MINTTU LAMPINEN

Users of New Technology

A Discourse Analysis of a New Technology User

■

ACADEMIC DISSERTATION

To be presented, with the permission of
the Faculty of Economics and Administration
of the University of Tampere, for public discussion in the
Paavo Koli Auditorium of the University, Kanslerinrinne 1,
Tampere, on March 11th, 2005, at 12 o'clock.

Acta Universitatis Tamperensis 1064

ACADEMIC DISSERTATION
University of Tampere
Department of Management Studies
Finland

Distribution
Bookshop TAJU
P.O. Box 617
33014 University of Tampere
Finland

Tel. +358 3 215 6055
Fax +358 3 215 7685
taju@uta.fi
www.uta.fi/taju
http://granum.uta.fi

Cover design by
Juha Siro

Printed dissertation
Acta Universitatis Tamperensis 1064
ISBN 951-44-6212-2
ISSN 1455-1616

Electronic dissertation
Acta Electronica Universitatis Tamperensis 415
ISBN 951-44-6226-2
ISSN 1456-954X
http://acta.uta.fi

Tampereen Yliopistopaino Oy – Juvenes Print
Tampere 2005

Acknowledgements

Many individuals have helped me in my doctoral dissertation work. First and foremost, I would like to thank Professor Hannu Kuusela, my supervisor since the beginning. With his guidance my research evolved into its final form through several stages. I want to thank Hannu for his patience during the years and his confidence in the work being finished one day.

I am honored to have had Professor Liisa Uusitalo and Professor Martti Laaksonen as the examiners of my dissertation. I wish to acknowledge your valuable comments which helped me in polishing the script. Your insightful comments and questions added to the quality of my work.

University of Tampere has played a significant role in my dissertation process. I received my first grant from the university which gave me the courage to take leave of absence. The Department of Management Studies has in several ways supported me in my studies. In addition to financial assistance I have received invaluable help from many people in the department. Research has been the topic of many of our discussions. The marketing post-graduate seminar proved to be extremely useful for my research. I would like to thank, in addition to Hannu Kuusela, also Tuula Mittilä and Uolevi Lehtinen for the successful seminars. I especially want to thank my friends and researcher colleagues Katariina Mäenpää, Heli Paavola, Nina Koski, Timo Rintamäki and Maria Mäntymäki. You have read my manuscript and provided me with insightful comments so many times that I will hardly be able to repay the favor to you. I am grateful to Niina Koivunen for her friendship and all those hours you spent in helping me. In addition I would like to thank Arja Ropo, Anne-Mari Järvelin, Richard Windischhofer, Marja Eriksson, Erika Sauer, Maija Rökman and Kyösti Koskela for their support during my research.

I have been pleasantly surprised about how many different people have helped me in my dissertation work. Important advice has been provided among others by Päivi Eriksson, Johanna Moisander, Pirjo Laaksonen, Kristian Möller, Mika Pantzar, Veronica Liljander and Veikko Seppänen. In addition I would like to thank the persons who have commented my work in the marketing tutorials and in the KATAJA (The Finnish doctoral program in business studies) courses. I am grateful to Jari Aro for his comments and for the possibility to take part in a postgraduate sociology seminar. I would also like to thank the other participants of the seminar, Jari Luomanen, Virve Peteri and Tuula Puranen, with whom I have had many fruitful discussions which helped me to orientate into the world of discourse analysis. By taking part in a postgraduate seminar and courses at the Tampere Technical University I have gained knowledge of the fields of

technology and industry. I would like to thank Juha Näsi and Mika Hannula at the Tampere Technical University for helping me in proceeding in the first stage of my studies.

Writing the English manuscript has had its own challenges. I would like to thank Jonathan and Emmi Watkins for careful and professional reading of the manuscript which helped to refine it. I would also like to thank Miila Juujärvi and Mari Lampinen, who assisted in translating the text and improving its readability. Your input raised the quality of the manuscript.

I would like to acknowledge my employer Nokia, which allowed me to use my working hours and -resources for my dissertation. I received wonderful support in the beginning of my postgraduate studies from Tarmo Jukarainen, my superior at the time. He understood the scale of a dissertation project. During the years, also during my study leave, I have received endless support from my colleagues. I especially would like to thank my closest co-worker-friends Sirkku Naatula, Marja Pihamaa, Petra Hynynen, Mika Savolainen, Janne Hämeensaari, Pia Jaakkola and Heidi Sohlberg. You have always had time for me, whether I needed to talk about work, studies or life in general.

During my dissertation project I have learned to know many special people in Finland and abroad. I have also had the chance to gain new experiences, which I will always cherish. I have made new, dear friends, of whom I especially want to mention Maria Sääksjärvi. Maria, it has been a pleasure to work with you and I feel very fortunate to have a friend like you. Your ideas have often guided me forward in my work and as a researcher you have served as an inspiring model for me.

For their financial support I would like to acknowledge The Finnish Graduate School of Marketing (FINNMARK), University of Tampere, Foundation for Economic Education, The Finnish Cultural Foundation and Jenny and Antti Wihuri Foundation. I am deeply grateful for their generous support, which made my research possible in the first place.

Finally I want to recognize the people who are the foundation of my happiness and who without my dissertation could not have materialized. I would like to thank my family, friends and relatives whom I can always count on. I am grateful to all my friends, who made me laugh even then, when I was experiencing difficulties in my research. Thank you Hanna Jokinen, Hanna Pihlaja, Jaana Salmela and Antti Lappalainen and many others friends. You reminded me that there is life outside a dissertation project and together we shared many fun experiences. I would also like to express my sincerest thanks to my relatives and my mother's partner, Tuomo Riuttu, who have supported me along the way. My dear mother, Tuula Lampinen, has always encouraged me to do what ever it is I really want to do. In challenging situations and in making important decisions I still seek your guidance.

Tampere, January 2005
Minttu Lampinen

Abstract

The purpose of the research is to develop a multifaceted view of the construction of a new technology user by addressing the following research question: “How is the user of new technology constructed discursively?”. The theoretical framework offers a distinct view on new technology consumption, as it compares different theoretical perspectives. The methodology is based on social constructionism, because the selected approach enables a researcher to develop versatile ways of interpreting the user concept. The research identifies and analysis five discourses that are called experience, self-extension, social distinction, fundaments of a society and fragmenting society. The analysis especially focuses on the discursive practices that are used to socially distinguish the user of new technology.

The research gives insights to understanding consumers, which is a fundamental issue in marketing. It has theoretical implications, as it expands research in marketing by utilising a combination of theories of technology consumption with a research approach based on social constructionism. Although the relevance of knowing and understanding a user has been amply documented in previous research, the discursive practices that are used to construct a user, have received less attention. Thus, the research contributes to the theoretical stream of consumption studies.

The research encourages a shift from the pre-determined definition of a user concept to its social construction. The findings suggest that such a shift will enable researchers to portray the complex and multiple perspectives that are available to the construction of new technology user. The findings of the research can be used in practice to find out how consumers themselves define the user of new technology, to understand the diversity of socially shared user constructions and to improve marketing communications related to new technology. The results argue for a closer examination and understanding of the discursive constructions in order to advance marketing theory and practice.

KEY WORDS: CONSUMER, TECHNOLOGY, MARKETING, SOCIAL CONSTRUCTIONISM

CONTENTS

ACKNOWLEDGEMENTS 3

ABSTRACT 5

CONTENTS 7

FIGURES 10

TABLES 11

1 INTRODUCTION 13

1.1 New Technology and its Users 13

1.2 Objectives and Research Questions 15

1.3 Research Approach 16

1.4 Reflection 17

1.5 Composition of the Study 20

2 USER AND TECHNOLOGY 22

2.1 Consuming Technology 22

2.2 Technology Shaping a User 25

2.3 A User Shaping Technology 26

2.4 Culture and Consumption 27

2.5 Social Construction of a User 29

3 METHODOLOGY 31

3.1 Discourse Analysis 31

3.2 Acquiring Data 32
3.3 Process of Analysis 39
3.4 Computer-assisted Qualitative Data Analysis 41
4 A USER AS A DISCURSIVE CONSTRUCTION 43
4.1 Introduction to the User Construction 43
4.2 Experiencing User 46
4.3 Self-Extending User 56
4.4 User and the Fundaments of a Society 66
4.5 User in a Fragmenting Society 73
4.6 Conclusions of the User Construction 80
5 SOCIAL DISTINCTION OF A USER 84
5.1 Introduction to Social Distinction 84
5.2 Interpretative Repertoire of a Reasoned User 85
5.2.1 Just a tool 85
5.2.2 Normalisation of a User 89
5.2.3 Overview of a Reasoned User 93
5.3 Interpretative Repertoire of a Shallow User 94
5.3.1 Making an Impression 95
5.3.2 Lack of Functional Use 98
5.3.3 Overview of a Shallow User 102
5.4 The Interpretative Repertoire of a Critical User 104
5.4.1 External control 104
5.4.2 Doubtful Progress 108
5.4.3 Overview of a Critical User 114
5.5 Reasoned, Shallow and Critical User 115
6 CONCLUSIONS 119
6.1 Bundles of discourses 119
6.2 Theoretical Implications 123

6.3 Methodological Implications 125

6.4 Managerial Implications 127

6.5 Directions for Future Research 130

REFERENCES 133

APPENDICES 143

Appendix A. List of Interview Participants 143

Appendix B. Interview guide 144

FIGURES

Figure 1. The identified discourses, interpretative repertoires and themes 45
Figure 2. The identified interpretative repertoires, topics and themes in the discourse of social distinction 85
Figure 3. The process of construction and deconstruction 126

TABLES

Table 1. Studies about technology and consumption 23
Table 2. The contents of the discourse of experience..... 54
Table 3. The contents of the discourse of self-extension 65
Table 4. The contents of the discourse of the fundaments of a society..... 71
Table 5. The contents of the discourse of a fragmenting society 79
Table 6. The appearance of themes in four discourses..... 82
Table 7. The contents of the interpretative repertoire of a reasoned user 93
Table 8. The contents of the interpretative repertoire of a shallow user 103
Table 9. The contents of the interpretative repertoire of a critical user..... 114
Table 10. The appearance of the interpretative repertoires and themes in the discourse of social distinction 116
Table 11. Perspectives of user construction..... 120

1 INTRODUCTION

1.1 New Technology and its Users

Many products based on new technology have become a part of everyday life of consumers. New technology is related to a number of electronic media, linked to a computer or a computer network. New services, new storage media and new types of digital content are included in the definition of new technology. These include, for example, e-mail and the Internet. The growth of new technology and its possible impact on consumers has aroused popular and academic interest.

Defining the user of new technology is important, because the success of an innovation is often regarded to depend on its ability to generate user representations that match a target group. After constructing the representation, the designers are expected to turn the corresponding user representations into new products. This perspective usually limits the role of consumers to informants that can and should be used during the design process to validate the ideas of the designers. The final decision concerning the design process is left to the company. However, there are also other methods that can be used to define the user of new technology. For example, the concept of a user could be approached from the consumers' point of view by allowing them to create the user definition. Then, the concept of a user is not a fixed definition, but the approach invites consumers to interpret it.

The consumption of new technology is often seen as deterministic, something that comes from outside and what people adapt to (Rogers, 1995). However, it can also be approached through interpretation (Grint & Woolgar, 1997). Interpretation is defined here as "the critical analysis of text for the purpose of determining its single or multiple meanings" (Holbrook & O'Shaughnessy, 1988, p. 400). In the interpretative worldview the consumption of new technology is not given from outside, but seen as discursively constructed in social interaction. Hence, the consumption of new technology can be seen as part of social reality. It is an important part of the system, where social reality is produced, negotiated and changed.

Consumption and production are not considered juxtapositions of opposites, but rather as something that occurs interchangeably and the consumer also becomes a producer (Firat & Schultz, 1997; Firat & Venkatesh, 1995). The subjective perspective of the consumer is important, because the consumers have an active role in shaping the meanings of cultural and technological artifacts

(Mackay, 1997, p. 3). Therefore, we should be concerned with the definitions that are used in a social context (Bowers & Iwi, 1993).

The interpretative approach can bring marketing managers closer to the consumers and provide useful insights (Fournier & Yao, 1997). Although the importance of knowing and understanding the user of new technology has been amply documented in previous research, the discursive ways, in which the social construction of the user is accomplished, have received less attention. However, as argued, there is need to study how consumers define social reality.

Mobile phone culture in Finland. An example of the markets of new technology is the industry of mobile phones. In Finland, the mobile phone was perceived as means for social differentiation in the late 1980s. It was stamped as a toy of the yuppies (Pulkkinen, 1997). By the 1990s, the majority of the Finnish population had access to and could use mobile phones. One of the reasons for this expansion was the global system for mobile (GSM). Although the GSM was originally targeted only at wealthy business customers, it spread almost immediately to ordinary consumers (Pantzar, 2003, p. 89). Nowadays, mobile phones have meanings of a tool and a normal phone in the Finnish culture (Kopomaa, 2000, p. 33). The use of mobile phones has been normalised to be a part of everyday life. However, a mobile phone is not just a tool used for communication, but it has become a part of identity and social world (Coogan & Kangas, 2001).

The mobile phone culture in Finland has been studied by, among others, Finnish sociologists. Kopomaa (2000) explores the role of the mobile phone in the work, leisure and, in particular, urban life of Finnish people. Mäenpää (2000) conceptualises the use the mobile phone as a part of the urban way of life. Maybe one of the reasons why a strong and homogeneous mobile phone culture has been born in Finland is that the urban way of life in Finland has a short history. The mobile phone has not remained a privilege of a certain group or class, but the majority of consumers can use it (Kopomaa, 2000).

On the other hand, the extensive use of mobile phones in Finland has had influence on people's everyday lives and relationships. Mobile phones can be seen to have given rise to a user culture of its own, creating a new urban culture and even new ways of life. The use of mobile phones has created a world in which life is lived spatially in different places, but subconsciously these places are kept intertwined (Mäenpää, 2000). In describing mobile phone culture, the mobile phone users have been characterised as users who want to participate in a society and to socialise. For example, the Finnish youth has been able to construct a world where they have power as users of mobile phones and the Internet (Coogan & Kangas, 2001).

A central topic in the dissertation is the consumption of the Nokia 9210 Communicator. Here the Nokia 9210 Communicator is referred to as “communicator”. It was chosen to be a topic for the interviews, because communicators are not so common or established product category as mobile phones. Thus, it aroused versatile interpretations among the participants. A

communicator product integrates a mobile phone and an electronic organiser into a pocket-size device and has a large number of voice and data communication features. On its website, Nokia says that "combining new key technologies such as high-resolution colour display and high-speed mobile email, the Nokia 9210 Communicator is designed to meet the demanding needs of mobile professionals and corporate users" (Nokia, 2004).

1.2 Objectives and Research Questions

The purpose of the research is to develop a multifaceted view of the construction of a new technology user. The theoretical aim is to understand the different meanings of new technology from the user's point of view. Based on these meanings, the research is able to show how the discursive construction of a user of new technology involves individual, interpersonal and societal perspectives. The purpose of the research is achieved by addressing the following research question:

"How is a user of new technology constructed discursively?"

To answer the research question, the research interprets and describes the versatile discursive practices that construct a new technology user. The term discursive practice is used here for the discursive ways people actively produce social realities (Davies & Harre, 1990, p. 45). The term user defines an actor engaging with new technology, and describes her or his interactions with it. The construction of a user is seen as a discursive and social accomplishment rather than an objective fact. Thus, the user definition rises from the research data, not from the existing theory. The research question is divided into two sub-questions. First, the aim is to identify the socially shared discursive practices that can be used to construct a user of new technology. Thus, the following sub-question is set for the research:

1. "What discursive practices can be used to construct a user of new technology?"

After answering the first sub-question, the analytical attention is focused on social distinction. It is one of the discursive practices identified when answering the first sub-question. Although the second question is also partly an answer to the first sub-question, the importance of both sub-questions is equally high in this research. Social distinction is an important aspect because consumption can be seen to stand at the intersection between public and private as well as between individual and social (Julier, 2000, p. 64). Consuming is also means to impress others, to bond, to increase social recognition, to define one's self and to socialize (Holt, 1995). Social distinction is not a predetermined classification,

but performed through discursive practices (Hall, 1999). This leads to the second sub-question of the research:

> *2. "How is social distinction of a user constructed interpersonally?"*

Combining the questions 'what' and 'how' can be regarded to advance qualitative research, because together they can provide a more versatile information of the studied issue. The research is made more coherent and consecutive, when not only the content, but also the ways by which the content is told and structured is analysed (Gubrium & Holstein, 1997, p. 147). The content of the discursive practices plays an important role in the first sub-question, whereas the process of user construction is emphasized in the second sub-question.

Here, concentrating on the process means that the analysis is concerned with the ongoing conversations, negations and arguments, by which the construction of a user is constituted. The appreciation for the content and the process comes from the research approach that is based on social constructionism. It considers that the process of meaning production is as important as the meaning that is produced (Berger & Luckmann, 1967). The mere reporting of the identified discursive practices would neglect the way language reproduces and transforms social reality (Bowers & Iwi, 1991).

In this research language is not seen as a window, through which a researcher could make deductions about the mental stages of consumers or about their cognitive processes (Edwards & Potter, 1992). Instead, the selected approach emphasises the role of language in constructing the social reality through established ways of speaking. It is focused on social and public, not on private or cognition. In addition, the results are dependent on the particular social and temporal context in which they were created.

1.3 Research Approach

Social constructionism is a research approach especially focused on shared meanings and on how they are produced. It is used as a research approach for this research, because it allows that the user concept is not a fixed definition given prior the data analysis, but the research constructs it through interpretation. Social constructionism is not a single theory or ideology, but it consists of a set of different theories. A central premise for these theories is the assumption that especially the use of language constructs the human world and reality.

Firstly, an approach based on social constructionism emphasises understanding and offers a social account of subjectivity by attending to the linguistic resources, which produce and reproduce the reality (Burman & Parker, 1993, p. 3). Social constructionism neither affirms nor denies that there is a

world outside the discursive practices. It sees that consumers can develop socially shared meanings during interpersonal interaction. There are four assumptions about the meanings: 1) The meanings are dynamic and socially constructed. 2) The socially constructed meanings of an object are intertextually linked with meanings of other cultural objects in a historically constituted system. 3) There is not one but a multiplicity of meaning systems available for a single social actor for constructing and negotiating the meaning of the cultural object in a particular situation. 4) The chains of meanings exist as multiple and overlapping resources, from which social actors can select, combine and juxtapose. (Askegaard, Jensen, & Holt, 1999)

Secondly, the research is also connected to the research stream of cultural studies. The consumption of new technology cannot be separated from the culture, from which it originates and in which is it consumed (Eriksson & Moisander, 2002, pp. 6-8). Technology is cultural and it exists in a cultural context, is surrounded by it and it is cultural in its design, meaning and use (Mackay, 1997, p. 268). Culture is about shared meanings and it involves the production and exchange of these meanings (Barker, 2000, p. 383). Meanings regulate and organize our practices, because they set the rules, norms and conventions, with which the social life is regulated (Hall, 1997, pp. 1-2).

Thirdly, the research is a part of literature about the consumption of new technology. It aims to give theoretical contribution for especially this stream of literature. Therefore, the theoretical framework and discussions about the research findings are based on this research stream. The examination of the existing studies about the consumption of new technology in the second chapter will show how the understanding of the consumer can be approached.

1.4 Reflection

Reflexivity is the process of reflecting critically on the self as a researcher (Guba & Lincoln, 1985). This means a concern with the blinding potential of what is "taken for granted". The premises of the researcher are placed into question to be open for the alternative framings of reality (Gergen, 1999, p. 50). An interview is seen as a dynamic, meaningful occasion (Holstein & Gubrium, 1995). It is a conversation with two or more equally important contributors. Both the interviewees and the interviewer are active participants who construct meanings. As well as the interviewee, the interviewer contributes to the interview because both are constructing versions, which draw on a varied range of interpretative resources (Bauer & Gaskell, 2000). Hence, as an interview is an interactional situation, it is more useful to talk of data generation than data collection (Mason, 2002).

Interpretation implies that there are no self-evident rules or procedures to analyse the research material. Crucial issues are the researcher's judgements and intuition as well as the consideration of the reader (Alvesson & Sköldberg, 2000,

p. 248). Since knowledge of the social world is assumed to reside in the meaningful mechanisms, the knowledge cannot be separated from the knower (Denzin & Lincoln, 2000, p. 176). Rather, it is rooted in the discursive description of that world (Polkinghorne, 1988). When analysing the research data, the researcher constructs a discourse analytic frame for the analysed text at the same time. This frame guides the appearance of the citations in the study, where they will be placed into a new kind of connection. Also the reader of the research is an interpreter, because she or he reads the analysis through his or her own interpretative repertoires. This process can be called "co-authoring" (Leudar & Antaki, 1996, pp. 11,18).

The researcher's interpretation is a constructive and interactive process (Parker & Burman, 1993). The social reality is both the target and production of the research, because the researcher's study is also constructive. The theoretical interest of knowledge is always present and guides the researcher to find certain themes in the material. Thereby, the researcher should understand her starting points, bindings and limits (Gummesson, 2000; Patton, 1990, p. 472).

The aim is to be reflexive and critical and not to construct the research object like it was assumed to be originally. Instead of treating the construction of the user of new technology as a concept of single meaning, the analysis takes into account the possibility that the participants have different interpretations about it. By doing so, the researcher cultivates openness, which will be receptive to the meanings that are constructed during the focus group discussions. The reader must have enough text from the original data to be able to evaluate whether the researcher made relevant and pertinent interpretations. It is important to notice that all discursive practices are necessarily context-dependent (Alvesson & Sköldberg, 2000, p. 202). Therefore, the study includes discussion about the context of the interviews, about the background knowledge of the studied phenomenon and about the theoretical framework of the research.

The group meanings assessed in focus group discussions are not translated into the terminology of the researcher, but expressed as said during the interviews. This kind of use of group terms and categories can be called as "indigenous coding system" (Holstein & Gubrium, 1995). This offers the researcher an opportunity to access original group terms and the situations during the discussion, in which they are used. The researcher also compared her interpretations with those of other researchers in marketing and sociology in several data sessions. Differences and confusion in interpretations helped to develop the analysis further.

The researcher is involved in the study at all stages (Ashmore, 1989; Potter et al., 1990). The discursive practices are not just evident in the textual data, waiting to be found. To be precise, they are not identified but rather created, because the researcher constructs them (Denzin & Lincoln, 2003, p. 37). This construction is not a neutral exercise, but it involves interpretations of the researcher (Ashmore, 1989). Thus, the analysis is always an interpretation and not truly inductive work, since the researcher approached the data with some theoretical preconceptions (Wetherell, Taylor & Yates, 2001, p. 397).

Post-reflection of the Research. I have been involved with post-graduate studies from May 2000. All the time I have been interested in consumers and new technology. The theoretical framework was originally based on the diffusion theory, especially on consumer-perceived product characteristics. Already in the beginning stage of the research process, I acknowledged that the diffusion curve of innovations in the market place has been studied exhaustively. Hence, it was not potentially as contributing research area as studying how consumers evaluate new products and services. The focus of studying the consumer perception and evaluation has ranged from measuring the evaluation process to comparing it across time during the development phase of the research. First, I studied the possibility to measure a change in the perception across time and with innovative product generations. Then, I studied whether consumer experience could explain the consumer perceived risk.

I have tested and developed the above mentioned research ideas with pilot data. There has been plenty of data available due to my work as a product manager in the field of new technology marketing. However, I did not find a satisfactory research proposal with the research approaches I had initially planned to use. The reasons were the incapability of the data to measure right issues and the insufficient power of theories to explain both variety and consistency that were evident in the data. In the pilot and actual research data, the consumers brought up issues that I could not explain or measure with the help of the reviewed theories of new technology consumption. Although the theoretical framework seemed to be valid to describe the studied phenomenon, it seemed to be impossible to bundle the findings under the definitions that the theories proposed.

I read familiarised myself with social constructionism in the spring 2002. As a result, I got interested in post-modern studies of consumer behaviour and in cultural research. The time spent on reading the philosophy of science was worth it in retrospective, because it helped me understand how versatile possibilities the research paradigms offered. Once looking at the data from the subjective worldview, I noted how different participants shared the same meaning constructions and, on the other hand, how the same things had several meanings. The notion led to the discovery that a meaning construction is an interpersonal process where negotiation and argumentation take place. It finally gave me an explanation why I had not been able to bundle the findings under certain, measurable categories. The focus group discussions were so versatile and dynamic that it seemed to be impossible to capture their dynamic flow into one static representation.

