. The stress is on an understanding of the social world through an interpretation of its workings by its participants. There is a constructionist implication that social properties are derived from the interactions between individuals believe Bryman and Bell (2007). Qualitative research tends to be subjective using non-standardised data, with the development of classifications and concepts. The results tend to have high validity but low reliability.

The mixed methods research approach described above by Cresswell (2003), has the potential to provide a wider perspective on the research subject and the combination of the two strategies will also ensure high reliability and validity. For these reasons, the author has chosen the mixed methods approach.

3.5 Research Methods

The methodology chosen for this research project has to be evaluated to ensure that the most appropriate ones are used. A critical analysis of each method used will highlight their strengths and weaknesses and explain the rationale for their choice.

3.5.1 Case study research method

A case study design has been chosen since the research will focus on the author’s team at Salford City Council. The author has not been able to locate any specific independent research on the Cisco Connected Office scheme although it is a form of teleworking with a bespoke office design and claimed financial and sociological benefits. Harrison (2002) states one of the strengths
of the Case Study approach is in situations where the theory base is comparatively weak.

There is a tendency to associate case studies with work related or community settings state Bryman and Bell (2007). Opinion is divided, they continue, on whether measurement validity, internal validity, external validity, reliability and replicability criteria can be met however. Writers coming from a qualitative approach tend to play down their significance, whereas writers coming from a quantitative approach say they are more significant. It is recognised, they continue, that research will only have internal validity to the organisation and cannot be used to generalise about other organisations.

3.5.2 Cross-sectional research method

Cross-sectional research is designed to obtain data in different contexts but over a short period of time. Problems with this approach include selecting a large enough sample to be representative, how to isolate the key phenomena from all other factors and also how to understand why any correlation exists. Compared with longitudinal research the problems of change over time are avoided say Collis and Hussey (2003). As there is a finite amount of resources and time available for this research and as Bryman and Bell (2007) believe that all research is time-bound, a cross-sectional approach will be taken.
3.5.3 Semi-structured interview data gathering technique

Interviews are a purposeful method of collecting data in which selected participants are asked questions to find out what they think, do or feel. They can be a useful way of gathering valid and reliable data. They can even help formulate research questions and objectives. In semi-structured interviews the matters explored can change from one interview to the next as different aspects are explored and this may be dependent on the order in which people are interviewed, but this process of open discovery, potentially leading to new insights, is a strength state Saunders et al (2003).

Collis and Hussey (2003) state interviews are associated with both positivist and social constructionist methodologies but caution that semi-structured interviews are time consuming, there may be issues with recording them or controlling the range of topics discussed and analysing the results. Eliminating any element of class, race or sex bias is crucial, so the questions must be drafted so that all interviewees understand them in the same way.

Semi-structured interviews were used to validate and cross-check data collected via the other two research methods used. The semi-structured questionnaire was first piloted with a member of the team to ensure that the questions were understood in the way that it was intended and that there were no unexpected paths that the discussion may take. It was also useful to consider the discussion against the first draft of the self-completion questionnaire to ensure the coverage of questions was appropriate. Piloting the questionnaires in this way resulted in some word and question order changes
and ensured content validity. The person piloting the questionnaires did not take part in the ‘live’ research.

There was a limited amount of time available to complete this study therefore a stratified sample of one person from each of the five teams within the unit was selected randomly in to be invited to participate in the semi-structured interviews. No one refused. Four out of the five interviewees consented to having the interview recorded. Notes were also taken. Interviewees were told that, if at anytime they felt uncomfortable with the recording process that it would be turned off. It was also explained that typed up notes of the interviews would be sent back to the interviewee for them to confirm that the author had represented their views accurately. This achieved very high levels of accuracy in the data gathering exercise and also secured respondent validation in the field.

The interviews were conducted in a private room where it was hoped that we would be undisturbed. Mindful that the author’s position as a senior manager within the unit might tend to restrict full and frank answers, it was explained to all participants that quotations from the interviews might be used in the report but that anonymity was assured and no information regarding the identity of those interviewed would be passed to the Council.
3.5.4 Self completion questionnaire data gathering technique

Questionnaires can be used in both positivistic and phenomenological studies and is one of the most widely used data collection techniques state Collis and Hussey (2003).

A questionnaire is a carefully structured and tested list of questions chosen with a view to eliciting reliable responses from the chosen sample. Like with semi-structured interviews the aim is to find out what respondents think, do or feel. In phenomenological studies open-ended questions are usually preferred. Saunders et al (2003) believe it is difficult to design an effective questionnaire, as there is no opportunity to refine it once it has been distributed for example, and there is no opportunity to prompt answers or remind the respondent that it remains incomplete. Asking a lot of questions can be problematic as respondents can lose interest and consequently response rates may be low. Uninformed responses are also an issue: they simply tick the nearest box without thinking about the answer they think is most indicative to the “real situation”.

Self-completion questionnaires do however, have several advantages including; efficient use of researchers time compared with face to face techniques, absence of bias due to interviewer issues, convenience for respondents and also a consistency in the way the interviewer asks questions (but possible inconsistency in the way they are understood). Response rates are boosted by assurances of anonymity.
The self-completion questionnaire was designed mostly to seek respondents’ opinions using Likert type scales but list questions were also used to capture information on the work style and technology in use. Basic demographic data was captured to analyse between the teams. Results from the piloting of the semi-structured interview were used to fine tune the self-completion questionnaire before it too was piloted with a team member. This process involved sitting alongside the team member whilst they completed the questionnaire and closely questioning them on their understanding of the instructions, the meaning of the question and why a particular response was selected. Instructions, question wording and the order of questions were changed. Piloting the self-completion questionnaire in this way ensured content validity.

The questionnaire was distributed via internal mail pigeonholes to 38 people in the unit who were present during the week long field-work testing period, and who had not taken part in piloting the questionnaire. Self-addressed envelopes were also made available to ensure that responses could be provided anonymously via the same pigeonhole system. An e-mail was sent to the unit outlining the purpose of the questionnaire and assuring anonymity. After allowing four working days for responses, a reminder was sent to colleagues allowing one further day to complete and return the questionnaire.

A total of 35 completed questionnaires were returned representing a response rate of 92.1%. Using a sample size calculator at: http://www.surveysystem.com/sscalc.htm shows that the author can say with
95% confidence that statements about the whole population are accurate within ± 4.72%.

3.5.5 Secondary analysis data gathering technique

Secondary analysis is the analysis of data that has been collected for another primary purpose. The data may have been processed for another purpose or may be in its raw unprocessed state. Saunders et al (2003) categorised the many different types of secondary data under three broad headings: documentary, multiple source and survey. Documentary data includes records maintained by the organisation. Basic cost, office space and work efficiency measures will be extracted from the author’s management control systems for analysis.

Advantages accruing to this method include; improved cost and time efficiency, potential for high quality data, unforeseen discoveries and more time to focus on the analysis. However, there are some disadvantages including: unfamiliarity with the data (should not be an issue in this case), control over data quality and it may not be sufficiently context specific.

A summary of the advantages and disadvantages of the three chosen data gathering techniques and whether triangulation is achieved is shown in figure 3/4. A cross mapping matrix of research objectives to research questions is shown as figure 3/5.
## Comparison Of Advantages And Disadvantages Of Data Gathering Techniques

<table>
<thead>
<tr>
<th>Secondary Analysis of performance data</th>
<th>Data quality variable.</th>
<th>Data may be too old.</th>
<th>Anonymity -ve</th>
<th>More time for data analysis</th>
<th>Re-analysis may offer new interpretations</th>
<th>Lack of familiarity with data</th>
<th>Complexity of data</th>
<th>No control over data quality</th>
<th>Not specific enough to area of research</th>
<th>Lack of opportunity for more comprehensive replies/difficult to make forced choice answers mutually exclusive</th>
<th>No face to face contact / lack of visual clues</th>
<th>Variation in interpretation of forced-choice answers.</th>
<th>Answers may be uninformmed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-completion Questionnaire (closed questions)</td>
<td>Some cost.</td>
<td>Low completion time</td>
<td>Anonymity -ve</td>
<td>Efficient method of data collection</td>
<td>High comparability of answers.</td>
<td>Familiar with data</td>
<td>Reduced variability in the recording of answers</td>
<td>Control over data quality – closed questions can clarify meaning for respondents</td>
<td>Question(s) designed to ensure context specific</td>
<td>Lack of opportunity for more comprehensive replies/difficult to make forced choice answers mutually exclusive</td>
<td>No face to face contact / lack of visual clues</td>
<td>Variation in interpretation of forced-choice answers.</td>
<td>Answers may be uninformmed.</td>
</tr>
<tr>
<td>Semi-structured Interviews (open questions)</td>
<td>Some cost.</td>
<td>High quality recent data</td>
<td>Face to face -ve</td>
<td>Time consuming process for collection of data</td>
<td>Difficult to compare answers due to varying structure to interviews/ difficult to analyse</td>
<td>Familiar with data</td>
<td>Increase variability in the recording of answers</td>
<td>Reduced control over data quality – open questions and less structure</td>
<td>Question(s) designed to ensure context specific</td>
<td>Good opportunity to gain more comprehensive replies/ improved flexibility to answer questions freely</td>
<td>Face to face contact/ ability to gauge reactions to questions</td>
<td>Ability to clarify nature/conten of questions with interviewee.</td>
<td></td>
</tr>
<tr>
<td>Triangulation achieved</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Figure 3 / 4 Advantages and disadvantages of data gathering techniques chosen.

