Investigation of Potential of Teleworking and the Needs of Teleworkers to Perform Their Role in the Libraries of the University of Verona

Research proposal

Anna Maria Prati

MODULE BP 101

MA/MSc Information Studies University of Northumbria – Newcastle Università degli Studi – Parma

Table of contents

- 1 Introduction
 - 1.1 Telework in the University of Verona : the "Progetto Iride"
 - 1.2 Telework in the libraries of the University of Verona
- 2 Aims and objectives
 - 2.1 Aims
 - 2.2 Objectives
- 3 Background
 - 3.1 Literature review
 - 3.2 Research issues and questions
- 4 Gaining access: authorization and communication
- 5 Methodology
 - 5.1 Resources available
 - 5.2 Characteristics of research and setting
 - 5.3 Methods
 - 5.4 Population of the study
 - 5.5 Technique to collect information from respondents
 - 5.6 Definition of research type
 - 5.7 Ethical issues
 - 5.8 Credibility, transferability, dependability, confirmability
- 6 Suggested analysis
- 7 Planning
- 8 Anticipated outputs
- 9 Bibliography

1 – Introduction

Since the 1980s there has been a proliferation of **literature about telework**. A vast majority of these books, articles, and web sites are focused on the benefits of this flexible form of work.

On the contrary **in library environment**, where telework embraces and develops side hand in hand with any form of ICTs development, telecommuting is almost unknown, seldom implemented – and often only in informal ways – and rarely reported.

Few experiences of telework in libraries are reported. Those experiences show, mainly in United States and German libraries, that wherever telework has been adopted a wide range of library activities are carried out through home-based telework.

The extraordinary development of ICTs has determined a growth of potential activities for teleworking librarians.

The University of Verona has adopted telework since 1999 putting the "**Progetto Iride**" into practice.

Telecommuting librarians at the University of Verona are mainly, if not only, doing original cataloguing of printed monographs.

This research **aims to investigate** the potential of teleworking and teleworkers' needs in this academic environment where major changes are affecting library working procedures and services.

Case studies unstructured interviews will be used to investigate how different groups of personnel perceive telework; to explore the potential of telework in this library setting; to highlight problems and issues related to the implemention of a new and wider range of library activities for the benefit of users, libraries and teleworkers as well.

1.1 - Telework in the University of Verona: the "Progetto Iride"

Telework, a flexible work arrangement allowing workers the ability to work from home, has been embraced by the University of Verona since 1999.

The "Progetto Iride: telelavoro azione positiva", promoted by the Equal Opportunities Committee of the University of Verona, aims to perform a "**positive action**" addressing only personnel with care problems or disabilities to help them manage work and family care.

Both staff and managers can participate in teleworking experimentation, which is **voluntarily** undertaken by staff after obtaining permission from their directors.

Telework experimentation started in Autumn 1999 with only one employee and has continued with different phases until this year, involving now **20 people** belonging to various offices and services and includes 4 librarians.

The main characteristics of telework in the University of Verona are:

- Home-based telework
- one to three days of telework each week
- on-line or off-line
- same status and compensation as co-workers in the office

Telework can involve:

- permanent or temporary staff
- full-time or part time staff

Due to all the above features, the telework project of the University of Verona is quite peculiar and not easily comparable with other experiences.

This experimentation is quite a rarity in the Italian public administration and it is the only one, as far as I know, in public library environment.

Many energies and enthusiasms have been raised by this project and now all its development and organization can been read on "Progetto Iride" website (http://centri.univr.it/iride/).

1.2 - Telework in the libraries of the University of Verona

Two teleworking librarians started to experiment this flexible form of work in 1999.

Since then four librarians were involved in the project, at the moment only 2 of them are telecommuting.

In fact one temporary librarian has stopped working and is now waiting to be taken on again. Another librarian is due to start telework in November.

Although the number of librarians involved in the project is quite small it is possible to identify a few subgroups among them:

- Full-time and part-time staff
- Central libraries and departmental libraries staff
- Temporary and permanent staff

At the moment telecommuting librarians are all female.

Telework has been adopted only in libraries of humanities.

At the moment all telecommuting librarians are mainly – if not only – doing original cataloguing of printed monographs

They carry home a fixed number of books and after a couple of days they come back with their books and the work done.

The academic environment seems to be quite favourable to experiment new forms of communication via new ITs. In 1997 the first tele-dissertation in Italy took place in the University of Verona, promoted by the academic responsible of the "Progetto Iride".

