A Survey of the Practice of Telecommuting in the Banking Industry in Kenya

By

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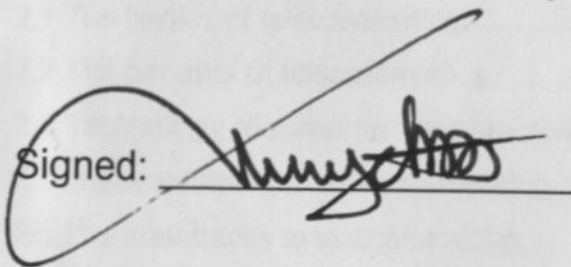Master of Business Administration

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DECLARATION

This management project is my original work and has not been published for a degree in any other university.

Signed: _____ Date: _01/11/03_

Timothy Mbatha Maillu

This management project has been submitted for examination with my authority as university supervisor.

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TABLE OF CONTENTS

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Abstract

Telecommuting is the use of telecommunications and information technology to allow work to take place from a location other than the actual office of the employer. There are more technical definitions that are used but the common element across all aspects of telecommuting though, is the use of computers and telecommunications to change the accepted geography of work.

While telecommuting continues to very rapidly develop as a normal way of working in many parts of the world, there is no available information on the extent of telecommuting in Kenya. This study therefore seeks to address this state of affairs. Specifically the objectives of the study was to establish the extent of the practice of telecommuting among banks operating in Kenya and to find out which forms of telecommuting were being used in the banking sector in Kenya.

It is important to state that there was no specific literature available in this particular area of study in Kenya that could be reviewed and so only related material from other parts of the world were examined. The literature review focused mainly on the benefits of telecommuting, technology required for telecommuting, and on the basic requirements for home based telecommuting.

Subjects for the study were selected from the population of banking institutions operating in Kenya and standardized questionnaires were utilized to gather data. The research utilized survey method as the developed data in this area was limited and the objective was the development of hypotheses, and not testing.

The research results show that quite a considerable number of the banks did not respond to the questionnaires. Even so, it can be concluded with a fair degree of confidence that the subject of telecommuting appeared to be a fairly new concept to most of the Kenyan banks and many do not seem to understand or practice it. But given the fact that telecommuting is widely accepted in other parts of the globe due to the benefits derived from it, the findings of this study suggest the need for further exploration of this concept to determine the benefits that can derived from its practice by Kenyan organizations.

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background to the study

During the Industrial Age, most of the work centred around being at the workplace to use tools and equipment that could not be used at home. But now that we are in the "Information Age", more than 60 percent of all jobs are information based instead of location-dependant (Council, 2001).

The introduction of information and communication technologies (ICTs) is changing the geography of work. In fact, for an increasing number of people, work is no longer something which takes place simply at a single centralised workplace. Instead of having to travel to work, the work now comes to them, brought though telecommunication links to wherever they may happen to be (Bibby, 2001). As a consequence, new ways of working are developing and becoming increasingly common. And now, more people are leaving the classic workplace and working from home thanks to the possibility of telecommuting.

The last few years have seen a growth in interest in the concept of telecommuting, and current predictions suggest that this could become a common mode of working in future (Hobbs and Armstrong, 1998). In fact, telecommuting was identified by US Presidents Bush & Clinton and Vice President Al Gore, as one of the fastest growing application of the information society (Hodson, 1995). And with the current pace of technological advancements, it is not hard to imagine that a new work paradigm is needed in the workplace of the 21st Century.

There is now little doubt that new technologies in general, and ICTs in particular, are having a deep-seated and largely beneficial effect on the environment, economic productivity, competitiveness and overall business performance. Consider the following scenario from the US. "If (just) 10% of the nation's workforce telecommuted one day a week, we would avoid the frustration of driving 24.4 million miles, we'd breathe air with 12,983 tons less air pollution and we'd conserve more than 1.2 million gallons of fuel each week." (Council, 2001). Merrill Lynch, a financial services company in the US, estimates that each telecommuter can save the

company $10,000 (about Kshs. 780.000) through lower absenteeism and fewer job-retention costs (Telecommute Connecticut, 2002). These beneficial effects of telecommuting could be true for almost any other part of the world.

Ten years ago, telecommuting was a peculiar way of working engaged in only by a technological elite. But now, telecommuting continues to very rapidly develop as a normal way of working in many parts of the world and it is estimated that more than 10 million Europeans now telecommute. In 16 Asia Pacific countries, 3.3 million people telecommute at least one day a month (Wireless Local Loop Newsletter, 2001). A national survey conducted in the United States of America last year showed that the number of telecommuters in the US increased 17 percent to 28.8 million (Telecommute Connecticut 2002). A more recent study conducted in April 2002 revealed that, in 2001, 31 million Americans (25% of the US workforce) telecommuted at least part of their work week (InnoVisions, Canada 2002).

Why telecommute? In most cases, starting telecommuting has no cost to business profits and income. On the contrary, the reason that the financial services sector in the USA and the UK was first to embrace computerization, telephone banking, telephone dealing, telephone selling, and other precursors of telecommuting is that it is very profitable to do so; and banks and the insurance companies are able to count the costs and the benefits more accurately than most (Hodson, 1995). Also, studies done in other parts of the world indicate that due to telecommuting, employees achieve a greater balance of work and family life, employers gain the benefits of lower overhead costs and increased productivity, and that the society at large reaps the rewards of less traffic congestion and pollution (Telecommute Connecticut, 2002). Hence the rise in the figures of those telecommuting.

Kenyan organizations thus need to tap into this wave of changes occurring in the workplace in a bid to reap the benefits that are being derived from such work practices in other parts of the world. In doing so they will then be in a position to take advantages of the new opportunities presented by these new work practices.

Telecommuting is rapidly becoming mainstream practice. It is therefore now even more urgent for governments, enterprises and individuals to recognise, and respond

to the impact that freedom from the constraints of time and place on work and a change in working culture is having on the economy and society, as well as on working and private lives.

The telecommuting industry is only just on the brink of development, and it is estimated that telecommuting will become the largest growth industry in employment in the next ten years. Telecommuting is thus definitely on the rise and now is the time for Kenyan organizations to be a part of it.

1.2 Problem statement

There is no available information on the extent of telecommuting in Kenya. In fact, to the best of my knowledge and awareness nothing has been written or documented on the subject in Kenya.

While telecommuting continues to be rapidly adopted by many people and organizations in other parts of the world with statistics of this being readily available (for example, a study done last year in the USA shows that 31 million Americans are telecommuting), it is unclear how the situation is here in Kenya. This state of affairs represents missed opportunities in the workplaces of many organizations in Kenya and needs to be addressed.

This study therefore seeks to address this state of affairs by investigating the extent of the practice of telecommuting in banks operating in Kenya. By doing so, this study will fill a knowledge gap concerning the extent of the practice of telecommuting by organizations in Kenya.

1.3 Research objective

This study seeks to examine the practice of telecommuting using an exploratory approach. Specifically the objectives of the study will be to:

1. To establish the extent of the practice of telecommuting among banks operating in Kenya.

2. To find out which forms of telecommuting are being used in the banking sector in Kenya.

1.4 Importance of the study

Telecommuting offers significant benefits to individuals, employers, and to the economy as a whole. This study will highlight the benefits that can be derived from telecommuting by organizations and ultimately to the economy as a whole.

Telecommuting as a concept and in practice is now fusing with, and metamorphosing into, a whole range of other developments and innovations, such as electronic commerce, knowledge management, the globalisation of trade and markets, virtual and learning organisations and teams, intellectual capital development, the digital or network economy, de-materialised or intangible production, and so on. This study will explore and expose other areas that can merge with the practice of telecommuting to create new opportunities for growth and development.

This study may also generate interest in employees leading to their participation in such telecommuting programs which may in turn result to the improvement in the quality of their working lives.

This study will also contribute to bringing better understanding of the value of telecommuting for organizations. Telecommuting is not an end in itself, it is one of a whole array of new methods of working and trading that can completely transform an organisation. The organisation cannot escape these changes, since they are already transforming its markets - whether today's management knows that or not! And this everyday use of new technologies at work goes hand in hand with the recognition that for many organisations human resources have become their greatest asset. Hence, there is a need to enhance the flexibility of the organisation and the individual by bringing work to people rather than people to work, as this ties in well with the individual's concern to improve the quality of life.