Adapted from Barnard (2008)**
### 3.5.5.1.1 Research Objectives

<table>
<thead>
<tr>
<th>Element of Conceptual Framework</th>
<th>Work patterns</th>
<th>Employee attitudes</th>
<th>Business Benefits</th>
<th>Residual barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSI SCQ SD</td>
<td>SSI SCQ SD</td>
<td>SSI SCQ SD</td>
<td>SSI SCQ SD</td>
<td>SSI SCQ SD</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------</td>
<td>------------------</td>
<td>-----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td><strong>Work patterns</strong></td>
<td>7, 8 x 1, 3 x 4b, 4c 4</td>
<td>11 5,12 1,2,3,4</td>
<td>x 4b,4c, 5,12 1,2,3,4</td>
<td></td>
</tr>
<tr>
<td><strong>Employee attitudes</strong></td>
<td>x 4b,12 4</td>
<td>2 4a,6, 14,15, 27 x</td>
<td>12 9,10, 4 11 12 2,12, 4a, 4b,6,9, 14,15, 27</td>
<td>1,4</td>
</tr>
<tr>
<td><strong>Business Benefits</strong></td>
<td>10 16,24 1,2,3,4 12 6,7 4 4,5,6, 11 8,12, 13, 26 x</td>
<td>45,6, 11,10, 12 6,7, 8,12, 13,16, 24, 26</td>
<td>1,2,3,4</td>
<td></td>
</tr>
<tr>
<td><strong>Residual barriers</strong></td>
<td>1,13, 15 19,21, 22,23 x</td>
<td>1,15 20,25 x</td>
<td>1,14, 15 23 x</td>
<td>1,13, 14 15 19, 20, 21,22, 23, 25 5</td>
</tr>
</tbody>
</table>

Figure 3/5 Cross Mapping Matrix

Adapted from Dr. P Moran’s (2006) “How to write your dissertation” University of Bolton Management Group
4 RESEARCH FINDINGS & ANALYSIS

4.1 Introduction

This chapter presents the findings gathered from the selected research methods discussed in Chapter 3. The findings will be structured and presented by the elements of the conceptual framework and then by research method.

The term “Agile Working” is used to describe teleworking as this is the language commonly in use within the population being sampled.

4.1.1 Demographics

The figures immediately below shows a very even gender distribution of the sample population, that 56% of them have worked for the organisation for 5 years or less and their distribution among the relevant teams.
Respondents Length of Service with Salford (in years)

- <2 years: 24%
- 2 to 5 years: 32%
- 6 to 10 years: 3%
- 11 to 15 years: 6%
- 15+ years: 35%

Respondents team membership

- Police: 23%
- Energy: 14%
- Risk: 11%
- Salford: 29%
- Senior management: 3%
- Computer audit: 20%
4.2 Work Patterns

4.2.1 Objective 1: To track the changing practice and nature of agile work patterns arising from the implementation of agile work methods into the Author’s team.

4.2.1.1 Semi-structured interview results

SSI 7 What changes to your working pattern have you made on where you work since the introduction of Agile Working?

Interviewees’ comments concentrated on a choice between working in the office or at home. Two people gave contrasting views on the ability to change desks every day (or during the day). One stated: “I like sitting with different people each day.” Whilst another claimed: “I use the same desk since the day we moved…” because it “suits me from a personal hygiene / religious point of view”.

Two different interviewees gave contrasting views on the ability to work from home. One regretted they were prevented from working outside of the office as often as they would like because there was an expectation that managers “needed to be in to manage your staff” but another tried “to work at home one day a fortnight”.

In another comment, the Galileo software was criticised for not lending itself to being used away from the office e.g. on customer premises.
SSI 8 What changes to your working pattern have you made on when you work since the introduction of Agile Working?

Three interviewees have not changed their working pattern because they felt they had sufficient flexibility previously but they were also aware that there were more people than desks and that on some days, the desks ran out. One now finds that they can exchange some longer hours working from home for some shorter days working in the office. The remaining interviewee saw added flexibility to vary start or finish times and that the new office environment assists better communication between the teams.

4.2.1.2 Secondary Data Results
4.2.1.3 **Commentary on Objective 1 for the Work Pattern element of the framework**

The new way of working has only been in operation since late December 2008 and it is acknowledged to be a temporary location but nonetheless contained all the work areas defined in the Cisco Connected Office Agile Working model. It was expected therefore, that interviewees would make specific mention of the “quiet” or “collaborative” office areas along with remote locations but comments were restricted to either home or office work locations. Interviewees did comment on the concept that there were no personally allocated desks, however. One seemed to appreciate the concept but another did not.

The absence of comments about working from remote locations would seem to be supported by secondary data on business mileage where no significant
variance was noted. (Business mileage during Q1 2008 totalled 3,338 versus 3,326 in Q1 2009).

There was evidence that interviewees were using the work location flexibility to work from home but one complained that they were not allowed to work from home as often as they were previously and were expected to adopt a management style that Wells (2001) called “line-of-sight” and that Huws (1998) called “over-the-shoulder”. Huws (1998) cautioned the management style was not as effective as relationships built on mutual trust with performance assessment based on clear, mutually agreed targets.

There are fewer desks now available to the unit with a consequent higher percentage utilisation factor. On some days, there have been more people in the office than desks and interviewees commented they considered altering attendance times to guarantee a desk when they arrived. The reason why desks ran out was not explored as part of this research but possible reasons could include there being too few desks, staff preferring the new office environment, or the Assistant Director’s statement that the office must be the default location.
4.2.2 Objective 2: To critically review the impact on employees’ attitudes to work arising from agile working

4.2.2.1 Self-completion questionnaire results

Q4b Have you altered when or where you work since the introduction of Agile working?

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>31</td>
</tr>
<tr>
<td>Yes because there are business benefits</td>
<td>0</td>
</tr>
<tr>
<td>Yes because there are mutual benefits</td>
<td>51</td>
</tr>
<tr>
<td>Yes because it benefits me</td>
<td>9</td>
</tr>
<tr>
<td>Yes because I have been told to</td>
<td>9</td>
</tr>
</tbody>
</table>

Q4c If you answered "No" to question 4b, what was the main reason?

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work only in office</td>
<td>15</td>
</tr>
<tr>
<td>No technology</td>
<td>8</td>
</tr>
<tr>
<td>Technology not reliable enough</td>
<td>31</td>
</tr>
<tr>
<td>Manager will not allow me</td>
<td>0</td>
</tr>
<tr>
<td>Do not wish to work outside office</td>
<td>15</td>
</tr>
<tr>
<td>Other</td>
<td>31</td>
</tr>
</tbody>
</table>

Q4c “Other” reasons

I was already working outside the office
I already worked from home at times prior to Agile Working and out on site when required so in that respect nothing has changed.
The lack of a designated desk is a hazard to me due to health reasons
Made to feel it can only be used in extreme circumstances, such as hospital appointments etc.
4.2.2.2 Secondary data

![Sick leave 2008 compared with 2009](image)

4.2.2.3 Commentary on Objective 2 for the Work Pattern element of the framework

The overriding reason why 51% of questionnaire respondents changed their working pattern is due to mutual benefits, which appears consistent with James and Hopkinson’s (2006) findings. 31% of respondents claim not to have changed their pattern however. Two respondents claim they were already working flexibly whilst one feels the arrangement can only be used in extreme circumstances and another cites: “…the lack of a designated desk is a hazard to me due to health reasons...” Only 9% of respondents changed their pattern due to personal benefits with a further 9% having changed because they were told to do so.
The secondary data show January and February 2009 sick absence returns to be higher than the corresponding 2008 period. This means the ability to vary work location has not yet had any positive influence on sick absence.

4.2.3 Objective 3 To develop a model which is capable of defining the business benefits which have accrued.

SSI 11 What business benefits have Salford gained generally from the introduction of Agile Working?

There was no common view on the benefits accruing to Salford. A reduction in carbon footprint, less office space, better productivity, better work-life balance, greater resilience, and value for money were among the items mentioned. However, the lack of guidance on how the system was supposed to work and the late change to making the office the default work location were amongst items mentioned as reducing the potential benefits.

4.2.3.1 Self-completion questionnaires

<table>
<thead>
<tr>
<th>Percent</th>
<th>0</th>
<th>&lt;1</th>
<th>1 to 2</th>
<th>2 to 4</th>
<th>4 to 7.12</th>
<th>7.13+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>23</td>
<td>6</td>
<td>9</td>
<td>20</td>
<td>9</td>
<td>34</td>
</tr>
</tbody>
</table>

Q5 In your last full working week, how many hours did you spend working out of the office?
4.2.3.2 **Secondary data**

Item 2.

<table>
<thead>
<tr>
<th>Address</th>
<th>Usable area (M²)</th>
<th>Number of desks</th>
<th>M² per desk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wesley Street</td>
<td>272.7</td>
<td>44</td>
<td>6.19</td>
</tr>
<tr>
<td>Civic Centre</td>
<td>206.3</td>
<td>37</td>
<td>5.58</td>
</tr>
</tbody>
</table>

4.2.3.3 **Commentary on Objective 3 for the Work Pattern element of the framework**

Since the move from accommodation at Wesley Street to the Civic Centre and the introduction of Agile Working, the number of desks available to the team has reduced from 44 to 37. Taking into account the amount of usable office space (e.g. excluding unproductive areas such kitchens and staircases), the amount of space per desk has reduced from 6.19 to 5.58 M² per desk.
Tested over two, two-week periods, desk occupancy increased from an average of 31.96 to 33.48, which means that people are spending more time in the office. There could be a variety of reasons for this including occupying the same building as clients, means that the opportunity for informal meetings is greater. Indeed, one interviewee reported such informal meetings: “I have approved issuing final reports in corridors…”.