2 - Aims and objectives

2.1 - Aims

- The project seeks to expand the awareness of how the experience of telework in libraries is interpreted by teleworking and not teleworking librarians in the University of Verona.
- This study will also focus upon the potential of telework in the libraries of the University of Verona and it will highlight problems and issues related to the implemention of a new and wider range of library activities for the benefit of users, libraries and teleworkers as well.

2.2 - Objectives

This research will try to explore:

- the general perception of teleworking among different groups in the university of Verona (teleworking and not teleworking librarians, directors of Centrall libraries)
- teleworking librarians' needs (trust need, control need, training need)
- relationships between teleworking and not teleworking librarians
- library directors' attitudes towards offering training to teleworkers
- library directors' feelings about introducing new activities fit to teleworking

3 – Background

3.1 - Literature review

Telework as a general issue

Research devoted to the issue of telework has been increasingly growing since the 1980s producing lots of books, articles and Web documents.

According to the literature, telework needs clear guidelines, good communication and information, training for managers and teleworkers; and it may require also new ways to review work.

Management issues are crucial because telework requires the greatest leap of faith for managers: this involves the problems of truth and control.

Categories of work candidates for a telework program are both routine, high-quantity tasks and largely autonomous tasks requiring concentrated thought.

Telework in library settings

In library environment, where telework embraces and develops side by side with any form of ICTs development, it is almost unknown, seldom implemented – and often only in informal ways – and rarely reported.

Technological changes have modified librarian's role and responsibilities, the type of service offered while in virtual libraries telework is the norm.

Information related activities require frequent periods of isolation and there is not much need of face-to-face communication.

Major teleworking experiences show that telework is used to deliver high quality library services such as: on-line reference, call-centre, authority and quality control, document evaluation, acquisition, electronic document delivery, project writing, creation of Web pages, training courses preparing.

Simon (1997) sharply wonders whether deskilled activities such word processing justify the investments required.

Telecataloguing

Telecataloguing begun to emerge in the library environment in 1990s. Now-a-days this activity is mainly done by contractors and consultants.

Fulton (2000) has conducted a very accurate study on teleworking cataloguers. This study reveals that teleworkers were often missing the information necessary to complete tasks at home and tried to cope by repeating parts of tasks at home and by dividing tasks according to available resources. They also "distinguished between home and central office tasks ..[and] reserved some tasks for the central office".

Deskilling of work

According to Fulton "telework could become the domain of simplified tasks, thus contributing to a deskilling of work".

Co-workers

Another major problem arising from literature is co-workers' feelings (jealousy) (Grensing-Pophal, quoting Piskurich, 1999)

Also Fulton (2000) underlies the fact that a heavy burden was placed on co-workers in the office who had to compensate for absent teleworking colleagues by performing additional work.

Also Forster (1999) reports that morale problems might arise for remaining staff mainly due to increased workload.

Telework, e-work and globalisation

It is particularly difficult to guess which chances to survive are ahead for telework. Outsourcing, dumping and globalisation are becoming very common words now-a-days. Has telework still good reasons to survive in this virtual world? It is big guess.

3.5- Research issues and questions

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- 1) Perception of telework and teleworkers among the different groups and especially coworkers in the office
- 2) Teleworkers' needs in a quickly changing library environment
- 3) Possible deskilling of teleworkers
- 4) Trust and control over telework on the part of library directors, which involves management and organization
- 5) Problems generated by possible implementation of new activities fit to telework

4 - Gaining access: authorization and communication

Access and authorization to conduct the research have been asked to and approved by the responsible of "Progetto Iride" of the University of Verona.

I have sent a short summary of the research project containing the names of the subjects I would like to interview.

Each subject has been contacted by the "Progetto Iride" components in order obtain their written consent to be interviewed.

I am going to provide further details about the research to highlight the fact that I (hopefully!) might be able to discover information beneficial to the organization

Communication

According to J. Steele and S. Ells (1990) suggestion I will tray to make good use of communication during all the research stages and after.

Respondents needs

I will also pay particular attention to making clear what I will be asking and what I will be offering in return to respondents. Researchers owe something to people who contribute to the information they collect: at least the communication of the final report and recommendations or a copy of it. I should avoid making assumptions that people are there to be questioned and should participate in the project because they have been asked.