The study contributes to the knowledge of the various aspects of telecommuting and how the concept is understood, adopted and practiced from an African perspective. The differences in application in Africa as compared to other parts of the world may also become clearer.

CHAPTER TWO

2.0 REVIEW OF RELEVANT LITERATURE

The purpose of this exploratory study is to find out the extent of the practice of telecommuting in banks operating in Kenya. It important to state from the outset that there is no specific literature available in this particular area of study in Kenya that can be reviewed and so only related material from other parts of the world will be examined.

For any study to be done, relevant literature must be studied with a view to reviewing, analyzing and incorporating into the study what others have said about the subject of study. In order to carry out this study, it is therefore important that a theoretical framework be built to form a foundation for the practice of telecommuting in banks operating in Kenya. For this to be achieved, this chapter will focus on review of literature in the following areas:

❑ The basics of telecommuting
❑ The benefits of telecommuting
❑ Technology required for telecommuting
❑ Implementation of a telecommuting program in an organization
❑ The drawbacks of telecommuting
❑ The basic requirements for home based telecommuting

Before embarking on this literature review, it is important to note that there is still a fair amount of confusion as to what, exactly are teleworking and telecommuting (Jala International Inc., 2002). Indeed, the question of whether there is a difference between the two terms has been the subject of "numerous debates, articles, and academic papers" (Gordon, 2002). And although the concepts have been discussed for some years, a universal definition is still not in place (IRS, 1996; Moon and Stanworth, 1997 in Baruch and Yuen, 2000). There is not even an agreed term: "Teleworking", "telecommuting", "working-at-home", "home-working", "working-at-a-distance", "off-site workers", or "remote-workers" – all these terms may have similar meanings and are used interchangeably (Baruch and Yuen, 2000).

According to Gil Gordon Associates, an acknowledged expert in the implementation of telecommuting and telework, the difference is minimal, with telework advocates seeing "telework" as a broader and more inclusive term (Gordon, 2002). He goes on to add that "telework" tends to be used more in Europe and some other countries, while "telecommuting" is used more in the united States. In most literature however, telecommuting and teleworking are often used as synonyms (Computer Information Center, 2002), with the qualifier that telecommuting places an emphasis on working at home and removing the need to travel to work. This is the position taken by this researcher.

2.1. The basics of telecommuting

2.1.1 Definition of terms and concepts

Telecommuting has been defined as the partial or total substitution of telecommunications technology for the trip to and from the primary workplace along with the associated changes in policy, organization, management, and work structure (Smart Valley Inc. Telecommuting Guide, 1994).

Telecommuter generally interpreted to mean someone who works at home all or part of the time. Can also mean someone who commutes a short distance to a telecentre instead of travelling to a more distant office.

Telecentre is a commercially focused facility that has been established to provide workplaces for people who may well have full time jobs but want to work away from their employer's "functional office" but who don't want to work in their homes. In the telecentre there is a very high emphasis on provision of workspace and facilities with high information technology and networking capabilities. Telecentres may be company owned or the company may take desk space in a multi-company telecentre.

Telecottages are a special class of telecentre, named because of their origins in rural villages. A "Telecottage" is usually a "community based" facility that is there to assist learning, access to technology, access to work etc. for its local community. The Telecottages movement started in Sweden and the idea has been taken up

quite widely, notably in the UK where at the last count there were some 200 telecottages.

Televillage is an extension of the telecottage and is very much about lifestyles and preferences. The idea is to develop a whole community that's highly geared to the future work and lifestyles environment of the networked economy - the whole village is "wired" and each home is fully equipped with an internal network connected to the village network and through broad band communications to the "global village". This is thought to be attractive to certain kinds of self-determining and successful people, who want to combine a rural lifestyle with excellent access to the "information highways".

Information and Communications Technology (ICTs) encompasses computer hardware and systems, computer controlled systems, computer software and systems, and communications equipment and systems and the services all these systems provide.

Teletrade means "doing business over networks". It uses advanced information and communication technologies (such as the internet) to market and sell goods and services, enhance customer relationships and reach distant markets without the overhead of a local "physical presence". Although similar in concept to electronic commerce, the latter most often refers only to the actual trading transaction e.g. the placing of an order. EDI (Electronic Data Interchange) is an example of a technique that exemplifies the narrow view of electronic commerce. Teletrade covers all aspects of the selling cycle and the buyer-seller relationship. It includes making potential customers aware of products and services, such as through the Internet; providing means of ordering and in some case making payment over electronic networks; providing online support and generally enhancing customer relationships via focused two-way communications (e.g. via email or electronic communities) between buyer and seller

2.1.2 What is Telecommuting?

The term "telecommuting" was coined in 1973 by Jack Nilles, who has since played a key rôle in promoting this concept in the USA. It was further popularised by futurist

Francis Kinsman in his book, *The Telecommuters* (John Wiley & Sons, 1987). It is widely believed that, in the USA, companies that hired a lot of women, such as banks and insurance companies were the early pioneers of alternative work arrangements (Benenson, 2001).

Telecommuting has been defined as the partial or total substitution of telecommunications technology for the trip to and from the primary workplace along with the associated changes in policy, organization, management, and work structure (Smart Valley Inc. Telecommuting Guide, 1994). Others define it as an off-site work arrangement that permits employees to work in or near their homes for all or part of the work week (Shaw, 1996). Simply put, it is when an employee is working from a location other than the actual office of their employer.

There are more technical definitions and explanations that are used. In the end they all add up to the same concept - work that is taken to the employee rather than the employee going to the work. The common element across all aspects of telecommuting though, is the use of computers and telecommunications to change the accepted geography of work.

While at first glance telecommuting may seem alien to the normal corporate way of life, it is in fact a close relative of several familiar experiences (Niles 2000). For example, taking work home to do at night and on weekends, sales representatives working out of their homes and cars and field personnel at all levels.

2.1.3 Alternative forms of telecommuting

1. **Home-Based Telecommuting** is the most popular form of telecommuting. The employee designates workspace at home to conduct business functions instead of commuting to an office. This applies to employed telecommuters, self employed or freelance telecommuters, informal or even illicit telecommuters, and entrepreneurial telecommuters.

2. **Satellite Office** is a remote office location usually placed within a large concentration of employee residences, allowing employees at a single

company to share common office space and reduce the time and expense of the commute to and from the main office facility.

3. **Neighbourhood Work Center** provides work space for employees of different companies in one location. Each company housing employees at these locations is usually responsible for the administrative and technical requirements of its employees.

4. **Hotelling or Hot-Desking** reflects the fact that of every hundred "office based" employees, perhaps only half - or less - are using "their own desk" at any one time. The others are in meetings, on the road or working at home. Instead of each employee who's "based" at a particular office having a personally "owned" desk, employees who happen to be there on a particular day use any available desk on that day. Each desk has the standard "office systems" - PC or computer terminal and phone. The employee may have a "personal" carousel in which his or her "personal" files etc are stored, and this is wheeled to the desk and kept there while the employee is around.

5. **Multi-site Teams** implies that team members work in the office nearest to their home rather than commuting or moving house so that the whole team can work in one location. It can also take the form of "dispersed team working", in which a company, for example, may make use of three or more teams in different time zones to work 24 hours a day on a time-sensitive customer tender, with each team "passing the baton" to the next at the end of its working day.

6. **Concentrative Telecommuting** brings together in one building tasks that would otherwise be distributed across many locations, as in the case of telemarketing / telesupport centres.

7. **Transborder Telecommuting** means an employer hires people in a different country (or contracts work to a supplier in a different country). This is some kind of "outsourcing", in that many kinds of work can now be done from thousands of miles away and "outsourced" across national borders.

8. **Shared Facility Telecentres** are independently managed facilities in which local people who work for a range of different companies can work locally instead of commuting to their employer's office.

9. **Mobile/Location Independent (Nomadic Telecommuting)** represents the mobile workforce. Employees who are constantly on the road using technology as the main link to centrally located resources. 'Nomadic' workers are those whose primary work activity entails considerable necessary travel and for whom their 'place of work' is 'wherever they happen to be'. Salespeople and service engineers are examples. Such workers usually have at least some office facilities at home, but their main concern is to have ready access to good facilities "on the road".