Useful though the savings from reduced space per desk are, they do not approach the 90% saving claimed at BT for some categories of worker (James and Hopkinson (2006)), although BT was found to have a dis-proportionally high number of managers teleworking, or the 50% saving noted by Huws (1998) in a local authority context.

Flexibility in work location has helped 62% of respondents to do productive work when they were prevented from reaching their intended location and 34% of respondents were able to spend more than a day working out of the office in their last full working week.

4.2.4 Objective 4: To identify any residual barriers to the take up of location independent working and make recommendations on whether and what policies should be changed.

4.2.4.1 Self-completion questionnaire results

The self-completion results for questions 4b, 4c, 5 and 12 are in sections 4.2.2 and 4.2.3.
4.2.4.2 Secondary data

The secondary data results are in sections 4.2.1, 4.2.2 and 4.2.3.

4.2.4.3 Commentary on Objective 4 for the Work Pattern element of the framework

The team has been taking advantage of the ability to work from home or the office. A period of inclement weather resulted in some people not being able to travel to the office but 62% of respondents reported being able to remain productive when prevented from reaching their original intended destination. There is little evidence, either from interviews or increased business mileage, of working from customer premises. There is evidence however, that the team is spending more time in the office overall, as even discounting for fewer desks, desk utilisation has increased.

Although team members are spending more time in the office, there was virtually no comment about the collaborative or quiet areas and other elements of the proprietary work style. More research may be needed but there is a possibility that cultural, national or functional differences between Cisco and ARMU mean that there is no demand for these types of work area. Bartolomeo (2004) noted differences between different countries in his research.

Kowalski and Swanson (2005) identify three critical success factors for teleworking i.e. communication, support and trust of which the most important
was trust. Ilozer et al (2001) pointed out how important management communication strategies were, saying that done well, they could have positive effects. Huws (1998) identified that supervision style could affect the trust relationship between staff and management. The Assistant Director announced his expectation that managers would be in the office to supervise staff and this was seen by one interviewee as limiting their personal benefits.

4.3 Employee attitudes

4.3.1 Objective 1: To track the changing practice and nature of agile work patterns arising from the implementation of agile work methods into the Author’s team.

4.3.1.1 Self-completion questionnaire

The results for question 4b are in section 4.2.2.

The results for question 12 are in section 4.2.4

4.3.1.2 Secondary data

The results for item 4 are in section 4.2.2.

4.3.1.3 Commentary on Objective 1 for the Employee Attitude element of the framework

The secondary data show January and February 2009 sick absence returns to be higher than the corresponding period in 2008. This is contrary to the
expectations of James (2004), Huws (1998), Hopkinson et al (2002) and also contrary to analysis of respondents answers where 62% reported taking up the opportunity of Agile Working in the previous month to avoid missing work due to ill-health or transport problems. Possibly this means that workers are willing to work from home in the case of transport difficulties, or a mobility restricting illness but disinclined to work if suffering a debilitating type of illness. It is also possible that only transport difficulties were encountered, but further investigation of this issue is outside the scope of this research.

4.3.2 Objective 2: To critically review the impact on employees’ attitudes to work arising from agile working

4.3.2.1 Semi-structured interview results

SSI 2. How has the introduction of Agile Working affected your work-life balance?

Four interviewees had not fully adjusted their work style to take advantage of Agile Working opportunities, whilst the fifth has fully embraced the opportunities. One reports that they are being prevented from maximising the advantages and another prefers not to take work home but does not rule this out in the future if family circumstances change.
4.3.2.2 Self-completion questionnaire

Q4a I am clear about what Agile working means in the ARMU context

<table>
<thead>
<tr>
<th>Agree</th>
<th>Tend to agree</th>
<th>Tend to disagree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>59</td>
<td>35</td>
<td>6</td>
<td>0</td>
</tr>
</tbody>
</table>

Questions 6 and 27

Q. 6 I feel less likely to look for an alternative job since the introduction of Agile working.
Q27. Overall, Agile working has resulted in benefits for me
Q14 and Q15 Stress and Enjoyment

<table>
<thead>
<tr>
<th>Percent</th>
<th>Considerable increase</th>
<th>Slightly increase</th>
<th>Neutral</th>
<th>Slightly less</th>
<th>Considerably less</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>6</td>
<td>14</td>
<td>37</td>
<td>46</td>
<td>23</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.3.2.3 Commentary on Objective 2 for the Employee Attitude. Element of the framework

There was clear agreement by 59% of respondents that they thought they knew what was meant by Agile Working. They seem to like the model as the majority (58%) think it will make them less likely to look for alternative employment, 80% think it has resulted in personal benefits, more people than not report less work-related stress, and more people than not are enjoying work more.

One interviewee did not like working at home as it currently interfered with their work-life balance, although they did not rule it out as a future option. This preference does not rule out benefits of working from customer premises and is in harmony with the findings of Tietze et al (2004) who identified work-life balance as a key employee driver.
4.3.3 Objective 3: To develop a model which is capable of defining the business benefits which have accrued.

4.3.3.1 Semi-structured interview results

SSI 12 Has Agile Working had any effect on absenteeism?

The interviewees agreed that Agile Working had no effect on absenteeism, and they also agreed that it was not a big problem in the unit prior to the introduction of Agile Working. Three commented that the ability to work from home in the event of a domestic emergency should reduce the propensity to take a day off sick.

4.3.3.2 Self-completion questionnaire

![Bar chart showing responses to Q9. Do you feel that your ability to work in an agile way has contributed to your work performance?](chart.png)

4.3.3.3 Secondary data

The results for item 4 are in section 4.2.2.
4.3.3.4 Commentary on Objective 3 for the Employee Attitude element of the framework

Respondents were positive that Agile Working had contributed to their work performance. Although secondary data does not yet support the case for a positive impact on sick absence, interviewees seemed confident that it would given time although they also agree that it had not previously been an issue: “It has been a positive improvement…” and “…was not an issue before…”

4.3.4 Objective 4: To identify any residual barriers to the take up of location independent working and make recommendations on whether and what policies should be changed.

4.3.4.1 Semi-structured interview results

The results of SSI question 12 were discussed in section 4.2.3

The results of SSI question 2 were discussed in section 4.3.2

4.3.4.2 Self-completion questionnaire

The results for question 4a, 6, 14, 15 and 27 were discussed in section 4.3.2.

The results for question 4b were discussed in section 4.2.2.

The results for question 9 were discussed in section 4.3.3.

4.3.4.3 Secondary data

The results for 1 and 4 were discussed in section 2 4.2.1 and 4.2.1.
4.3.4.4 Commentary on Objective 4 for the Employee Attitude element of the framework

The most popular reason for changing work pattern (51%) was “mutual benefits”. James and Hopkinson (2006) found that some employees gave up personal gains in the form of extra hours worked. This suggests a strong psychological contract. The psychological contract in ARMU would appear to be weaker than in James and Hopkinson’s sample however, as zero respondents changed working patterns due to business benefits but this would require further research to confirm.

4.4 Business benefits

4.4.1 Objective 1: To track the changing practice and nature of agile work patterns arising from the implementation of agile work methods into the Author’s team.

4.4.1.1 Semi-structured interview results

SSI 10 Please discuss the business benefits that have accrued from the new office layout in practice in your opinion.

Interviewees like the brighter more open aspect to the office layout but did not like the way that teams cannot always sit together. They felt that to have short informal discussions they needed to go to a meeting room when this would not have been necessary before. No one mentioned the quiet area (“library”) as a benefit. One interviewee commented that people arranged to work from home if
they needed quiet to concentrate on a task. One interviewee could see no
benefits for their team

4.4.1.2 Self-completion questionnaire

![Q16 How has the amount of business expenses you claim changed since the introduction of Agile working](chart)

Q24. Technology supplied by Salford for Agile working works well

![Q24. Technology supplied by Salford for Agile working works well](chart)

4.4.1.3 Secondary data
The secondary data results are in sections 4.2.1, 4.2.2 and 4.2.3.
4.4.1.4 **Commentary on Objective 1 for the Business Benefits element of the framework**

Office space density is greater than the old accommodation and desk utilisation is higher. The obvious financial business benefits arising from this were discussed in section 4.2.3.1. Despite being more crowded, interviewees also liked the brighter more open aspect but did not seem to be taking advantage of the new aspects of the office layout design e.g. the library quiet area was not mentioned at all by interviewees.

Interviewees did not seem to notice any change in business expenses they were claiming and this result corresponded with business miles travelled where there was no significant change. Business miles are unlikely to reduce in the author’s opinion however, as the compensation system is made up of a fixed annual allowance and a variable rate based on miles travelled. The expectation is that some workers will travel as many miles as necessary to retain the fixed allowance but no more.

4.4.2 **Objective 2: To critically review the impact on employees’ attitudes to work arising from agile working**

4.4.2.1 **Semi-structured interview results**

The results for question 12 are discussed in section 4.2.3

4.4.2.2 **Self-completion questionnaire**

The results for question 6 are discussed in section 4.3.2.
4.4.2.3 **Secondary data**

The results for element 4 are discussed in section 4.2.2.

4.4.2.4 **Commentary on Objective 2 for the Business Benefits element of the framework**

Respondents report being more motivated by the work style changes, and in a business benefit identified by Clarke (2005), also less likely to change jobs. Sick absence is stable but without a longer-term trend it is too soon to judge the effect.