In the autumn of 2002, I rewrote the methodological chapter to correspond the philosophical assumptions of social constructionism. After familiarising myself with especially discourse analysis, semiotics and narrative approach, I decided that discourse analysis was the best tool to answer the research question with. The precise contents of the research question have changed during the research process. First, the research question argued for understanding how

consumers construct different meanings for new technology. Then, after acquiring the final research data in the spring of 2003, the research question began to have its final shape, as the data analysis proved that the construction of a user concept offered the most interesting findings for the marketing practise and theory.

I have been working in a major Finnish telecommunications company, Nokia, since 1998. Due to the nature of my work, I have been closely connected with the latest developments in the field of new technology, especially in information and communication technology. Sometimes my roles of a researcher and a product manager for communicators overlapped, when I thought how the knowledge gained from this study could be used in my work. However, Nokia did not contract the research.

The decision to plan and conduct the dissertation without employer's supervision proved to be important in two occasions. Firstly, many of the participants told they would not have been participating for a research contracted by Nokia. They were reluctant to give a few hours from their tight schedule for an interview for the purposes of a mobile phone manufacturer. Instead, they were willing to attend an academic post-graduate study in order to develop scientific knowledge about the studied phenomenon. The autonomy of the research findings is secured because I collected the research material self-sufficiently and did not use material from companies providing new technology solutions.

1.5 Composition of the Study

For the sake of clarity, the composition of the dissertation was designed so that it reports the research in a logical order, although the actual research process was not as straightforward as this composition. The second chapter presents the theoretical framework of the research. It positions the dissertation into the stream of previous studies and research approaches. The chapter discusses theories and research streams concerning the consumption of new technology. Its chapters examine the theoretical constructs that shape the concept of a new technology user. The discussion introduces the user concepts, which these studies have constructed over time. A research gap in the theoretical framework is identified and the rationale for the research is argued.

The third chapter explains the methodology and describes the research data. It begins with the introduction of social constructionism as the research approach. The chapter proceeds with the definition of the methods of data analysis and their application in the research. The chapter describes the use of focus groups as a research method and portrays the data acquisition. The process of data analysis is explained in this chapter to make it transparent for a reader. The chapter also includes discussion about computer-aided data analysis. To summarise, the third chapter brings out the decisions and steps taken during the

data generation and during the process of data analysis. It aims at making the research process more visible for a reader.

The fourth and fifth chapters discuss the findings of the research. Chapter four concentrates on the first sub-question of the research. The discursive practices are identified and discussed in detail in it. The fifth chapter concentrates on social distinction of a user, as proposed in the second sub-question. The discursive practices that construct the user through social distinction are analysed and compared to existing theory. Because of the research approach, much of the theoretical discussion is dependent on the findings of the data analysis. Therefore, the theoretical discussions with existing theories are partly combined with the research findings.

The conclusions with theoretical, methodological and managerial implications are discussed in the sixth chapter. The chapter evaluates the success and effectiveness of the research and its findings. Suggestions for future research are identified at the end of the sixth chapter.

2 USER AND TECHNOLOGY

2.1 Consuming Technology

Technology can be approached through three different meanings: physical objects, objects in conjunction with related human activities and knowledge (MacKenzie & Wajcman, 1999). Definitions of technology vary through time and place, but it is common for them to distinguish between its human and non-human elements (Grint & Woolgar, 1997, p. 9). Non-human elements correspond the technical characteristics, whereas human connotates the social factors. Studying technology in a society is relevant, because technology is not a separate sphere from social life, but constitutive to society (MacKenzie & Wajcman, 1999, p. 23). The definition of new technology arise from the research data in this research, and it will be discussed in the chapter 4.1.

A growing body of research emphasises the need for collaboration between social and technical factors at the level of discourse (Engeström & Middleton, 1998; Heath & Luff, 2000). The selected interpretative approach enables the researcher to turn the dualism of the technical and non-technical dichotomy into a topic rather than just a resource to be drawn upon. Thus, the consumption of technology can be seen as a catalyst for changing conceptions of the nature of a consumer, because the coexistence of both technical (e.g. the use of technology) and non-technical (e.g. the user) issues can become the object of study.

The historical studies emphasise the use of household technologies, and the contemporary studies of new technology concentrate on information and communication technology like computers, mobile phones and modern media like digital TV. The review of the studies about technology and consumption is presented in Table 1. The grouping of the studies is based on Arndt's (1985) research orientations in marketing.

According to Arndt's (1985) orientations, this research is positioned into the paradigm of the subjective world. It makes the assumption that individuals construct their social reality. The social reality is not constructed in a concrete sense, but it is a construction that comes from individuals' subjective and intersubjective experiences. The reality is constructed through talk and text in a social context. The metaphor of "language and text" sees that spontaneous talk and text reflect the culture, because they are a part of a continuous system of social meaning. The selected research paradigm sees that the meanings are best studied as a dynamic and changing process that is not absolute and cannot be measured. (Arndt, 1985)

Table 1. *Studies about technology and consumption*

RESEARCH APPROACHES FOR CONSUMPTION OF TECHNOLOGY				
Orientation	**Orientation, paradigm**	**Objects of study**	**Summary of results**	**Research examples**
Empirism	Empirism, logical empirism	Objective measurements: statistical analysis, sales figures, personality measurements. Cognitive and decision making theories about consumer behavior.	Explanations about adoption of technology in social system along time, characteristics of adopter groups of technology and how they evaluate products and technology acceptance and adoption models.	Davis, 1989; Dholakia, Mundorf, & Dholakia, 1995; Gatignon & Robertson, 1991; Hoffman & Novak, 1996; Karahanna, Straub, & Chervany, 1999; Mahajan, Muller, & Bass, 1990; Moore & Benbasat, 1991: Rogers, 1995; Venkatesh & Davis, 2000; Venkatesh & Vitalari, 1992; Ylikoski 2003
Critisism-empirism	Critisism-empirism, sociopolitical	Macro-marketing. Field experiments, involvement of governments and different coutries. Moral issues of technology consumption in prosperous societies	Explanations how information technology can be used as a public policy and as a marketplace option.	Borgmann, 2000; Hutton, Mauser, Filiatrault, & Ahtola, 1986; Uusitalo 2002
Constructivism	Constructivism, subjective world view	Subjective meanings. Enthnography, social constructionism, semiotics and phenomenology. Narrative, discourse and rheteorical analysis.	The consumption of technology has subjective meanings. Users as producers.	Bijker, Huhges, & Pinch, 1987; Callon, 1991; Latour, 1992; Douglas & Isherwood, 1979; Du Gay, Hall, Janes, Makay, & Negus, 1997; Grint & Woolgar, 1997; Mackay, 1997; Mick & Fournier, 1998; Moisander & Valtonen 2002
Critisism-constructivism	Critisism-constructivism, liberating paradigm	Culture and marketing. Concern for the consumption possibilities of elderly consumers and sexual equality in technology consumption	Focuses on conflicts and asymmetries in technology consumption. Analyses power between different user groups (e.g. elderly persons or women)	Cockburn & Ormrod, 1993; Gilly & Zeithaml, 1985; Fischer & Arnold, 1994; Oropesa, 1993; Vehviläinen, 1997; Venkatesh & Morris, 2000

The research based on the paradigm of logical empirism emphasises the diffusion of technology (Mahajan, Muller, & Bass, 1990; Rogers, 1995), innovative decision processes (Gatignon & Robertson, 1991), technology acceptance and adoption models (Davis, 1989; Dickerson & Gentry, 1983; Midgley & Dowling, 1978; Venkatesh & Davis, 2000) as well as comparison of pre- and post-adoption (KaraP26, Straub, & Chervany, 1999). The work of Bass (1969, p. 215) on the rate of diffusion of innovations illustrates a probability law in marketing. In addition, there is an instrument that can be used to measure the perceived characteristics of an innovation (Moore & Benbasat, 1991). Special attention has been paid to the use of new technology at home (Venkatesh & Vitalari, 1992) and the growing use of the Internet (Dholakia, Mundorf, & Dholakia, 1995; Hoffman & Novak, 1996).

The research based on the sociopolitical paradigm is focused on macro-marketing in societies. It offers, for example, explanations on how information technology can be used as a public policy and as a marketplace option (Hutton, Mauser, Filiatrault, & Ahtola, 1986). It is also concerned about the moral issues that relate to the consumption of new technology in prosperous societies (Borgmann, 2000).

The work of Douglas and Isherwood (1979) goes beyond the descriptions of diffusion and describes the meaning of the technology in the lives of individuals. It is a classical example of research that is based on the paradigm of subjective worldview. The studies based on social constructionism see that technology is socially constructed and depends on interpretations, which are context and perspective dependent. Thereby, the users of technology can be seen as producers of meanings related to technology (du Gay, Hall, Janes, Mackay, & Negus, 1997; Mackay, 1997; Moisander & Valtonen 2002). Although talk about the technology may seem to be based on facts, the technology is, nevertheless, communicative and textual (Vehviläinen, 1997).

The recent work in the paradigm of the subjective world has been focused, for example, on the paradoxes of technological products and their influences on emotions and behavioural coping strategies (Mick & Fournier, 1998), social construction of technological systems (Bijker, Hughes, & Pinch, 1987) and actor-network theory. The actor-network theory in the context of technology consumption was evolved from the work of Callon (1991) and Latour (1992). It analyses the socially constituted network. It describes the progressive constitution of a network, in which both human and non-human actors adopt identities in interaction. The actors' identities are defined during negotiations between representatives of human and non-human actors. The approach focuses on the practical constructions of the alignments between social and technical aspects (Grint & Woolgar, 1997, p. 28).

The research orientations of criticism and constructivism are combined in the studies that are focused on the conflicts and asymmetries of technology consumption (Uusitalo 2002). These studies take into account, for example, the gender (Cockburn & Ormrod, 1993; Fischer & Arnold, 1994; Oropesa, 1993;

Vehviläinen, 1997; Venkatesh & Morris, 2000) and pay attention to how elderly people can adopt new technology (Gilly & Zeithaml, 1985).

Two research orientations dominate the research on the consumption of technology. They include the statements that technology shapes people's lives and that the people shape the character of technology (Venkatesh & Nicosia, 1997, p. 3). The view that technology shapes people's lives is most visible in the studies based on the paradigm of logical empirism. The studies based on the paradigm of subjective worldview often support the statement that the people shape the character of technology. The differences of these two views will be discussed in the following sub-chapters to demonstrate how consumption of new technology can be approached theoretically. The view that users adopt and adjust to new technology is compared with its somewhat opposite view, which proposes that the technology can be seen as socially shaped and, therefore, the consumers themselves have an active role in defining the users of new technology.

2.2 Technology Shaping a User

In the field of marketing, the research on new product diffusion has focused on the adoption perspective. This can be called the adoption-diffusion paradigm. It examines the process through which an innovation reaches a critical mass of adopters, the diffusion is accelerated, and innovation is considered to be successful (Mahajan, Muller, & Bass, 1990). An adopter is a person who continues to use the innovation after its initial purchase. Diffusion is a process by which an innovation is communicated through certain channels over time, among the members of a social system (Rogers, 1995). The diffusion theory and understanding the characteristics of innovations has also been used as a tool to explain failure of new technology, for example smart cards (Ploffe, Vandenbosch, & Hulland, 2000). In the adoption-diffusion paradigm, the consumption of new technology is seen as deterministic, as something that comes from outside and what people adapt to.

The adoption process of new technology focuses on the stages that individual consumers go through when making a decision to accept or reject an innovation. Rogers' model about the diffusion of innovations, dating back to 1962, has been repeatedly demonstrated to explain how innovations enter a social system (Rogers, 1995). It is widely recognised that not all consumers try or adopt an innovation at the same time and that some innovations diffuse much more quickly than others.

Developing on the belief that individuals differ in their readiness to adopt new technology, five types of groups have been identified: innovators, early adopters, early majority, late majority and laggards. Early adopters, early and late majorities and laggards have progressively less interest and less knowledge about an innovative product and less confidence in their own judgement about its

adoption (Rogers, 1995, p. 11). The detailed profiles of the consumers can be used to present adopter categories on the basis of demographic, socio-economic and personality characteristics (Wright & Chariett, 1995, p. 33).

The classification of consumers into adopter categories is not the only explanation for diffusion. The theoretical framework based on the diffusion theory proposes that the characteristics of innovations, as perceived by individuals, help to explain the different rates of adoption. It has been suggested that the characteristics of an innovation affect the speed and likelihood of its diffusion through a social system (Gatignon & Robertson, 1991, pp. 322-330; Peter & Olson, 1996, pp. 522-527; Rogers, 1995, p. 15).

In addition to the diffusion theory, the technology acceptance model (TAM) has been one of the most influential theories for new technology acceptance among users. The model sees that two perceptions play an important role in the adoption. These are usefulness and ease-of-use (Davis, 1989). TAM has strengths that include its specific focus on the use of new technology solutions and the validity and reliability of its instruments. However, the model lacks a broader framework that would include variables related to both human and social processes (Legris, Ingham, & Colloretta, 2003).

Marketing literature recognizes the importance of the social context as a key aspect of diffusion (Fisher & Price, 1992). Nevertheless, the above discussed theories on consumers adopting new technology often focus on individual consumer behaviour. They attempt to account for the influence of the product and consumer characteristics, associated with the acquisition of innovations. In addition, they attempt to be comprehensive in their explanation of these characteristics.

However, the initial adoption is only one part in the life cycle of new technology. This is especially true for the new technology, as the complexity and evolving nature of technology can indicate that the trajectory and time scale of diffusion can be quite prolonged (Shih & Venkatesh, 2004). Accordingly, the current research in the adoption-diffusion paradigm could be extended with studies about the user and the use of new technology. Hence, instead of predicting the formation of adopter and user segments, it could be studied how the consumers define the concept of a user. This means that the interest would be to follow a situation where dynamic and social interactions influence the discussions between people.

2.3 A User Shaping Technology

New technology can be seen as designed, built and standardized for certain, assumed users and usage practices (Akrich, 1992, p. 174). However, these built-in scripts don’t determine the usage of new technology, because it is not interpreted until during its consumption (Julier, 2000, pp. 52-53). In the metaphor of machine as a text, the manufacturing and design process of a

technological product is compared to the process of writing a text. The use of the product is compared to the process of reading. Therefore, the design process of a product determines how its user is configured into the product. The configuration includes requirements about and for the users. But as in any text, the user makes the final interpretation. (Grint & Woolgar, 1997).

The perspective of the social shaping of technology is that the needs become shared, understood, and socially accepted in social negotiation processes (MacKenzie & Wajcman, 1999). The perspective is critical of both technological determinism and linear models of the diffusion of innovations. Bijker, Hughes and Pinch (1987) developed the social construction of technology (SCOT) approach that aims to show how the society shapes technology and to explain why an artefact is designed in a specific way. It argues that producers and consumers mutually construct the meanings and forms of technology and that both humans and technology can be seen to shape each other. A central concept in the social construction of technology is the group of actors. It means, for example, potential users or political decision makers. This concept of central groups is somewhat simplifying and can be compared to the concept of segmenting in marketing literature. A problem in both segmentation and in SCOT is that a person can belong to several groups. In addition, groups are heterogeneous.

SCOT has an implication that an artefact stabilises, when it becomes accepted through social negotiations (Grint & Woolgar, 1997, p. 24). As a difference to this, an approach based on the interpretative approach would see that the negotiations of meanings about the acceptance of new technology are ongoing and dynamic and do not reach a stable state. According to the interpretative approach, a consumer can be seen to create and alter the meanings of new technology (Dant, 1999, p. 14). Hence, new technology can be assumed to be formed during an individual's exploration of the new technology within a particular social context (du Gay 1997, p. 103; Mackay, 1997). In addition, when meanings of new technology are constructed, also the user is constructed at the same time (Akrich, 1992, pp. 208, 222). Therefore, consuming new technology can be seen to construct and shape both the technology and its user (Dant, 1999, p. 84).

2.4 Culture and Consumption

Consumer behaviour can be explained from the perspective of culture and consumption (Arnould & Wallendorf, 1994; Belk, Wallendorf, & Sherry, 1989; Ritson & Elliot, 1999). The cultural approach seeks to uncover the layers of cultural meaning that structure consumer experiences in a social context (Arnould & Price, 1993; Fournier, 1998; Holt, 1995, 1997; Thompson, 1996). There is research on consumer culture (Featherstone, 1991; Lury, 1996; Slater, 1997) and material culture (Miller, 1987). In comparison, the psychological

approach would seek to identify generalisable value structures that correspond to psychological needs (Kamakura & Novak, 1992, p. 130). These needs, in turn, would motivate consumer goals, choices and behaviours (Kahle, Beatty, & Homer, 1986; Kamakura & Mezzon, 1991).

From the post-modern perspective, consumption and production are not considered juxtapositions of opposites, but rather as something that occurs interchangeably (Firat & Venkatesh, 1995). Hence, the consumer can be viewed as the producer (Firat & Schultz, 1997) or as a co-producer (Wikström, 1996) of new technology. Therefore, the consumer should be studied as an equal participant in the production of meanings. The post-modern perspective requires willingness to undertake research that does not assume that there is a single solution, but approaches consumer culture expecting to find multiple meanings and a rich construction of reality (Firat, 1992; Firat & Venkatesh, 1995).

When a technological product is approached through the process of interpretation, it can be studied as a cultural artefact. The consumption of new technology in different cultural contexts offers an interesting research area for marketing. Therefore, culture plays an important role in the selected research approach. It insists on seeing that all interactional sequences, like conversations between people, are embedded in some kind of cultural context (Wetherell, 1998). Cultural contexts give meanings to consumption objects, constitute the desirability of consumption objects and the preferred ways of consuming them (Holt, 1997, p. 332).

The emergence of cultural studies to analyse the use and meanings of goods and artefacts in everyday life has involved historical, ethnographic and semiotic analysis (Slater, 1997). There is also research that analyses the symbolism of product consumption practices (Arnould & Wallendorf, 1994; Belk, Wallendorf, & Sherry, 1989; Hirschman, Scott, & Wells, 1998). Often these kinds of studies are based on the semiotic approach. An example of research based on semiotics is “the Story of the Sony Walkman”. The study uses Sony’s Walkman as an example of new technology and decodes the meanings of Walkman from the images and texts of advertisements. It concentrates on analysing how Sony produces the meanings and how the researchers and consumers can decode them (du Gay, Hall, Janes, Makay, & Negus, 1997).

The semiotic perspective is based on the assumption of ontological constructionism. It sees that language describes the world and is a representation (Jokinen, Juhila, & Suoninen, 1999, p. 162). Unlike the semiotic, an epistemic approach of constructionism, like social constructionism, sees that the world is constructed in language. Language is seen not just to represent the world, but construct it (Fairclough, 1992, p. 3; Foucault, 1972, p. 49). An approach based on social constructionism can bring contribution to the research on new technology consumption, because it takes a different perspective to the relationship between language and reality than the studies that are based on semiotics. Unlike the object signification view, social constructionism argues that meanings are socially constructed. In addition, they do not just represent the reality, but also create it.

2.5 Social Construction of a User

The concept of a user is fundamental to much of the research and practice related to the technology consumption. The conceptualisation of consumption of new technology has been driven by individual preferences. The research has focused on the decision-making process and emphasises the singular buyer or decision maker (Ritson & Elliot, 1999, p. 261). These theories concentrate the individual as locus of the meaning (McCracken, 1988) and tend to de-emphasise the role of social context (Holbrook, 1995, p. 93). As a result, inherently individualistic models have been developed, although it was noted in the previous literature review that new technology is embedded in society from its first stages of development and not only in the diffusion stage. Thus, social constraints play an important role in the shaping of technology as well as the use of new artefacts.

The studies reviewed earlier have improved the understanding in marketing of how well new technology fits the consumers using it. However, the research approaches based on an individualistic user concept are narrow. Although they share the understanding that social constrains and social context are important, they rarely focus on the importance of socially shared discursive practices that create social, interpersonal reality.

As long as the problem of interpersonal meaning derives from the belief that an individual is the centre of a meaning, it will remain resistant to a solution. This is, because "it is the human interchange that gives language its capacity to mean, and it must stand as the critical locus of concern" (Gergen, 1994, pp. 263-264). Thus, a socially thin user construct limits the understanding of the technology consumption within complex social contexts (Lamb & Kling, 2003, p. 197). Social constructionism neither affirms nor denies that there is a world outside the discursive practices. Instead, the focus is on the discourse itself and on its construction (Elliott, 1996, p. 65; Potter & Wetherell, 1987, p. 48). The potential contribution of this research lays on the argument that socially shared discursive practices construct the user of new technology. The user of new technology is interpersonally created and negotiated.

The historical approach on technology consumption probably makes the best attempt to take into account the social context of new technology. This is, because the historical approaches have been focusing less on the practices of individual's use as such and more on the role of technology in a society. They have seen the social structures as possible counter-forces that can influence the development of technology. Nevertheless, due their historical approach, the historical approaches focus on the result of the social influence over time. A shortcoming of this kind of approach is that it mainly deals with history and is not focused on the question of how this influence takes place in the consumer-to-consumer level. Thus, there is need for a research on the social construction of a user.

In this research, the interpretations were guided by ideas related to the earlier presented theoretical framework, as the theoretical background of the study

suggested consideration of different meanings in the research material. However, because the research is data-driven in its nature, the final theoretical linkages can only be formed after the data analysis, not prior it. In a similar way, the central concepts of the research, like the concept of a user of new technology, were raised from the data analysis and not strictly driven from the theoretical framework. The interpretations were also related to other frames of reference, like the background of the Finnish culture and researcher's working experience in the field of new technology. These were discussed in more detail in the chapter about reflexivity.

The positive side of a data-driven research process is that is gives freedom and flexibility needed in a qualitative research. The negative side is that the integration of empirical findings and a theoretical framework, which includes various views from different contexts, is a harder task than in a deductive research. Thus, the reviewed theories form a ground for discussion of the results, but do not guide the research process itself. To summarise, the theoretical framework offers visibility to related research and validates the findings of this particular research. Comparison of the research findings with the earlier theories also constructs new theoretical implications that will be discussed in more detail in the conclusions chapter.

3 METHODOLOGY

3.1 Discourse Analysis

Discourse analysis is a useful method for data analysis, when the research approach is based on social constructionism. Discourse analysis can be viewed as an advance on hermeneutics and social semiotics (Arnold & Fisher, 1994; Elliott, 1996, p. 65). The fundamental assumption of discourse analysis is that language is a medium oriented towards action and function (Heritage, 1984). People use language to construct versions of the social world and the variation of language shows the active process of this construction (Elliot, 1996, p. 65). The concept of variability is essential for the analysis, because discourses vary depending on their functions (Potter, Wetherell, Gill, & Edwards, 1990).

A discourse is a collection of claims about the reality and discourses influence meanings and can refer to other discourses. Discourse analysis is focused on text and the discourses in it, not on the individuals who have written or spoken the texts (Deleuze, 1986). Thus, the researcher is not focused on the speaker or the personal history of the speaker, when analyzing transcribed texts. It is more important to focus on the discursive practices. This makes discourse analysis different from most other interpretative methodologies in marketing (cf. Mick, 1986; Thompson, Locander, & Pollio, 1989).

The use of the term discourse or discourse analysis has been increasingly used in business administration in Finland (Keso, 1999; Koivunen 2003; Moisander, 2001; Pietiläinen, 2002; Söderqvist, 2002; Tuusjärvi, 2003; Vaara, 1999). However, quite varied styles of research have been developed in the name of discourse analysis. The use of discourse analysis depends where and how it is applied (Mills, 1997). This research is based on the British tradition and on the Loughborough school in it. The British tradition sees that cultural actors produce discourse in social interactions (Wetherell & Potter, 1987). It often focuses on conversation, which is done face-to-face (Stubbs, 1983, p. 8). The Loughborough school of thought offers an opportunity to study how language constructs reality. It accepts discourse in its wide definition so that all formal and informal talk and text are covered. The main focus is on the variation of language (Nikander, 1997).

Another potential option would have been the Manchester school of thought. It was not selected for this research, because it lacks of interest in actual linguistic performance. Its analytical focus is more on studying political or

repressing systems of meaning. Thereby, the Loughborough school of thought was seen to be an appropriate approach for the purposes of this research.