Communicate the focus of the research

I will ensure that everybody who contributes knows what the research project is about and will try to communicate from the start also in order to encourage contributions to the project. A copy of the project brief will be used to inform all participants. It will contain:

- the aims and objectives of the research,
- the reasons of the research,
- the methodology.
- the timescale
- my names, addresses, e-mail address and telephone number

Participants' suspicion

Interviewees need to be informed about what is happening during the course of the research project also in order to avoid suspicion.

Feed back

It is quite important to give feed back to participants. This will give them confidence and encourage them to give points they feel are important.

Information and language

It will be important to provide only relevant information to the participants receiving it using appropriate language.

Timing

Those participating need to know in advance when the interviews will start. It is quite important to warn participants that I will be asking them some time to help me with my investigation. They can start writing comments and notes and get prepared in advance. I will keep copies of all communications with participants.

5 – Methodology

5.1 - Resources available

Time

Qualitative research is time consuming especially in this project which includes interviews.

Trascription and analysis of interviews will take me quite a long time

Particular attention must be paid to satisfy respondents' needs for adequate time, lengths and location of interviews.

Interviews will cost me a lot: I will have to ask permission leave to interview my colleagues and library staff during my working time.

Money

I need a new tape recorder and tapes lasting at least the duration of an interview in order to avoid the disturbance of interruption.

Respondents

The Equal Opportunity Committee, who I have asked authorization to conduct interviews to, is asking all potential respondents the permission to be questioned.

I have not yet received all the answers, but many colleagues have already informally told me that they are quite happy to help me.

5.2 – Characteristics of research and setting

Practicality

As an inexperienced researcher, I will try to keep the study focused and not dispersed.

Neutrality of site

The setting is not completely neutral. As a permanent library employee of the Universey of Verona I am very familiar with many colleagues.

The positive effect is the easy access I have to enter this environment.

Biases, such as preconceptions, will be put aside in order to behave like a stranger in this setting.

Value of the topic

Possible strategic developments could help understand problems related to the potential widening range of library activities for the benefit of users, libraries and teleworkers as well.

Flexibility of approach

It might be necessary to change plans according to the first results of interviews.

5.3 - Methods

Justification of the proposed method

The overall **approach** I intend to adopt for this study is qualitative.

This study will deal with a **small population** belonging to different sub-groups, it will address issues that are not readily quantified and can find new answers to teleworking related problems. The complexity of the topic cannot be reduced to simple **yes/no responses** and it is concerned with the nature of the phenomenon rather than its relevance in statistical terms, it investigates the essence of experience and explore causation (Slater, M., 1990).

Qualitative research helps understand those being studied from their point of view, to share their own experience (Gorman and Clayton, 1997) and investigation goes **in depth and detail** not in breadth.

Teleworking is a process which involves **many components** which can be studied through immersion in their activity (Gorman and Clayton, 1997) in order to understand what people believe, how they feel, how they interpret events.

Qualitative research methods are **flexible and fit the social nature** of work organization in libraries. Organizational problems do not always meet the requirements of quantitative research. Libraries are social realities where individuals and groups work and create social interaction.

Strengths of qualitative data

According to Miles and Huberman (1994) qualitative data focus on "naturally occurring, ordinary events in natural settings"

They are rich and holistic "with strong potential for revealing complexity"

The fact that they are collected over a sustained period makes them powerful for studying any process, assess causality.

They allow flexibility: data collection times and methods can be varied as study proceeds Qualitative studies are suited for "locating the meaning people place" on their lives and for "connecting this meanings to the social world around them".

Triangulation

I will use triangulation by collecting information from several sources about telework in order to address different aspects of the same research question.

My sources will be: teleworking librarians, not teleworking librarians and library managers. According to N. Moore (1990) it is useful to combine more than one research technique and even experienced researchers limit the number of research techniques in a project to keep things simple. The more different techniques are used the more difficult the research becomes to handle. Triangulation helps finding a confirm of findings from more than one source.

Limitations of the method

The setting is not completely neutral as I am very familiar with many colleagues of the University of Verona libraries.

The positive effect is the easy access I have to enter this environment.

Biases, such as preconceptions, will be put aside in order to behave like a stranger in this setting.

5.4 - Population of the study

Interviews will involve the following groups and sub-groups:

• Group 1 - Librarians

Subgroup 1A - Teleworking librarians

The entire available population (3 people) of this Subgroup will be interviewed. At the moment I cannot reach a temporary librarian who used to telework but she is not on duty now.