2.1.4 Factors that make telecommuting feasible

Telecommuting is made feasible by:

- The reducing cost and increasing performance of computers and telecommunications;

- The ready availability of tools and services that support Open Electronic Networking (including the open Internet);

- Increasing willingness by employers, employees and self employed people to explore innovative ways to achieve business and personal goals.

Further, telecommuting is made attractive by:

- Increasing pressure on industry to reduce costs while improving levels of customer service.

- Increasing concern about the environment and especially the impact of roads and cars.

- The emergence of a networked economy, in which telecommute and teletrade will play central roles.

- The shift from "paid employment" to "work opportunities", with a rise in self employment and part time employment, and increasing dependence on entrepreneurs, very small firms and "micro enterprises".

- Computers, cellular phones, fax, and advanced communications links such as ISDN and dial-up access have removed the physical barriers that once required workers to be in their offices.

- Economic pressures, turbulent and unpredictable changes in the business environment as a result of global competition (Lim and Teo, 2000).

2.1.5 Evolution of telecommuting

In summary, below is a depiction of the evolution of telecommuting as progressing through four ages to its current state (adapted from European Telework Online).

The First Age: Telecommuting *out in the cold* (1980s)
During this period, telecommuting was a topic for discussion amongst some researchers and policy makers and practised only by a handful of gurus and by the technological elite

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The Second Age: Telecommuting *in the kitchen* (Early to mid 1990s)
In this age, vanguard economic groups took over, especially those individuals with the resources and authority to be able to determine their own ways of working without recourse to higher decision-makers

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The Third Age: Telecommuting *by the fire* (1997-98)
This age marked the take-off of telecommuting during which a meeting of minds and objectives started to form between large numbers of decision-makers (who began to see the economic benefits of telecommuting) , and large numbers of workers (who began to understand and demand the benefits telecommuting could bring to both their working and private lives)

The Fourth Age: Telecommuting *in the frying pan* (From 1999)
Telecommuting is now in flux; it is starting to exhibit a wide range of characteristics and forms, entering a large number of different sectors and situations, and using manifold techniques and methods, all of which, however, arise from the core characteristic of being enabled by the new network technologies. In this context, telecommuting is indeed becoming the new form of work.

2.2 The benefits of telecommuting

Telecommuting offers significant benefits to individuals, employers, and to the economy as a whole. It also presents opportunities to secure wider social benefits - for example by reducing the environmental impact of car travel. Note that benefits only accrue from successful telecommuting programmes.

2.2.1 Benefits for individuals

The advantages for the individual employee include fewer work interruptions, increased s ense of control over work and increased scheduling flexibility. Others benefits are:

- **Reduced travel time and costs.** This is the most obvious benefit and, for many telecommuters, a primary motivation.

- **Improved work opportunities.** Work opportunities are not confined to jobs within reasonable commuting distance.

- **Better balance of work and family life.** Even though the telecommuter may put in more hours of effective work, he or she can still expect to see more of the family and can more easily participate in home responsibilities such as ferrying children, shopping etc. That is, there is less disruption to family life.

- **Participation in the local community.** An important benefit for many rurally based telecommuters is being "on the spot" to participate in community activities - for example as a school governor or in local clubs and societies, at a time when commuters are still *en route*.

- **Flexible hours.** Each individual has a personal daily "rhythm" - some are at their most lively and creative in the early morning, some late at night. Typical commuting patterns and office hours condemn everyone to work roughly the same timetable, while a flexible telecommuting approach can mean individual freedom to stop and start according to what works best.

- **Mental Health** concerns are alleviated through telecommuting opportunities. The employee reduces the frustration and fatigue resulting from commuting to the official office.

- **Accommodates employees** who have temporary or continuing health problems or who might otherwise have to retire on disability. Thus telecommuting may extend employment opportunities to people with disabilities.

Other benefits for employees include improved job satisfaction, fewer daytime home break-ins and reduced exposure to "office politics".

2.2.2 Benefits for the employer
Telecommuting is a valuable option for employers who are experiencing problems with balancing work and life for their employees or lack of on-site resources.

- **Cost savings.** The main savings are in premises costs, office overheads and labour. In some circumstances recruitment costs can also be reduced, as can the costs associated with high staff turnover (attrition) rates. Other hidden costs such as office heating , car parking facilities (if provided) are also reduced. For example, in "hot-desking", the savings in office overheads can be dramatic since many desks in conventional offices are only occupied for as little as 20% of the working day. One IBM office in New York State has actually fulfilled the 80-20 rule - it supports 800 people with just 200 desks (European Telework Online, 2001). Company wide, IBM managed a net saving of $56 million (about Kshs. 4.4 billion) per year when it first introduced telecommuting in 1993 due to the drastically reduced need for office space. At AT&T, savings of $550 million have been realised by eliminating or consolidating office space people no longer needed (InnoVisions Canada, 2002).

- **Increased productivity.** According to a recent study in the United States carried out by the International Telework Association & Council over seventy percent (72.4%) reported that working at home slightly or greatly increased productivity (International Telework Association & Council, 2002). Productivity increases of 40% have been reported, though a range of 10%-40% is probably more typical across a large-scale programme (European Telework Online, 2001). At Boeing, the world's largest manufacturer of commercial jetliners and military aircraft, reports showed that productivity increased between 15% and 30% (Telecommute

Connecticut, 2002). Since telecommuters avoid travel time and the interruptions of an office environment, significant productivity gains are realized.

- **Improved motivation.** In successful programmes, employees respond well to the signal of trust and confidence indicated by the employer's adoption of more independent work styles encouraged by telecommuting.

- **Skills retention.** Employees who might otherwise leave can remain in their jobs, for example when the family moves because of a job change by another family member who works in a non-telecommute company. Employees who take a career break can also continue working part time and remain up to date with the business and its methods. Women employees who take maternity leave can also continue to undertake some tasks and require less retraining when they return to work full time. A survey conducted in 1996 at IBM indicated that the company's telecommuters were the group who anticipated staying with the company the longest (Telecommute Connecticut, 2002). At the Bank of America in the US, one of the driving forces behind offering telecommuting was their need to attract and retain the best and brightest associates (Telecommute Connecticut, 2002).

- **Organisation flexibility.** In the event of restructuring and reorganisation, people can continue to work without disruption to their personal lives. People work in dispersed teams that can be assembled and reassembled as the needs of the enterprise change. Teams representing the best skills and experience for a particular project can be created, regardless of geography and time zones and with a minimal need for extra travel.

- **Flexible staffing.** In activities that generate peaks and troughs of workload, telecommuting can enable staff to work limited hours to match peak workload, without the staff concerned having to travel. In some cases, staff can be on "standby time" at home at retainer rates and then paid at higher rates when needed for active work.

- **Emergency preparedness/disaster recovery.** Organisations with effective telecommuting programmes may be more resilient in the face of external disruption - for example transport strikes, severe weather, natural disasters or terrorist action. For example, in the case of a fire at the main office,

telecommuting employees could easily resume work at their home where voice calls to the damaged office could be redirected.

- **Enhanced customer service.** Customer services can be extended beyond the working day or the working week without the costs of overtime payments or the need for staff to work (and travel) at unsocial hours. Many organizations have reported enhanced relationships with customers, improved quality, increased speed and expanded customer access to required information after implementing their telecommuting program (Kirchgraber, 2000).

- **Employing the invisible workforce.** There are a wide-range of untapped talents available who for one reason or another, are unable to work conventional hours. For example, a single parent who has young children to take care.

- **Fresh Vision.** Employing a telecommuter from outside the company, will bring fresh ideas and vision. Particularly overseas employees may bring a huge paradigm shift to your business, as they are unconstrained by society's conventions.

- **Increased efficiency.** Recent studies showed an increase on efficiency of 15% where employees worked from home (Hamilton, 2001). Reasons for this are not difficult to find - no other staff distractions, no phones ringing, working through coffee/tea breaks and so on.

- **Improves morale and reduces stress** by giving employees more options to balance work and family demands. Morale at Merrill Lynch, a financial services company in the US that employs 70,700 people worldwide, went up 30% due to telecommuting (Telecommute Connecticut, 2002).