Interpretative Repertoires. Talk is constructed of existing resources. These resources are repertoires, which we borrow and refashion for our own purposes (Marshall & Raabe, 1993, p. 4). These different ways of talking are called interpretative repertoires. Interpretative repertoires were developed for researching people's own understandings (Gilbert & Mulkay, 1984). Interpretative repertoires construct the studied phenomenon in different ways and discourse analysis focuses upon these constructions. Conversations are made up from various interpretative repertoires, of which flexible and creative use is sometimes compared to the improvisation of dance (Edley, 2001).

Interpretative repertoire is used as an analytical tool in this research. An interpretative repertoire is defined here as "the register of terms and metaphors drawn upon to characterise and evaluate actions and events" (Potter & Wetherell, 1987, p. 138). They can be seen as a kind of a tool kit of discursive resources that people use. They represent a consistency that is not located at the level of an individual speaker, but that is culturally shared (Burr, 1995, p. 117). Hence, interpretative repertoires regard use of language as form of social practice rather than purely individual activity (Fairclough, 1992, p. 4).

The definitions of interpretative repertoires and discourses are very close. The concept of discourse is often used as a tool for analysing historical power and hegemony in talk and discourses as shapers of social institutions (Foucault 1972). Unlike the analytical concept of discourse, the concept of interpretative repertoire emphasises the flexibility in the local use of discursive practice. It is a suitable analytical tool because this research places emphasis on discourse as a social practice and on the context of its use. An interpretative repertoire is often the concept for this kind of research (Wetherell & Potter, 1992, p. 89; Gilbert & Mulkay, 1984).

In the analysis of interpretative repertoires the idea is to see the varieties and controversies of an interpretation of a single issue (Potter & Wetherell, 1988). Variability is important because it shows the different ways of constructing reality. The aim is to show the whole picture with the different versions of the subject (Gilbert & Mulkay, 1984, p. 15; Potter & Wetherell, 1987, p. 162). Attention to multiple and contradictory reasons people have for their prejudice produces a better understanding than simply fixed ideas (Gill, 1993, p. 5). Hence, variability is often one of the most interesting findings in the research using discourse analysis, because it makes the similarity more nuanced.

3.2 Acquiring Data

Focus groups as a method. Focus groups generate data on a particular topic for research purposes (Frey & Fontana, 1993). The focus group setting provides

information on how people talk about certain topics and themes and how they respond in a situation where they are exposed to the views and experiences of others (Albrecht, Johnson, & Walther, 1993). Thus, the group interaction generates data and is the basis for the data analysis (Templeton, 1994). This goes well with the approach of social constructionism, which prefers participants to take an active role (Denzin & Lincoln, 2000, p. 175).

The use of focus groups can produce data, which is rich in detail and insights that could be less accessible to achieve with other research methods (Morgan, 1997, p. 12). Focus groups offer a way to gain meaningful understanding of the phenomena, which emerge out of sharing and discussing issues, exchanging opinions and highlighting differences (Carson, Gilmore, Perry, & Kronhaug, 2001, p. 115). Group interviewing can provide emphasis on the participant's points of view, because they interact among themselves, not only with the researcher (Morgan, 1997, p. 18). An analysis of the interaction in focus groups can reveal the shared language on the topic, the arguments which participants call upon when their views are challenged and the arguments, sources and types of information that stimulate changes of opinion or reinterpretation of experiences (Catterall & Maclaran, 1997, p. 4).

Since discourse analysis does not concentrate on an individual, but on social conventions, it is a suitable method to analyse group discussions. When it comes to individual behaviour, the use of focus group would be less suitable than individual interviews (Bloor, Frankland, Thomas & Robson, 2001). The real value of group data is to be found from the interaction between participants (Catterall and Maclaran 1997, 4). Groups include the social interaction and can be argued to be closer to the natural setting of social life than individual interviews (Krueger, 2000). Still, the success of focus group data depends on the dynamics between individuals within the group. A negative side of the group effect is that respondents might feel uncomfortable about sharing contradictory views and remain silent. On the other hand, participants may be reassured when noticing that others share the same feelings and uncertainties (Morgan & Krueger, 1993).

Focus group setting provides information on how people talk about a topic and how they respond in a situation where they are exposed to the views and experiences of others (Albrecht, Johnson and Walther, 1993). Albrecht, Johnson and Walther (1993) argue that the opinions in a group are determined through communication with others. Further, they say that the interaction between the participants and the modification of opinions may provide data that is more valid than methods that assess individual's opinions. The focus group is a social event, although it is not a natural social setting, if created for the research purposes. However, the group still reflects quite well a normal social event, where people exchange their opinions and are influenced by other people.

There are advantages in recruiting participants from pre-existing social groups. The reason for this is that the participants who belong to pre-existing social groups may bring comments about shared experiences into the discussion. This might encourage individual members to challenge each other and point out

contradictions in expressed views even in a group where individuals have no prior knowledge of each other. In addition, including different groups that can inform analysis at a variety of levels has been found to be useful. These guidelines were followed when the groups were arranged for this research. (Bloor, Frankland, Thomas, & Robson, 2001, p. 47)

The criteria for using focus groups as a research method are suitable for the selection of the method for the purposes of this research. As the method fits well to the goals of discourse analysis, focus groups were chosen as a preferred methodology for this research. The rationale for the selection of the focus groups was hope that the participants would discuss interactively with each other as well as directing responses for the interviewer. It was assumed that the focus groups could elicit more complex responses and debate than individual interviews. As discussed later in this chapter, focus groups were a successful choice of research method for the purposes of this research.

Conducting interviews. A total of 26 Finnish adults participated in the interviews in March-April 2003, in five groups of 4-7 persons. Traditionally, focus groups have involved around 6-10 people (Morgan, 1997), though smaller groups have been found to be more suitable to support new product development (McDonagh-Philp & Brusenberg, 2000). All the participants were aged between 25 and 55 years. The groups included a cross selection of occupations. The list of interview participants is in Appendix A. Each focus group participant was assigned a pseudonym to ensure anonymity. Thus, invented names (P1, P2 etc.) of the participants are used to protect their real identity in the analytical chapters. Each participant was offered one movie ticket (7€) to participate. The group interviews lasted for between 90 and 120 minutes and were both tape- and video-recorded and later transcribed.

The interviews were theme interviews, where the central topic was the new technology consumption. The research approach admits that the participants will be influenced by any number of others, including the researcher. The questions of interviewer are necessarily leading, but the interviewee can always subvert such leading (Collins, 1998, p. 9). The starting topic for the conversation was Nokia 9210 Communicator. The participants in the interviews were both users and non-users of the communicator to enable the researcher to generate and study the diverseness of discussion about new technology consumption. The participants were selected using contacts to people and organizations that were either using Nokia 9210 Communicator or otherwise willing to attend a discussion about the consumption of new technology. Contacts were received from Nokia and through personal acquaintances of the researcher. From the available people she selected those who formed heterogeneous groups. The selected sample is a convenience sample. There could have been more female communicator users included and users that have used communicator, but do not use it anymore for various reasons, but more of these types of interviewees were not found for the research purpose.

In order to keep up the conversation in a group, there must be enough shared understanding about the meaning of the discussion topic. But this does not mean that all the arguments must be in harmony (Billig, 1990, p. 60). The only requirement for the participants was that they were willing and committed to discuss the communicator for about two hours in a group. Ample knowledge about the product or experience of using the communicator was not required.

The heterogeneous collection of participants aimed to obtain a more general picture of the discursive and ideological climate in which the new technology consumption comes to be negotiated. The idea was to generate as versatile discussions as possible by using different compositions of groups. The interviewees were not expected to form a representative sample. As discussed earlier, discourse analysis focuses on the performative functions of interpretative repertoires and not on the individual participants. So, the question of sample bias does not arise here. Although the research does not aim at generalisation of the findings, it should be noted, however, that the amount of discourses, interpretative repertoires and themes could be biased due to interviewee sample that is not representative of the Finnish population. Five focus groups were formed as follows:

1. Group
   - In Tampere, in the home of host couple
   - 4 participants: 3 women (non-users), 1 man (user)
   - 1 hour 20 minutes
   - The host and hostess were instructed to invite 2-5 of their friends. Three were invited and two came to the interview.

2. Group
   - In Jyväskylä, at the home of host couple
   - 6 participants: 3 women (non-users), 3 men (1 user, 2 non-users)
   - 1 hour 30 minutes
   - Group of people related to each other (mother and father, two children with spouses)
   - The host and hostess (married) were instructed to invite as many relatives as possible for the interview
   - Four were invited and all of them came to the interview

3. Group
   - In Tampere, at the premises of the University of Tampere
   - 5 participants: 5 men (1 non-user, 4 users)
   - 1 hour 40 minutes
   - The researcher contacted participants individually and asked them to participate
   - Seven were invited and five came

4. Group
   - In Tampere, at the premises of the work place of the participants
   - 6 participants: 2 women (non-users), 4 men (2 users, 1 non-user, 1 former user)
   - 2 hours
   - All worked in the same business area and knew each other
   - 4 worked in the same organization and 2 in another organization
   - All worked at the same hierarchical level, i.e. no supervisors were present
   - The host was instructed to invite 3-6 participants from the same or close-working organizations. Six were invited and five came

5. Group
   - In Tampere, at the premises of Nokia Mobile phones
   - 5 participants: 1 woman (non-user), 4 men (non-users, 1 user of previous communicator model)
   - 1 hour 30 minutes
   - The researcher contacted participants individually and asked them to participate
   - Five were invited and all were able to participate

The researcher needs to make the decision about the suitable level of transcription (Silverman, 2001). The careful transcription certainly has its place in the discourse analysis. The transcription needs to be specific enough to pertain the nature of the data, but there is no need to make it more complex than needed. The decision for this research was that it would be enough to transcribe all the recorded talk from all speakers so that it would be possible to identify each speaker. This included talk where more than one person is talking at the same time as well as unfinished or interrupted talk.

The most useful purpose of the video recording was to later determine who was speaking, because the voices were sometimes difficult to identify from the tape. The video recording was also the main source of audio recoding, while the side of the tape had to be changed in the tape-recorder. It was important to identify individual voices within the group to follow the changing points of the interpretative repertoires through the transcript.

The interviews were made in Finnish. After the analysis was complete, a professional interpreter translated the selected data extracts from Finnish into English. The professional interpreter was used to ensure that the translation would maintain the important meanings of spoken language. The data extracts in the analytical chapters of this research have been polished from the mannerisms of spoken language, for example the use of expletives and repetition of words.

They were excluded from the extracts because they did not have an influence on the data analysis. The used transcription marks in this research are:

… = pause, change of theme, continues address (own or other's)
..??.. = unclear point in transcription
() = comments of the researcher

The interviews yielded over 180 pages of transcripts. The sample may seem small, but the criterion of scientific research in qualitative research is not the amount, but the interpretation and understanding of the data and the scope of conceptualisation (Eskola & Suoranta, 1998, p. 18). Focusing on a limited amount of data made it possible to investigate its richness of discursive constructions in detail. The analysis of the interviews has proved that the required content and detail has been gathered with the five conducted group interviews, since the same interpretative repertoires appear within and across the interviews. It seemed that new issues would not arise, which would be relevant for the data analysis.

Description of the Interviews. The focus group interviews took place in contexts in which the spatial, temporal and social dimensions were given to the participants in the face-to-face conversations (Kvale, 1996). Because these contexts are not evident to the reader of the study, the conducted focus groups interviews are described next. The intent was to allow the participants as much freedom in the interview as possible and to let them direct the flow of conversation in the interviews. The chosen strategy had two objectives. Firstly, it aimed at creating an encouraging atmosphere in the interviews. The researcher told participants that they could bring up topics they thought to be interesting or worth discussing and that the aim was not to find right or wrong answers, but all the opinions were valuable. Secondly, the participants were expected to use their own language and expressions. This was important in order to get linguistically rich data that could provide the researcher with versatile perspectives (Silverman, 2000).

Following the customs of focus group interview, a list of topics was used. The interview guide is in Appendix B. The interview guide was developed for the help of the interviewer. Still, it allowed a discovery-oriented exploration of participants' conversations. The technique encouraged participants to speak with rich descriptive details and to tell stories, rather than through abstract rationalizations (Thompson, et al., 1989). This method needs to be used, because the discursive practices cannot be accessed with direct questions about them (Giddens, 1984). Instead, discussions of the topics of interest are gathered in sufficient quantity and detail to allow the researcher to infer the discourses in operation with a high level of redundancy within and across interviews (Thompson, et al., 1989). The method is derived from poststructuralist approach of research (Holt, 1997, p. 329).

The participants shared experiences and opinions about new technology consumption. The participants of a group stimulated each other by bringing up agreeing and disagreeing views. Once someone brought up a new topic, others often reacted by agreeing or disagreeing. The participants complemented and commented on the topics others had brought into discussion. Depending on the topic, the discussion stayed on one topic for some time and inherently moved to another.

The interview sessions proceeded in the following way. First, the interviewer and the participants introduced themselves for the group. The researcher then asked how the participants experience the communicator. After this, the next question offered leads to cover likes and dislikes of various aspects related to the consumption of new technology. Often, the participants themselves lead the discussion forward intensively, without additional questions from the interviewer.

One of the discussed issues was the availability of new technology in different occasions. The occasions were various, ranging from home to work place and from everyday events to trips abroad. Some functions, like reading email and surfing the Internet were commonly shared and found to be suitable. Some participants had more specialised ways of using new technology like browsing through WAP-services and making conference call with multiple participants.

As interviewing has become more and more common in the western society, it also makes interviews natural occasions for articulating experience (Gubrium & Holstein, 1997). The discussion was versatile in the focus groups. The participants mainly described their usage patterns of new technology, places and situations they normally experienced and the technical solutions that they had found for their needs and problems. Without guidance from the researcher, the participants often intuitively compared devices against other devices. They, for example, compared mobile phones to laptops and traditional means of communication and information management to modern solutions. When both more and less experienced consumers were in the same group, the discussion often lead to asking and giving advice about new technology consumption.

The participants had different strategies to construct the user of new technology in the focus groups. They told stories they expected the researcher would want from them in the interview situation (Potter, 1996, p. 123). This is because they had to take into account that they were interviewed for a certain purpose and that the participants had in advance committed to take part in the interview (Hine, 2000, p. 122).

To conclude, the selection and composition of the focus groups seemed to be successful, as the heterogeneous groups generated rich data for the research purposes. The richness of the data is especially important for the discourse analysis, as one of its purposes is to identify the multitude of different interpretative repertoires.

3.3 Process of Analysis

The discourse analysis must be done in a manner that does not lose the varieties and controversies of an interpretation (Wetherell & Potter, 1988). Discourse analysis aims not to normalise interpretative repertoires, but maintain their consistency and complexity (Burr, 1995, p. 176; Foucault, 1972, p. 47). Patterns of variation and consistency in the form and content of the conversation make it possible to analyse the discursive constructions of the participants (Potter & Wetherell, 1987).

It was natural to start the data analysis with the search for both variety and consistency. Regularity does not necessarily appear in the level of the individual participant. There is, however, regularity at the level of relatively internally consistent language units (Elliott, 1996, p. 66). On the other hand, variability is important, because it shows the different ways of constructing the reality and makes the similarity more specific.

Discourse analysis focuses on language at a broader level than at the sentence level. The unit of analysis varies in length from single utterances to dialogues spanning to several lines. These are all a part of the context. Thereby, it can be said that the unit of analysis is conversation in its context. The notion of statements' context is important in discourse analysis. Two kinds of contexts can be separated. The situational context of a statement is the social situation where it occurs. The verbal context is the position of the statement in relation to other statements, which precede and follow it (Foucault, 1972, pp. 97-98).

The analytic objective is not merely to describe the production of interpretative repertoires, but to "show how what is being said" (Holstein & Gubrium, 1997, p. 127). Therefore, the meaning-making processes are documented and presented to the reader in a coherent way. The analysis includes the discursive practices of the participants with several illustrations and references to the recorded interviews. The goal is to explicate how interpretative repertoires are used and what is done with them.

Pilot research. The analysis started initially with identifying of themes and interpretative repertoires from the pilot data. The pilot data consisted of group interviews, which were done in the United Kingdom in years 1996 and 1999. The participants were potential and actual users of the Nokia 9110 Communicator. The Nokia 9110 Communicator was the previous product generation of communicators before the Nokia 9210 Communicator.

The pilot interviews in English were not used in the research as such. Instead, the Finnish interviews were produced for the research in order to make competent interpretations with the mother language of the researcher. The actual research data was produced after the examination of the pilot data. The analysis of the pilot data importantly showed that the examination of interpretative repertoires was a task that must be done in a high level of abstraction. More importantly, a few preliminary interpretative repertoires were identified from the

pilot data. Later, these repertoires were used as a basis to analyse the actual research data of this research, although the preliminary interpretative repertoires changed and refined during the research process.

The process of the actual data analysis started by transcribing the recorded group interviews into a Word-document. Both audio and video recordings were used for the transcription. The use of the both means of recording was complementary, because the audiotapes had a better quality of sound, but it was easier to identify the individual participants from video recording. In addition, one of the tapes was always recording. This enabled the recording of all the utterances during the discussions.

Themes. The first analytical task was to make an inventory of the themes, which appear in the group discussions. The process of data analysis started so that the researcher read through the transcribed interview texts several times and marked preliminary notions on the paper marginal. Identification of the themes was challenging, because the analysis was not based on fixed constructs that the researcher had, but on the differences and varieties that the participants used in the conversations. It should be noted that the themes do not automatically appear from the text, but the researcher has actively selected the themes. The themes were identified from the text so that they were inventoried and the pieces where the theme appears are taken from the discussion. Then, the transcribed text of each group was divided into distinct thematic sections.

Originally, there were over hundred themes that the research had identified from the interview data. At this stage, the themes were on a very concrete level. They were based on direct quotations from the participants and the research did not yet include any further interpretation about the themes. A closer examination of these themes revealed that many of them were overlapping and had to be combined. Some of the originally identified themes were also irrelevant for the purposes of the research and were, therefore, dropped.

All together, there were six complete rounds of analysis with a computer-based program NVivo. The use and the benefits of the computer program will be explained later in the chapter. After the six rounds of analysis, the amount of identified themes was about 60. The final amount of themes is 45, because some of the themes were still combined during writing the research report, as their contents came clearer for the researcher. The process of identifying the themes was time-consuming and challenging, but necessary. It was important to identify the themes, because one criterion for a discourse, and for an interpretative repertoire, is that it occurs in the context of several themes (Foucault, 1972). An interpretative repertoire uses a certain perspective to discuss themes.

Interpretative repertoires. After inventorying the themes, interpretative repertoires became more visible. Rising above the themes to understand what was done with language was an intuitive but systematic process in which the researcher made choices. The analysis involved the development of tentative interpretations that were revised several times. When reading the transcribed

texts over and over again, it was visible that some issues kept repeating themselves. People made similar kind of arguments as others in different groups. Gradually, it was possible to recognise discursive practices across the interviews. The construction of interpretative repertoires went forwards and backwards to the interpretative repertoires and back to the individual lines in the transcribed texts. During the process, the contents of interpretative repertoires and their names varied and got their final form only after writing and re-writing the results of the analysis several times.

It is typical of discourse analysis that the analysis involves a progression from interpretation to description and back to interpretation (Fairclough, 1992, p. 231). At the first stages of the analysis, the interpretations were close to the empirical material and low in their level of abstraction. The interpretations were enhanced during the process of data analysis. At the final stage of data analysis, a critical self-reflection was needed on the elements of dominance in the interpretations of the researcher. Openness to alternative interpretations and conclusions was the final stage of the process. It was done during the last stages of writing and editing the dissertation manuscript.

The paths of the construction of each interpretative repertoire will be shown in the following chapters. Interpretative repertoires are presented here by themes. As discussed, the actual analysis concerned first the analysis and identification of the themes and, only after that, the interpretative repertoires could be created. In the written study, the analysis proceeds in reverse order to make the content of each interpretative repertoire visible for the reader. Thereby, an interpretative repertoire is presented first and its themes are analysed after that.

In practice, the use of interpretative repertoires in a discussion is not clear. They did not appear in the text as such, but instead the interpretative repertoires were partial and often intertwined to each other. When presenting the construction of interpretative repertoire for the reader, the data extracts are relatively long so that both the content and structure of the construction can be seen. In addition, there are quite a number of data extracts so that the reader can evaluate the dialog of the researcher and the data. These notions form the premises that gave the specific form for the analytical chapters of the study.

3.4 Computer-assisted Qualitative Data Analysis

Computer-assisted qualitative data analysis refers to the wide range of software available that supports a variety of analytic styles in qualitative work (Lee & Fielding, 1995). A PC program called NVivo was used in this research, because it helps the researcher to annotate and organize qualitative data. NVivo is a qualitative analysis program originally created in the early 1990s by a company called Qualitative Solutions and Research. NVivo is designed specifically for the qualitative analysis of non-structured textual data. It has tools for recording and

linking ideas and for searching and exploring the patterns of data. These facilities made Nvivo a suitable tool for discourse analysis.

Coding of the text is distinct from the analysis itself. Coding was used to focus on the relevant issues and to administer the extensive textual data. The selection of the coded text extracts was inclusive at the beginning of the analysis, as the coding should rather have irrelevant extracts included than to have some relevant material excluded. The coding was repeated and modified several times, because understanding developed during the data analysis. It was necessary to go back to the original materials and search through them again for instances that became relevant only after the initial coding.

The analysis of the data composed of many readings of the transcripts. First, the analysis was about reading through the texts and writing interpretations in the margins. This means reading through the printed transcripts as a whole, because computers cannot understand the meaning of the text (Kelle, 1995). This was useful especially in the beginning to the get the initial thoughts and ideas and at the end, to complete the interpretation of the findings. Later this form of reading turned to be indexing. Indexing means giving index codes, which relate to the content of the data and to themes or issues that the researcher is focused on (Bloor et al., 2001, p. 47). The process is like chapter headings with sub-headings. First, a few trial indexing categories were developed and tried. Once the indexing started, it became possible to discover how sensible and workable the indexing categories were. Simultaneously, they could be modified, disregarded and new categories were developed.

The coding of interpretative repertoires involved going through the transcripts and selecting out all occasions where a user of new technology was constructed. Under an index, the coded data is homogeneous and it is heterogeneous in relation to other indexes. The completed and final coding scheme will be presented later, as the identified interpretative repertoires are discussed. The indexing helped the computer coding, but like in manual coding, the danger was that the analysis would become too focused on small extracts of data. This problem can be avoided so that the context follows the extracted piece of text when writing the interpretation. Otherwise the important message of the text could be missed. After all, context plays an important role in the selected method.

Code and retrieve possibilities of computer programs do not facilitate an accurate documenting of processes that would take into account group interaction, because often the researcher sees only one theme of the data on the screen in time (Kelle, 1995; Lee & Fielding, 1996). Regardless, this loss of process can also happen in manual cut and paste operations (Richards & Richards, 1995). To summarise the experiences from the computer-assisted qualitative data analysis, the computer program NVivo was on help in coding the qualitative data. It could be used to efficiently identify and retrieve themes that occured in the discussion. Nevertheless, an important notion is that the interpretation of the findings is always left to the researcher.

4 A USER AS A DISCURSIVE CONSTRUCTION

4.1 Introduction to the User Construction

The definition of new technology and its user. The communicator was the topic for the focus group conversations, but it was not the only technological solution that was discussed. Instead, the communicator was merely a topic to start the conversation about new technology. The participants also discussed the use of different new technologies in general, as they told about the use of several technological devices and solutions. They described and compared various solutions of new technology and, by doing this, created their own definition for new technology. For example, the participants made a clear difference between traditional and new means of communicating, organising and processing information. The mentioned traditional means were either paper-based methods like paper calendar and notebook or technologies that have been used for several years, like desk phones. These technologies were compared to and contrasted with new technologies. New technologies that were referred during the interviews were, for example, mobile phones, computers, email, electronic calendar, electronic office tools like Word and Excel, text messages and the Internet.

Since the participants themselves especially used the term new technology, the term is used in this research to describe the tools and the processes to access, retrieve, store, organise, manipulate, produce, present and exchange information by electronic means. New services, electronic solutions, new storage media and new types of digital content are included into the definition. It should be noted that the definition of new technology is close to the definition of information and communication technologies or media and communication technologies, in a way that these terms are often used in the related studies. Overall, there seems to be no commonly agreed definition of the different terms, but they are used interchangeably in different studies. This research applies the term ‘new technology’, because it seemed to be legitimate in the context of the research. Firstly, the interviews include discussion about various new technologies, like described above. Secondly, the participants themselves used the term ‘new technology’ in their conversations. Thus, the term seemed to be entitled to be used in the research report.