4.4.3 **Objective 3: To develop a model, which is capable of defining the business benefits, which have accrued.**

4.4.3.1 **Semi-structured interview results**

SSI 4 What has been the effect of Agile Working on the way you collaborate with colleagues (including your line manager)?
There was no consensus on whether collaboration had been improved or not with one interviewee stating: “Collaboration has improved, barriers are being broken down” compared with another’s view that collaboration “has been impeded a little bit”. The other interviewee’s opinions were neutral except for two positive comments about Communicator instant messaging.

SSI 5 How has your relationship with your customers changed as a result of Agile Working?

Three of the five interviewees explicitly stated that there had been no change in their relationship with customers. Nonetheless one of these also indicated subtle changes to their pattern, which meant early work starting times to fit in customer meetings. The two others of the five also indicated flexibility in the way they were able to meet and deal with customers. One respondent thought that improved guidance on work patterns could benefit the environment as well as the business. He believed there should be: “… a set of rules that said if you have to travel more than 20 miles to work, you cannot come in to the office if you intend to leave in under five hours.”

SSI 6 How has your productivity changed as a result of the introduction of Agile Working?

Two interviewees thought there had been no change to their productivity; one thought it had increased whilst the remaining two felt that some of the conditions for improved productivity were now in place. In one interviewee’s opinion, Agile Working did not directly affect productivity but it did have the
potential to change the work-life balance and that it was the effect of an improved work-life balance that would change mood and therefore productivity. The results for question SSI 11 are discussed in section 4.2.3

4.4.3.2 Self-completion questionnaire

The results for question 12 were discussed in section 4.2.3

![Bar chart showing the results of Q8]

Q8 Do you think your work performance has changed since the introduction of Agile working?

- Considerably deteriorated: 0%
- Slight deterioration: 0%
- About the same: 63%
- Slightly improved: 29%
- Considerably improved: 9%
Q13. What influence has your ability to work in an Agile way had on your competence and skills (e.g. by giving you greater control over your tasks; more or less access to training)?

<table>
<thead>
<tr>
<th>Major positive contribution</th>
<th>Slight positive contribution</th>
<th>About the same</th>
<th>Slight negative contribution</th>
<th>Major negative contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>29</td>
<td>60</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Q26. Overall, Agile working has resulted in business benefits for Salford

<table>
<thead>
<tr>
<th>Agree</th>
<th>Tend to agree</th>
<th>Tend to disagree</th>
<th>disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>68</td>
<td>6</td>
<td>0</td>
</tr>
</tbody>
</table>

4.4.3.3 Commentary on Objective 3 for the Business Benefits element of the framework

There was strong overall agreement that Agile Working has resulted in business benefits for Salford with only 6% tending to disagree. Employees also feel that the work style has improved their competence and skills with only a slightly less
positive result for the contribution to their overall work performance. There was no clear evidence from interviewees on whether collaboration had improved or not, however.

The work style has improved the continuity plans for the unit as 62% of respondents reported being able to continue working when either transport difficulties or illness would have otherwise prevented them.

4.4.4 Objective 4: To develop a model which is capable of defining the business benefits which have accrued.

4.4.4.1 Semi-structured interview results

Results for questions 4, 5 and 6 were discussed in section 4.4.3.
Results for question 10 were discussed in section 4.4.1
Results for question 11 were discussed in section 4.2.3
Results for question 12 were discussed in section 4.3.3

Self-completion questionnaire

Results from question 6 were discussed in section 4.3.2
Results from question 7 were discussed in section 4.4.2
Results from question 8, 13 and 26 were discussed in section 4.4.3
Results from question 12 were discussed in section 4.2.3
Results from question 16 and 24 were discussed in section 4.4.21
4.4.4.2 Secondary data

Results from questions one and three were discussed in section 4.2.1, question four in section 4.2.2 and question two in section 4.2.2

Commentary on Objective 4 for the Business Benefits element of the framework

On balance interviewees thought their productivity had increased or that the conditions for increased productivity were now in place and this point of view was supported by a clear majority of respondents (55%) who attributed improved work performance to better productivity. James and Hopkinson (2006) also found that the people in their study thought themselves to be more productive and that their work style was a contributing factor. Audit projects typically take up to three months to complete, so there is not yet any secondary data to further confirm this hypothesis.

The conditions for a stable workforce in the future seem to be in place as a small majority (58%) of respondents are less likely to look for alternative employment. This should save the cost of searching for and training replacements. Respondents are also more likely to be better motivated which could improve productivity as 74% agree or tend to agree they feel more motivated and 80% agree or tend to agree that Agile Working has resulted in personal benefits.

As discussed previously, there is more efficient use of office space, but possibly this could be improved even further if the team were to make better use of the
special office areas e.g. the quiet room, or if it was to be brought into general use.

4.5 Residual barriers

4.5.1 Objective 1: To track the changing practice and nature of agile work patterns arising from the implementation of agile work methods into the Author’s team.

4.5.1.1 Semi-structured interview results

SSI 1. What differences have there been between your expectation and experience of how Agile Working works in practice?

The number of desks is reduced from the number at the previous location and two interviewees commented on a general fear that there will be nowhere to sit although one of these expressed the view that it had not impacted their own stress levels. They said:

...will I get a seat?...
I have heard people say they will come in early to get a desk.
There has been occasions where there has been nowhere to sit...

Guidance in the form of a briefing and video was given to staff early in 2008 but interviewees expressed dissatisfaction that there had not been an update closer to the move and the new way of working was not operating as intended:

I don’t think it’s fully integrated into how we operate …
We’re lacking clear guidance.
The size of the office and the way it’s set out has let us down.

However one interviewee thought: “The new layout is fantastic…”.
Managers did receive a briefing at which they were told the default work location was the office and that managers were expected to be in the office to supervise staff. One interviewee reported their interpretation of this as: “If you were a manager then you needed to be in to manage your staff...”

SSI 13 Are there any restrictions on your working pattern that limits business benefits?
Four interviewees did not think there were any restrictions but the other reiterated points made earlier about a recent management instruction to make the office the default location and the lack of commonly understood rules on how Agile Working was supposed to work.

SSI 15. With hindsight what do you wish had been implemented differently?
Three interviewees commented on issues with the Civic Centre accommodation e.g. shortage of meeting rooms, shortage of office space, shortage of filing space, petty theft, and three interviewees also commented on problems with wireless working including the quality of response by ICT to resolve the issues.
4.5.1.2 **Self-completion questionnaire**

**Q19. Please rate the level of management support you receive to resolve any non-IT related Agile working issues**

![Bar chart showing the percentage of respondents who rate the level of management support as About right, Not enough, or Do not have issues.]

**Q21. A different office design layout would be more effective**

![Bar chart showing the percentage of respondents who agree, tend to agree, tend to disagree, or disagree with the statement.]

- Agree: 40%
- Tend to agree: 37%
- Tend to disagree: 17%
- Disagree: 6%
Q22. When working away from the main office, which of these resources do you use for work purposes (tick all that apply)?

- Do not work away from main office
- Broadband (own)
- Broadband (Salford’s)
- XDA
- 3G broadband
- Mobile phone (own)
- Mobile phone (Salford’s)
- Personal computer (own)
- Personal computer (Salford’s)

Q23. If you work away from the main office on occasion, for each of the resources please indicate whether they meet your requirements for Agile working (tick all that apply)

- Fully meet
- Partly meet
- Do not meet
- Do not use
4.5.1.3 Commentary on Objective 1 for the Residual Barriers element of the framework

Interviewees say they are lacking guidance on how the office layout and other aspects of the new way of working should operate but generally agreed there were no restrictions imposed on them. Respondents remain positive about how the work style helps them to do their jobs and they remain motivated. Benefits of the new office layout are not being maximised, however. Interviewees are not using all the facilities and 77% of respondents agree or tend to agree that a different one would be more effective. Interviewees’ complaints include a shortage of meeting rooms, office space, and filing space. One interviewee however described the layout as “fantastic”.

Respondents say that three of the four most popular remote working resources are from their own provision rather than Salford’s but it is desks and chairs that receive the lowest “do not meet” or “only partly meet ratings”. Up to date, only one person has received a health and safety risk assessment of their “home office”.

4.5.2 Objective 2: To critically review the impact on employees’ attitudes to work arising from agile working

4.5.2.1 Semi-structured interview results

Results for question 1 and 15 were discussed in section 4.5.1
4.5.2.2 Self-completion questionnaire

Q20. How has the amount your manager trusts you to get work done changed since the introduction of Agile working

<table>
<thead>
<tr>
<th>Percent</th>
<th>Considerable increase in trust</th>
<th>Slightly increase in trust</th>
<th>About the same</th>
<th>Slightly less trust</th>
<th>Considerably less trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>0</td>
<td>9</td>
<td>89</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

Q25. Agile working is being applied consistently across the teams

<table>
<thead>
<tr>
<th>Percent</th>
<th>Agree</th>
<th>Tend to agree</th>
<th>Tend to disagree</th>
<th>disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>9%</td>
<td>36%</td>
<td>48%</td>
<td>6%</td>
<td></td>
</tr>
</tbody>
</table>
4.5.2.3 **Commentary on Objective 2 for the Residual Barriers element of the framework**

Respondents overwhelmingly enjoy the trust of their managers but 54% tend to disagree or disagree that the Agile Working work style is being applied consistently across the teams. Possibly managers are compensating for the lack of a recent unit wide briefing on how Agile Working is supposed to work by conducting their own briefings or just expecting team members to have remembered what was said previously. Further research on this issue is outside the scope of this paper however.