2.2.3 Social and economic benefits

Telecommuting programs benefit more than just the employer/employee, they also benefit the economy.

- **Reduced traffic congestion.** In the most intensive commuter areas, it is quite noticeable how much more easily the traffic flows when even ten percent of the working population is telecommuting.

15

- **Reduced total travel.** Telecommuters g enerate a w orthwhile net reduction in total car travel. And this in turn also reduces wear and tear on roads, the costs of road maintenance, road accidents and the consumption of transportation fuels.

- **Environmental benefits.** Telecommuting can save wear and tear on the environment due to the reduced pollution due to less car travel.

- **Wider employment/work opportunities.** Potentially, telecommuting can enable people in an area of high unemployment to have access to work opportunities that arise anywhere worldwide.

- **Access to work for people with specific difficulties.** Telecommuting can also enable access to work, training and social interaction for people who have specific problems - for example those with disabilities that make it difficult to travel to work or to do a normal nine-to-five working day; single parents who need to be at home for the children; carers with responsibility f or a n e lderly o r s ick relative.

- **Economic regeneration.** Telecommuting and teletrade are central to future opportunities for trade and work and should now be an important element of any economic regeneration programme.

- **Lower urban migration**. Telecommuting could be the answer to stemming the rural to urban migration which in most cases is as a result of people looking for employment. This would in turn result in less congestion in urban centres and thus provision of better services.

2.3 Technology required for telecommuting

Many technological advances in the telecommunications and computer industry make telecommuting possible. Products and services which facilitate telecommuting are grouped in the following four categories:

2.3.1 Hardware products

- Computers - The size and speed is determined by what it will be used for. The PC should also be upgradable and have other necessary capabilities.

- Faxes, Modems and Fax/Modems - To facilitate communication and exchange of documents between home and office.
- ISDN - This enables two separate voice conversations to take place, at the same time, through the same single twisted-pair telephone wire that traditionally, in an analog environment, carried only one conversation. Since ISDN delivers two separate channels through the wire, it is possible to conduct a conversation on one channel, and simultaneously use the other for a data device such as a PC or facsimile machine.
- Printers – The choice of printer depends on its use. Will a lot of printing be done? Documents? Graphics? Combinations?

2.3.2 Software products

A good word processing package and software for spreadsheets is a must. Knowing what is being used is the best way to determine what one should have. Such software must of course be compatible with what is being used in the company offices.

2.3.3 Telephones and service

Most people don't give this item a lot of thought. A phone with speaker capabilities, caller id or other features should be considered. A check with the local telephone provider to see what services are available is also advisable. Additional phone lines could also be a consideration. And depending on the communication needs and remoteness, wireless communication may even be required.

2.3.4 Networking

It is necessary to link the equipment at home with office computing resources. Whatever networking facilities are chosen they should be able to meet the requirements of the telecommuting arrangement in place. It is networking that will enable exchange of information to and from the office facility.

Once the telecommuter has all the basics and has established his/her business or secured the telecommuting position, then he/she might want to consider the extras. Multi-function machines are an idea, desktop photocopiers are always great to have,

and scanners are also another important piece of equipment that can lead to doing other types of work.

2.4 Implementation of a telecommuting program in an organization

A telecommuting program can be implemented with a modem and a single telephone line, but the success of a long-range program will depend on its ability to expand. The solution that supports a single telecommuter might not be suitable for more than one. Therefore when an organization is determining the specifics of its program, it should give careful thought to how it will be expanded.

2.4.1 Steps to implementing a telecommuting program

Implementation of a telecommuting program is a step-by-step process. The order of the steps may vary. Some telecommuting administrators do not have to provide their senior management with a formal proposal. Instead, they implement their program by forming a steering committee. Others form their committee, complete their telecommuting policy and agreement, define their evaluation criteria, then present a formal proposal to senior management. The implementation steps for a telecommuting program are not cast in concrete and the program won't fail if they are not all done in the specified order. The steps are provided as a checklist and may help in projecting how much time will be needed to set up the program.

1. Prepare and present a Telecommuting Proposal.
2. Obtain support from the top.
3. Establish a Telecommuting Implementation Committee.
4. Define pilot program parameters.
5. Present telecommuting orientation sessions.
6. Develop a Telecommuting Policy for the organization.
7. Develop a Telecommuting Agreement.
8. Develop selection criteria to select the participants.
9. Develop evaluation criteria for the program.
10. Determine equipment and technology needs.
11. Develop resource and reference material.
12. Recruit participants.
13. Implement managing by objectives.

14. Select the telecommuters and supervisors.
15. Select the control group.
16. Train the telecommuters and supervisors.
17. Administer pre-telecommuting evaluation.
18. Begin telecommuting!
19. Conduct focus groups.
20. Administer telecommuting evaluation.
21. Analyze and prepare the results of the evaluation.
22. Present the results to senior management.
23. Obtain concurrence from senior management to expand and formalize the program.
24. Begin implementation of the program throughout the entire organization.
25. Monitor the program.
26. Make adjustments where necessary.

2.4.2 Implementation concerns
2.4.2.1 Management concerns

1. **Security:** Banks and other financial-service firms must be more concerned about this even more than most employers are (Gordon, 2002). . Telecommuting, by nature, opens another potential path for information access. Adopting the appropriate technology and safety measures can address these concerns. Before implementation of a telecommuting program, the security controls in the company should be assessed. Current security arrangements should be upgraded if necessary. Many of the same controls will apply at home (passwords, hardware and software security standards, etc.). When deciding what work an employee should take home, the following should be assessed:

   ❏ The extent to which the information is known outside of the company.
   ❏ The extent to which the information is known to the personnel.
   ❏ The value of the information to the company and its competitors.
   ❏ The amount of effort or money spent to develop the information.
   ❏ The ease or difficulty with which the information could be accurately duplicated by others.
   ❏ The potential consequences of its disclosure outside of your organization. If the material is highly confidential, implement controls to protect it. For

example, hard copies of confidential information should be disposed of in a security-conscious manner.

2. **Productivity:** How productive is an employee who telecommutes? Such concerns can be allayed by studies that indicate that telecommuters can be just as productive as their on-site colleagues. And in some cases, productivity of employees has been found to increase when they are allowed to telecommute.

3. **How to select telecommuters:** Telecommuting must be voluntary. No employee should be required to telecommute. If the company has employees that management thinks would be good candidates for telecommuting, this should be discussed with them. If they have needs that can be met by telecommuting, they may choose to apply. Determining which of the employees will make good telecommuters requires consideration of the individual's work responsibilities and habits and, if applicable, whether his or her home situation is conducive to telecommuting.

2.4.2.2 Business Concerns

There are a number of general business considerations to be accounted for in the preparation of a telecommuting program. Employers and their telecommuting candidates should define these considerations and make specific arrangements which suit their particular needs. These include tax requirements, workers' compensation, security, equipment, insurance, union considerations, emergency preparedness/disaster recovery and how much these will cost the company.

2.4.3 Conditions for successful implementation

Fifty percent of telecommuting programs fail. They fail because organizations have not properly defined the expected outcomes and because the programs have been poorly planned and implemented (Kirchgraber, 2000). Successful implementation of an organization-wide telecommuting program depends on anticipating potential problems as well as careful planning and execution. Awareness of potential problems helps determine the program that will make sense to the organization. Some issues to consider when designing a telecommuting program of a company are listed below:

- **Development of formal policies** - The development of formal telecommuting policies is especially critical. Written policies and procedures are needed to ensure understanding and avoid misunderstanding about the terms and conditions of employment. Policies should cover short term as well as continuing arrangements. Such policies should cover equipment, telecommunications, security, eligibility to work away from the office, off-site support (including hardware, software, other facilities), health and safety issues, legal issues, financial issues (i.e. taxation) and other general personnel issues.