This research focuses on the construction of the user of new technology. The definition of the user comes from the research data, as the participants constructed it in the focus group interviews. The participants applied the term user to describe an actor, who was actively engaging with new technology and to describe her or his interactions with it. The use of new technology is closely related to the concept of user, but it is not the main focus of this research. Still, the use is a way to operationalise the being and acting of the user. The being and acting as a user incorporates the use, because there would not be use without the user. Thus, when the participants discussed the use of new technology, they were constructing the user simultaneously. For example, when the participants described the experiences related to the use of new technology, they were describing experiences, which were available for the user of new technology. Or, when the participants were arguing that the use of new technology has changed the society, they were, at the same time, arguing that acting as a user has changed the society.

To conclude, the participants made a distinction between the new and traditional technologies. Besides, the discussion in the focus groups covered the use of new technology in general, because it was not limited to only one product or service. Consequently, the construction of the user is interpreted here to be the construction of the user of new technology in general and not the construction of the communicator user in particular. It was also noted above how the discussion about the use of new technology constructs the user. This way, the new technology is a generic concept in this research, whereas the user is a specific concept, because a user personalises the use of new technology.

The identified discourses. The analysis of the research data resulted in the identification of several interpretative repertoires. Together these repertoires portray the discursive practices that can be used to construct the user of new technology. There is not one interpretative repertoire that would be better than the other to construct the user, but they are all available and alternative. Often, they even overlap, because an interpretative repertoire seldom exists as its pure self in the data. Instead, the pieces of different interpretative repertoires can be used jointly in a discussion.

Each of the interpretative repertoires takes a certain perspective to the world, although an interpretative repertoire can also include conflicting themes (Parker 1992, 6-17). In this research, there was some resemblance among the interpretative repertoires. A closer examination of the resemblance indicated that the interpretative repertoires could be bundled into groups. A bundle of interpretative repertoires forms a discourse. A discourse is descriptive for all the interpretative repertoires that it contains. The discourses collect those interpretative repertoires that share a similar perspective about the construction of the user. There were five discourses, i.e. bundles of interpretative repertoires, which were identified from the data.

As discussed, a discourse can be separated into certain interpretative repertoires. Furthermore, each interpretative repertoire can be divided into

themes, which are characteristic of it. Next, the identified discourses and their contents are briefly described. Figure 2 summarises all the discourses, interpretative repertoires and themes, which have been identified in the research. It can be seen that many of the themes are the ends of a same dimension. For example, frustration-pleasure, dislike-liking, abandonment-commitment, inconvenience-convenience, collectivism-individualism, following behind-leadership are these kind of themes. They were originally analysed as a one dimension, but are presented separately in this research report to allow enough room for the analysis of both the sides of a same dimension and to make it clear what perspective of the dimension is being analysed. It was considered to be a better option than trying to force the ends under one single theme.

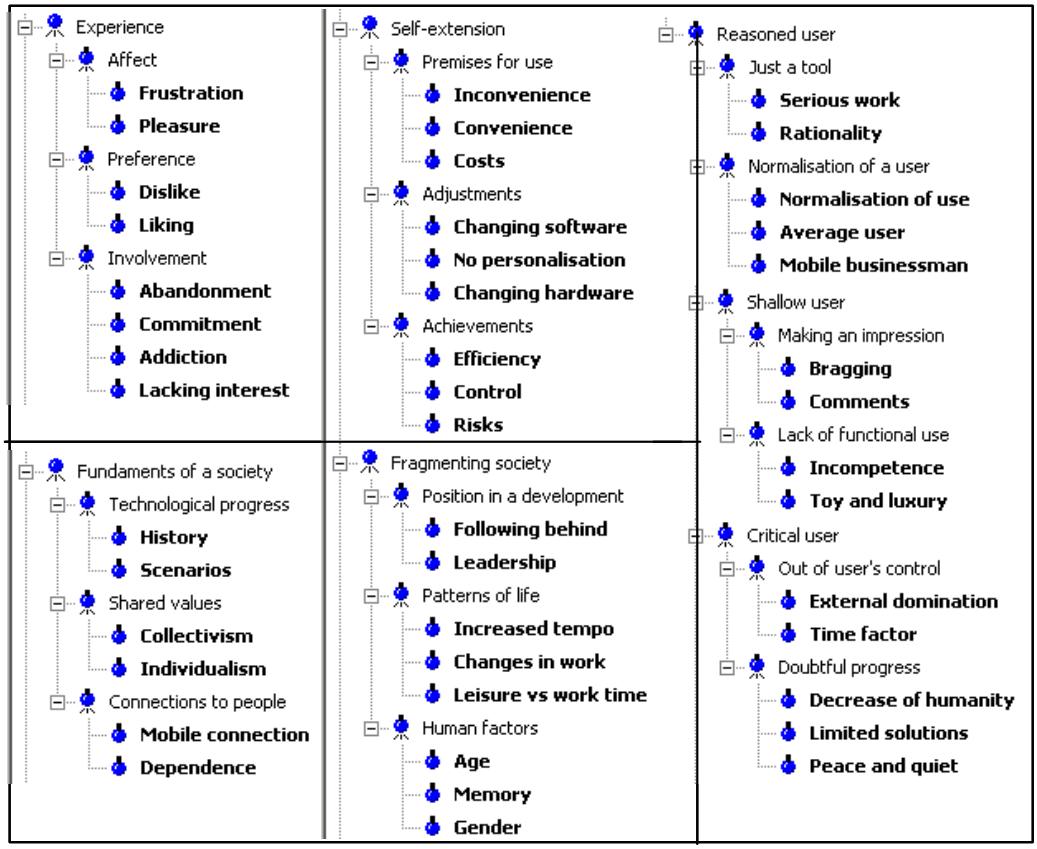

Figure 1. *The identified discourses, interpretative repertoires and themes*

In Figure 2, the highest hierarchical structure is the discourse. Under it are the interpretative repertoires, which have several themes that are characteristic of the interpretative repertoire. The themes represent issues typically discussed with a certain interpretative repertoire.

Both the users and non-users of the communicator in the focus groups used the same interpretative repertoires to construct the user of new technology. Some group discussions emphasised certain discursive practices more than the others.

For example, the users of the communicator often discussed the actual use and features of the communicator more than the non-users who, in turn, questioned the relevance of using a communicator. These subtle differences in the use of the interpretative repertoires are not discussed here, because it does not affect the identification of the discursive practices as such. This is because the practices are rooted in the socially shared discursive practices. They are socially shared, although not every consumer deploys them in the same way.

The following sub-chapters go through the content and construction of the discourses of experience, self-extension, fundaments of society and fragmenting society. The discourse of social distinction will be discussed in the next chapter. The next chapter concentrates solely on social distinction of a user, as proposed in the second sub-question. The interpretative repertoires are portrayed one at a time, by presenting the themes it consists of. In addition, the discursive functions of the identified discursive practices are discussed to show how they construct a certain kind of a user of new technology.

4.2 Experiencing User

The discourse of experience constructs an experiencing user. It includes three interpretative repertoires. The interpretative repertoire of affect covers the themes of frustration and pleasure. The interpretative repertoire of preferences includes the themes of dislike and liking. The interpretative repertoire of involvement includes the themes of abandonment, commitment, addition and lacking interest. Next, these interpretative repertoires are presented by the themes they consist of.

Affect. The interpretative repertoire of affect is the first interpretative repertoire under the discourse of experience. Its internal contradictions enable it to discuss the negative and positive feelings that the users can have towards new technology. The interpretative repertoire covers the themes of frustration and pleasure.

The theme of frustration constructs a user who can have negative feelings with new technology. Reasons for frustration varied from devices being too big to software that did not work properly. Many participants had experienced that new technology did not either work correctly or according to their wishes. The malfunction might not have caused any damage or had any other consequences than a momentary fault. Nevertheless, the participants found the unreliability of new technology frustrating. In addition, unfamiliar operating systems and restrictions of functionality, like limited memory capacity, were mentioned to cause frustration for the users:

”P12: Nothing infuriates me more than when I’ve just picked up some tools and climbed up somewhere to do something and then somebody calls.
P13: And then it’s also extremely irritating in this normal (mobile) phone, that the messages are full.”

In the above extract two participants described their frustration towards new technology. The discussed issues were the capacity to store text messages and that someone could call at a wrong time or place. The mentioned problems could occur in everyday life with new technology. Apart from these frustrating occasions, the irritating features of new technology could cause the users to feel bored or even so annoyed that they lost their nerves:

“P18: You loose your nerves with the big size”

“P7: I don’t like those you have to poke with a pen. That’s very irritating”

“P9: The help-key is in a wrong place in my opinion. I don’t know how many times I’ve stricken the wrong key there…
P11: Exactly, because you’re looking for that line, the hyphen.
P8: You need it so often and you always miss the ctrl.
P9: Yeah, it’s really nerve racking.”

The communicator has a button that opens an interactive help function onto the screen. The function is designed to help the user to solve use-related problems. However, the wrong location of the button had irritated the participants. They had accidentally pressed the button, which had caused the device to open the help program, which takes a few seconds to open. The participants agreed that this functionality is frustrating.

In the above quotations, the usability of new technology was perceived to be irritating. The participants thought that it could cause the users to lose their nerves. As well as the size of technological device, the software functionality was also thought to be potentially irritating.

The theme of pleasure describes the positive feelings, which new technology enables for its user. The context of experiencing pleasure was often situated to leisure time or to user’s home. Some participants enjoyed the possibility of having fun alongside work. Pleasure was derived from games, digital cameras, video cameras, ringing tones, browsing the Internet and downloading content from the Internet. Another aspect that can bring pleasure for the users was the experience of freedom:

“P3: And you might say it gives you freedom. Releases you from thinking, oh do I have this or that, because it reminds you then when you choose it when you need it, you say, alright, if I have a some meeting, that if we have it in the office I’ll set it up to ring 10 min before. It always tells me, whether it’s this kind of phone or a communicator calendar, it let’s me know, that I have something that I need to…”

"P15: It's freedom, freedom to be mobile"

In the first excerpt, the participant had experienced pleasure from the possibility to assign appointments and reminders with the new technology. This gave the user freedom from remembering the obligations, like meetings, in time. The electronic calendar was described as an active subject, which looked after its user. Owning an electronic calendar made the user feel free. In the latter excerpt, the feeling of freedom was associated with mobility.

The participants told that freedom could bring pleasure for users, as they could be free to do work outside an office building and office hours. The tasks were not necessarily work-related, but the participants said that the user of new technology has freedom to do various tasks in a personal way that individually suits her or him. Some participants suspected that the experienced pleasure could lead to the frequent use of new technology. In this case, a technical device would be used more often than it would really be necessary, because it could be a toy that the users want to play with in order to get pleasure from it.

Preference. The interpretative repertoire of preference is the second interpretative repertoire under the discourse of experience. It is used to evaluate the users' likes and dislikes. In terms of like and dislike, the participants discussed their personal tastes regarding new technology.

The theme of dislike was used to construct a user who has negative experiences with new technology. The design was a provocative issue in this theme. For example, the communicator's design and accessories could be regarded as unattractive:

"P8: This communicator is not especially beautiful. It's rather clumsy."

"P24: But then those carrying cases that they have for these. Those are horrible.
P23: But they are very practical.
P24: Yes, but so ugly, at least I wouldn't want to have one hanging there."

Communicator's design brought up several comments of dislike. The design was considered old-fashioned and to make the device look like a brick. In the last extract, a participant says that the unattractiveness of the carrying case accessory would prevent her from using it. She criticised the appearance with a strong choice of words, like grotesque and horrible. She did not change her opinion despite another participant trying to change the topic to the usefulness of the accessory. During the interviews, the participants said how the product itself could be useful, but its looks might hinder the user from adopting it. A few participants named products, like the communicator, that they would not like to use in a public place, because they thought it would be embarrassing for them to be seen as a user of products that they personally disliked.

Apart from the design, malfunction and unreliable software or the lack of preferred features were reasons for dislike. Especially the keyboard and the size of technological products were disliked. The keyboard could be perceived as too small for the user's fingers and too big for carrying the device around. Similarly, a mobile phone could be too big to carry, but too small to be convenient to use:

> "P12: How can you use this (communicator keyboard) with sausage fingers like mine?
> P16: That's what I was saying when I said that if you try to write something with gloves on you end up pushing four keys down simultaneously."

> "P3: Zippo on the other hand is too small. A phone has to be a phone… so that in principle it's not a piece of jewellery, it should have a certain size. If it's too small I get the feeling I gonna loose it."

The size of the keyboard was regarded as an important ergonomic factor for a user. It should not be too small to use a device conveniently, but on the other hand it should not be too large to enable easy mobility. In addition to the keyboard and the overall size of the device, microphone, network coverage, cables and the lack of GPRS data transfer, radio, tri-band and bluetooth were mentioned as causes of dislike. Some participants expressed their general dislike of mobile phones.

The size and the weight of the communicator were discussed, when the participants tried to define the right limits for the size and weight of a mobile device. However, there was no consensus in this issue. Instead, the size and the functionality were seen to be compromises. For example, the communicator is lighter and smaller than a laptop, but bigger and heavier than a mobile phone. The communicator was said to be "too big to be a mobile phone and too small to be a laptop" and a compromise between size and functionality.

The theme of liking includes the positive preferences of the users. As in the theme of dislike, the design of new technology raised discussion about personal preferences. The participants mentioned that they liked design that is not old-fashioned but up-to-date. Still, the product attribute preferences were agreed to depend on personal taste. The following extract describes the experienced liking of a laptop computer:

> "P1: Yes, I've found the new table-pc really good… I've liked it a lot."

The user can have good experiences that result in liking. Before the above excerpt, the participant had said that there are some negative features in her laptop, like its lack of support for the Finnish language. Despite this, the participant liked the product and she emphasised this with the selection of words "really good" and "liked it a lot".

> "P2: Calendar is the feature why I actually use it. I tried once for a month the Time System with all the files… after which I gave it to my colleague, like would you please get this off my table, that… It was like, for all I cared you could've thrown it out the window…"

Overall, small size, good screen, extensive phonebook capabilities and calendar functionality were mentioned to be the attributes that the users would like to have in technological devices, especially in mobile phones. The newest mobile phones with digital camera, tri-band and other innovative features had created fondness among the participants. Communicators, other handheld devices and laptops were liked because of their all-in-one capabilities, like email and office applications. Many participants were accustomed with the Windows operating system and said that they liked handhelds with the same kind of operating logic.

Involvement. The interpretative repertoire of involvement is the third interpretative repertoire under the discourse of experience. It includes the themes of abandonment, commitment, addiction and lacking interest. This interpretative repertoire constructs a user who has a more or less sustainable relationship with new technology.

The theme of abandonment covers the user's rejection of new technology. The possibility to abandon new technology was one of the topics discussed in the focus groups. The participants generally felt that giving up the current technology and going back to the previous use practices would be hard, because the adopted technological instruments made life easier or because the participants were used to have a certain phone model. The participants said that after getting used to one model and after learning to use it, it would be difficult and time consuming to learn the operating logic of another device.

> "P24: I wouldn't like to make the change from my current phone. It basically has all the features which I need, aside from the few I mentioned which are missing."

> "P19: If I'd had to give it up, since I've gotten used to the big, clear colour screen, so it would feel pretty modest to have a five-row black and white screen after that, even though you can get by with it, but you're used to something better."

Both the above excerpts are an example of a situation, where a user is reluctant to abandon new technology, which she or he has already adopted and gotten used to. In the first extract, a participant was reluctant to abandon her current phone model. She said that the current model fulfils her needs, although it has some failures. In the second extract, another participant described that a change from a colour screen back to a black and white screen would not please him. The problem in the abandonment of new technology was perceived to be the transfer

from new solutions back to the traditional methods, after new technology has been taken into use once. This is described in the following:

> "P7: But it's exactly that I wouldn't go back to the (time before electronic calendar) ever again, because back then I had such a panic about losing my calendar that my life would end that day if it happened. Now I have back up copies on my desk top and home computer and everywhere, so that if the communicator disappears, I still have my calendar. I sleep much better nowadays."

The possibility to change use patterns was seen to be available for a user, but perhaps too complicated to fulfil in practice. The difficulty did not lie in the abandonment of the terminal product itself, but in the functions which would be lost when changing the terminal. In the above extract, a participant described how losing an electronic calendar would cause him panic, because important information would be lost. Thus, the participant had prepared for this possibility by back-uping the data into several different places.

Alternatively, the participants said that they would consider abandoning the current technology if the future developments would offer them evidently more advanced solutions. The improved functions were said to include small and light size, keyboard and high-speed data transfer capability. The advanced solutions should have at least the same or improved features as the current devices, because the participants said they were already used to having an electronic calendar, for example.

In *the theme of commitment* the participants described how the users can trust new technology. One way for the user to commit to the new technology is to use it as a means to manage important issues, like remembering appointments and contacts. The commitment was seen to develop over time, so that eventually the user could feel helpless without the new technology she or he is used to. Many participants said that the commitment was a question of getting used to a certain technology:

> "P24: I have a certain kind of a calendar.
> P23: If it's electronic or on paper depends on what you use it for.
> P25: Depends on what you are used to."

> "P20: The communicator has its own role.
> P19: It's what you get used to"

Commitment might have driven a user to replace her or his old habits of using traditional methods like paper calendar and phonebook. The old and new technologies can coexist, but the participants also argued that it might be beneficial to concentrate on certain technologies instead of using all available solutions. One of the participants compressed this view about commitment by

giving other participants an aphorism as an advice. The aphorism was ”don’t keep other gods”. The gods here represent the technological devices:

> “P7: With the calendar it’s quite appropriate this thou shall not have other gods, like during the first month I had all those yellow notes as well, but then I realized that it was a really hellish situation and when I gave it up and didn’t put anything down on a paper and instead had everything in that digital version, ah, it gave me such a peace of mind.”

In the above excerpt, a user of an electronic calendar explains how the idea to commit to use only one calendar, in this case an electronic calendar, has been an excellent solution. The participant said that he had had both an electronic calendar and a traditional, paper calendar before he had committed to use only one system. The participant had had a list of unfinished tasks both on paper and in a digital system, but this had been too difficult for him. Once the participant had committed to use only one device, he described his problems were solved. The participant emphasised the successfulness of the commitment with a phase ” a peace of mind”.

To conclude, commitment was discussed by describing a user’s dedication to use certain technology or unwillingness to change to new solutions. The participants told how it would be difficult to change between operating systems, like from a PC to a Mac or from Nokia to Ericsson in mobile phones. A few participants had noted that they were so committed that they were ready to accept some faults in their current devices, like occasional crashing of the software system, rather than change the devices to some other solutions they had no experience from.

The theme of addiction constructs a user, who can become addicted to new technology. Addiction has both positive and negative meanings. It is negative in the sense that a user can have compulsory use practices. It is positive in the sense that a user can have practices she or he feels so comfortable with that she or he returns into using them over and over again. For example, one of the participants described, how she has become addicted to the Internet games:

> “Interviewer: What do you do on the Internet?
> P26: I read my e-mail and then all those funny games, which you can download for yourself. So stupid, so childish, which I get hooked on.”

Above, a participant said that she knew that the games on the Internet were stupid and childish. Still, in practice, she had gotten hooked on them, because they were fun. Later in the interview, the same participant said that she had felt annoyed, when one of the games she had enjoyed had disappeared. Some other participants admitted that they spent leisure time browsing the Internet, although they had no special tasks there. Rather, they surfed the net for fun and because it had become a habit for them.

The participants debated how likely it could be that a user gets hooked into new technology. They described that the mechanism of addiction was such that first a user tries a new solution, then she or he gets accustomed to it and finally it will be difficult to live without it.

> "P25: On e-mail I might get… it might cause more harm for me than be of use, because it becomes a bad habit to check it all the time."

> "P7: I've become totally dependent on Outlook when I'm synchronizing. So could I live without a digital calendar, well that could be though for me."

In the above extracts, two participants described their new technology related addictions. One participant felt she could be hooked into constantly checking her email. The other participant said that he was addicted to using a calendar synchronisation program and that it would be very difficult for him to live without an electronic calendar. These excerpts show how the users can try to avoid addiction beforehand, but after they have become addicted, it is not necessarily perceived negatively.

The theme of lacking interest contradicts the involvement of the user with new technology. The theme constructs a user who is not interested in adopting new technology. The participants said that the reasons for the lack of interest could be the lack of overall enthusiasm to have new technological solutions, or that there simply seems to be no need to have new technology. With the theme of lacking interest, the participants expressed why they were not involved with certain solutions:

> "P25: I've never been all that interested, usually you have something in mind, that you've heard about something from somewhere else, that there is something there, which is worth checking out, and then you go do it. Otherwise it's just e-mails and banking."

> "P10: So I don't have a communicator and it will never occur to me to get a communicator. And I still haven't any… I don't see any reason why I should have one."

In the first excerpt, one of the participants described the use of the Internet. She said that she is not interested in using the Internet more than she currently does. The participant felt that using email and online banking were enough for her. She sometimes visited web pages that friends recommended. Otherwise, she had no interest in using the Internet more than she does at the moment. In the second excerpt, the participant brought up a reason that often came up among the participants: he had no need to use certain technologies. In this case, the participant saw no reason why he would need a communicator. He referred to the other participants in the same focus group. They had said negative things about the communicator earlier in the interview. The participant argued that exactly

these negative aspects were the reason why he lacked interest to have the communicator.

A new technological solution could be perceived as strange, if a participant knew that none of her or his acquaintances has not tried or used it. Then, they were reluctant to be the first users to test it. In addition to the arguments that new technology might not be needed, not important or that it is useless or strange, the participants explained that the lack of interest comes from their estimations that they would not use new technology frequently or that they did not have the needed perseverance to commit to using it.

In conclusion, an experiencing user can be constructed with the interpretative repertoires named affect, preference and involvement. Table 2 draws together the construction of an experiencing user by presenting the themes and the interpretative repertoires of the discourse of experience. The typical terms and phrases of each theme are summarised to give an overview about the contents of the discourse.

Table 2. *The contents of the discourse of experience*

Interpretative repertoires	**Themes**	**Typical terms or phrases**
Affect	Frustration	frustrating, stressful, loose nerves, furious, irritating, annoying, drive mad, boring
	Pleasure	entertaining, fun, educational, play, relaxing, freedom, flexibility, energy, toy
Preference	Dislike	malfunctioning and unreliable software, lack of features, too big/small keyboard, too small/heavy device, ugly design
	Liking	big color screen, small size, fast data transfer, electronic calendar, up-to-date design, suitable keyboard, email, computer-like feature set, digital camera
Involvement	Abandonment	rather have the current model, no going back in development, difficult to change habits, only if better solutions are available
	Commitment	used to the current model, feel helpless without it, dedicated to use only certain device, would not use other operating system, acceptance of occasional faults
	Addiction	addicted to games, spend time in Internet, annoyed if cannot play, hooked, addiction after first trial
	Lacking interest	not enthusiastic, no need, useless, no frequent use, lack of perseverance, strange, not important

The interpretative repertoire of affect is divided into two themes that are frustration and pleasure. Complex technology often frustrates users (Mick & Fournier, 1998). Frustration arises, if the technology fails to perform reliably or to meet the user's expectations (Shih & Venkatesh, 2004). The previous research has identified that the reasons for frustration include the lack of control (Mukherjee & Hoyer 2000, 470). In this research, the content of the theme of frustration can be characterised with the terms irritating, infuriating and annoying. In comparison, the characteristic terms for the theme of pleasure have positive meanings, like entertaining, fun and freedom.

The interpretative repertoire of preference constructs a user with dilemmatic product attribute preferences. The user's product attribute preferences can be problematic, because the same attributes, like the size of the device and the keyboard, can be both liked and disliked. In the interviews, the participants pointed out that the relative size and weight of technological devices are and will remain as compromises, and, thus, exposed to the contrasting preferences of users. Both the themes of like and dislike included conversations about design, features and usability. Characteristically for the theme of dislike, the size and the reliability of new technology were criticised, whereas the features such as electronic calendar, email and a suitable keyboard, were appreciated in the theme of liking.

The interpretative repertoire of involvement constructs the user's relationship with new technology. The relationships between consumers and their brands can be evaluated in terms of the forms of the relationship. Previous research has classified the forms of a relationship into four main categories, which are: friendships, marriage, dark-side relationships, and temporally oriented relationships (Fournier, 1998). In this research, the themes of involvement were abandonment, commitment, addiction and lacking interest. Next, these themes will be compared with some of Fournier's categories.