4.5.3 **Objective 3: To develop a model, which is capable of defining the business benefits, which have accrued.**

4.5.3.1 **Semi-structured interview results**

Results of questions 1 and 15 were discussed in section 4.5.1.

**SSI 14 Does technology adequately support Agile Working?**

All the interviewees reported some issues with the technology varying from teething problems to a more general concern about the capacity of the wireless network and the speed with which ICT have been addressing the issues.

**Self-completion questionnaire**

The results of question 23 were discussed in section 4.5.1
4.5.3.2 Secondary data

There are no applicable results for this section.

4.5.3.3 Commentary on Objective 3 for the Residual Barriers element of the framework

Possibly as a result of restrictions imposed on work location there has been a shortage of desks on some days with 77% of staff agreeing or tending to agree a different office layout would be more effective and interviewees claiming increased stress from having to arrive early to guarantee a desk. The increased stress claims were not borne out by the self-completion questionnaire results however where 26% of respondents reported lower levels compared with 17% reporting higher levels.

The consensus of interviewees was that there had been no effect on sick absence so far. The secondary data however, shows January and February 2009 sick absence returns to be higher than the corresponding period in 2008. This is contrary to the expectations of James (2004), Huws (1998), Hopkinson et al (2002). Possibly the benefits of agile working have not yet had a chance to lift morale and future surveys may show more positive results or alternatively the views of interviewees do not represent those of the respondent population.

4.5.4 Objective 4: To develop a model which is capable of defining the business benefits which have accrued.
4.5.4.1 Semi-structured interview results

Results for questions 1, 13 and 15 were discussed in section 4.5.1.
Results for question 14 were discussed in section 4.5.3.

4.5.4.2 Self-completion questionnaire

Results for questions 19, 21, 22 and 23 were discussed in section 4.5.1.
Results for question 20 were discussed in section 4.5.2

4.5.4.3 Secondary data

2008-09 budget Vs 2009-10 budget

<table>
<thead>
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<th>Budget heading</th>
<th>2008-09 Percentage of total budget</th>
<th>2009-10 Percentage of total budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries</td>
<td>81.1</td>
<td>86.0</td>
</tr>
<tr>
<td>Premises</td>
<td>3.6</td>
<td>3.7</td>
</tr>
<tr>
<td>Transport</td>
<td>2.1</td>
<td>1.6</td>
</tr>
<tr>
<td>Supplies &amp; services</td>
<td>7.7</td>
<td>3.1</td>
</tr>
<tr>
<td>Transfer charges</td>
<td>4.6</td>
<td>4.7</td>
</tr>
<tr>
<td>Debt charge</td>
<td>0.9</td>
<td>0.9</td>
</tr>
</tbody>
</table>
4.5.4.4 Commentary on Objective 4 for the Residual Barriers element of the framework

The table shows the major cost components of the unit’s budget by percentage. Although the percentage attributable to premises has increased from 3.6% to 3.7%, the actual cash charge has remained static. The transport budget has reduced from 2.1% to 1.6% mainly as a result of reducing the budget for a fixed cost allowance component. Actual spend in period one, remains at previous levels though.

4.6 Other findings and analysis relating to the conceptual model

The author believes that analysis of the interaction between changing work patterns, employee attitudes and business benefits will help to identify residual barriers to a successful teleworking program. The conceptual model in Chapter 2 was designed therefore to test this hypothesis.

The scope of this research concentrated on assessing how an operational unit within Salford City Council could make a success of teleworking. Taken to a higher level, if the research was to be conducted into how Salford City Council could make a success of teleworking, a whole new set of business benefits would have to be introduced. These include: public transport policy, environmental issues and the social inclusion and economic issues expected of leaders in a local community.
The Changing Work Patterns element was designed to capture the benefits and drawbacks of location independent working: Did people work from locations other than the office? Was there evidence of working from customer premises, or from home? Did people work other than 9 to 5? Were different work methods or technology in use or being used in different ways? What was the impact on staff of these new methods?

There was evidence of all the above but in some cases it was difficult to work out what was a cause and what was a symptom. Did an employee attitude issue affect a work pattern or vice versa? In one case it appeared that a management attitude issue affected staff work patterns e.g. one interviewee was not allowed by their manager to work from home as often as they would like. It appeared that their manager preferred a ‘line-of-sight’ management style and had no confidence that the interviewee would complete their tasks or was incapable of ensuring that the staff they managed would complete theirs. That particular interviewee claimed to be self-motivated but the issue could be negatively affecting their motivation or others in similar positions that are less self-motivated.

The Employee Attitudes element of the model was designed to investigate whether staff felt motivated by the new work style, whether they felt more productive, and whether they wanted to try new ways of working. It also applies to managers e.g. are they comfortable with managing a highly mobile workforce, and do they give their staff enough support?
Business Benefits can be positive or negative. Both should be fed into the Residual Barriers element for continuous improvement and recycling. It is implicit that management should be assessing the benefits and barriers within these elements and subsequently adjusting strategy, management of staff, office organisation, and work flows to maximize business benefits.

Following the exposure of one issue identified through the semi-structured interviews which does not easily fit the model; that is the lack of management guidance in respect of how Agile Working was supposed to operate. The author now believes that the conceptual model would be improved by adding an explicit management dimension to better allow for investigation of management’s role in strategy setting, monitoring and motivating the work force. A revised model is shown below.

Figure 4/1 Re-drafted Conceptual Model
5 CONCLUSIONS

5.1 Introduction

In setting out to discover the benefits arising from the impact of the introduction of Cisco’s Connected Office work and accommodation style on the Audit and Risk Management Unit (ARMU) of Salford City Council this research presents a number of conclusions. The research has revealed a number of business benefits and barriers arising from work patterns and employee attitudes. They should be interpreted in the light of the fact that they have only been in operation for three months and the effects have largely been to replace the location of the workplace, with relatively little change in the timing of when work takes place. The conclusions detailed below are discussed in decreasing order of importance.

5.2 Communication

The literature supports the view that communication is key to the success of any organisational transformation programme, and this should take place at all levels across the organisation. Sometimes managers incorrectly believe their employees share the organisation’s sharply focused view and assume that their vision can be linked easily to operational action. Without a conscious and planned effort to ensure that people see the connections between vision and goals, goals and organisation performance, and performance and reward however, the message can be lost or misunderstood.

It was apparent that interviewees were unclear about how Agile Working was supposed to operate. They commented on the lack of guidance and noted
differences between the ways it was being managed by the various teams. Questionnaire respondents however, stated they were very clear in their understanding of how the work style was to operate but were in agreement with the interviewees that there were differences between the teams on how it was being operated. Some differences in how teams are managed is to be expected but management need to be aware of the potential for divisiveness if the teams feel they are not being treated equitably.

5.3 Governance

The literature tells us that the overall effectiveness of telework depends on business process re-design together with documented organisational governance mechanisms, and objective setting. It also tells us that managers should adopt a coaching style and be trained in managing a remote workforce so as not to rely on “over-the-shoulder” or “line-of-sight” management styles.

The unit received a briefing on the new work style in the form of a video some time before the new work style was adopted. Interviewees commented on a lack of guidance on how the system was supposed to operate and instruction that the office was the default location and that managers were expected to be in the office to supervise staff but this was not documented and no other documented organisational governance mechanisms exist.

There is an inconsistent approach in giving flexibility over where to work with some workers facing a restriction on being able to work from home. Interviewees commented on the restrictive work pattern. Management’s actions
not only have the potential to limit business benefits but also risk negatively affecting the trust relationship contrary to Huws (1998) warning.

5.4 Staff’s attitude

Considerable agreement was found between the literature review and empirical findings on staff attitudes. Teleworking increased their enjoyment of work, they were less likely to look for alternative jobs, they felt more motivated, they felt their competence had improved due to higher productivity, but interviewees had mixed views on the effectiveness of the office layout and respondents were strongly of the view that it could be improved. Absenteeism rates were unchanged, (but the data were limited). Nobody was motivated to change work style solely due to business benefits. Empirical findings supported those of James and Hopkinson (2006)) who found that mutual and personal benefits were key to employee motivation.

Notable deviations from the literature included ARMU staff not “donating” some of their personal benefits to the business but this could be because the literature (James and Hopkinson (2006)) identified saved commuting time as the pool from which donations were made, but as we have seen, staff were restricted in their work location by management decree so savings on commuting time would be minimal.

Interviewees reported changing their arrival time to counter the fear that there would not be a desk for them when they arrived. There was stronger evidence from respondents that work related stress had reduced rather than increased
overall, but nonetheless, the tension between work related stress and increased
desk occupancy is deserving of being monitored by management because
increased desk occupancy and density is the likeliest source of savings.

It is possible that any improvements noted in staff attitude could be due to the
Hawthorne effect, which will wear off after time unless the unit is given further
“attention”.

5.5 Business benefits

The literature suggests some company heads believed that home workers were
less productive and used working from home as an excuse for time off
(Mohamed (2005)). Empirical evidence from DuBrin, cited by Siha and Monroe
(2006) however, reported an increase in productivity of home-based workers
and they concluded that careful selection of teleworkers would mitigate
concerns over productivity. ARMU staff felt more productive and strongly
supported the view that Salford had gained business benefits.