- **Suitability of work** - The nature of the work should be suitable for telecommuting. Work suitable for telecommuting depends on job content, rather than job title, type of appointment, or work schedule. Telecommuting is well suited to positions where the employee has no direct physical contact with the public and direct contact with co-workers is not required (may still involve phone contact). Some jobs, those of a clerical nature, some secretarial positions, and data entry positions are more suitable than others for a telecommuting. Jobs that are information-based (e.g., information processing, technical writing, graphic design) also lend themselves well to telecommuting. Many experts also say that most employers that permit telecommuting produce and work with information: banks, insurance agencies, high-tech companies, law and architecture firms, consulting agencies, publications and software companies (Yaukey, 2001). Other industries that favor telecommuting positions are telecommunications firms, internet companies and companies in the information systems arena (Collamer, 2002).

  Salaried jobs that can be successfully done at home include: accountant, administrative assistant, architect, desktop publisher, human resources professional, illustrator, insurance agent, news reporter, secretary, typesetter or word processor.

- **Employees and supervisors** - The characteristics of an employee are particularly important. The employee should be an organized, highly disciplined,

21

and conscientious self-starter who requires minimal supervision. His or her performance should be at least "fully successful." In certain situations, however, a supervisor may choose to offer telecommuting as a way to help an employee improve performance.

The characteristics of the supervisor are also critical. He or she should be willing to try out the new arrangement and take the necessary steps to ensure its success. Most importantly, the supervisor should be comfortable managing by results. At J. P. Morgan bank in New York, a partnership approach between manager and employee, has seen the popularity of the telecommuting program soar such that 25% of the employees telecommute (Benenson, 2001).

- **Workplace schedules** - Most telecommuting employees spend part of the workweek in the regular office to improve communication, minimize isolation, and use facilities not available offsite. Organizations should develop flexible procedures that allow supervisors and telecommuters to determine the best balance for individual situations.

- **Involve all key organizational representatives -** Solicit the participation of the CEO, legal counsel, human resource specialists, local union representatives in the organizational telecommuting planning.

- **Determine the need for a telecommuting project manager -** Depending on the size of the organization a telecommuting project manager may be required. The primary role of the telecommuting project manager is to be the single point of contact for the organization and to provide leadership for the program. Telecommuting is more effectively implemented when several people share the responsibility and have an opportunity to feel ownership for their individual contribution to the program. Therefore the other role of the telecommuting project manager is to put the team together.

- **Overcoming management resistance -** Some managers are resistant to telecommuting. For example in New Zealand, managers are still saying, "if I can't

see them, how do I know they're working?" (Tapsell, 1999). This is a natural reaction considering that, traditionally, jobs have been office based. Some managers feel a loss of control when their employees are not in close contact. Others feel that having telecommuters puts an extra burden on them. Managers should be trained to see that managing people off-site should be no different from managing people on-site and to manage by results and not by activity. It is therefore important to have clearly defined and measurable output.

- **Determine employees not suitable for telecommuting** - Not everyone is suitable for telecommuting. If an employee is unsuitable, discuss any characteristics the employee could change, such as organization skills or the need for supervision and feedback. The option can be re-evaluated in six months. It should be kept in mind that telecommuting is not only for star performers. It should be available for all employees; however, high-performance employees are going to be more suitable

- **Communication** - Clear understanding and constant promotion of the benefits of telecommuting are essential. Share that perspective regularly, and emphasize the positive aspects of telecommuting. Spread the word about telecommuting. This will help ensure that everyone understands why telecommuting has been implemented in the organization.

- **Determine an administrative structure** - The telecommuting implementation committee can help decide how the program is to be administered. If the organization is a large one, a telecommuting coordinator could be appointed in each department to interface directly with the telecommuting project manager. The coordinators would have decentralized position s, managing the telecommuting program in specific departments. Smaller organizations may want to conduct a centralized program with a single project manager. In determining an administrative structure it is also important to explore the type(s) of telecommuting arrangements - home-based or Telecenter – that will be feasible in the organization.

- **Make a trial run** - A six to 18 month pilot program will give the organization a chance to monitor costs, equipment, training, and other issues (Dudley, 1998). This would include a survey, logistical preparation, promotion of the telecommuting initiative, training and implementation. Evaluation would be an on going process and would operate continuously. That said, a thirty to ninety day acclimatization period should be expected when telecommuting is started. This is because it takes a while for even the most organized person to figure out how to manage time, space, communication systems, and projects while working in two locations.

Telecommuting is not a one-size-fits all proposition. Successful telecommuting programs must be tailor made to the specific needs of the company, its workers, customers, culture, business strategy, technology and the work performed (Kirchgraber, 2000).

2.5 The drawbacks to telecommuting

The drawbacks to Telecommuting are serious enough to send an average 1 in 5 telecommuters packing for the office according to a national survey by Link Resources in the US (Council, 2001). These drawbacks include:

- Boundary Issues (Being on call 24 hours a day, 7 days a week),
- Envy from Co-Workers. Some colleagues can be jealous, especially if they are refused the chance to telecommute. For example, in one case, a telecommuter complained that because he lived next to a golf course, his colleagues teased that when he worked at home, he had gone "tele-golfing" (Lim and Teo, 2000).
- Workaholic Tendencies (Let me work just five more minutes). There is a temptation to log in and work after business hours and even weekends.
- Self-Motivation (There is not anyone standing over you watching you work)
- Isolation. Isolation (both social and professional) is the most trying of all these drawbacks. This is to be distinguished from the peace and quiet that is mandatory for creative or thought-intensive activities. To avoid isolation, contracts of employment should require home workers to periodically attend the office.

- Social customs and cultural diversity are other issues that could impact negatively on telecommuting. Some countries and/or religions celebrate different holidays and seasons that affect when they work and when they do not. For an employer with a large diversified telecommuting work force, it could get complicated keeping all schedules straight and projects on track.
- There is also the issue of a creating a virtual corporate culture. The organization has to deal with the issue of making telecommuting acceptable among employees and customers. Clearly, expanding the corporate culture to include virtual etiquette and understanding poses tremendous challenges to the organization (Kurland and Bailey, 1999).

Although the drawbacks present obstacles, they are not impossible to overcome. Proper planning, coordination and realistic goal setting can alleviate all of these drawbacks (Council, 2001).

2.6 The basic requirements for home based telecommuting

In studies of telecommuting sponsored by the UK Government, Management Technology Associates identified five dimensions along which home based telecommuting can be categorised and evaluated (European Telework Online, 2001):

1. The Person
2. The Task-Set
3. The Home Environment
4. The Organisational Environment
5. The Organisational and External Infrastructure

2.6.1 The Person

Telecommuting specialists often suggest that employees should be "evaluated" to determine their "suitability for telecommuting ".. An appropriate person for home-based telecommuting will be one who is reasonably self-starting and doesn't have a high personal need for the continuing personal presence of co-workers.

Here are the main "person factors" to consider:

25

- ❑ *How long in organisation* - established or newcomer? Unless the organisation is very highly oriented to telecommuting, its usually best for new employees to spend at least some time working in conventional mode to "get under the skin" of the enterprise, understand the culture, get to know other people.
- ❑ *Self-managing, self-determining?* Some people prefer to entirely manage their own workstyles and activities, others need the external prompts that are built into the conventional workplace.
- ❑ *Age* - how much experience of business environment and processes? Until such time as telecommuting methods are very widely accepted, most young people starting their first job will probably benefit from starting in a conventional environment until they get a feel for business life.
- ❑ *Personality* - active communicator? In every meeting or informal conversation, some people are active communicators - they start discussions and join in without prompting. Others tend to be passive and need to be "brought into" the discussion. The first type find it easier to "stay in touch" through electronic mechanisms (phone, email etc) at a distance.
- ❑ *Skills* - specialist or tyro? At the two extremes, someone who is a world class expert in their field will more readily adapt to new methods of work than someone who is learning new skills as a beginner.
- ❑ *Personal preferences?* And of course this is very important - positive management styles suggest that more and more people can and should decide for themselves what work mode is most appropriate for them.

2.6.2 The Task-Set

Telecommuting is *possible* for almost any office based task and for an increasing range of industrial tasks, but the question should be is it *appropriate*? Or rather, will telecommuting *enhance* (or detract from) the way a particular task set is performed? There's no point in implementing telecommuting unless it will make a contribution to improving results for the organisation as well as having benefits for the individuals.

Tasks that may be positively enhanced by working at home include those that require concentrated individual effort free from unwanted distractions. Tasks that may be adversely affected by working at home include those where considerable advantage is gained from frequent or continuing "rub off" contact with co-workers, for

example brainstorming a new campaign or a new slogan in an advertising agency; or brainstorming a new product concept in a marketing unit.