The theme of commitment can be linked to Fournier's categories of friendship and marriage, because commitment describes a long-term relationship between a user and new technology in this research. The intensity of the relationship varies so that it can be associated with both friendship and marriage. The participants said that users could be accustomed to new technologies, dedicated to use certain solutions and feel helpless without them. Temporality of the user involvement was visible in the theme of abandonment. Once a user had adopted new technology, she or he can feel reluctant to abandon it. The participants described this experience with phrases like that a user would rather keep the current model, would not want to go backwards in development and would find it difficult to change her or his habits.

The theme of addiction represents the dark-side of user involvement. Although the participants gave it positive meanings like spending leisure time and gaming, the addiction had some compulsory characteristics. The addiction to a mobile phone is characterised with compulsive urge to be connected and to know that the mobile phone is with the user and not lost (Kopomaa 2000, p. 35). In the interviews, the addiction to new technology was described with terms like

get hooked and obsessed. Understandably, the theme of lacking interest does not represent an involvement with new technology, but rather the lack of it. The terms to describe the theme of lacking interest with are useless, not enthusiastic and not important. Despite its lack of actual involvement, the theme is included in the interpretative repertoire of involvement, because it opens up the possibility to discuss why users are not involved with certain technologies.

To summarise, the discourse of experiences describes encounters that a user goes through with new technology. It constructs an experiencing user. The interpretative repertoires of the discourse deal with affect, preference and involvement. With these interpretative repertoires, consumers can, for example, talk how a user can experience frustration or pleasure or get addicted to new technology.

4.3 Self-Extending User

The discourse of self-extension constructs a user who enhances or deteriorates her or him with new technology. The term self-extension illustrates here that a user can improve himself or herself with new technology, because it gives the user not only benefits (or disadvantages), but also constructs user's confidence that he or she is capable to do more (or less) with new technology than without it. The discourse includes three interpretative repertoires, of which all have three themes. The interpretative repertoire of the premises for use includes the themes of inconvenience, convenience and costs. The characteristic themes for the interpretative repertoire of adjustments are changing software, no personalisation and changing hardware. The third interpretative repertoire is named achievements. It covers the themes of efficiency, control and risks. Next, the interpretative repertoires are presented by the themes they consist of.

Premises for use. The first interpretative repertoire under the discourse of self-extension is called the premises for use. It includes the themes of inconvenience, convenience and costs and discusses the basis, which users take into account when evaluating the practical use of new technology as an instrument.

The theme of inconvenience discusses the troubles new technology can cause for a user. For example, the participants told that it is uncomfortable to read long texts on a small screen or to carry a mobile device that is too heavy. Inconvenience was often related to time and effort.

> "P25: When you have such a slow connection, it takes along time. I don't use that reminder-thing even on my own phone.
> P24: Because it's so inconvenient."

In the extract, the Internet connection was estimated to be too slow, because it required more time than the user was ready to spend on browsing. In addition, some available functions of new technology were left unused, because the participants had found them too inconvenient. Some of the participants said they had a WAP browser in their mobile phones, but they had not taken it into use, because they found it difficult to make the needed configurations. A few told they would not change their SIM cards to another phone, although it would be possible, because they wanted to avoid the inconvenience of importing contact details into another device.

New technology was said to be too inconvenient to use if it required several steps to finish a task. As an example, the participants mentioned that the sending of a text message to multiple recipients required too many steps in the older phone models. Inconvenient software also bothered users at times, when it had to be updated to a newer one. One of the participants described the software updating of a communicator:

> "P23: It's a huge task to take that (the communicator) into the service. It's bad, that it needs to be taken into service, it could probably be fixed, but I don't have the energy, I don't have time during the day that I would drive to a TPO (Tampereen Puhelinosuuskunta) service point, leave it there and take another mobile phone for a day or two. I would also have to transfer the calendar for the week somewhere from there, if it would take longer."

There were different types of inconvenience mentioned in the excerpt above. A participant said how taking the communicator to a service point required time and effort. The participant felt reluctant to fulfil all the requirements that a software update would need. The participant said that he had rather been struggling with the old software version than taken the effort to get it updated. Like him, many participants reported that they suffered from crashing operating systems and had to reboot their computers weekly.

The theme of convenience is a counter-theme for the previous theme of inconvenience. It is used to discuss how a user can perceive new technology as comfortable. The important issues for convenience were that new technology is easy to learn and comfortable to use. The useful features of new technology were said to be, for example, its capability to store information like notes and calendar appointments:

> "P22: I've taken some notes with it (the communicator). You save certain things there and it's easy to give them if… to transfer them to your own PC for example."

In the extract, one of the communicator users described what he has done with his communicator. He claimed that it is useful to be able to store, transfer and distribute information. By doing so, he used the theme of convenience to discuss how easily a user can use new technology. Another participant said that

information management would be easier, if he had a device that stored all the needed information:

> "P12: Perhaps you'd also have e-mail, fax, notebook, and phone numbers. Now I have a normal Nokia phone and then I have an A5-size this thick notebook, which I always carry around, it would be a lot easier to have it all in one place."

The convenience of having all the information in one place was appreciated. On the other hand, the size of a device should not grow too big. A complete keyboard and a comfortable text writing capability were argued to be convenient. Some participants predicted that the easiness of writing text messages with a complete keyboard would result in an increased amount and length of text messages.

> "P9: If you need to send e-mail while you're walking around, this is a lot better for that."

> P8: Nowadays if I call, I usually look up the number here, press and then close it and put it to the ear…
> P7: It's so easy when you can write the name and it looks it up from the list.
> P8: It's the luxury in it, that it's so easy."

In the above excerpt, participants discussed the use of a communicator. They agreed that the keyboard inside the device made it easy to write text messages or search names from a telephone list. In another group, the communicator's speakerphone was considered a convenient feature. The convenience of new technology was argued to benefit not only the user, but also other people, as it could be useful to, for example, check co-workers' availability via calendar booking on a company intranet:

> "P3: At least our team is away so much, so that if you need to know, that for example next Thursday for somebody, that I would call, like then I click with the mouse on (name of a colleague) calendar and see where (name of a colleague) is next Thursday. I can see where (name of another colleague) is next Thursday. If I have to figure out which would be a good time for all three of us, I can see it with two clicks."

One participant explained how he could use an electronic calendar on the company intranet to check the availability of co-workers he is supposed to arrange a meeting with. This, of course, requires that the others used the new technology, too. In addition to the easy usability, the participants thought that convenience included a possibility to use new technology straightforwardly, without specifically starting it up or going somewhere to be able to use it.

The theme of costs assessed the price of buying and using new technology. The main point of the theme was to note that many innovative products and services are interesting, but not always affordable. Mobile phones, digital cameras, tablet

PCs and multimedia messages were mentioned as examples of new development. The participants had noticed that especially new, innovative products and services have high prices when they enter markets:

> "P22: The prices must be considered too. Sending (multimedia message) costs.
> P19: All new things cost.
> P21: Yeah"

The participants said that the costs and price were concepts that are relative to and dependent on a person who is making the estimation. Students were agreed to have less money than those who work. Thus, saving some money through using the Internet at a university for free or sending free text messages via web pages were estimated to be more important for students than for those whose expenses the companies paid. The relatively high costs were also seen to depend on time:

> "P13: The price question is kind of interesting, I've been thinking exactly that, that the price is an obstacle, but then when I remember how much our first mobile phone cost, something like 17 000 marks or around there, in -81 or -82…"

Before the excerpt, the participants had discussed the high price of new technology. A participant pointed out that the prices used to be much higher, and yet people bought new technology even then. Compared to the prices years ago, the current costs could be considered relatively small, because the prices of new mobile phones have decreased. This way the participant pointed out the relativity of costs.

The participants had noted that not only private users, but also companies had price limits for new technology. Although companies have bigger budgets than individual users for buying new technology, they tend to restrict the costs to some extent. One of the participants said that many people in his company and in the companies working closely with his company, had a communicator, but he did not have one. The participant said that the company did not buy everybody a communicator. Instead, the need for new technology equipment was evaluated case by case.

Adjustments. The interpretative repertoire of adjustments is the second interpretative repertoire under the discourse of self-extension. It discusses a user's possibilities to shape new technology according to her or his personal preferences. The interpretative repertoire brought up a possibility to personalise the software and hardware of technological devices. There was no common agreement among the participants on whether personalisation is needed or important and what kind of forms it should take. Rather, the interpretative repertoire enables the discussion of the themes that concern personal adjustment.

The theme of changing software discusses the personalisation of new technology through changing programs and files. A user can install new software like games or work-related programs into a device and create new documents or download files from the Internet:

> "P16: To that (communicator) you get all kinds of software, work follow-up things, programs for, like I've been talking to one firm, who do exactly this, how for example to keep a travel diary with the communicator.
> P12: Yeah, all that sort of things."

> "P8: I visited the Symbian pages. I downloaded a PDF-reader, so that I can get a VR timetable card for example."

As an example of possibilities to change the functionality of an original software package, the participants brought up ideas on how a user could adjust software by installing new programs and using new technology for tailor-made purposes, such as to track travel costs or to check timetables for trains.

In a similar way, the participants said how a user could personalise an web browser to include her or his favourite web pages. Adding personalised ringing tones or creating and editing their own tones were issues, which the participants covered in the theme of changing software. Some of the participants had created their own ringing tones, some had recorded the first words of their children and some had subscribed to new tones via text messages:

> "P8: My son went and got the ringing tone from somewhere so that I would have it and when my wife calls me you would hear that song from Juice Leskinen, "The Pig".

The choice of ringing tones was a personal choice made in order to please the user. The choices were often humorous and entertained the user when the mobile phone rang. Users can control new technology by installing and uninstalling software that they do not need. A few participants wished that there would be devices that just included a hardware terminal. Then a user could select the software she or he wanted to have and install the preferred programs. This way a user would control the operating system. Nevertheless, the participants also noted that there are obstacles in adjusting software. Not only does it take time and requires know-how, but it also requires enough free memory from a device, so that a user would be able to have all the additional programs and files.

The theme of no personalisation is used to claim that the personalisation of new technology is not needed or not at least the main goal for the user of new technology. The participants named many reasons for not changing new technology with additional pictures, programs or documents. They said it was too expensive to download software or ringing tones, it consumed too much memory from the device or was otherwise a trivial thing to do:

"P23: Ringing tones become uninteresting so fast…"

"P11: You can get different covers for these too.
P8: Really?
P7: I never felt I needed one.
P9: I'm just above wanting new covers and melodies."

The user's personal adjustments of new technology seemed to be something that could soon be old-fashioned or not pleasing the user anymore. This made coloured covers or ringing tones needless. One of the participants said he is "above that kind of need". This argument can be interpreted to mean that he thought the using of coloured covers is childish behaviour, because it is usually teenagers who use this kind of personalisation of a mobile phone. Still, there were plenty of conflicting opinions about the issue of personalisation:

"P13: He (P12) didn't even let me buy colour covers.
P12: It's completely useless to buy colour covers.
P13: I said that it was so inconvenient when our phones looked exactly alike, so that you have to see where both of them are and then… But I finally got colour covers because they were so cheap.
P12: Waste of money.
P13: The logic is not really working. 5 euros."

In the above excerpt, a married couple discussed a possibility to have coloured covers. The wife said she had bought coloured covers to easily separate her phone from the husband's phone. She also pointed out that the purchase had not been an expensive investment, but it had cost only five euros. However, the husband thought the buying of coloured covers had been a needless and vain decision.

The theme of changing hardware discusses the personalisation of new technology through changing its looks or other tangible parts. In this theme, the change of hardware is aimed to change a product so that it can be distinguished from other similar products and that to please the user via personalisation. The change of coloured covers is one way to personalise a mobile phone or a computer:

"P8: Now that we have so many different machines here I begin to miss some personality; are we all such grey officials types?
P7: Yes!
P8: I would like to have the top part blue for example, so that I would recognize my own and be a little different from the rest."

"P6: Macs are a lot better looking, nice colours and blinking systems and the same goes for the phones. I want to have something different. You can customize it and first of all if the content is pure facts, for example boring

> information about where you need to be and what you still have to do and so forth, I want it to have something uplifting like the colours. That way working is a bit nicer."

In the first excerpt, one of the participants started the discussion about changing the hardware of a mobile phone. He thought that the current looks of his phone were dull and, thus, he longed for an opportunity that would distinguish his mobile phone from the others. In the latter excerpt, a participant in another focus group compared the personalisation of PCs to the personalisation of mobile phones. With the personalisation of a computer, she wanted to add fun into the serious content of work-related devices.

Achievements. The third interpretative repertoire in the discourse of self-extension is called achievements. It perceives new technology as an opportunity to increase the capabilities of a user or to bring benefits for her or him. Importantly, the interpretative repertoire can also be used to describe a user who loses or scarifies something due to the new technology. The themes of the interpretative repertoire are efficiency, control and risks.

The theme of efficiency is one of the themes that is used when the benefits of new technology for a user are discussed. New technology has a role in saving user's time and in enabling her or him to accomplish many tasks in a short period of time. With new technology, a user can benefit from being free from time and place constraints:

> "P15: A couple of weeks ago I was in Ruka and I sent a fax to a couple of factories in Germany because I needed a few work things. I was standing in the lift line and when I got up with the lift, they called from Germany and asked a few more related questions, these are quite important things and you can deal with them, it's very practical. Use the time you have. And the goods got delivered on time, before I got back to work. "

> "P13: The same goes for the e-mail. I don't, I don't call anymore. I don't like calling. I think a SMS is a lot more compact, a more compact form… Saves time."

In the first excerpt, a participant described the efficiency he has got from taking advantage of the possibilities that new technology offers. The participant explained how he had used a fax and a mobile phone to accomplish work-related tasks during his holiday. The participant said that new technology enabled him to save time. Saving time was also the theme in the latter extract, in which another participant described how email and text messages saved her time. These forms of communication had replaced the use of phone calls in her case.

Efficiency can result from a minor saving of time. For example, the participants said how efficient it is that a user can save a few seconds when browsing the Internet with a high-speed connection, searching appointments

from an electronic calendar, automatically synchronising data from a handheld device to a PC or using a complete keyboard to write text messages. These relatively small timesavings resulted in efficiency.

The theme of control was related to a user's control of time and information in both private and business life. New technology was argued to help a user to keep files and documents under control, because a user could store plenty of information into data archives and find it from the archives afterwards. A user is able to control appointments and meetings she or he has with the help of new technology:

> "P11: The calendar is terribly important to me. On top of the calendar function, it's also a tool to plan your work. My work consists of an enormous amount of details, which you have to be able to control and it works that way.
> P9: Yeah, about that calendar thing, when you are on a trip those little pieces of paper are so inconvenient, you leave them in your pockets and forget about them and something doesn't get done, so for that reason I think it's really good. You don't always have to carry pen and paper with you.
> P7: Also contact information, because you can transfer them to your desk top immediately when you get back to work."

The theme of control was used to show how a user could control her or his tasks and keep up to date with a calendar and contact details. In the excerpt above, a communicator was compared to paper and pencil methods to discuss the different means of control. In the other groups, the participants said how the continued use of new technology not only keeps users up to date, but also allows them to work flexibly. This is because they can use the same technology to plan and to accomplish several things:

> "P9: That (communicator) is like an extra memory chip for your brain…
> P7: Exactly, it saves lot of energy when you don't have to try to remember all your appointments and agreements."

New technology was argued to have the capability to function as an extension of human brains. It enables a user to control her or his life, because a user does not have to remember everything. Instead, new technology reminds and saves notes on behalf of the user. To conclude, the theme of control was used to discuss how a user can control new technology and, on the other hand, how a user's life can be controlled with the help of new technology.

The theme of risks covers dangers and uncertainty relating to the use of new technology. The user perceived risks were mainly related to the security of information and to the robustness of hardware. Especially a possibility that a user could lose information bothered many participants. They were concerned that new technology could cause such a failure that all the stored information, like

documents and calendar, would be deleted or corrupted for good. The participants asked others to give advice on how to take care of the stored information. The following excerpt is an example referring to the security of data storage:

> "P6: What if PDA gets jammed, for example all the contact information. Do you have some kind of a backup reference library, from which you retrieve or what?
> P5: You need to have a memory card in which you can do back up all file and it goes in there and it takes maybe two minutes. You have to have really bad luck if you loose everything."

Before the excerpt, the participants had discussed the development of the handheld markets. P6 asked what the risks are related to these devices. She wanted to know how likely it is that a user would lose all the information. P5 replied that it is possible to create backup files. He did not think it would be likely to lose all the information if the user regularly back-uped data. Instead, it would merely be bad luck if the information were lost with new technology. The conversation continued, as P1 wanted to give a contrary example to what P5 claimed. She explained about a man who lost important information, because new technology failed him:

> "P1: When those new phones, (name of a colleague) lost almost all those calendars and he was calling if we had a meeting or something. It happened a couple of times back then.
> P5: You would think it depends on you, your own mistake if you didn't take care of it. It's quite interesting when you discuss it with someone, if that calendar function is good or not, they almost always say, that what if the information gets lost or the phone gets lost? Like in that case you loose the information… why can't a calendar get lost as well.
> P2: And a lap top can get stolen too.
> P3: It's usual in the it-business and with these computers; you concentrate a lot more on security than you do in the traditional media. Paper files are considered safe even though it's possible for everyone to get that information. People overreact with the security that you always think what if it gets lost."

After P1 had told the others about a man who lost his electronic calendar, because the software of a new phone crashed, P5 and P3 joined the conversation. They argued that a risk to lose data is not unique for new technology only, but it can happen with more traditional methods as well. In their opinion, the risks of new technology have been overly emphasised in the media and among consumers. Unauthorised access and thefts have happened already before the time of new technology. For example, a hospital cannot guarantee that their paper-based register is absolutely protected from unauthorised access. With his

comment, P3 labels the discussion about the risks of new technology as overreacting.

Although some participants commented that risks related to the new technology are overemphasised, the theme of risks included one of the most negative meanings, which were discussed during the group interviews. Many participants were concerned about the risks of new technology, because the security of information was perceived to be an important issue.

To conclude, a self-extending user can be constructed with the interpretative repertoires of the premises for use, adjustments and achievements. Table 3 presents these interpretative repertoires, themes and their typical terms and phrases to give an overview about the contents of the discourse of self-extension. From a theoretical point of view, the discourse of self-extension can be compared to the concept of extended self, which sees that consumers regard possessions as parts of theirselves (Belk, 1988). The self-extension has been previously discussed in the context of plastic surgery (Schouten, 1991). In this research, its content is formed from the interpretative repertoires of the premises for use, adjustments and achievements.

Table 3. *The contents of the discourse of self-extension*

Metadiscourse of self-extension	Interpretative repertoires	Themes	Typical terms or phrases
	Premises for use	Inconvenience	takes too much time/effort, difficult, uncomfortable, reboot, hassle
		Convenience	handy, easy, straightforward, simple, comfortable
		Costs	price, afford, premium price for premium product, save money, different perceptions of what is expensive and what is not, expenses
	Adjustments	Changing software	install software, create and download files, create, edit or import ringing tones
		No personalisation	not in fashion anymore, costly, to save memory, not interested anymore, has not known about this possibility, not for adults, no additional software required, vanity
		Changing hardware	changeable covers, to distinguish oneself, change color of the PC and mobile phone
	Achievements	Efficiency	save time, not tied to time or place, accomplish faster
		Control	private and business life, control of time and information, flexibility, up to date, make plans, extension to brains, archive system
		Risks	crash, loss of data, totally jammed, backup files, corrupted data, drop the phone and break it, unreliable software

The interpretative repertoire of the premises for use constructs a user, who takes into account the grounds of the use of new technology. The interpretative repertoire discusses the convenience and costs that a user considers when using

new technology. The participants described new technology -related inconvenience with terms such as effort, difficulty and hassle. In comparison, convenience was derived from ease and simplicity, which made a user to perceive new technology as comfortable. The costs of adopting new technology formed an apparent premise for use. However, the participants found that the line between high and low costs is difficult to draw, because the price is relative to a user, who is estimating it.

The interpretative repertoire of adjustments constructs a user, who personalises new technology according to her or his wishes. It can be compared to the concept of personalisation. In earlier studies, personalisation has been identified as a ritual of occupying a new house (McCracken, 1988) and to belong to the definition of sacred and profane (Belk, Wallendorf, & Sherry, 1989). In this research, the interpretative repertoire of adjustments contained the themes of changing software, no personalisation and changing hardware. Changing software is related to installing new programs, downloading documents and selecting ringing tones. Changing hardware covers issues like changeable colour covers. The theme of no personalisation contradicts the two previous themes by claiming that adjustments are not needed or at least not the main purpose for a user.

The interpretative repertoire of achievements constructs a user who gains or loses something by using new technology. One of its themes is efficiency, which describes how a user could save time and accomplish tasks fast. The theme of control revealed how a user can control her or his life with new technology. The theme of risks covered the negative consequences, like the crashing of a device and loosing information. The user's drive to the systematic control information, place, time and life in general has been reported already in earlier studies. They argue that a consumer is becoming related with the same attributes as a consumer product: fastness, flexibility and efficiency (Moisander & Valtonen, 2002, p. 227; Sironen, 1989, pp. 28-29).

To summarise, the discourse of self-extension constructs a user who extends herself or himself with new technology. The discourse includes interpretative repertoires called premises for use, adjustments and achievements. These interpretative repertoires construct a user who, for example, uses new technology as an instrument, modifies it or has negative consequences due to new technology.

4.4 User and the Fundaments of a Society

The discourse of the fundaments of a society constructs are a user who is a part of a society. There are three interpretative repertoires, which all include two themes. The interpretative repertoire of technological progress is used to discuss the themes of history and scenarios. The interpretative repertoire of shared values includes the themes of collectivism and individualism. The third

interpretative repertoire is called connections to people. It has the themes mobile connection and dependence. Next, these interpretative repertoires are presented by the themes they consist of.

Technological progress. The interpretative repertoire of technological progress is the first interpretative repertoire under the discourse of the fundaments of the society. It can be used to reflect the development of new technology and to speculate its future scenarios. Thus, the themes of the interpretative repertoire are named history and scenarios.

The theme of history discusses the historical development of new technology and the user's place in it. In the interviews, the participants looked back several years and described the changes they had witnessed in the development of new technology. The history of mobile phones seemed to be familiar to many participants. They described how the old phone models used to be much bigger and heavier than those that were in the markets currently. Although the first mobile phones models were described as expensive and difficult to carry along, they were looked back at with nostalgia:

> "P12: I remember when my father bought the first one in -83, it cost 23 000. It was one of those you installed into the car.
> P13: Yes and I think we had… was it -87…
> P12: Such a brick by Mobira, you see them in museums which had the large keys on the back.
> P14: And a wire came out of it.
> P12: A real wonder from America and all.
> P16: Mobile phone into a backpack and a wire comes out."

The above extract, a participant looked back to the history of new technology. The discussion involved several participants, who shared their memories about mobile phones. They told how mobile phones used to be big and expensive. The first Mobira mobile phone had given its users a feeling of an American lifestyle. This kind of retrospective view to the history could also be used as a means to show one's long-term experience with new technology. From this point of view, remembering the historical development of new technology made the participant look experienced and knowledgeable.

Mobile phones were used for calling and for storing contact details in the early stage of their development. They did not have as advanced functionality as nowadays. When speaking about the current status of mobile phones, the participants often referred to new imaging phones with digital camera, modern design and colour screen. Handheld devices were seen to approach the functionality of computers, as they began to have complete keyboards and Windows operating systems. Alongside the technical development, the use

practices had also changed, because people could now make phone calls and receive information while travelling, for example.

Generally speaking, the development of new technology was seen to be fast and continuous. The participants looked back five to ten years and concluded that a lot had changed since then. In the early days of mobile phones, only a few users could afford to have one. Nevertheless, the Finnish people were argued to be the forerunners in the adoption of mobile phones.

The theme of scenarios was used when the participants presented estimations about the future development of new technology. New technology was assessed to develop especially regarding its functionality. For example, the memory capacity and the picture resolution were speculated to be higher and to be optimised for various kinds of users. The future scenarios were focused on the development of new technology, which has been launched lately, because it was seen as a basis for the future developments:

> "P5: I start to wait for a new model now, I suppose it might have bluetooth."

> "P19: It doesn't have a trimode… Maybe in the next model. We'll see."