There was virtually no change in the number of business miles travelled or days
off sick although staff said they enjoyed the new work style. They agreed that
the ability to work remotely had helped them to remain productive when
prevented from travelling due to transport difficulties. But these aspects need
more evidence to draw statistically valid conclusions.

Secondary data show that desks were more densely packed and desk
occupancy had increased. This sweating of the assets should be capable
producing business benefits but the granularity of the unit’s budget did not allow this to be quantified. It should be noted however, that staff were strongly of the opinion that the office layout could be improved. If this view included more space per desk, then satisfaction and productivity may decline over time.

5.6 Technology

Interviewees were generally happy with the technology they had been supplied with, but negative comments were made about the ability of Galileo to support off-site working, wireless technology supplied in people’s homes and the quality of response by ICT to resolve any issues. Respondents also rated the desks and chairs used off site quite low.

5.7 Areas for further research

The case study approach limits the reach of any research project, and it would be valuable to widen the scope to include other teams within Salford City Council who are more mobile and have greater scope for saving on business miles and increasing desk utilization even more.

This research has not looked at the environmental, public transport or social inclusion aspects of teleworking. As the environmental agenda assumes more importance, Councils have a role to play in setting good examples for their communities. Although this study did look at business miles, it did not assess emissions from the vehicles in use, whether public transport would be a viable alternative, or the environmental impact arising from the technology or furniture in use and the contribution towards targets for reducing carbon emissions.
If employees are commuting to the office when their work could equally well be completed at home, then they add to traffic congestion and possibly add to carbon emissions too (but need to offset against rebound effects of power used at home). Since Councils have a role to play in public transport policy, they also have a duty to reduce unnecessary car journeys. Further research into the need to work from the office could help to target the roles best suited to teleworking and broaden its take-up within the Council.

Worklessness in economically deprived areas such as Salford is a major issue for the community. Salford now has a policy to advertise its own job vacancies via a magazine distributed to its citizens rather than in other local media channels. Maximising the opportunities for teleworking could help unemployed citizens take up opportunities with the Council, and create a virtuous circle of finding work for local citizens and thus helping them off of benefits. Research into identifying suitable roles and then monitoring the progress of the initiative would benefit the Council and community.

Some of the literature reports additional tasks having to be performed on behalf of the teleworkers by those left in the office. For example, office based workers may be called upon to answer phone calls or deal with mail sent to teleworkers. In some situations resentment has built up. These effects can be mitigated to some extent by use of technology e.g. call forwarding to another phone number and voice messaging systems that can route voice messages to email. There was no evidence that this is an issue for ARMU but it may become one for other
units. Research on the effect and mitigating factors maybe of use to the wider teleworking community at Salford.

This study found no significant impact on absenteeism, but this was based on limited data and sick leave data only. As, some of the literature points out the difficulty in defining absenteeism, further research should be undertaken to include a wider range of absence e.g. special leave, and annual leave requested at short notice.

In the authors view, one of the areas for greatest business benefits is the savings to be made from real estate. The study found that there were insufficient desks on some days and workers reported some stress associated with the fear of there not being a desk available or having to adjust working pattern to arrive at the office early enough. Further research needs to be conducted on how this stress can be avoided.

The literature says that cultural, national and functional differences can affect how teleworking operates. Cisco’s model was designed especially for them whereas Salford is engaged in different types of work, has a different culture, operates a different function and has a different level of worker mobility. The research showed that the majority of respondents thought the office design could be improved. Further research or consultation on the office design needs to be undertaken.
6 RECOMMENDATIONS

The following recommendations are made in priority order to address the problem identified in Chapter one.

This research was undertaken in the first three months of operation of the new work style. Not all of the issues may have become apparent in this time and some identified problems may also have been resolved or changed in impact. The author does not believe that any of the recommendations poor value to implement or even that they will take a long time (except possibly for one as acknowledged below).
<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Cost</th>
<th>Priority</th>
<th>Caveat</th>
<th>Timetable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management should propose and agree a framework for the operation of teleworking. As a minimum, the framework should address the following issues:</td>
<td>The cost of implementing this recommendation is estimated to be:</td>
<td>High</td>
<td>When implementing any change programme it is vital that a vision for the future – the desired state for the organisation – is developed and widely communicated. Ideally, this vision should be the product of a consultative approach, involving employees at all levels in the organisation. Some elements of the recommendation already exist e.g.</td>
<td>June to August 2009</td>
</tr>
<tr>
<td>a) Scope. Who the framework applies to.</td>
<td>• 3 days research, • 3 days writing up, • 10 days consultation, • 2 days remediation and • 6 days briefing making 24 days in</td>
<td></td>
<td></td>
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<tr>
<td>b) Voluntary or compulsory nature with amendments to contract of employment and job descriptions. (N.B. Voluntary nature is best practice)</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>c) Employment conditions including:</td>
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<td></td>
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<td></td>
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<tr>
<td>• place of work base (home or office), hours of work,</td>
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<tr>
<td>• additional responsibilities,</td>
<td></td>
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<tr>
<td>Recommendation</td>
<td>Cost</td>
<td>Priority</td>
<td>Caveat</td>
<td>Timetable</td>
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<tr>
<td>• expense policies (e.g. starting point for expense claims),</td>
<td>total.</td>
<td>H/M/L</td>
<td>employment conditions but they were developed before the advent of teleworking. Implementing this recommendation could have implications outside of teleworking.</td>
<td></td>
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<tr>
<td>• allowances, if any, towards power bills, council tax, wear and tear etc.,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• provision of equipment,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• insurance cover for employers equipment,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• holiday and sick leave arrangements,</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>• procedure if the worker wishes to cease telework,</td>
<td></td>
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<tr>
<td>d) Security. Salford’s expectations with regard to physical and logical security and compliance with legislation e.g. Data Protection Act.</td>
<td></td>
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<tr>
<td>e) Contactability. Salford’s expectations for</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Recommendation</td>
<td>Cost</td>
<td>Priority H/M/L</td>
<td>Caveat</td>
<td>Timetable</td>
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</tr>
<tr>
<td>contactability when the teleworker is working but away from their desk (e.g. at a meeting, lunch etc.) and hours of the day (e.g. between 07:00 and 19:00)</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>f) Equipment. Responsibilities for installation and maintenance. The employees responsibilities for due care.</td>
<td></td>
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</tr>
<tr>
<td>g) Health and Safety. Arrangements for working away from council premises including the employers need to assess the home workplace (including desks and chairs). Reporting of accidents and hazards. Display Screen Equipment assessments. Portable appliance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recommendation</td>
<td>Cost</td>
<td>Priority H/M/L</td>
<td>Caveat</td>
<td>Timetable</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
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<td>--------------------</td>
</tr>
<tr>
<td>h) Organisation of work. Attendance at team meetings, progress reports to managers, allowance for extra administration. i) Taxation. Guidance to employee on how to avoid being assessed for business rates. Guidance for handling any allowances for power usage (some allowances can be tax free).</td>
<td>The cost of implementing this recommendation is estimated to be: 10 days research</td>
<td>High</td>
<td>Granularity of the budgeting process does not currently support detailed analysis of office space or energy consumption costs. Changing this may meet</td>
<td>Sept. – Dec. 2009</td>
</tr>
<tr>
<td>Management should establish baseline cost models for future implementations of teleworking so that before and after costings can be compared. The model should include: a) Productivity measures</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recommendation</td>
<td>Cost</td>
<td>Priority H/M/L</td>
<td>Caveat</td>
<td>Timetable</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>----------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>b) Office cost</td>
<td>and preparing, surveys to establish baseline.</td>
<td></td>
<td>resistance. Creating a staff satisfaction index may also meet resistance due to the difficulty of deciding which components make up the index.</td>
<td></td>
</tr>
<tr>
<td>c) Business expense costs</td>
<td>10 days changes to budget model,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Environmental costs (including energy costs at employees home if applicable)</td>
<td>10 days consultation,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) Staff satisfaction index</td>
<td>2 days remediation and 5 days per occurrence conducting before and after</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f) Input costs (i.e. new items bought compared with net current value of replaced items)</td>
<td>surveys</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g) Additional costs of supporting the model (administration and technical support)</td>
<td>10 days per occurrence conducting before and after surveys</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recommendation</td>
<td>Cost</td>
<td>Priority</td>
<td>Caveat</td>
<td>Timetable</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>The management team should undertake training in the principles of managing a remote workforce. Key principles to address are:</td>
<td>making a one-off cost of 32 days plus 5 days per occurrence.</td>
<td>High</td>
<td>This may take some time to achieve, as the dominant motivational style currently in the unit is Theory-X. The management team may feel uncomfortable with the new style for a while and need support.</td>
<td>By December 2009</td>
</tr>
<tr>
<td>a) Enhancing human performance by utilising softer skills</td>
<td>The cost of implementing this recommendation is estimated to be:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Setting measurable targets, monitoring regularly, telling staff what they have to achieve but not how to achieve it</td>
<td>- 1 day researching available courses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) The impact on workers of different management and motivational styles</td>
<td>- 3 days per person attending course</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 1 day per-person focus group /</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recommendation</td>
<td>Cost</td>
<td>Priority</td>
<td>Caveat</td>
<td>Timetable</td>
</tr>
<tr>
<td>----------------</td>
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<td>--------</td>
<td>-----------</td>
</tr>
<tr>
<td>d) Encouraging social interaction and teamwork</td>
<td>reflection to ensure common understanding</td>
<td>Medium</td>
<td>Empirical evidence pointed to dissatisfaction with the current office layout. This could relate to many aspects or one. Consultation should identify the key areas to address.</td>
<td>June to August 2009</td>
</tr>
<tr>
<td>e) Leading by example</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f) Training people for remote working</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g) Balancing the use of technology with face to face meetings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h) The impact on those left in the offices that are not teleworking.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff should be consulted on the successes and failures of teleworking. In particular their specific views on the office layout should be sought to better understand what could be improved. This exercise should be repeated periodically to ensure that the layout remains fit for purpose.</td>
<td>The cost of implementing this recommendation is estimated to be: • 1 day set up • 8 days consultation</td>
<td>Medium</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recommendation</td>
<td>Cost</td>
<td>Priority</td>
<td>Caveat</td>
<td>Timetable</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>----------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>The technology for remote working installed in employees homes and the ICT support arrangements for dealing with faults should be reviewed. Sufficient priority should be allocated to fault analysis and resolution so as to not leave remote workers without service for longer than necessary.</td>
<td>• 3 days analysis and reporting. 12 days per occasion</td>
<td>Medium</td>
<td>ICT allocate priorities to problems assuming the user can maintain continuity of service by using an adjacent PC, but this is not the case for remote workers who may have to make a journey to the office to maintain continuity.</td>
<td>June to August 2009</td>
</tr>
</tbody>
</table>