- *Routine versus varied; repetitive versus creative.* It may appear that repetitive routine tasks are ideal for telecommuting but this is a serious misconception. The more routine and repetitive the work the more likely it is that the employee needs the stimulation and social support of colleagues and a relatively close level of supervision. With today's affordable technologies, this is usually best achieved in a conventional office environment. New methods do apply, but mainly through concentrating work into centres rather than distributing it to home-based workers.

- *Interruptive versus concentrative.* These factors suggest ways to look at the work setting. For work requiring peace and quiet and freedom from interruptions, some homes provide a much better environment than the office.

- *Communication patterns* - internal or external? Intensive/infrequent? Every task-set involves communicating with other people - face-to-face, phone, email, video. The pattern of communications has a profound effect on what makes an ideal setting for the task. If there is frequent contact with the same group of people then the mutual understanding that is built can mean distance is no barrier to sustaining effective contact - complex matters can be sorted out at distance by groups who are in intensive contact, they develop the skills to do this. If the task involves only occasional contact, but with complex content, then face to face may be the only effective way to do it - that's why in some cases even committed telecommuters do a lot of travelling to meetings. The internal/external balance can affect loyalties and commitment. If someone's main contact is with the outside world, the company and it's managers need to work harder to build and retain that person's attention to the company's needs and philosophies. Many managers feel unable to do this at a distance!

- *Relationships* - close and informal or fragmentary, formalised? The closer and more informal the relationships that arise from the task, the easier it is to sustain these relationships at a distance - especially if communications are intensive. Conversely, where relationships are fragmentary and/or formalised (for example between a directory enquiries operator and the momentarily online customer) no task-based relationship can develop and there has to be a strong internalised relationship added by the management and team processes.

The most successful companies of the recent past have tended to place a strong emphasis on the atmosphere and environment in which staff work, as well as on the traditional Taylorist aspects of improving the mechanics of how tasks are performed. This is because - all other things being equal - happy, enthusiastic and positively motivated people who enjoy coming to work are more productive and deliver better performance for customers than people who are only at work because they need the money and can't get a better job.

When work and teams are distributed in a telecommuting programme, there may be lose of some of the background elements that affect motivation and enthusiasm. For example in a call centre handling brief and repetitive calls there is usually something of a "party atmosphere" surrounding the work; the work itself provides little opportunity for fun and interpersonal exchanges, so we add in little celebrations and excitements.

Some aspects of this "positive environment" approach do lend themselves to analysis, particularly communications and relationships. There is need to assess the patterns of communications and relationships that are built in to the task set, and what the missing elements that have to be delivered through other processes are. Some of these other processes should be automatic - for example regular personal contact between the manager and each member of the team. But some may need what could be considered "non-essential" and costly effort - for example bringing a widely dispersed team together in an attractive location from time to time when there may be no obvious business "work" to be done.

2.6.3 The Home Environment
In debates about telecommuting at national and international level its often forgotten that in some countries many (perhaps most) homes are probably unsuitable for telecommuting. There are both physical and emotional aspects to be considered:

- **Physically**, the main requirement is the ability to create a defensible work space within the home, meaning an area where the telecommuter can at least partially insulate him or herself from domestic activities when necessary, and such that the telecommuter can also "close the door on the work" and not have it as a

constantly visible presence and reminder when they are trying to enjoy family activities.

- **Emotionally**, its important that telecommuting should be "good" for the rest of the family as well as for the telecommuter. It needs to be recognised that the family may take time to adjust to a telecommuter who is physically present but mentally preoccupied.

In looking at the home, numbers as well as space need to be taken into account. If there are two or three potential telecommuters in a house, is it realistic for each of them to have defensible space and the appropriate facilities? Will co-existence help or hinder their work and/or the emotional environment and their relationships? These issues are often forgotten when making forecasts about the growth of telecommuting.

Location factors to evaluate:
- *Available space, defensible space?* "Defensible space" has two meanings: (a) an area which is "for work", where work can be started and stopped without having to reorganise the area for non-work activities; and (b) a place where it is possible to "shut the door" on work and enjoy home activities without constant visible reminders of pending or overdue work items.
- *Other people* - partner, children - their needs and attitudes? Imagine a family with two parents and two children, all involved in work. If one decides to work at home this may have little impact on the others. But if two or three want to work at home this could cause problems.
- *Facilities* - telecom quality? In the same department of the same company, one person may live in the city centre, with high performance, low cost cable to every home, another in a small rural village with relatively slow, costly, less reliable communications.
- *Environment* - local noise, disruptions? Consider the telecommuter who lives with a partner and two very young children in a small apartment with thin walls and noisy neighbours. Compare this with the one who lives in a large detached house in the country and whose children have moved away. Home based telecommuting looks and feels quite different to these two people.

2.6.4 The Organisational Environment

For employees and managers this is probably the main governing factor: *is the organisation ready for telecommuting?* Here again, both physical (in this case technological) and emotional aspects arise. It would not be prudent to introduce telecommuting on a general basis in an organisation that hasn't yet implemented electronic networking (email, online discussion, online notice boards and libraries etc) successfully, or in an organisation where the management approach is bureaucratic and strongly hierarchical. Telecommuting (of any kind, but especially home based) works best where there is already a lot of electronic networking, where employees are empowered to act and think for themselves, where management is by results not by attendance and timekeeping.

If the organisation is "actively and effectively networking", there is less practical need for p hysical p roximity o f c o-workers a nd f or p hysical a ccess t o f iles and systems. Information is shared electronically and relationships are built and sustained across networks as well as through physical encounters. If everyone is connecting electronically, the employee who is working at home doesn't feel "out of it" or out of touch. No special communication arrangements are needed for home based workers because the network becomes the main communication mechanism for all. But if s pecial n ew s ystems h ave t o b e i mplemented t o support telecommuters as distinct from other office based workers, this may suggest that the organisation is not yet ready for telecommuting.

The "managerial environment" is equally important. If managers are still managing by counting the hours and by observing whether people *appear* to be working hard, then they may well assume that an employee who is allowed to work at home will slack off and pay less attention to work. They will be worried about how to manage someone they can't observe - the most common managerial objection to telecommuting! When managers have learned to manage on the basis of results and achievements they will know how to measure these, and will be less concerned about whether they can see the employee at work.

Note: This emphasis on electronic networking doesn't mean that face to face communication becomes unimportant. In most organisations physical meetings

remain important in team building and in attaining a common vision of goals and common sense of purpose, building mutual trust etc. But the nature of and need for physical meetings changes when organisations are effectively networked.

The most important organisational factors are to do with culture, behaviours, attitudes and expectations:

- *What is the management style?* If the enterprise has an "empowered" management style in which individual managers and employees make their own day to day decisions about their work and take responsibility for their own results, this is a positive indicator for and open and permissive approach to new methods of work. In contrast, a strongly bureaucratic organisation, with centralised decision making and little delegate authority should only adopt new methods of work on a very planned and controlled basis.

- *Communications culture?* Are their open communications across as well as up and down the organisation? Again open, any-to-any communications indicates a flexible, opportunist approach to new methods of work. In contrast, strong adherence to reporting structures and the organogram suggests a controlled and selective approach to new work methods.

- *Business stance or cycle?* If the enterprise is growing, profitable and well funded, new methods of work will be seen as a better way to get the job done. If the enterprise is struggling and in cut-the-bottom-line mode, it may be seen as a threat to job security.

- *Use of electronic networking methods?* Once email and other online communications are well established, new methods of work tend to become an obvious next step. Otherwise, communications problems will arise.

2.6.5 The Organizational and External Infrastructure

The organisational infrastructure needs to be supportive of telecommuting. Here are some questions to ask (posed from the perspective of an enterprise):

- **How intensively does the enterprise use Information and Communications Technologies (ICTs)?** Wide and deep use of computers and telecommunications is a positive indicator for telecommuting and other new methods of work. The level of additional investment needed will be relatively low; staff and managers are already familiar with relevant technologies; the enterprise

has acquired skills in using and supporting a technology intensive work environment.