Bluetooth and trimode are examples of the recent progress in new technology. These innovative features are still under development, because they have not been widely applied to new products so far. The participants saw future potential in them, but they did not present radical developments ideas about features, which would not have been public in the markets yet. The fast development of new technology also brings new demands for technological systems. The more devices and technologies there are, the more compatibility users require from them. The lack of common standards had already become a problem for some users:

> "P3: If you think that you use the calendar so that you have two calendars, in a way one common one which everybody uses and it's synchronized, well it's not possible for us because we all use different programs."

In the above excerpt, a participant explained how the lack of standards made it impossible to use a communicator with the customer management systems of the interviewed company. The participant had said earlier in the interview that he had thought about using a communicator, but it could not be connected to a computer program, which is essential for his company. Since these two systems could not be synchronised, any information could not be exchanged between them. This made the communicator useless for the company.

Shared values. The interpretative repertoire of shared values is the second interpretative repertoire under the discourse of the fundaments of a society. It discusses the fundamental values of a society and includes the themes of collectivism and individualism.

The theme of collectivism focuses on a user, who is living and acting as a part of a larger society. Thus, the individual user includes a factor of collectiveness, too. For example, the participants described how they used new technology to remember birthdays and to store pictures of the people they had met or held dear. The following excerpt describes how new technology creates togetherness:

> "P8: Bounce-ballgame is suitable for children as well. We often spend time that way, if we have to wait somewhere a few minutes, my son demands that we play."

In the excerpt, playing an electronic game was a collective hobby for the father and the son. They played it together and, by doing so, spent time together. The other participants told similar stories about playing computer games together with friends. One of the stories was about a chess game that two friends played by sending text messages to each other.

New technology offers a basis for arranging competitions between the users. Two of the participants described how they had competed in a text message writing with their younger relatives. The participants said that these younger relatives had not believed that the users of communicator would be faster in writing a text message, because they saw themselves as faster mobile users as their older relatives. To settle this, the users had organised a small-scale competition. Both participants reported that they had won with the help of a complete keyboard.

The theme of individualism looks at the rights and duties of an individual user in a society. The participants told that by keeping a phone or a computer free from games had enabled them to keep it only for their personal use, because then their children or friends were not interested in borrowing the device. The participants had noted that the line between individualism and collectivism was sometimes difficult:

> "P9: Sometimes I get questions at home, like why does it have to be locked. The password… a little bit like a function which works with the same principle as the screen saver-password. Like do you have some secrets because it has to be so locked the phone."

The user of new technology has the right not to share everything with others. On the other hand, some information should be shared with close family members according to unwritten social norms in order to avoid conflicts within a family. The theme of individualism discussed the boundary between the rights and the obligations of a user.

Connections to people. The third interpretative repertoire under the discourse of the fundaments of a society is called connections to people. It points out the user's connectedness to other people in a society. These connections are dynamic

and changing. The themes of the interpretative repertoire are called mobile connection and dependence.

The theme of mobile connection describes the variety of ways a user can be connected to other people. A user can connect through a mobile phone, a handheld device or a laptop or she or he can use email or fax or change files remotely through data call. The mobile connectedness to other people is not tied to a certain time or place:

> "P15: When you are travelling, someone can send an e-mail. If someone sends a fax you receive it here. So you are independent from location.
> P14: Exactly, you can communicate in different ways with people and business partners. Send e-mails and faxes, if something happens."

In the above extract, one of the participants described how he could use email and fax while travelling. He described how new technology enabled him to be connected to other people while he was out of the office. Another participant concluded that there are many ways to communicate with others. The participants named places and occasions where a user could be connected to others via new technology independently of the physical place. The mentioned places were work, home, summer cottage, forest and foreign countries. There were two directions in the mobile connectedness, as a user could connect to other people or they could connect to her or him.

Mobility is closely connected to the modern life in the society. It was seen to characterise life both locally and globally. With the new technology, users are able to do work while they are travelling, changing places or out of the office environment. Wireless solutions, like email, were seen as the key developments that enabled new technology users to be mobile.

The theme of dependence was used to explain how a user needs and gains guidance from other people or from manuals. A user would need guidance from others in the case she or he did not know how to operate new technology. Thereby, a user was dependent on others. Many participants reported that they had not used manuals at all or only a little, but, rather, they asked real persons for guidance:

> "P23: But training to use them… I don't know that that's available anywhere. That means that it's the responsibility of the PC support officer at the work place and he hasn't read the manuals either. He shows you some things to get started and how to put the e-mail addresses and other things, so in the end you ask your colleagues. I think that's negative… a negative thing… You don't get instructions from the phone store."

In the excerpt, a participant described how different people could give guidance about the use of new technology for an individual user. These sources were: specific training personnel, computer support advisor at working place, friends

and the personnel of the dealer. Although there were potentially many sources to ask guidance from, the participant was not satisfied with the quality of their advices. He considered this to be a bad thing. The same was noted in another excerpt:

> "P4: One phone call to your friends and the guys can tell you right off how to do this or that… But if you go and buy one and you don't know anybody who uses it, it's very difficult… Just try and go to Mäkitorppa and ask about connecting your e-mail to your computer, how you do that and… Service is so good anyway, so that… well, sure I'll come by at your house; it's only 50 euros an hour!"

Friends that are able to help with new technology were said to be valuable, because without them, the adoption of new technology could be difficult. If a user does not have friends that can help, she or he can contact the personnel of the dealer. Still, P4 had found that professional service is not the best option due to its price and the level of service. The two excerpts above have showed how an individual user may use new technology for private purposes, but still, she or he is dependent on others.

In conclusion, the interpretative repertoires of technological progress, shared values and human factors construct a user as a part of society. Table 4 presents these interpretative repertoires, their themes and typical terms and phrases to give an overview about the contents of the discourse of the fundaments of a society.

Table 4. *The contents of the discourse of the fundaments of a society*

Interpretative repertoires	**Themes**	**Typical terms or phrases**
Technological progress	History	versions, new models, development in size, price and functionality, continuous and fast development, 5-10 years ago, Mobira mobile phone, American model, Finns as forerunners, old usage practices
	Scenarios	optimisation, development of functionality, new features, standards
Shared values	Collectivism	playing together, compete, to remember other people's face or birthday
	Individualism	rights and duties of an individual, share personal information
Connections to people	Mobile connection	independent from time and place, many means of connection, movement, travelling, mobile work, wireless
	Dependence	friends, manual, personal computer support advisors, dealer, training, professional guidance

The interpretative repertoire of technological progress constructs a user who follows the development of new technology. Its themes can be used to reflect the history of the new technology development and to speculate future scenarios. The interpretative repertoire enables a user to be an active actor in the development of new technology, because she or he can take part in both looking back and also in planning the future development. The participants saw that historical developments in new technology markets during the past years related to the functionality of new technology and to the variety of the available models. The future scenarios presented somewhat linear development in the conversations of interview participants. The participants assessed that the functionality will be developed further and that the technologies will be optimised and standardised for the certain purposes of a user.

The interpretative repertoire of shared values discusses the dilemma between the themes of individualism and collectivism. The theme of collectivism includes conversations on how users can play and compete together with new technology. The theme of individualism points out how users have rights and obligations. The participants especially discussed the boundary between private and publicly shared information, but there was no clear line for individual and collective use of new technology. For example, the participants did not take up the possibility that excessive individualisation of the consumption would lead to loneliness or separation of an individual user, although this kind of research finding has been proposed in previous studies (Putnam, 2000).

The interpretative repertoire of connections to people constructs a new technology user, who is connected to other people or even dependent on them. In the theme of mobile connection, the typical terms and phrases were independency of time and place, many means of communication and wireless society. Although a user might be independent of time and place, the participants told how a user is, still, dependent on other people or on the manuals to be able to use new technology. These issues were discussed in the theme of dependence.

The importance of interpersonal communication has been stressed in the context of innovation diffusion (Kraut, Rice, Cool, & Fish, 1998). Communication can be quite intensive in groups like families (Reingen & Kernan, 1986). When a user can discuss with other people, particularly with more knowledgeable users, information can be exchanged quickly to overcome difficulties in using the technology. In contrast, when users are unable to resolve a situation alone, they may be discouraged and either limit the amount of time spent on the technology or abandon it altogether (Shih & Venkatesh, 2004). The possibility to gain guidance for the use of new technology is important, because it has been suggested that a person's ability to use a product successfully results in higher satisfaction (Downing, 1999; Kekre, Krishnan, & Srinivasan, 1995).

Overall, the discourse of the fundaments of a society discusses socially shared principles and assumptions. It constructs a user who is part of society. The interpretative repertoires of the discourse deal with technological progress, shared values and human factors. They go through the history of technological

development, compare the importance of individualism and collectivism or describe a user's connections to other people.

4.5 User in a Fragmenting Society

The discourse of a fragmenting society constructs a user, who lives in a shattered society. It includes three interpretative repertoires from which two have three themes and one has two themes. The interpretative repertoire of the position in a development covers the themes of following behind and leadership. The interpretative repertoire of the patterns of life includes the themes of increased tempo, changes in work and leisure versus work time. The third interpretative repertoire is called the human factors and it includes the themes of age, memory and gender. Next, these interpretative repertoires are presented by the themes they consist of.

The position in a development. The interpretative repertoire of the position in a development is the first interpretative repertoire under the discourse of a fragmenting society. It emphasises that users are not equal in their skills to use new technology, because the fragmentation of a society creates heterogeneous groups of people. Users differ in their positions in the development of new technology. They can be separated into groups, which consist of less experienced and expert users. The interpretative repertoire of the position in the development of new technology discusses this fragmentation. It includes two themes which are the theme of following behind and the theme of leadership.

The theme of following behind constructs a user, who has little or restricted experience about new technology and is potentially falling behind of the technological development. The lack of experience is related to the facts that not everybody owns or has possibilities to own the latest technological gadgets, has used certain devices or, simply, is interested in following the developments in the area of new technology:

> "P24: Now I couldn't anymore with this kind… I don't think I could even get used to a communicator anymore. I couldn't figure it out. Somehow so old fashioned."

In the above extract, a participant knew there are various choices available, but that she has chosen not to use the latest technology. The participant saw herself as old-fashioned and not eager to be at the edge of technological development. Another example shared the opinion that a user does not have to stand in the front line of the development:

> "P25: I dread all that kind of technical things. I don't have a drive to learn about those things."

In the excerpt, a participant explained how she did not feel drive towards using the latest technology. Earlier, she had said that she started using a computer at university, when she needed it for her studies. Before this, she had not had a need to use a computer. In conclusion, the participants often justified their position behind the leaders of the development with the lack of personal drive towards new technology and with rationalised reasons why they did not use a certain technological solutions.

The theme of leadership claims that some users have an extensive experience of new technology. These users are, therefore, experts. Due to their vast experience, the leaders of the development have a broad knowledge about technical details. The participants said that most likely the first adopters have to learn to use new technology by themselves, without external help from others. This can restrict potential users from adopting new technology.

> "P12: It was exactly the same situation in the end of the 80's when I bought my first computer, it was like some kind of a miracle machine, and what does an entrepreneur like me even do with it. And the same thing with a fax. Now I guess I should get a communicator, since I've gotten all the other equipment before others as well…
> P16: As a pioneer.
> P12: Yes! At least in that respect."

One of the participants proposed that he should act as an example for the development in his work field. He described how he has been among the leaders of technological development already earlier. He had noticed that his work field had not developed as fast as it could have. Therefore, somebody should take the first step and show others an exemplar of the leadership in the issue of taking new technology into use.

Overall, the participants described that the enthusiastic leaders of development share an interest towards the latest developments in technology. They keep in the pace of the development by actively following the trends of the new technology. They do that, because they want to do so and not because of the external demands.

The patterns of life. The second interpretative repertoire in the discourse of a fragmented society is called the patterns of life. It describes the current life in a society, where new technology has diffused and discusses the recent changes of life. The life in the modern society can be characterised with mobility, fast tempo and increased work demands.

The theme of increased tempo points out how life has become faster than ever before. The participants had noticed how they are required to be available and

connected almost anytime and anywhere. Some saw this as a good thing, but others criticised the demands to increase the tempo of their lives:

> "P15: For example in Germany and in America the company's responses to clients requests are quicker that here. The circle goes around faster than here and I think it's more polite. It would be nice if it would work quicker here as well. It's appalling if you ask something and then you don't here anything from them. You've send e-mail twice and two weeks have passed and then some guy comes and asks what you actually meant. Another week goes by. You need to take care of things fast and technique is a part of it.
> P13: Well that's what I meant with the hurry…It doesn't have to get that busy. In full stress every evening…"

In the extract, P15 spoke for the increased tempo of business life. He complained that the Finnish people are not as polite as people in foreign countries, because they are not as eager to answer emails quickly. P15 considered that it is a norm that the users of new technology should react to the inquiries of other people as soon as possible. This argument made it look like the new technology would be inherently built into the life of the users in order to increase its tempo. However, P13 was against this view. She rather took things easily and relaxed, without "having a red face". She questioned the unwritten social norm that a user should answer a mobile phone or emails as soon as possible.

The theme of changes in work covers the changes in the user's working life after new technology has been introduced. The working life was seen to have changed quite a lot during the last 20 years. Nowadays, new technology was seen as an essential part of everyday life. Because of the technological solutions, a user is not tied to an office anymore, but can work remotely. The participants associated the demands of modern work to the use of email and electronic systems:

> "P3: Well this wasn't a communicator rather than technology in general. That it does kind of make certain things easier. And information transfer… okay, on one hand they say that when the information increases also problems increase, but then on the other hand you also get more information. You can receive a lot more information in a shorter time to base your decisions on. So working has changed a lot in the last 20 years because of technology."

The changed demands of work require that a user gains more and more information in a short period of time. The participants thought that new technology could help in this, although difficulties were also identified, as discussed in the previous theme of increased tempo. Nevertheless, the use of new technology was perceived to be so important for the working life that it should be taken advantage of rather than be totally rejected.

The theme of leisure versus work time is concerned about the boundary between leisure and work time, because this boundary is blurred in a fragmented society.

For example, the user of new technology has an access to work-related information from her or his home and, thus, can accomplish work-related tasks during leisure time, too. The importance of separating leisure and work time was both agreed and disagreed on in the focus groups:

> "P16: Doesn't it disturb vacation time if you answer e-mails on vacation?
> P15: Yes, of course, but it's also true that when you go back to work after vacation you have messages all over and you have to deal with 100 phone calls and messages, which you could've dealt with during your vacation in peace."

> "P8: Was it in an advertisement for lap tops or where… that this is how you work at the summer cottage. So there's a contradiction, that at the summer cottage…
> P7: … and who wants to work there…
> P8: that if you relax there and forget about work…
> P9: Then there are people who can't go to the cottage because they have so much work. So which is better, that you work at the cottage or that you don't go there at all? I know a couple of entrepreneurs who can't take any vacation."

Some of the participants saw that work and leisure time are mixed together and some saw that they are separate things. This division of views evoked discussion on whether a user should work during holiday in order to decrease the workload that will otherwise emerge during the time off, or whether a user should enjoy the holiday and take care of the accumulated work after the holiday. The dilemma between work and leisure made some of the participants state that new technology does not make a user free, but, instead, ties her or him into a continuous flow of work and decreases leisure time.

The human factors. The third interpretative repertoire in the discourse of a fragmenting society is called human factors. It discusses the innate characteristics of the users. The related themes that were mentioned in the interviews were age, memory and gender.

The theme of age focuses on the age differences of new technology users. The participants described how elderly users have different needs for new technology than younger users. For example, the participants said that the elderly have needs for an external, electronic aid so that they could remember all the things they are supposed to remember. They also required a clear, large screen to see well enough. On the other hand, the younger generation was seen to be able to adopt new technology fast and to be skilful users of it. All in all, people at different ages were guessed to use new technology differently:

> "P17: Nobody thinks it's necessary to take photos and send them with the phone. It's not a need yet. But maybe kids who see these things around all the time, for them it's an every day function. You need to have… I'm in a great party here…

> I have to send a photo to my friends to show them what a good time I'm having."
>
> "P12: Actually use… my needs have changed, so that they are now closer to that phone. That it might have a lot of functions that I need. It would've been a different story 10 years ago. It felt just as remote then as it feels to the kids nowadays. That… my needs and the phone wouldn't have met."

In the above excerpts, the different use practices and needs of older and younger users were compared. The participants mentioned that adults might not see a reason for taking digital pictures, whereas teenagers would like the possibility to share their moments with friends via multimedia messages. In the latter excerpt, one of the participants explained how he had noticed a change in the needs over the years. He had started to need technology that he had not needed earlier. The participant suspected that the issue was the same with the current youth. They could not yet understand all the needs they would have in the future.

The theme of memory included versatile notions about the human capability to remember. It discussed the differences between users in this matter. In addition to age, also user's memory capacity placed requirements for new technology:

> "P8: Different people have a different ability to remember numbers. I know people who can memorize the phone book if they want. My memory is not so good in that way."

Some people were seen to have a better memory than others. The use of an electronic calendar was excused with a poor memory of a user or with the large amount of tasks she or he has to remember. The participants defended their use of an electronic calendar by saying that otherwise they could not remember all the meetings. Some said that they needed the calendar especially for business purposes, even though they were able to remember their free time appointments without it. New technology was argued to help its users to remember appointments and meetings. For example, an electronic calendar or a mobile phone could store the agreed engagements of a user and remind about these tasks at a defined time.

The theme of gender was used to discuss the differences between the male and female users of new technology. The gender was perceived as a factor that influences the use of new technology. In one of the groups, a male participant commented that women are better to remember all the engagements they have agreed to do during the leisure time. In comparison, he argued that men do not remember these kinds of tasks as well:

> "P3: There's that difference as well that I'm a man. Men don't remember this kind of free time things at all. I've noticed that there's a clear difference…
> P1: That's probably true, I've noticed it too."

Before the excerpt, the group had pondered whether an electronic calendar would be needed or not. P1 had said that she has a lot of work-related tasks to remember, but she manages without an electronic calendar during her leisure time. P3 replied that he also uses the electronic calendar during his leisure time. As a reason for this, he proposed that men don't remember their leisure time engagements as well as women do. He emphasised that there is a clear difference between the genders in this issue. P1 agreed.

Apart from different needs, the male and female users were seen to use new technology differently. A few participants suggested that it would be easier for the women to carry a relative large piece of technical equipment, because they have handbags. Carrying a bag was claimed to be more natural for the women and, thus, carrying new technology would not be a problem for them:

> "P2: This maybe a silly question, but wouldn't you think that it would be easier to carry in a handbag?
> P3: For women, sure, that's what I was thinking.
> P6: Yeah, but not… certain handbags… Of course in business use.
> P2: But if you had the one you use when you go out, then it would fit into a bar handbag?
> P6: Well actually at work I only use a little bit bigger bag where a calendar fits into. I don't necessarily carry a handbag; I don't have a large lipstick collection or anything, so I don't necessarily need a handbag otherwise. So I would actually have to use the smaller phone quite a lot."

Above, the men were interested in hearing whether women would find it easy to carry a large mobile phone in their handbags. The men also questioned the use of different handbags at work and in leisure time. A female participant answered that she carried a handbag at work, but that did not help her to solve the problem of carrying new technology during the free time. It should be noted that the relatively large size of new technology was here, and in many other excerpts, accepted for work context, but not accepted for free time context. In addition to handbags, the participants discussed whether the size of male and female hands and fingers would affect the usability of technical devices. Both genders were seen to have advantages and disadvantages.

To summarise, the complex processes of technological development shape and are shaped by everyday lives and consumption practices (Thomson, 1996). The choice of new technology solutions is vast, contributing to the fragmentation of society. In a fragmented society, consumers live in two parallel worlds: The consumer is both situated in the physical reality and in the virtual reality of webs and mass media (Uusitalo, 2002, p. 213). The same issues were reflected in the discourse of a fragmenting society. The interpretative repertoires of the position in a development, the patterns of life and the human factors construct a user in a fragmenting society. Table 5 includes the themes and typical terms of these

interpretative repertoires to give an overview about the contents of the discourse of a fragmenting society.

Table 5. *The contents of the discourse of a fragmenting society*

Metadiscourse of the fragmenting society	Interpretative repertoires	Themes	Typical terms or phrases
	Position in a development	Following behind	lack of usage experience, does not want new technology, is not interested in development, old-fashioned
		Leadership	innovator, taking the first step, advance the work field, exemplar, interested in the latest developments, know the details, vast experience
	Patterns of life	Increased tempo	self-caused hurry, norm to answer as soon as possible, Finns slower than people in other countries, work never ends
		Changes in work	demands of modern life, remote work, take advantage of new technology
		Leisure versus work time	blurred boundary of work and leisure, working at free time and on holidays
	Human factors	Age	older and younger generations, differences in needs and usage practices, fastness of adoption and development of skills
		Memory	people with good and bad memory, amount of tasks to remember, new technology as reminder and information keeper
		Gender	size of hand, handbags, differences in needs

The interpretative repertoire of the position in development constructs a user who can either follow the latest developments in the area of new technology or stay behind the edge of the development. Staying behind is not necessarily a negative issue for an individual user, because it can be a deliberate strategy for someone who does not want to be among the first users to test new solutions. Other reasons for staying behind were the lack of use experience and interest. In comparison, the typical terms and phrases in the theme of leadership were innovator, taking the first steps and advancing the work field.

The participants defined the leaders of development to have vast experience and knowledge of many technical details. Understanding the fragmentation in a user's position in the development of new technology is important, because the complexity of technology suggests that user knowledge plays an important role in shaping the use (Alba & Hutchinson, 1987; Norman, 1999). User knowledge can come from accumulated experience, which provides users with the skills they need to recognize situations in which the technology can be applied and how to apply it (Shih & Venkatesh, 2004).

The interpretative repertoire of the patterns of life constructs a user, who follows some predictable ways in a fragmented society. These ways are discussed under the themes of increased tempo, changes in work and leisure

versus work time. The theme of increased tempo notices how the user of new technology seems to be captured in an endless chain of rush. A user is demanded to speed up the pace of doing work. There are changes in the work life due to the demands of modern life. For example, users are able to work remotely.

The participants had witnessed how the boundaries between the work and leisure time are blurring because of the new technology. For instance, users are urged to work from home and during holidays. Other Finnish studies about the consumption in the context of new technology agree that the boundaries of work and leisure are blurring and that the tempo of the user's life has increased due the multitasking the new technology has enabled (Kopomaa, 2000, p. 48; Moisander & Valtonen, 2002, p. 228, Valtonen 2004).

The interpretative repertoire of the human factors constructs a user, who has innate human characteristics. These characteristics were discussed under the themes of age, memory and gender. The participants argued that the elderly and the young had differences in their needs and use practices and in their ability to adopt new technologies. Similarly, the participants said that the memory capacity of an individual user caused differences.

In the theme of gender, the differences between female and male users were discussed. The particular issues were the size of a hand, the use of a handbag and the differences in needs. Overall, the gender issues related to new technology have been a focus in many cultural studies. The results have indicated that information technology (Vehviläinen, 1997), VCR (Lull, 1988) and telephone (Rakow, 1992) are masculine. In this research, the issue of masculinity and femininity was seen to fragment the society, because it resulted in the difference between the men and women users. The gender was not argued to discriminate either gender in particular in relation to new technology use. On the other hand, the discussion separating female and male users both maintained and constructed gender differences and hierarchies.

To conclude, the discourse of a fragmenting society pays attention to changes in society and in human life. It constructs a user who acts in a fragmenting society. The interpretative repertoires of the discourse pay attention to a user's position in technological development and discuss human factors and patterns of life.

4.6 Conclusions of the User Construction

To validate the interpretations in a systematic manner, the amount of coded passages and the appearance of each theme in the different focus groups were counted. Then, the amount of coding was gathered into one table to enable a closer examination of the identified discursive practices and to deepen the interpretations. Although the research does not aim at quantitative explanation, the numbers are included here to validate the data analysis and to serve as an evidence of an overall structure. This should increase the trustworthiness of the

findings, as it decreases the common concern that a researcher selects just the extracts that support her or his arguments.

However, it must be noted that the absolute amount of coded passages does not tell the whole truth about the popularity of each theme or how dominant they are, because some of the themes include several shorter passages, whereas some themes include fewer passages, but the passages are longer. In addition, the mere amount of codings is not a measure of their trustworthiness, because the disussion in different groups followed various paths. Still, because a passage is signed to one code only, the amount of coding can give some indication about the overall structure of the research data. It also can indicate the popularity of each discourse in among consumers.