Figure 6/1

Recommendations and Caveats
Appendix A Secondary Data Sources

1. Desk utilisation before Vs after
2. Office space utilisation before Vs after
3. Miles travelled before Vs after
4. Days sick leave before Vs after
5. 2008/9 budget Vs 2009/10 budget
Appendix B Semi Structured Interview Questions

1. What differences have there been between your expectation and experience of how Agile Working works in practice?

2. How has the introduction of Agile Working affected your work-life balance?

3. How has your motivation changed as a result of the introduction of Agile Working?

4. What has been the effect of the introduction of Agile Working on the way you collaborate with colleagues (including your manager)?

5. How has your relationship with your customers changed as a result of Agile Working?

6. How has your productivity changed since the introduction of Agile Working?

7. What changes to your working pattern have you made on where you work since the introduction of Agile Working?

8. What changes to your working pattern have you made on when you work since the introduction of Agile Working?

9. Please discuss the business benefits that have accrued from your working pattern since the introduction of Agile Working.

10. What business benefits have arisen out of the new office layout in practice, in your opinion?

11. What business benefits have Salford gained generally from the introduction of Agile Working?

12. Do you feel that Agile Working has had any effect on absenteeism.

13. Are there any restrictions on your working pattern that limit business benefits?

14. Does technology adequately support Agile Working?

15. With hindsight, what if anything do you wish had been implemented differently?
Appendix C Self Completion Questionnaire

Dear Colleagues

Agile Working Research Questionnaire

You may not be aware that I have been studying part time for my MBA. I am now nearly finished and just have to complete my research project. The subject I have chosen is Agile Working and its pilot implementation in ARMU. As part of this research I need to seek your views on aspects of its implementation so far. There are two elements of the research that I need your help with: a) this questionnaire circulated to the whole ARMU team; and b) an interview with a small number of the team (4-5 people) who I will approach separately.

Completion of the questionnaire is voluntary but you may book the time taken to “Other training HOAE”. You cannot be identified from the information you provide and no information about individuals will be given to the Council.

All the information will be treated in the strictest confidence

The questionnaire should take about 10-15 minutes to complete. Please answer the questions in the space provided. Try to complete the questions at a time when you are unlikely to be disturbed. Also, do not spend too long on one question. Your first thoughts are usually your best!

Even if you feel the items covered do not apply directly to your working life, please do not ignore them. Your answers are essential in building an accurate picture of the implementation of Agile Working.

When you have completed the questionnaire, please return it to me in one of the specially printed envelopes available in room 3.3 via my pigeonhole.

I hope you find completing the questionnaire enjoyable, and thank you for taking the time to help me. If you have any queries or would like further information about this project, please do not hesitate to ask.

Thank you for your help

Peter Paddon
Please indicate your answer with a tick ✓

Q1. What is your gender?

Male □
Female □

Q2. What is your length of service with Salford?

Less than 2 years □
2 to 5 years □
6 to 10 years □
11 to 15 years □
more than 15 years □

Q3. What is your team?

Computer Audit □
Energy Audit □
“Police” Team □
Risk Management □
Salford Audit □
Senior Management □

For the following statements, please tick ✓ the box that matches your view most closely.

Q4a. I am clear about what Agile Working means within the ARMU context

Agree □
Tend to agree □
Tend to disagree □
Disagree □

Q4b. Have you altered when or where you work since the introduction of Agile Working?

No □
Yes, because there are business benefits □
Yes, because there are mutual benefits □
Yes, because it benefits me □
Yes, because I have been told to □

Q4c. If you answered “No” to question 4b, what was the main reason?

My work can only be done in the office □
The technology to facilitate out of office working has not been made available to me □
The technology is not reliable enough □
My manager will not allow me to work from elsewhere ☐
I do not wish to work outside the office ☐
Some other reason (please specify) ☐

Q5. In your last full working week, how many hours did you spend working out of the office?

☐ 0
☐ Less than 1 hour
☐ More than 1 hour but less than 2 hours
☐ More than 2 hours but less than 4 hours
☐ More than 4 hours but up to 7 hours 12 minutes
☐ More than 7 hours 13 minutes

Q6. I feel less likely to look for an alternative job since the introduction of Agile Working.

☐ Agree
☐ Tend to agree
☐ Tend to disagree
☐ Disagree

Q7. I feel more motivated in my job since the introduction of Agile Working.

☐ Agree
☐ Tend to agree
☐ Tend to disagree
☐ Disagree

Q8. Do you think that your work performance has changed since the introduction of Agile Working?

☐ Considerably deteriorated
☐ Slightly deteriorated
☐ About the same
☐ Slightly improved
☐ Considerably improved

Q9. Do you feel that your ability to work in an Agile way has contributed to your work performance?

☐ Major positive contribution
☐ Slight positive contribution
☐ About the same
☐ Slight negative contribution
☐ Major negative contribution
Q10. If you feel that your work performance has improved since the introduction of Agile Working, please tell us how?

- Higher total output (doing more)
- Better quality of work
- Higher productivity (more output per hour spent)
- More creative work

Q11. If you feel that your performance has improved since the introduction of Agile Working, what are the main reasons for this (tick all that apply)?

- More pressure to perform
- More autonomy
- Longer hours
- Better working conditions
- Greater ability to concentrate
- Reduced stress
- Improved technology
- Other (please specify)

For the following statements, please tick the box that matches your view most closely.

Q12. During the previous month, has the option to work in an Agile way helped you to work when you have been prevented from reaching your intended destination (e.g. you were too ill to travel or there was some travel disruption)?

- Do not have the option to work from home
- Yes
- No

Q13 What influence has your ability to work in an Agile way had on your competence and skills (e.g. by giving you greater control over your tasks; more or less access to training)?

- Major positive contribution
- Slight positive contribution
- About the same
- Slight negative contribution
- Major negative contribution

Q14. How has your work-related stress changed since the introduction of Agile Working?

- Considerable increase in work-related stress
- Slightly increase in work-related stress
- Neutral
Slightly less work-related stress
Considerably less work-related stress

Q15. How has your enjoyment of work changed since the introduction of Agile Working?
Considerable increase in enjoyment
Slightly increase in enjoyment
Neutral
Slightly less enjoyment
Considerably less enjoyment

Q16. How has the amount of business expenses you claim changed since the introduction of Agile Working?
Considerable increase in expenses claimed
Slightly increase in expenses claimed
Neutral
Slightly less expenses claimed
Considerably less expenses claimed

Q17. Please rate the level of management support you receive to resolve Agile Working IT issues.
About right
Not enough
Do not have IT issues

Q19. Please rate the level of management support you receive to resolve any non-IT related Agile Working issues.
About right
Not enough
Do not have any non-IT related issues

Q20. How has the amount your manager trusts you to get work done changed since the introduction of Agile Working?
Considerable increase in trust
Slightly increase in trust
About the same
Slightly less trust
Considerably less trust

Q21. A different office design layout would be more effective
Agree
Tend to agree
Tend to disagree
Disagree
Q22. When working away from the main office, which of these resources do you use for work purposes (tick ✓ all that apply)?

Do not work away from the main office □
Broadband (own) □
Broadband (Salford provided) □
XDA □
3G broadband □
Mobile phone (own) □
Mobile phone (Salford provided) □
Personal computer (own) □
Personal computer (Salford provided) □

Q23. If you work away from the main office on occasion, for each of the resources, please indicate whether they meet your requirements for Agile Working (tick ✓ all that apply)?

<table>
<thead>
<tr>
<th>Resource</th>
<th>Fully meet</th>
<th>Partly meet</th>
<th>Do not meet</th>
<th>Do not use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadband (own)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broadband (Salford provided)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XDA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3G broadband</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Mobile phone (own)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile phone (Salford provided)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal computer (own)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Personal computer (Salford provided)</td>
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<tr>
<td>Desk</td>
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<tr>
<td>Chair</td>
<td></td>
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</tbody>
</table>

For the following statements, please tick ✓ the box that matches your view most closely.

Q24. Technology supplied by Salford for Agile Working works well.

Agree □
Tend to agree □
Tend to disagree □
Disagree □

Q25. Agile Working is being applied consistently across the teams

Agree □
Tend to agree □
Tend to disagree □
Disagree □
Q26. Overall, Agile Working has resulted in business benefits for Salford

Agree □
Tend to agree □
Tend to disagree □
Disagree □

Q27. Overall, Agile Working has resulted in benefits for me

Agree □
Tend to agree □
Tend to disagree □
Disagree □
Appendix D Organisation Chart

The Author’s team is edged in red.