Subgroup 1B - Not teleworking librarians

I have included here **purposive sample (3 people)** of population with characteristics relevant to the research. In selecting subjects I have considered their availability, their position and interpersonal compatibility

• Group 2 - Heads of both Central Libraries

The entire available population (2 people) of this Group will be interviewed.

Stratification

Subgroup 1A - Teleworking librarians, includes:

- teleworking full time and part time librarians
- Central libraries and Departmental libraries employees

Subgroup 1B - Not teleworking librarians, includes:

- Central libraries and Departmental libraries employees
- Immediate colleagues of teleworkers

Group 2 - Heads of both Central Libraries, includes:

• Library directors who have or do not have teleworking staff

Extension of participants' number

I can identify and reach every potential respondent.

It might be necessary to interview other participants but now I fear extending too much the research and prefer to cut it down and see if I can manage.

At the moment I am not sure that I want to interview Academic Heads of Departmental Libraries. Their position makes them usually difficult to reach and difficult to deal with.

5.5 – Technique to collect information from respondents

Justification of the proposed technique

Interviews seem to suit the type of investigation I am going to undertake. They provide individual perceptions of reality concerning: here and now constructions, reconstruction, projections.

In-depth, unstructured interviews, according to Gorman and Clayton (1997) are fit to conduct exploratory research "to investigate little-understood phenomena, to identify important variables".

I have decided not to use group interviews for a matter of results and applications. Group interviews provide a wide range of exploration but they sacrifice individual reaction and experiences.

Interviews (hopefully!) can allow me to go deeper in detail into teleworking librarians experience. Solo interviews are generally considered a better media than group discussion for investigating sensitive or confidential issues.

Also structured interviews have appealed me quite a lot: their analysis is easier through comparations of answers to the same questions.

The small number of scheduled interviews has determined my choice to experience unstructured interviews which can be richer.

The pilot interviews will test my ability to manage this problem.

Strengths and the weaknesses of the interview

Strengths

- Immediacy
- Mutual exploration
- Investigation of causation
- Personal contact
- Speed

Weaknesses

- Costly
- Uncritical
- Too personal
- Especially open to bias

Unstructured interviews

Unstructured interviews, with an interview guide where topics are specified in advance, seems to "enable the interview to be more natural and conversational" (Gorman and Clayton, 1997) Interviewer has just a list of topics to be covered during the interview and let interviewees talk freely, deciding the order of the topics.

At the end of the interview the researcher will ask questions about the topic which have not been covered.

The questions will be clearly stated, words will be chosen with care and redundancy will be avoided.

Data collection tool

Analysis and conclusions will be facilitated by the use of a tape-recorder which allows to have a permanent record of the respondents' words and expressions.

Unfortunately transcription will take a long time.

I will ask permission to use the tape recorder.

Fieldnotes

I will write field notes in the form of analytical or reflexive notes to record ideas, feelings, impression and perceptions.

Notes need to be jotted down during the interview also while using tape recorder and expanded after the completion of interviews.

Expanded notes will include the questions and the answers and the context of the interview.

These notes will be used as careful documentation to strengthen replicability and confirmability.

5.6 – Definition of research

Interview case studies

My research can be defined as interview case studies because interviews are the only mean of data collection.

Interviewing is a flexible process which allows to return to earlier interviewees to ask them newly emerged questions.

Comparative case studies

My case study research will focus on a group of teleworking librarians and another group of library directors.

The two cases, of equal value and depth will be compared and contrasted

Case studies pros

- In depth exploration of a topic
- Meaningful interpretation of real-life phenomenon
- Capture and understanding of context

Case studies cons

- Localised study
- Generalisations not possible
- Potential subjectivity of data collection and analysis

Research problems and research questions

Research problems are mainly exploratory: there is a need to investigate telework and to identify important variables.

Research questions are: What is happening? What are the main themes, categories in participants' meaning structures? How are these themes linked with one another?

Strategic research could hopefully follow in order to inform and guide policy makers about the experiences of those for whom policy is established (Slater, M., 1990).

In this part the research question is "What – if anything – should be done about it?" (Slater, 1990).

5.7 - Ethical issues

As any researcher I will have responsibility to all the participants who may give highly personal information or information which could compromise themselves or the organization. For this reason mutual trust and respect are required.