Table 6 shows the amounts. First, the names of the discourses and interpretative repertoires are listed. After them, each of the included themes is presented on their own lines. These are then followed by remarks on the number of interviews the interpretative repertoires and themes appeared in. The interviews were numbered in the order they were conducted. Also, the table includes information about the number of coded passages for each theme.

Overall, the consideration of the coding amounts strengthened the analysis, because it assured the researcher of the appearance of the themes, interpretative repertoires and discourse throughout the focus groups. As the table shows, the analysed issues were brought up in several groups. The notion further strengthens the assumption that the identified issues were culturally and socially shared discursive practices, because they were used across the interviews and interview participants. Further, the splitting of discourses into themes advanced the data analysis, because the identification of the discourses was possible after identification of its smaller fragments, which were interpretative repertoires and themes. The systematic coding of themes was needed in the data analysis. It importantly showed that the examination of interpretative repertoires and discourses was a task that must be done in a high level of abstraction. The careful examination of the coding amount validated the interpretation and made it possible to present the interpretations systematically. The analytical and coherent approach to the details of data analysis also gives transparency to the process of data analysis.

Table 6. *The appearance of themes in four discourses*

	Appeared in interviews	*Passages Coded*
Experience		
Affect		**32**
Frustration	1, 2, 3, 4, 5	16
Pleasure	1, 2, 3, 4, 5	16
Preference		**59**
Dislike	1, 2, 3, 4, 5	26
Liking	1, 2, 3, 4, 5	33
Involvement		**49**
Abandonment	1, 2, 3, 4, 5	15
Commitment	1, 2, 3, 4, 5	12
Addiction	1, 4, 5	9
Lacking interest	1, 2, 4, 5	13
Self-extension		
Premises for use		**56**
Inconvenience	1, 2, 3, 4, 5	18
Convenience	1, 2, 3, 4, 5	23
Costs	1, 2, 3, 4, 5	15
Adjustments		**20**
Changing software	1, 3, 4, 5	12
No personalisation	1, 3, 4	6
Changing hardware	3, 4, 5	4
Achievements		**40**
Efficiency	1, 2, 3, 4, 5	12
Control	1, 3, 4, 5	13
Risks	1, 3, 4, 5	15
Fundaments of a society		
Technological progress		**26**
History	1, 2, 3, 4, 5	12
Scenarios	1, 2, 3, 4, 5	13
Shared values		**10**
Collectivism	4, 5	6
Individualism	3, 4, 5	4
Connections to people		**31**
Mobile connection	1, 2, 3, 4	17
Dependence	1, 3, 4, 5	14
Fragmenting society		
Position in a development		**35**
Following behind	1, 2, 3, 4, 5	18
Leadership	1, 2, 3, 4, 5	17
Patterns of life		**30**
Increased tempo	1, 2, 3, 4, 5	10
Changes in work	2, 3, 4, 5	12
Leisure versus work time	1, 2, 3, 4, 5	8
Human factors		**28**
Age	2, 3, 5	7
Memory	1, 4, 5	9
Gender	1,2, 5	12

When comparing the discourses, it can be seen that the discourses of experience and self-extension include the highest number of coded passages. Especially the themes of preferences and premises for use were often referred themes in the interviews. In comparison, the discourses of the fundaments of a society and a fragmenting society have fewer coded passages than two other discourses. Especially the theme of shared values has only a few coded passages. This can implicate that the participants were more comfortable or accustomed to discuss an individual user than to reflect the user as a part of a larger society.

When comparing the appearance of all the themes and interpretative repertoires, the table shows that they were brought up in more than one group. However, there were some differences between the groups. The second group discussed the least amount of themes. The group consisted of participants who were relatives to each other. Since this particular interview was not the shortest in time, the lack of some themes cannot be explained with a short interview time. Instead, it could be understood in the light that the members of a family might have shared a somewhat similar view on new technology and that explains why they did not bring up all the contrasting perspectives into discussion.

When looking at the amount of coding of individual themes, it can be seen that the themes in the interpretative repertoire of shared values were not discussed in length. This might be understood in the light that the participants took these values for granted and did not need to argue about them. Societal issues are important, because new technology plays an important role not just within the home, but in connecting consumers to the world beyond and mediating the local and the global (Mackay, 1997, p. 288).

Although values and norms can be socially shared, it is the individual consumer who considers them and makes the decisions. This can create a dilemma between personal and social goals (Uusitalo, 2002, p. 214). This dilemma was discussed with the interpretative repertoires of the fundaments of society and a fragmenting society. With these interpretative repertoires, the participants contrasted, for example, individualism and collectivism, connectedness to other people and dependence on other people, and the blurring boundary between the leisure and work time.

Work on materialism suggests that attaching meaning to acquiring and possessing things may lead people to be more self-centred and less concerned with relationships with others (Holt, 1995; Richins & Dawson, 1992). This notion was not supported in the findings, as the participants told they appreciated the collective use of new technology and had noted that they are almost always connected to other people and, sometimes, even dependent on them.

5 SOCIAL DISTINCTION OF A USER

5.1 Introduction to Social Distinction

In the everyday life we tend to discriminate consumers based on their possessions or behavior (Holt, 1997). This is due to normative expectations of our culture and of different consumer groups within it (Goffman, 1963). However, individual consumers do not belong to a single defining identity of class (Holt, 1997). Rather, they are fragmented across contextually specific discourses (Thompson, 2003, p. 85).

The notion of difference creates distinction. Social distinction pays attention to who one is or wants to be and whom or what one wants to be associated with. It creates the sense of who and what is rightly included in and excluded from certain consumer classifications. Social distinction is functional, social and moral by nature. It involves not only appearance of new distinctions and formation of new boundaries, but also transparency of this process, reflexivity and awareness of a conventional and social character of the boundary-forming processes. (Bourdieu, 1984) From the perspective of social distinction, consumption becomes increasingly implicated in the processes of social ordering, in which consumers act as producers of social distinctions. The worldview of social constructionism argues that such social ordering can be done discursively.

Social meanings are important because they serve to represent and distinguish social categories (Holt, 1997, p. 328). Collectivities are involved in consumption, as the social meanings of consumption can mark collectivity (Veblen [1899], 1994). The communal aspect of consumption is important, because many traditional class distinctions have blurred, but still, the consumers are looking for belonging to certain groups (Uusitalo, 2002, p. 221). Consumers define group affiliations not only based on what they desire and like, but also on what they dislike.

Social distinction was one of the five identified discourses in this research. Figure 3 summarises the identified interpretative repertoires that can be used to construct the user of new technology with the discourse of social distinction. In the figure, the themes of the interpretative repertoires are summarised under topics to clarify the contents of each interpretative repertoire. Hence, the highest hierarchical structure is an interpretative repertoire. Each interpretative repertoire is divided into two main topics that have two or three themes. Themes represent issues that are characteristic to an interpretative repertoire.

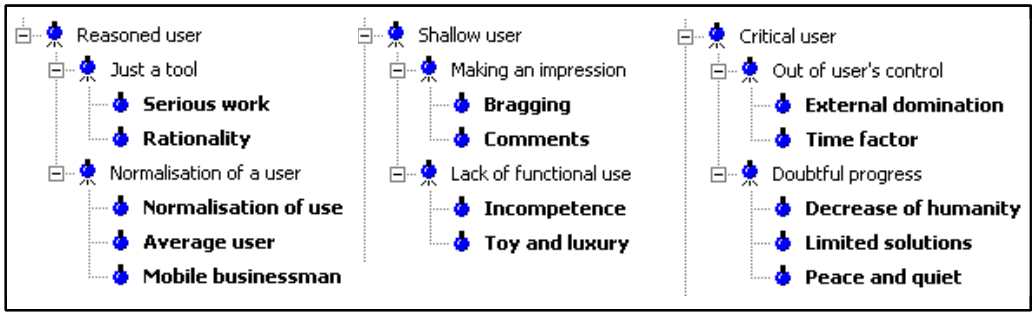

Figure 2. *The identified interpretative repertoires, topics and themes in the discourse of social distinction*

There are three interpretative repertoires in the discourse of social distinction. They are the interpretative repertoires of reasoned, shallow and critical user. The following sub-chapters go through the contents and construction of the discourse of social distinction. The identified interpretative repertoires are portrayed one at a time, by presenting the topics and themes it consists of. In addition, the discursive functions are discussed to show how the interpretative repertoires construct certain kinds of users of new technology.

An underlying assumption is that in modern societies consumer's need for social distinction is satisfied through consumption and display. It can be argued that consumption reflects underlying structures of taste (Bourdieu, 1984). Thus, consumption will have an important role in asserting or challenging rank and status (Holt, 1998). However, it should be noted that the starting point in this research was that social relationships are cultural and discursive rather than economic.

5.2 Interpretative Repertoire of a Reasoned User

The interpretative repertoire of a reasoned user constructs a user who has justified reasons to use new technology. The interpretative repertoire discusses the use of new technology as a tool and normalises a user. It includes two topics that are called just a tool and normalisation of a user.

5.2.1 Just a tool

The topic of just a tool includes the themes of serious work and rationality. Throughout the focus groups, the participants presented new technology with a metaphor of a tool, with which a user could accomplish various goal-oriented tasks. Often, the use of new technology took place in a working situation.

Serious work. The theme of serious work emphasised that new technology should not be merely a toy for its users. Instead of entertainment, the user should take a full advantage of the useful functions of new technology. The participants provided different reasons and justifications why new technology would and should be used for serious work. One of the most referred to reasons was the distinction between work and leisure. The participants said they associated the use of new technology with work-related issues and argued that, therefore, a user would more likely have new technology to do serious tasks with than to play with. Another reason was that many innovative products and services are so expensive that a user would not buy them, unless they were meant for valuable tasks. Both reasons are mentioned in the following extracts:

> ”P12: That’s a tool for work purposes only, so a person who needs it at work, for him it’s an excellent tool.”

> “P21: Nowadays I do notice if some student has one (communicator).
> P22: That a student has one?
> P21: They probably also work already and study on the side. So that they really need one. I doubt a student would get one if he didn’t really need one.”

In the first extract, one of the participants emphasised the meaning of a tool. In the latter extract, another participant said that she had noted that some university students have a communicator. She said that the majority of them have mobile phones, but that she sometimes noted that some students had a communicator. She guessed that this could be related with special tasks they had. P22 wanted to confirm whether students really had communicators. P21 argued that students could have communicators, if they had a good reason for owning those devices. One reason could be that a student works alongside studies. At the end of the extract, P21 remarked that a student would not purchase an expensive device, if she or he did not really need it.

The theme of serious work included argumentation whether entertaining features could function as a tool, too. A few participants concluded that although some new solutions could be entertaining, they should also be beneficial at the same time:

> “P7: You can’t buy one just for fun, as a toy. You need to have a clear function for it.”

> “P21: Probably if you have that kind of a communicator it in a meeting or some other situation… and you can make notes with it, it won’t be considered strange like it might be if you had a normal mobile phone.
> P22: It’s an instrument and a tool.”

In the first extract, a participant suggested that hedonic ideas cannot be the main reason for a purchase, but instead, rational needs should form the main grounds to become a user. In the latter extract, a participant proposed that a

communicator has its own role. Another participant joined discussion and gave an example of a specific situation, where a communicator had a different role than a mobile phone. Together, the participants agreed that in a meeting situation, a communicator has a meaning of a tool that is for serious work. They said that compared with a user of a mobile phone, a user of a communicator could be more easily accepted in a working situation.

To summarise, despite the fact that new technology can bring pleasure for its user, the participants did not argue that the possibility to use new technology for enjoyment would be valued to be the main reason to use relatively expensive and innovative products and services. Instead, having new technology for serious reasons instead of fun was more acceptable.

Rationality. Potential of a user using new technology as a tool and potential of a user using new technology for status reasons were combined in the theme of rationality. It claims that a user does not or should not use new technology just to gain status:

> "P23: If you carry that around for a week you won't brag about it! It's just not practical.
> P24: I could be that person that I would carry it around for the status, but still, if it was of no use to me, I wouldn't do it."

First, P23 claimed that nobody would like to carry a heavy product just for status reasons. P24 agreed, but she acknowledged that she would be a user for status reasons, too. However, a mere status reason would not be enough for her to carry a mobile phone around. She said she would need a more rational, practical reason to be a user. She later told that a practical reason could be, for example, gaining benefits or making everyday life easier. The understatement of a user's status value was shown in several other quotations:

> "P15: Well of course it gives a certain image of you if you sit on a train and open it and start to write. Of course people start to look and think that you have something better. A normal citizen. But for a personal use it's a fine piece of equipment. It's a good tool, you can't underestimate that."

In the above quotation, the mixing of status and tool perspectives was evident. A participant remarked that a user could have new technology as a tool, but the same device could also be perceived as a status symbol. The participant admitted that a user could attract attention, but he tried to move the emphasis away from a user's status aspects and towards the construction of a user, who uses new technology as a tool. The participant emphasised the meaning of new technology as a tool by saying that no one should underestimate this aspect. As presented in the next extract, this was not the only means to decrease the status value of new technology for its user:

> "P16: There are no changeable colour covers for it, because we can see that people who use it for work are not necessarily interested in that sort of thing, it's more for work and not something which is emotionally charged and which you use for self expression."

The above quoted participant had agreed earlier in the interview that mobile phones have status value. He said that the users of new technology could distinguish themselves from others when using personalised solutions. He pointed out that this was not, however, an important aspect in the case of a communicator, because he did not define it to be a personal device. The participant said that unlike mobile phones, a communicator was not such a personal choice for its user. Thus, a communicator would not tell as much about its user as a mobile phone would. Other focus groups also referred to the dilemma between tool and status potential:

> "P9: I don't think this is a very sexy equipment to be used in the public.
> P10: At least anymore. I think it was earlier.
> P7: The status factor has disappeared. But at least for those who actually use it, it's clearly a tool. In a way the time when it was about status… it is not the thing anymore and there are all kinds of gadgets you can choose from, so it (communicator) is not anymore…
> P11: ..ones that have a higher status.
> P8: And also the fact that there are quite a few of them already among the people I know. As tools. Not as a status gadget.
> P7: Yeah, maybe this status thing is starting to be more about the tablet pc's and that sort of things, if you need to emphasize the fact how progressive you are."

The interviewer had asked earlier, whether the participants had received comments about their use of new technology. P9 answered that a communicator was not a status symbol anymore. P10 agreed that its value in this matter was not as great as it used to be. P7 joined the discussion by saying that a communicator is a tool for its users, not a status object. A bit later, he continued by saying that many technological devices have lost their status values, because there were all kinds of devices available, like tablet PCs. Similarly with this extract the following one defines new technology as a work-related tool, not status-related:

> "P23: All purchases and investments work that way, that if someone has earned it they get rewarded and it can be a day off or a raise or something…
> P24: And at Nokia also, the bosses get bonuses and they… the various workers lower on the ladder, they don't get any bonuses. The ones who perform they get rewarded and the ones who can't or are not allowed to do, well, it's…
> P23: It's quite natural. It's exactly like a computer or something else."

A participant reasoned that companies give new devices to employees who have earned credit in their jobs. The employer-paid devices were, therefore, like bonuses. The participant disagreed that personal emotion, like greed, would be

involved in the use of these devices. Another participant joined the conversation by saying that new technology can be perceived as a bonus, because an employer can award those who have earned it. Then, P23 took a turn again and said that this makes new technology natural, because it is bought to those who need it and who have earned it. To summarise, the theme suggested that users do not use new technology for status reasons.

5.2.2 Normalisation of a User

The topic of normalisation of a user has three themes that are called normalisation of a user, average user and mobile businessman. The themes construct a user, who is not so different from the other people in society, but belongs to a mass of consumers.

Normalisation of use. The theme of normalisation of use makes the use of latest technology normal by integrating it into everyday practices of a user. The participants discussed, for example, using new technology for the same purposes as they used to have paper calendars for. The following extract normalises a user by comparing the use of new technology with traditional methods and by emphasising that the purpose is not to brag. Bragging is a related theme here, because the participants had talked about users who brag with new technology before the extract:

> "P23: When we had a press conference, also then, people usually write down notes on a piece of paper.
> P24: Yes. :
> P23: I wrote on the machine and I had it open so I even said that I'm not trying to show off in any way!"

At the beginning of the extract, a participant wanted to tell a story how he had used new technology in the everyday life at his work place, but in a manner that had required explanations for other people. The participant described how he had replaced paper-based notes with an electronic notebook, when he gave a presentation for the press. At this point, another participant interrupted discussion and asked how this could be done in practice. After explaining the technical details, P23 continued to explain how he had used new technology to remember his speech for the press. He told his excuse for the use of a communicator was that the press conference was related to an up-coming exhibition of information technology. Thus, he wanted to demonstrate various possibilities that were available in the area of information technology. He had explained his use of new technology at the beginning of his presentation to make it clear that he did not use the latest technology for bragging.

Another example of normalisation of use is presented next. In the following extract, two participants discuss whether an electronic calendar is a normal or a

special feature for a mobile phone. The issue of an electronic calendar had come up earlier in the discussion:

> "P22: Almost every phone has a calendar nowadays.
> P19: Well, yeah."

One of the participants pointed out that almost every mobile phone has an electronic calendar. Therefore, he claimed that it is not a special, but a normal feature. Another participant agreed. Hence, both participants normalised the use of an electronic calendar that is one of the solutions of new technology. Apart from single solutions or features, normalisation can also be related to time and context:

> "P3: Probably in the beginning when you took it (communicator) out at the airport and around, well people did look. But not anymore. In my opinion it is starting to be so common, especially here in Finland and actually abroad as well.
> P1: Yeah, abroad as well.
> P5: It's difficult for us to estimate, since for us it has been so self-evident already for a long time. It makes a big difference, if you yourselves are in the it-business, so in your circles people have more of them.
> P3: I'm sure that's true."

Above, one of the participants told that a communicator had become normal over the years. He grounded the notion by sharing experiences from previous years, when a communicator had attracted more attention than nowadays. Other participants agreed with the conclusion that a communicator is a common product in Finland and abroad. At the end of the extract, P3 commented P5's notion about a working context. He said that communicators could be more common in his work field, because he worked with partners that were involved with information technology. This way, he normalised the use of new technology in a specialised work field.

To conclude the theme of normalisation of use, normalisation can cover single features or solutions of new technology or consumers can normalise the use of new technology is special places, occasions or contexts. Often, the participants normalised the use by integrating it into everyday practices of a user.

An average user. The theme of an average user normalises the user of new technology. The participants defined an average user as someone who is an individual, but still, part of a larger mass of consumers. Many of the participants defined themselves as average users. They described that their use practices included the basic use of new technology and that they were not in the leading or in the last edge of technological development. Since they argued this behaviour was typical of an average user, it was claimed to be normal:

> "P24: It's not really for the average consumer.
> P23: What is average?

> P24: Average consumer is the kind who sends SMS messages and calls. I think those are the basic functions."

In the above extract, a participant described how an average user needs only basic functions of a mobile phone. She defined the basic functions to be, for example, text messages, phone calls, call log and reminder. The definition excluded, for example, games, digital camera and mobile Internet from the requirement list of a normal user of mobile phones. However, a different characterization of an average user was offered later in the same interview and also in other groups:

> "P26: In your immediate surroundings you start to see, if you use this term 'average'
> P25: Yes
> P26: …people have a communicator."

> "P21: Any of your colleagues have one?
> P22: Yes, my colleagues have, two or three even…
> Interviewer: What do they use it for?
> P22: For the same things as I use it for. Making calls, the calendar and… so in our firm you do find them. So I'm not the only one."

In the extracts, a user of a communicator was normalised, although the participants shared the opinion that there were fewer communicator users than mobile phone users. The participants were able to normalise a user of a communicator, as they illustrated that their acquaintances, friends or colleagues had communicators. Since the participants knew these users personally, the users were considered to be normal consumers and not to differ from other consumers significantly. In the latter extract, a participant added that his colleagues used communicators for the same purposes as he did. The claim constructed the speaker as an average user.

To conclude the theme of an average user, an average user is someone who does not significantly differ from the mass of consumers. The participants defined the characteristics of an average user as contradictory. Some participants told that an average user would be satisfied with the basic functionality of the current technology and would not long for additional or new features. Some participants said that especially a user who has the latest technology is an average user, because new technology is so common.

A mobile businessman. The participants often evaluated mobile businessmen to be suitable and probable users of new technology. The word businessman appeared across the interviews, when the participants defined the target group of the newest technical devices, like a communicator. A communicator was a tool that mobile businessmen needed in their jobs. The following extract shows how the definition of a mobile businessman was developed between four participants in one group:

"P25: Many sales people, I mean ones who…
P23: Ones who travel.
P25: Around, yeah."

"P26: It is a machine for… I mean for…
P24: business people, yes that's right.
P26: …peoples' machine… yes."

In the extract, P25 and P23 characterized a user of a communicator. Together, they defined a user to be a mobile businessman. Later in the same group, P26 and P24 discussed the characterization again and resulted in the same definition as the other two participants before them. Before the latter extract, P26 was saying how she had seen a communicator for the first time some years ago. At that time, she had liked the idea of a mini-computer. However, she had not bought the device for herself. She mentioned that one reason was the price and that the other reason was that the device was not meant for her. At this point, P24 joined the discussion and proposed that a communicator is aimed at businessmen. P26 agreed, as shown in the extract.

The definition of a user is also evident in the following extract. At first, a user is defined with the term "businessman". The definition is then changed to an entrepreneur and then to a person, who uses new technology because of her or his work:

"P12: So it still has that businessman image, that it's only used by them, only for work.
Interviewer: How about you, P13, what are your perceptions about people who use the communicator?
P13: I can't really imagine it in other use than in work related. So it doesn't…
P12: Business is such an ugly word…
P13: W… entrepreneurs… let's say entrepreneurs…
P12: In work use!
P13: ...Or work use or in general…or other times of course than entrepreneurs… Business is Business… Mostly for work… It's still quite uncommon in private life."

In the extract, one of the participants mentioned that he associated the use of new technology with working and a businessman. The second speaker, JoP26, associated new technology to business life, too. However, P12 interrupted JoP26, because he disagreed with the word business. For him, the term business included some negative associations. JoP26 redefined users to be entrepreneurs. P12 took part again to add that he meant work-related use in general. JoP26 agreed that a user might need new technology for work. Both participants emphasised the distinction between work and private life, as shown in the extract.

To summarise, the theme of a mobile businessman constructed a reasoned user who mainly uses new technology for work-related tasks. The theme

characterised a user as a businessman and someone who travels a lot and, therefore, needs capabilities that the wireless technology can offer.

5.2.3 Overview of a Reasoned User

The interpretative repertoire of a reasoned user consists of two topics, which can be divided into five themes. Table 7 draws together the construction of a reasoned user by presenting these topics and themes. Typical terms and phrases of each theme are summarised in the table to give an overview of the contents of the interpretative repertoire of a reasoned user.

Table 7. *The contents of the interpretative repertoire of a reasoned user*

Interpretative repertoire of a reasoned user	**Topics**	**Themes**	**Typical terms or phrases**
	Just a tool	Serious work	Usefullness and not games, rational reasons, informative services, too expesive toy, real needs, practical usage, not for pleasure, calculated acquisition
		Rationality	Too heavy to carry on for bragging, not purchased solely for status, bonus from work well done, not for personal self-expression, not a sexy instrument, does not show innovativeness
	Normalisation of a user	Normalisation of use	Only usefulness counts, showing exemplar to others, mundane product, common features, variety of products, normal in Finland and abroad and in IT field
		Avarage user	Basic functions, majority of consumers, ordinary, many have new technology
		Mobile businessman	Business people, travelling, entrepreneur, project manager, airport, wireless usage, dynamic

The topic of just a tool includes two themes that are called serious work and rationality. Together, these themes construct a user for whom new technology is mainly a tool. The participants used the theme of serious work to contrast the hedonic needs with practical needs. They argued that a user's interests should be based on rational reasons and not on desires to have fun and entertainment. Since new products and services are often expensive, the participants claimed that they would be too expensive toys for users. Rather, technological solutions were more likely to be calculated acquisitions.

In the theme of rationality, a user was argued to use new technology because of other than just for fun or status reasons. Although the possibility to increase

status with new technology was acknowledged in the theme, the participants pointed out that new technology should not be purchased or used solely for status reasons. They explained that new technology could be received as a bonus from a job well done and, therefore, technical devices do not necessarily tell about the personal characteristics of a user. In addition, some participants questioned the whole status value of new technology, as they claimed that innovative products go out of fashion fast.