The Audit and Risk Management Unit is edged in green.

Figure D/1

ARMU Organisation Chart

- 105 -
### Appendix E Self Completion Questionnaire Answers

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1. What is your gender?</td>
<td>male</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>51</td>
</tr>
<tr>
<td>Q2. What is your length of service with Salford?</td>
<td>&lt;2</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>2 to 5</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>6 to 10</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>11 to 15</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>15+</td>
<td>35</td>
</tr>
<tr>
<td>Q3. What is your team?</td>
<td>Computer audit</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Energy</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Police</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Risk</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Salford</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Senior management</td>
<td>3</td>
</tr>
<tr>
<td>Q4a. I am clear about what Agile Working means within the ARMU context</td>
<td>Agree</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>Tend to agree</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Tend to disagree</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>0</td>
</tr>
<tr>
<td>Q4b. Have you altered when or where you work since the introduction of Agile Working?</td>
<td>No</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Yes because there are business benefits</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Yes because there are mutual benefits</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>Yes because it benefits me</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Yes because I have been told to</td>
<td>9</td>
</tr>
<tr>
<td>Q4c. If you answered “No” to question 4b, what was the main reason?</td>
<td>Work only in office</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>No technology</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Technology not reliable enough</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Manager will not allow me</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Do not wish to work outside office</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>31</td>
</tr>
<tr>
<td>Q5. In your last full working week, how many hours did you spend working out of the office?</td>
<td>0</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>&lt;1</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>1 to 2</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>2 to 4</td>
<td>20</td>
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<tr>
<td></td>
<td>4 to 7.12</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>7.13&gt;</td>
<td>34</td>
</tr>
<tr>
<td>Q. 6 I feel less likely to look for an alternative job since the introduction of Agile Working.</td>
<td>Agree</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Tend to agree</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Tend to disagree</td>
<td>19</td>
</tr>
<tr>
<td>Q7. I feel more motivated in my job since the introduction of Agile Working</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disagree</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Tend to agree</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>Tend to disagree</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Disagree</td>
<td>15</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Q8. Do you think that your work performance has changed since the introduction of Agile Working?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Considerably deteriorated</td>
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<tr>
<td>Slight deterioration</td>
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<tr>
<td>About the same</td>
</tr>
<tr>
<td>Slightly improved</td>
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<tr>
<td>Considerably improved</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q9. Do you feel that your ability to work in an Agile way has contributed to your work performance?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major positive</td>
</tr>
<tr>
<td>Slight positive</td>
</tr>
<tr>
<td>About the same</td>
</tr>
<tr>
<td>slight negative</td>
</tr>
<tr>
<td>Major negative</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q10. If you feel that your work performance has improved since the introduction of Agile Working, please tell us how?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher total output</td>
</tr>
<tr>
<td>Better quality work</td>
</tr>
<tr>
<td>Higher productivity</td>
</tr>
<tr>
<td>More creative</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q11. If you feel that your performance has improved since the introduction of Agile Working, what are the main reasons for this (tick all that apply)?</th>
</tr>
</thead>
<tbody>
<tr>
<td>More pressure to perform</td>
</tr>
<tr>
<td>More autonomy</td>
</tr>
<tr>
<td>Longer hours</td>
</tr>
<tr>
<td>Better working conditions</td>
</tr>
<tr>
<td>Greater ability to concentrate</td>
</tr>
<tr>
<td>Reduced stress</td>
</tr>
<tr>
<td>Improved technology</td>
</tr>
<tr>
<td>Other (please specify)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q12. During the previous month, has the option to work in an Agile way helped you to work when you have been prevented from reaching your intended destination (e.g. you were too ill to travel or there was some travel disruption)?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not have the option to work from home</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q13 What influence has your ability to work in an Agile way had on your competence and skills (e.g. by giving you greater control over your tasks; more or less access to training)?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major positive contribution</td>
</tr>
<tr>
<td>Q14. How has your work-related stress changed since the introduction of Agile Working?</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Considerable increase in work-related stress</td>
</tr>
<tr>
<td>Slightly increase in work-related stress</td>
</tr>
<tr>
<td>Neutral</td>
</tr>
<tr>
<td>Slightly less work-related stress</td>
</tr>
<tr>
<td>Considerably less work-related stress</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q15. How has your enjoyment of work changed since the introduction of Agile Working?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Considerable increase in enjoyment</td>
</tr>
<tr>
<td>Slightly increase in enjoyment</td>
</tr>
<tr>
<td>Neutral</td>
</tr>
<tr>
<td>Slightly less enjoyment</td>
</tr>
<tr>
<td>Considerably less enjoyment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q16. How has the amount of business expenses you claim changed since the introduction of Agile Working?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Considerable increase in expenses claimed</td>
</tr>
<tr>
<td>Slightly increase in expenses claimed</td>
</tr>
<tr>
<td>Neutral</td>
</tr>
<tr>
<td>Slightly less expenses claimed</td>
</tr>
<tr>
<td>Considerably less expenses claimed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q17. Please rate the level of management support you receive to resolve Agile Working IT issues.</th>
</tr>
</thead>
<tbody>
<tr>
<td>About right</td>
</tr>
<tr>
<td>Not enough</td>
</tr>
<tr>
<td>Do not have issues</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q19. Please rate the level of management support you receive to resolve any non-IT related Agile Working issues.</th>
</tr>
</thead>
<tbody>
<tr>
<td>About right</td>
</tr>
<tr>
<td>Not enough</td>
</tr>
<tr>
<td>Do not have issues</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q20. How has the amount your manager trusts you to get work done changed since the introduction of Agile Working?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Considerable increase in trust</td>
</tr>
<tr>
<td>Slightly increase in trust</td>
</tr>
<tr>
<td>About the same</td>
</tr>
<tr>
<td>Slightly less trust</td>
</tr>
<tr>
<td>Considerably less trust</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q21. A different office design layout would be more effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Tend to agree</td>
</tr>
<tr>
<td>Tend to disagree</td>
</tr>
<tr>
<td>disagree</td>
</tr>
</tbody>
</table>
Q22. When working away from the main office, which of these resources do you use for work purposes (tick all that apply)?

<table>
<thead>
<tr>
<th>Resource</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not work away from main office</td>
<td>1</td>
</tr>
<tr>
<td>Broadband (own)</td>
<td>24</td>
</tr>
<tr>
<td>Broadband (Salford's)</td>
<td>9</td>
</tr>
<tr>
<td>XDA</td>
<td>6</td>
</tr>
<tr>
<td>3G broadband</td>
<td>1</td>
</tr>
<tr>
<td>Mobile phone (own)</td>
<td>18</td>
</tr>
<tr>
<td>Mobile phone (Salford's)</td>
<td>6</td>
</tr>
<tr>
<td>Personal computer (own)</td>
<td>10</td>
</tr>
<tr>
<td>Personal computer (Salford's)</td>
<td>24</td>
</tr>
</tbody>
</table>

Q23. If you work away from the main office on occasion, for each of the resources, please indicate whether they meet your requirements for Agile Working (tick all that apply)?

<table>
<thead>
<tr>
<th>Resource</th>
<th>Fully Meet</th>
<th>Partly meet</th>
<th>Do not meet</th>
<th>Do not use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadband (own)</td>
<td>7</td>
<td>12</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Broadband (Salford's)</td>
<td>3</td>
<td>7</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>XDA</td>
<td>2</td>
<td>2</td>
<td>13</td>
<td>17</td>
</tr>
<tr>
<td>3G broadband</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mobile phone (own)</td>
<td>4</td>
<td>0</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Mobile phone (Salford's)</td>
<td>2</td>
<td>10</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Personal computer (own)</td>
<td>2</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Personal computer (Salford's)</td>
<td>7</td>
<td>17</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Desk</td>
<td>5</td>
<td>20</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Chair</td>
<td>4</td>
<td>22</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Item</td>
<td>Count</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>-------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal computer (own)</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal computer (Salford provided)</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desk</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chair</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q24. Technology supplied by Salford for Agile Working works well.

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>25</td>
</tr>
<tr>
<td>Tend to agree</td>
<td>44</td>
</tr>
<tr>
<td>Tend to disagree</td>
<td>22</td>
</tr>
<tr>
<td>disagree</td>
<td>8</td>
</tr>
</tbody>
</table>

Q25. Agile Working is being applied consistently across the teams

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>9</td>
</tr>
<tr>
<td>Tend to agree</td>
<td>36</td>
</tr>
<tr>
<td>Tend to disagree</td>
<td>48</td>
</tr>
<tr>
<td>disagree</td>
<td>6</td>
</tr>
</tbody>
</table>

Q26. Overall, Agile Working has resulted in business benefits for Salford

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>26</td>
</tr>
<tr>
<td>Tend to agree</td>
<td>68</td>
</tr>
<tr>
<td>Tend to disagree</td>
<td>6</td>
</tr>
<tr>
<td>disagree</td>
<td>0</td>
</tr>
</tbody>
</table>

Q27. Overall, Agile Working has resulted in benefits for me

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>37</td>
</tr>
<tr>
<td>Tend to agree</td>
<td>43</td>
</tr>
<tr>
<td>Tend to disagree</td>
<td>17</td>
</tr>
<tr>
<td>disagree</td>
<td>3</td>
</tr>
</tbody>
</table>
Bibliography