- **What is the capacity/cost/resilience of the telecommunications and data communications environment?** Is the IT and communications environment well established, reliable and regularly updated? It will become more intensively used as new methods of work are adopted and ideally needs to be "useful but invisible". Problems with technology are an avoidable distraction and demotivator when undergoing organisation change.

- **To what extent is remote access supported?** Can all the same applications and data be assessed as one were at an office desk? If there are technical or policy (e.g. perceived security issues) problems with this then arguably the enterprise may not yet be ready for new methods of work.

The external infrastructure can be important, since the telecommuter is also dependent on good communications at home. In some places very fast data communications (i.e. Internet) access is available to homes at very low cost. In other places either effective communications may not yet be practicable or may add considerable cost.

Interaction among the five dimensions

It should be clear from the above comments that none of these five aspects works in isolation. The conditions for successful home based telecommuting are there when a *person* for whom it is right has an *appropriate task set*, there is both *space and an appropriate emotional environment at home*, and the *organisation is "ready for telecommuting"* from both the managerial and *infrastructure* perspectives. If we do get someone telecommuting in the wrong setting, doing a task that's inappropriate, we must expect problems. Too often, the result is a judgement that "telecommuting doesn't work" or "telecommuting doesn't work for us". The truth is that a mess of adopting telecommuting has been made.

2.7. <u>Conclusion</u>

According to a 2000 report on telecommuting in Europe, over 16.2 million (or 10.8%) of the European workforce will be involved in one way or another with telecommuting by 2005. Another study by Access Markets International Partners, predicts that 67 million Americans (over half of the US domestic workforce) will be telecommuting by 2006 (InnoVisions Canada, 2002). From such statistics, it seems almost certain that the trend in the adoption of telecommuting will definitely increase in future.

Organizations that will have the greatest success with telecommuting are the ones that will integrate telecommuting so that it fits within the existing legal, financial, administrative, and human resources infrastructure. The focus for such organizations will not be on "where" one works but also on "how" one works. Focusing on the "how" will enhance the results, increase the benefits and accelerate the acceptance and growth of this alternative work arrangement.

In a sense, telecommuting is the organizational equivalent of the *Swiss Army Knife*™ – it is a multipurpose tool that can accomplish many useful and productive things. But as with the *Swiss Army Knife*™, the results can be negative if improperly used (InnoVisions Canada, 2002). While new technologies bring many opportunities they bring new problems as well when they are applied in creative ways that challenge traditional thinking about work. But the beauty of technology is that it never ceases to amaze (Guthrie, 1997) especially if it is put to proper use.

Therefore, as the information revolution continues to reshape our corporate and personal lives moving us closer to a global society, telecommuting will definitely play a major role as it represents a major step towards working anywhere, anytime. As one of the key workplace transformers of the next decade, there is little doubt that it will inevitably and dramatically re-shape how work is carried out in Kenya.

So where are organizations heading in this stormy seas of change? Organizations are moving from the traditional, centrally based, commuting workforce type to the networked, computer serviced, dispersed type relying on advanced communications – just as the major banks and insurance companies in the UK and the USA started

doing more than a decade ago. The costs and capital involved in a networked organization are a fraction of the costs and capital required for a traditional organization. The old cannot possibly compete with the new. Organizations must thus embrace the changes being forced upon them by technology or will eventually be forced to retire from business because they will not be able to compete with others who have adopted new and more beneficial modes of working. According to Hodson (1995), organizations will shortly have to adopt telecommuting methods – or die.

And it is with this theoretical framework of telecommuting in mind and in a bid to examine the reality on the ground in Kenya that a study has been deemed to be necessary. The study will build upon this literature review to examine the practice of telecommuting in Kenya, specifically to establish the extent of the practice among banks operating in Kenya.

CHAPTER THREE

3.0. RESEARCH METHODOLOGY

3.1 Population

The population of interest in this study will be all the banking institutions operating in Kenya. Since the population under investigation is clearly small, all the subjects in the population will be included in the study. Thus the study will be a census. The list of all banks will be obtained from the Central Bank of Kenya. (See appendix II)

3.2 Research design

The research will utilize survey method. Since the research is exploratory in nature, the survey design is considered the most suitable because it also serves the purpose of exploration. Exploratory research is also appropriate for topic areas where the developed data is limited. The objective of the exploration will be the development of hypotheses, and not testing.

3.3 Data collection technique

This study will rely on primary data that will be gathered using standardized questionnaire-interview. The same questionnaire will be used for all respondents. The questionnaire will contain closed and open-ended questions and will have three parts.

Part I of the questionnaire will seek to find out the number of employees telecommuting and which categories of employees telecommute. Part II will seek to find out the telecommuting structures in place and the types of telecommuting arrangements permitted by banks. Part III of the questionnaire will be for banks that do not have employees who telecommute. This part will mainly be to find out if such banks have any future plans regarding the practice and to find out if there have been any barriers to having a telecommuting program.

The respondents for the questionnaire will be specific individuals (human resource managers) who can answer the questions on behalf of the specified bank. A brief

explanation will also be given to such individuals as to the purpose of the study before the interview.

3.4 **Data analysis techniques and presentation**

Analysis will start with data organization that will mainly include editing and coding of the raw data. In coding the specific response categories such as work option and job type will be sorted. In the editing process, the responses will be reviewed and incomplete answers will be omitted.

Exploratory m ethods o f d ata a nalysis will then be used to discover what the data collected reveals concerning the topic of study by making use of simple arithmetic and easy to draw pictures to summarize the data. Using these methods, for example, using such a measure as the arithmetic mean, the analysis will be able to reveal the average number of employees who telecommute as well as the total number of those telecommuting. And from such figures it will be possible to meet the main objective of establishing the extent of the practice of telecommuting among banks operating in Kenya.

The results will then be reported in the form of tables, charts, other graphical representations and also through a set of percentages.

36

CHAPTER FOUR

4.0. DATA ANALYSIS AND RESEARCH FINDINGS

4.1 <u>General observations and results</u>

The data collected was from questionnaires as depicted in the table below:

<u>QUESTIONNAIRES</u>	NUMBER
Filled in questionnaires	17
Questionnaires returned unfilled	19
Lost questionnaires	11
Total number of questionnaires used	**47**

The response rate was about 36.17% (percent), with seventeen (17) out of the forty seven (47) respondent banks taking time to fill the questionnaires. Included in the category of lost questionnaires are banks that did not return questionnaires even after subsequent follow-ups. Some of the banks in this category had poor communication from downwards thus questionnaires got misplaced.

Some of the banks also returned questionnaires unfilled as shown in the table above. Most would just use their bank stamps to show that they had received the questionnaires but were unwilling to fill them for one reason or another. Reasons given for not taking part in the research varied from lack of adequate time, general unfamiliarity with the topic of study to unavailability of staff. One bank even had a personnel manager who was sick for one month and thus was unavailable to answer the questionnaire, and no one would fill it in his absence.

Apart from these, some banks admitted they did not take part in this kind of study as it was against their policies. Therefore, on the whole, many banks shied away from the study and preferred not to take part and thus many questionnaires were returned unfilled.

4.2 Detailed results and analysis of the findings

4.2.1 Part I and II of the questionnaire: For those that had a telecommuting program

- Categories of employees who telecommute:

  Executives and managers were mainly found to be the ones allowed to telecommute. Even so, no bank gave the number of those telecommuting.

- Form of telecommuting policy:

  Written policies were found to be preferred. This is as opposed to having informal ones or none.

- Types of telecommuting arrangements permitted by bank

  Two types were mentioned:
  a. Home based telecommuting – This is where an employee designates workspace at home to conduct business functions instead of commuting to an office.
  b. Hot desking - Instead of each employee who's "based" at a particular office having a personally "owned" desk, employees who happen to be there on a particular day use any available desk on that day.

- Difficulties encountered in having telecommuting
  1. Telecommunications infrastructure
  2. Funds unavailability

4.2.2 Part III of the questionnaire: For those without a telecommuting program

Following is the response and analysis of the questions asked:

Q9: Do you think telecommuting would be beneficial for your company?

> Yes: 5
>
> No: 1,
>
> Don't know:9

33% of those who responded think that telecommuting would be beneficial to the company

7% don't think so

60% don't know the subject well enough to decide

Q10: Do you think telecommuting would be beneficial for employees?