Therefore I will assure confidentiality as a concealment of their individual identity giving them pseudonyms and making sure that the setting is not identifiable (Gorman and Clayton, 1997)

I will play fair with my respondents and no hints will be purposely given to identify participants. Unfortunately the population is so small that identification will be however possible. To get round this problem I will read the results to the four teleworking colleagues not to harm them.

5.8 - Credibility, transferability, dependability, confirmability

Credibility

The concept of credibility is linked to "truth value".

I will try to reach credibility trough:

- Face validity: which takes place only when observations make sense to the researcher
- Criterion validity: that is triangulation of sources
- Prolonged engagement
- Confirmation of findings with participants

Transferability

The concept of transferability is linked to "applicability". I will try to reach transferability trough:

- Detail of data collected
- Findings presented in sufficient depth to allow transfer
- Highlight local details likely to impact at a global level

Dependability

The concept of dependability is linked to "consistency". I will try to reach dependability trough:

- Consistent note taking
- Referring to literature review
- Having the process externally examined

Confirmability

The concept of confirmability is linked to "neutrality". I will try to reach dependability trough:

- Triangulation of sources
- Reflexive journal

6 – SUGGESTED ANALYSIS

Analysis begins early and is ongoing with the use of constant comparative method of analysis.

"No stage is really left behind completely until the final report has been written" (Gorman and Clayton, 1997)

Inductive data analysis

I will use qualitative analysis of data which is based on constant comparative method and implies the use of:

- Processing (sorting/organising data)
- Interpreting data (attributing meaning to that data, deriving a theory grounded in that data).

With inductive data analysis theory emerges from the data while processing and interpreting go hand in hand. This process is iterative and I will have to constantly examine and compare data.

Constant comparative method of analysis

I will follow all the steps of constant comparative method of analysis (Finch, 1990):

• Familiarization with issues

It involves: reading of transcripts and field notes, first impressions, reactions and hypothesis for later investigation, to discover what in broader terms is represented in the interviews.

Compiling a list of key themes

Summarize in broad terms the issues emerging from the data towards a identification of the themes. This takes place grouping the issues under a number of central themes and topics.

Systematically indexing the data

The index created in previous stage will help coding sections and subsections of data with the relevant themes code.

The categories are not fixed and are likely to expand.

• Charting the data themes

Displaying the data so that all data of all interviews relating to a particular theme can be viewed together.

This includes also relationship among the themes.

Describing the emergent story

Analysis continues in the description and communication of the story which has emerged from the research.

Further questions may arise and participants' reactions to the data can be taken into account. Presentation to respondents can be carried out in order to confirm the findings.

7- Planning

Every stage of the research has been carefully considered.

I have also tried to foresee some eventualities such as: delays in interviews, need to repeat interviews to get more detailed information.

The first interviews could highlight new aspects of interest for the research.

Data analysis will start right after each interview with transcription, careful reading and coding.

Major problems could arise from time-consuming change of direction of research.

Research timetable

Item	Key activities	Nov. 1- 15st	Nov. 16- 30th	Dec. 1- 15th	Dec. 16- 31th	Jan 1- 15th	Jan 16- 31th	Feb. 1- 15th	Feb. 16- 28th	March 1-15th	March 16- 28th	Apr. 1- 15th	Apr. 16- 30th	Post- research activity
1	Prepare interview questions and interview strategy													
2	Pilot interviews													
3	Gain agreements from respondents													
4	Conduct interviews, transcribe, code and analyse data													
5	Finish analysis of collected data													
6	Write draft report													
7	Prepare and submit final report													
8	Post-research activity (communication and thanks)													

8 – ANTICIPATED OUTPUTS

This research, if well conducted, could improve understanding of:

- acceptance or refusal of this form of work as it occurs in library organizational milieu
- teleworkers' needs and feelings to fully participate in the quickly changing library environment
- problems related to the extension of teleworkable library activities

It might be of interest as a general study of the various factors which come into play in this particular setting.

Providing a deep insight into these problems, guidelines stemming from this study could help develop the right ideas about telework in the libraries of the University of Verona for the benefit of users, libraries and teleworkers as well.

While "outsourcing, dumping and globalisation" are becoming very common words now-a-days has telework still good reasons to survive in this virtual world?

It's up to the people who do and manage telework to transform it in a powerful tool to support library development or to make it sink.

9 - Bibliography

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