    Yes: 5

    No: 1,

    Don't know: 9

33% of those who responded think that telecommuting would be beneficial to employees

7% don't think so

60% don't know the subject well enough to decide

Q11: Any actions taken or plans to have a telecommuting program in future?

    YES: 2

    NO: 8

It appears that 80% of those who responded do not plan to undertake telecommuting in future and only 20% plan to do so.

Q12: Any barriers to having a telecommuting program?

    Barriers mentioned include the following:

      1. Size of business: 1

      2. Telecommunications infrastructure: 6

      3. Funds unavailability: 6

      4. Still a growing bank: 1

From these it seems that 43% of the respondents felt that telecommunications infrastructure and funds unavailability are the main barriers to having a telecommuting program. Even so, some banks cited reasons such as size of the bank and the fact that they were still growing institutions as being barriers.

CHAPTER FIVE

5.0 DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 <u>Discussion</u>

As can be seen from the results of the findings, the response rate was not as good as expected. But as indicated in an earlier section of this paper, the main purpose of the study was exploration. And as in most explorations, it is not easy to determine in advance what will be discovered as there is often no basis of what to expect.

The general trend of the findings though support what is experienced elsewhere in the world where telecommuting is practiced. For example, as anticipated from literature it is senior employees, executives and managers in this case, who were found to be the ones allowed to telecommute. Also, the findings reveal that written telecommuting policies are preferred to other forms as in most other organizations practicing telecommuting in other parts of the globe.

Even so, some of the findings were quite startling. It appears that eighty percent of those banks that responded do not plan to undertake telecommuting in the near future and that only twenty percent plan to do so. These are worrying statistics given the rate at which telecommuting is being adopted in other parts of the world. For example, a national survey conducted in the United States of America last year showed that the number of telecommuters in the US increased 17 percent.

But this finding can be said to be as a consequence of what many banks cited as being barriers to having a telecommuting program in Kenya. The lack of adequate telecommunications infrastructure, combined with unavailability of funds may be barriers that lead to many banks not considering having telecommuting work arrangements given also skepticism in the likely improvements in these areas in the near future.

5.1.1 Limitations of the study

❑ There was quite a bit of hostility and suspicion concerning the study. Some banks even after being handed the university letter asking them to assist the

candidate to collect data in their banks would still not agree to answer the questionnaire.

❏ Most foreign owned banks showed no commitment to the study and form the majority of those who did not fill the questionnaires.

5.2 Conclusions

From the research results it can be seen that quite a considerable number of the banks did not respond to the questionnaires. The findings of the study therefore have to be taken with a bit of caution since the majority of the banks did not participate in the research for one reason or another as mentioned in the previous chapter.

That said, the specific objectives of the study have been met by the study to some extent and the following conclusions can be drawn with a fair degree of confidence. That:

1. The subject of telecommuting appeared to be a fairly new concept to most of the banks examined and many did not seem to understand or practice it. Of all the respondent banks, it was discovered that telecommuting was practiced significantly by only about two banks in Kenya.

2. Home-based telecommuting and hot desking were the forms of telecommuting found to be most popular with banks in Kenya.

5.3 Recommendations

Telecommuting is a concept that needs to be explored further. It is one concept that cannot be ignored by developing countries given the statistics about it from other parts of the world where it has gotten widespread acceptance. The concept needs to be examined to discover the benefits that are derived from it to cause, for example, over 30 million Americans currently to telecommute. Further study is required to determine why telecommuting is so beneficial as to be accepted by so many, and what benefits can be derived from it by Kenyan organizations.

Appendix I

Questionnaire to the Banks

<u>A Survey of the Practice of Telecommuting in the Banking Industry in Kenya</u>

Telecommuting describes a work arrangement that permits employees to work part-time or full-time near or from their homes for part of the work week. It refers to when an employee is working from a location other than the actual office of their employer. The term teleworking is sometimes also used in place of telecommuting.

<u>NB</u>

If your company has a telecommuting program please answer Part I & II

If your company does not have a telecommuting program please answer Part III

<u>Part I</u>

1. Does your Bank have employees who are telecommuting?

      Yes _____

      No _____

2. Total number of employees telecommuting

      Regular/Regularly scheduled _____

      Situational/Adhoc _____

      Medical _____

      Other _____ (specify) _____

3. Which categories of employees telecommute? (Tick all that apply)

      Executives _____

      Managers _____

      Supervisors _____

      Clerical officers _____

      Others _____ (specify) _____

<u>Part II</u>

4. Form of telecommuting policy (Tick all that apply):

      Written (handbook, letter, memorandum, etc.) _____

      Informal _____

      None _____

5. Scope of telecommuting policy (Tick all that apply)

      Company wide _____

      Headquarters _____

      Regional _____

      Branch/Department _____

6. Types of telecommuting arrangements permitted by bank (Tick all that apply)

      Home-based _____

      Neighbourhood work center _____

      Hot desking _____

      Others _____

7. Has your Bank derived any benefits from telecommuting? If Yes, please list.

_____

_____

_____

_____

8. Any difficulties or problems encountered in operating the telecommuting program? Telecommunications infrastructure, funds, etc.? If Yes, please list.

_____

_____

_____

_____

Part III

9. Do you think telecommuting would be beneficial for your company?

      Yes _____

      No _____

      Don't Know _____

10. Do you think telecommuting would be beneficial for employees?

      Yes _____

      No _____

      Don't Know _____

11. Any actions taken or plans to have a telecommuting program in the near future?

    Yes _____

    No _____

12. Any barriers to having a telecommuting program (Tick all that apply)

    Telecommunications infrastructure _____

    Funds unavailability _____

    Others_____ (specify) _____

Thank you for your assistance in having taken the time to answer the questions.

Appendix II

List of Banks Operating in Kenya

1. ABN-AMRO BANK N.V
2. AFRICAN BANKING CORP. LTD.
3. AKIBA BANK LTD.
4. BANK OF BARODA (K) LTD.
5. BANK OF INDIA
6. BARCLAYS BANK OF KENYA LTD.
7. BIASHARA BANK OF KENYA LTD.
8. BULLION BANK LTD.
9. CFC BANK LTD.
10. CHASE BANK (K) LTD.
11. CHARTERHOUSE BANK LTD.
12. CITIBANK N.A.
13. CITY FINANCE BANK LTD.
14. COMMERCIAL BANK OF AFRICA LTD.
15. CONSOLIDATED BANK OF KENYA LTD.
16. CO-OPERATIVE BANK OF KENYA LTD.
17. CO-OPERATIVE MERCHANT BANK
18. CREDIT AGRICOLE INDOSUEZ
19. CREDIT BANK LTD.
20. DAIMA BANK LTD.
21. DEVELOPMENT BANK OF KENYA LTD.
22. DIAMOND TRUST BANK KENYA LTD.
23. DUBAI BANK KENYA LTD.
24. EQUATORIAL COMMERCIAL BANK LTD.
25. EURO BANK LTD.
26. FIDELITY COMMERCIAL BANK LTD.
27. FINA BANK LTD.
28. FIRST AMERICAN BANK OF KENYA LTD.
29. GUARDIAN BANK LTD.
30. GIRO COMMERCIAL BANK LTD.
31. HABIB BANK A.G. ZURICH
32. HABIB BANK LTD.
33. IMPERIAL BANK LTD.
34. INDUSTRIAL DEVELOPMENT BANK LTD.
35. INVESTMENT & MORTGAGES BANK LTD.
36. KENYA COMMERCIAL BANK LTD.
37. K-REP BANK LTD.
38. MIDDLE EAST BANK KENYA LTD.
39. NATIONAL BANK OF KENYA LTD.
40. NATIONAL INDUSTRIAL CREDIT BANK LTD.
41. PARAMOUNT-UNIVERSAL BANK LTD.
42. PRIME BANK LTD.
43. SOUTHERN CREDIT BANKING CORP. LTD.
44. STANBIC BANK KENYA LTD.
45. STANDARD CHARTERED BANK (K) LTD.
46. DELPHIS BANK LTD.
47. TRANS-NATIONAL BANK LTD.
48. TRUST BANK LTD.
49. VICTORIA COMMERCIAL BANK LTD.

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