The topic of normalisation of a user includes three themes that are called normalisation of use, average user and mobile businessman. In the theme of normalisation of the use, the emphasis is on usefulness and on common features of a mundane product. A variety of innovative products were described to be normal in Finland and at work fields that relate to new technology. The participants said that an average user uses the basic functions of new technology and represents the majority of consumers. Since many consumers are already users of new technology, being a user was an ordinary issue. However, the participants often referred to one definition that especially characterised users of new technology. This was the group of businessmen, who travelled a lot and worked dynamically. The participants constructed the group as a stereotype of new technology user. One reason to this might be that the communicators have been advertised as tools for mobile businessmen especially. The participants might have absorbed the theme of a mobile businessman from public discussion concerning communicators.

To summarise, the interpretative repertoire of a reasoned user claims that especially businessmen are a user group of new technology. The interpretative repertoire disagrees with the accusations that a user would adopt new technology just for status reasons. The notion reinforces the traditional picture of a rational consumer of new technology (Oksanen-Särelä & Pantzar, 2001, p. 200). Rational rhetoric of technology has been found to dominate much of the Finnish PC advertising (Eriksson, Oksanen-Särelä, & Pantzar, 1998). It could be speculated that the interviewed consumers have adopted some of this rhetoric and used it in the focus group discussions. This might explain why a user of new technology is often constructed as a rational user, who wants to manage time and workload regardless of time and place constraints. Another explanation could be that consumers can try to give a good impression of themselves in a public situation (Goffman, 1974).

5.3 Interpretative Repertoire of a Shallow User

The interpretative repertoire of a shallow user constructs a user, who uses new technology for other purposes than to accomplish tasks or to do real work with it. The activities of a shallow user were described to be, for example, playing with and showing-off new technology. The topics of the interpretative repertoire of a shallow user are called making impression and lack of functional use.

5.3.1 Making an Impression

The topic of making an impression deals with an issue that a user can use new technology to show off with it. The topic includes two themes that are called bragging and comments. The themes construct a user, who brags with the latest technology and, by doing so, is exposed to the judging comments of other people.

Bragging. The participants described bragging as a deliberate behaviour that was aimed to impress other people. However, those participants, who had witnessed bragging, told that they disfavoured it and avoided bragging themselves. Bragging with new technology was perceived as an unnecessary, even irritating attempt to give others a better impression of one self than what a user really was like. An example of bragging is discussed in the following extract:

> "P25: I still get that feeling a little bit, like yeah right, what are you trying to prove with your communicator! It's so exaggerated when you take it out and open it and you might even look around and then you start hitting the keys and close it and back in the pocket it goes. I get that, you know, yeah, yeah, you got money and communicators and all that!
> P26: Like when you're at work and somebody in a suit walks in and he has to right there on the counter take the communicator out and have a look. As if he couldn't do it somewhere else. From those people I still get the feeling they're trying to show off because they have one."

A participant started the discussion by saying that bragging still exists, although it has decreased over the years. She then gave an example of a situation where bragging had occurred. The participant suspected that the aim of bragging in that situation had been to give others an impression that a user has money and the latest technological equipment. She described making an impression as a user's deliberate act, which made it irritating in her eyes. With this negative example of a user, she constructed a shallow user by using the theme of bragging.

Another participant continued the theme of bragging in the above extract. She said that she had witnessed bragging at her work place that was a restaurant. She also judged bragging as irritating and deliberate. After the above comments, discussion in the same focus group continued with the characterisation of a user who bragged with new technology:

> "P25: It's some kind of a status thing which you get through your work. And if you're a certain type, you might try to use it as a way to gain some appreciation."

One of the participants proposed that users could try to give others a good image about themselves, although the image would not correspond with their real personality. The participant proposed that it is possible to try to be better than one really is, if, for example, a company has bought an expensive device for its

employer. Then, a user could seek status by using the company-paid device so that others can see it. The extract illustrates that a user can cross the boundary between private and public use by showing off a device that is meant for personal use.

The participants evaluated that the common situations for attracting attention with bragging were public places, like restaurants and bars. There was a distinction between acceptable use of new technology in a work place and in a restaurant, because the participants described that there were different guidelines for behaviour in various places. The participants divided norms between the norms that a user should follow in a public place and the norms of a private place. When using new technology privately, a user was not as open for the critic of other people as in a public place. The participants explained this by arguing that private use depended on a user's individual choices, but the respect of an individual choice was not durable in a social context, like in a public place.

The participants argued that a user using new technology in a public place is open for the criticism of consumers, who are witnessing the use. The participants described how the use of new technology in public places had a possibility to bring up negative evaluations of a user:

> "P18: Maybe the bourgeois-yuppie comes from that, that people buy a communicator and then they sit in a café and push the keys and flip through the ringing melodies and just act like… You can see it right off, if you think that you're in a café, you can see who really needs it."

In the extract, a participant had noticed that using a communicator in other than business purposes could attract attention. The quoted participant explained that technical functionality of new technology was an attraction factor. She described a particular situation, in which a user had attracted attention, because she or he had created noise in a cafeteria. She claimed that a user had wanted to attract attention and did not have real needs to actually use the device. Hence, she constructed a user who had bragged with new technology.

In another group, the participants discussed the possibility to have personal ringing tones in mobile phones. They acknowledged that a possibility to personalise a mobile phone was an instrument that a snobbish user could use for bragging. Personal ringing tones were not disapproved of as such, but the participants remarked that using them deliberately to attract attention would be bragging. In addition to bragging context and manners, the participants discussed the characteristics of a bragging user. For example, they described that this kind of a user would be a slippery, well-dressed businessman with fine sunglasses, watch and an expensive jewelry.

The theme of bragging can be summarised so that when bragging, a user's emphasis is on making an impression and not on the actual use of new technology. When bragging, a user tries to make a positive impression in the eyes of the others. The data extracts demonstrated how consumers witnessing bragging tended to consider it socially not acceptable. In addition, the examples

of a bragging user were mainly examples of other consumers instead of the speaker herself or himself.

Comments. Together with bragging, condemning non-accepted use of new technology with negative comments was another theme under the topic of making an impression. Several participants described comments they had made or had heard from others. The participants told that people making comments about users of new technology often belonged to a user's close reference groups or were relatives or friends:

> "Interviewer: How did other people react to you?
> P15: Our boys said back then when we bought the mobile phone that does it have to be the best one. But I just didn't care and kept on using it."

> "Interviewer: Have you received any feed back from outsiders or your family on using the communicator?
> P9: I think it was… when the colour screens came on the market that somebody said: "Oh, you have a communicator."
> P7: Back then…the same thing…some friends made some comments sort of, when I got it, but they probably realized, they probably realized that I actually use it for something and they stopped.
> P9: I think we're past that time already."

In the extract, a participant described how his sons had criticised him for having the best possible product. The sons had questioned the user's need to be a user of this kind of new technology. The participant had heard the negative comments, but said that he had just accepted the comments and continued to be a user despite them.

In the second extract, two participants in another group had got comments about their use of new technology. P7 explained that the comments ended when the commentators saw that he was not an incompetent, but a skilful user, who really needed new technology. He emphasised that he used new technology not to brag about, but to accomplish tasks. Therefore, negative comments would not be justified in his case. P9 joined the conversation and proposed that time changes comments. He had noted that there had been more negative comments about users earlier, when a colour screen was an innovative feature, but that nowadays time had made the feature normal. Therefore, there were no negative comments about it anymore.

In the above extracts, it was discussed how fellow consumers gave criticising comments for users of new technology. Also another perspective was visible in the focus group discussions. The participant explained how receiving comments from other people were potentially embarrassing for a user. This is discussed in the following extracts:

> "P11: Yeah you (the interviewer) asked a moment ago how people would react if I had a communicator. I don't know maybe somebody could wonder that

> necessarily but my colleagues maybe wouldn't say anything, but of course they could wonder what do I need it for. Something you have to be a little bit ashamed of, that… it's not… it's unnecessary."

> "P18: … it was one of those teen places, there two guys were both busy with one, they both had one of those (communicator), and there people started pointing their fingers at them, like who do they think they are."

In the first extract, a participant claimed that mobile phones could be embarrassing if other people considered that users used them incorrectly in some occasions. The participant said that she keeps her mobile phone on silent mode to avoid the possibility of attracting attention. The second extract gave a description of a situation where a user of a communicator attracted attention in a bar. A participant described how two users had attracted so much negative attention that other people had pointed at them to criticise them for showing off.

The participants told that when receiving criticising comments from other consumers due to their use of new technology, they often resorted in a passive defence. Although the participants told that they had received criticism for being and acting as a user of new technology, they did not tell any verbal counter-arguments that they would have given back to those judging them. Instead, they described how they had either kept silent or trusted that time will change the negative comments of others. On the other hand, the participants criticised other users of new technology for bragging or otherwise incorrect behaviour with the theme of comments.

5.3.2 Lack of Functional Use

The topic called lack of functional use can be divided into two themes that are, firstly, incompetence and, secondly, toy and luxury. The themes construct a shallow user, who either cannot or is not interested in accomplishing tasks with new technology. The themes discuss issues that can prevent a user from using new technology for goal-oriented purposes. The main reasons for the lack of functional use were named to be false beliefs, lack of knowledge or user's enthusiasm to be amused by new technology.

Incompetence. The participants criticised that some users lack competence to use new technology correctly. Since devices based on the latest technology have many functions, the participants saw that the main idea for a user was to take advantage of the multitude of functions. If a user could not do this, she or he was described to be an incompetent user:

> "P24: I think it makes sense if you can use it and if it works, but if you don't know about it, it can be quite confusing. That you don't get to the bottom of it, how to use it. That's… the idea is that you can take advantage of all the different

> possibilities which it has and there are a lot of them. Like that you can access the internet with it and everything."

In the extract, a participant described how important it is that a device worked and that a user knew how to use it efficiently. The participant pointed out that current technological devices have an enormous amount of functions. She emphasised the importance of knowing the functions by saying that a user should take advantage of all the possibilities new technology offers. The argument illustrated how a partial use could mean that a user is incompetent. However, other participants argued that a user might not be able to take advantage of all the possible functions and features. Instead, she or he could be satisfied with the basic functionality. This was evident, when participants described their own practices:

> "P26: So all right, there are a lot of functions, but there are some you haven't been able to take into use or you simply haven't needed them."

> "P23: If I think of myself as a user I probably use about 15 % or 20… that's the impression… 20 % of the features. I didn't even know that to that…recently that you can attach a mouse… I have the impression that … that you can use more."

In both extracts, the quoted participants admitted that they do not use all the functions that would be available. Hence, they constructed themselves as somewhat incompetent users. In the first extract, a participant commented that he did not know how to take all the functions into use. He admitted his incompetence as a user of new technology and explained that the reason for the incompetence was that he had not needed all the functions.

In the second extract, a participant estimated that he uses only about 20 percent of the available functions and that he could use them more. He excused his partial use of the available functions by blaming learning possibilities. He listed that manual, information technology personnel and friends can help a user, but that there is still lack of adequate education. The problem of learning and education was an explanation for a user's incompetence in other groups, too. For example, the participants told that the variation of different operating systems was a reason that could cause user's incompetence:

> "P1: One had a Motorola and the other an Erickson. My god were we in trouble. We couldn't get them… it was such a hassle since people were used to a Nokia…to figure out the logic it was so…
> P4: (Name of a colleague) has a Motorola, has had it probably for 2 months and he still can't write with it."

The discussion on an incompetent user began with a story about how one of the participants and her friends had to use unfamiliar mobile phones during their trip abroad. Differences of operating systems had caused many problems for them. Another participant commented on this and created a limit for how much can be

blamed on new technology and how much on a user's capabilities to learn. He said that one of his colleagues had had a new mobile phone for two months, but he still could not write a text message with it. Writing a text message can be considered a basic function of a mobile phone, because this function was not mentioned to be a difficult task during any of the interviews, unlike, for example, configuring Internet settings or sending email through a mobile modem. Thus, the comment about a colleague not knowing how to write a text message can be interpreted to construct an incompetent user.

The participants often related the incompetence of a user to the lack of know-how and to false beliefs a user might have. One example of false beliefs can be illustrated with the case of product adoption. The participants told how false beliefs can guide a shallow user to adopt new technology, although she or he could not really use it. The issue is discussed in the next extract:

> "P18: So now we return to this positive thing. They have a digital camera for example, but they can't use it. With many, you can see that because hey, there's a new communicator or digital camera on the market and I have to buy one, but if you ask them if they can use it, they say no… No I can't. Here you answer. Or here you can take a photo. Can you use the menu, do you know what you could actually do with it. No. That's like, well, okay… for you maybe a different model would've been enough. But what ever."

In the above extract, a participant remarked that some consumers were users of digital cameras and communicators merely for the sake of the innovative characteristics of the devices and that they used only the basic functionalities. Thus, in P18's opinion, these users could have been satisfied with less innovative solutions, if they had just realised that they would not use new technology in its full potential. The full potential here means the way in which a competent user could take advantage of new technology. The following two extracts point out the same issue and concentrate on false beliefs that users can have:

> "P6: There is a group of people who imagine they get something out of it and some of them may actually have some use for it, but the ones who get it because of the handy features. And in the end they can't use most them."

> "P4: That probably expressed, what P3 was saying, when you asked what kind of a user. The user is probably a 25-35 –year –old male, who knows technology and feels he needs technology for this sort of thing even though you necessarily wouldn't need it."

In the first extract, a participant claimed that a group of users thought they could benefit from using a communicator, but they had false beliefs. The participant claimed that, in practice, users with false beliefs could not use the functions well after adopting the device. This was, because they had had their skills wrongly in advance. This constructed them as incompetent.

In the second extract, a participant referred to an earlier discussion in the focus group. He first discussed the age of a user. After characterising a user, he argued that a user could start to think that new technology would be needed, although it would not be needed. The comment constructed a shallow user, who would not actually need new technology in everyday life.

Toy and luxury. The participants gave a meaning of a toy for the latest technology that users owned for other than rational, goal-oriented use reasons. The following extract was included in the discussion about the latest developments of new technology. In it, the participants evaluate the purpose of new products.

> "P22: I would wonder more about those with this camera phone.
> Interviewer: What about it?
> P22: Well… it's not…
> P21: What is it for…
> P22: Exactly, what is it for?"

Above, the participants questioned the aims of users who had imaging phones, as they asked what the users used their cameras for. The doubting comments constructed users of imaging phones as potentially shallow, if they had not any real use for camera phones, but, rather, used devices as toys. The theme of toy and luxury was continued later in the same focus group:

> "P20: It's the same thing with the Nokia camera phone. Many average people out there have one.
> P18: Well, these are such… so called… If you don't need it for work, then I… these sort of … so called toys for the rich."

Above, a participant stated that all kinds of users have bought imaging phones. Another participant replied that for some users, having an imaging phone is like having a toy of the rich and that for them, the purpose of use is to play with a product. The extract demonstrates how the participants defined the meaning of a toy as something that brought joy and entertainment for a user. New technology can also be luxurious for its user, as discussed in the following:

> "P13: For me it's maybe more of a luxury item."

A participant quoted above had said earlier in the interview that the use of email had replaced her telephone calls. Although she said that she used email a lot and told that she knew that a communicator had email capabilities, she said that a communicator would be a luxury item for her. She explained that her opinion was based on an assumption that it would be too expensive to make data calls with a communicator. She argued that sending email to friends was not so important for her that she would be ready to pay a premium price for it. Thus, a communicator would be a luxury item for her. However, she later justified her

husband to be a reasoned user of a communicator because, unlike her, he would use the device for his work and not for pleasure. The extract points out how the participants argued that new technology should not be bought for aimless or non-rational use. The meaning of a toy is elaborated in the following extract:

> "P17: It's no miracle anymore, but still it's a yuppie-show off thing anyway. Or damn bourgeois.
> Interviewer: Tell me more what, why is it?
> P17: Well that's what it is. Well no. It's considered a business phone. It's expensive, expensive to use. As a normal average person you don't go out and buy one just for fun, as a toy."

In the extract, two participants discussed how a user could be accepted, if she or he used new technology as a tool and not as a toy. In the conversation, a user had potential to be defined as a yuppie, if she or he used new technology as a toy. Although both participants agreed that new technology should not be a toy, they included the definition of a yuppie user in the discussion. Both participants told how they had experienced that some users used the latest technology as a toy. Other characteristics of a shallow user were, for example, playing:

> "P7: I know someone… he doesn't use it for anything except showing silly videos to his friends when he's drunk. So there has gone…so there are some people who have no sensible use for it."

In the above extract, one of the participants admitted that some users could use new technology without trying to actually accomplish anything with it. In fact, he knew a person like this. The person used to show video clips to his friends in a bar. The participant said that this kind of use was non-rational. Thus, he constructed the described user as a shallow user.

To summarise the theme of toy and luxury, the participants claimed that users were shallow, if they used new technology mainly for entertainment or for other purposes that were not functional or goal-oriented. The participants discussed how a shallow user uses new technology as a toy or a luxury item.

5.3.3 Overview of a Shallow User

The interpretative repertoire of a shallow user consists of two topics and themes. Table 8 draws together the construction of a shallow user by presenting these topics and themes. The typical terms and phrases of each theme are summarised in the table to give an overview of the contents fo the interpretative repertoire of a shallow user.

Table 8. *The contents of the interpretative repertoire of a shallow user*

Interpretative repertoire of a shallow user	Topics	Themes	Typical terms or phrases
	Making an impression	Bragging	Extraordinary situation, showing-off, showing money, boaster, seeks status, attracks attention, tries to be better than really is
		Comments	Privacy, embarrassment, aggressive behaviour, condemn, judge
	Lack of functional use	Incompetence	Confused, obscure, blurred, does not know, has not realised, limited usage, cannot use, overestimates own capabilities
		Toy & luxury	Yuppie, toy, entertainment, irrational desire, no use, indulgence, extraordinary, usage for fun

The topic of making an impression includes the themes of bragging and negative comments. The themes covered both the making of an impression and its consequences. The participants related bragging to situations, where a shallow user tried to seek status or otherwise give an excessively good image of herself or himself to other people. The participants felt that when bragging, users try to give a better image of themselves than they really are by showing off with new technology. Bragging invoked negative comments. In the theme of comments, the typical terms and phrases were embarrassment, condemning and judging. With the theme, the participants constructed a shallow user by discussing comments that were related to a user making an impression.

The topic of lack of functional use includes the theme of incompetence. The theme constructs a user, who cannot take advantage of new technology or is not interested in using it for goal-oriented purposes. The participants described an incompetent user with the terms confused, obscure and overestimating own capabilities. The second theme under the topic of lack of functional use was the theme of toy and luxury. Its typical terms were, for example, yuppie, entertainment and irrational desire. Previous research on mobile phone users has revealed that mobile phones are not only functional tools, but also status symbols and tools for self-expression especially for the young (Mannak & Schoormans, 1999, p. 61). In this research, however, the participants shared the interpretative repertoire of making impression, independently of their ages.

New technology remains luxury until it has become part of the normal technological base, from which all the consumption activities proceed (cf. Douglas & Isherwood, 1979, p. 112). Some research findings explain that people seek new products and new pleasures, because they are stimulating and offer ways of averting boredom (Csikszentmihalyi, 1991). These aspects fit in the contents of the interpretative repertoire of a shallow user. Overall, the

participants described that a shallow user uses new technology actively, but is socially disapproved of.

5.4 The Interpretative Repertoire of a Critical User

The interpretative repertoire of a critical user constructs a user, who takes an analytical position towards the use of new technology. Such a user might not be against new technology as such, but she or he questions the reasons and grounds to use it. Thus, the interpretative repertoire of a critical user does not take the development of new technology as granted or as natural. The topics of the interpretative repertoire are called external control and doubtful progress.

5.4.1 External control

The topic of external control argues that users of new technology are not in control of their needs and wants, but instead, external forces shape users' needs and market offering. The interpretative repertoire has two themes that are called manufacturer domination and time factor. The participants used the themes to argue how external factors controlled the demand of new technology despite the wants and needs of an individual user. From this point of view, an individual user has to consider and critically examine external factors that guide her or his use of new technology.

Manufacturer domination. With the theme of manufacturer domination, the participants criticised new technology manufacturers for their dominance over the markets. The participants blamed companies for manipulating the supply of new technology according to their own aspirations. As an example of the manipulation, the participants discussed how some important features were missing from the products, how products did not work like they should and how the companies decided when new models were introduced to the markets. In addition, the participants argued that companies created new needs without listening to the needs of users. From the point of view of a critical user, the theme of manufacturer domination remarked that it is important that a user could be able to control the development of new technology. In practice, however, the control was in the hands of the manufacturers:

> "P19: I want to add something to that when you asked why now and not a few years ago. This difference… This leads to the ability of marketing people and companies to create needs for people that they buy services and products. A short time ago we still thought when the first NMT's came, what do you need this for, you can reach people at home. People tend to resist new things for a

> while. And then by chance came the SMS messages and you start having pocket computer functions, pda-functions on your mobile."

The above excerpt illustrates how participants said that the control of technological development was in the hands of manufacturers. A participant used historical examples to describe how innovations had been introduced to users, who had not needed this kind of development before the innovations had been invented. The participant mentioned NMT-network, text messages and pocket computers as examples of innovations. He claimed that the struggle against the creation of needs was useless, if a user adopted new technology eventually and started to think that is was needed after all.

The point in the previous excerpt was not to discuss whether new technology was useful or beneficial, but merely to point out how participants claimed that manufacturers control the development and market introduction of new technology. Dominance of manufacturers over users was also discussed in relation to the selection of innovative technological features:

> "P4: Like why can't you have all the functions in one model? They divide them around; this one has those and another one something else, but not all of them."

One of the participants stated that companies did not include all the features in one mobile phone, although they could. He told how he had detected that there are no mobile phones that would include all the possible functions. The participant said that he did not understand why manufacturers had to do their product development this way. Hence, he constructed himself as a critical user, who was disapproved of the domination of manufacturers. The following excerpt is from a different focus group. It brings out an idea that companies could offer users freedom to select preferred features:

> "P3: Yeah, and also Nokia doesn't want to produce one great model, which is for everyone, which has all the features, because then… they can't increase the sales anymore.
> Interviewer: Anything else?
> P4: As a final remark… you notice from all of this that money is the factor which counts."

The participants criticised manufacturers for unavailability of perfect products. They blamed manufacturers for not offering users all the feature combinations that were possible. In the extract, a participant said that manufacturers were deliberately making products that lacked certain features and that they deliberately slowed down development cycles of new, better products. This enabled manufacturers to produce a variety of mobile phones with several different kinds of feature combinations at times that were beneficial for them. In addition, the participant said that manufacturers were able to sell a greater amount of phones, because they did not have all the features in one phone. The

participant said that hence, users had to choose among mobile phones that were not perfect.

At the end of the above extract, a participant claimed that money rules the world. According to this view, those who can control the flow of money, like manufacturers, can control the markets of new technology. It was also mentioned in the group discussions that major manufacturers like Nokia and Microsoft compete against each other and that, therefore, they do not use the same operating systems in order to sustain their core competencies.

As the theme of manufacturer domination shows, consumers could argue that manufacturers controlled the markets of new technology in different ways. The participants criticised that manufacturers deliberately slowed down processes of innovation development and decided available sets of features independently of the needs and wishes of users. The quoted extracts illustrated how participants constructed a user, who was critical towards the dominance of new technology manufacturers.

A time factor. The participants saw time as a factor that creates and changes needs of users. The flow of time can establish new needs, change existing ones or make some needs socially accepted. In all the cases, time was a factor that a user cannot influence, but that passes by independently of a user. The participants told how a user could notice the passing of time by following the emergence of new needs that did not exist before. One of the participants mentioned sliced bread as a classic example of an innovation that users wanted and needed only after someone had first introduced it:

> "P4: It's a little bit like this sliced bred that when it didn't exist yet you were thinking why should we buy bred that's already sliced."

In the example of sliced bread, a participant compared the development of new technology to sliced bread. The participants had evaluated that new needs come at intervals earlier in the interview. A participant told that new ideas developed along time and, as time passed by, they were defined as new needs of users. In the case of sliced bread, it was laborious to cut bread nowadays, after sliced bread had been invented. The participant said that a similar change was also applicable to the use of new technology. In the following extract, a change in the use of new technology involved sending a digital photo from a mobile phone:

> "P17: Maybe it's a question of making the service… or that the function should become necessary… Nobody considers it necessary to take photos and send them with a phone. It's not a need yet."

Participants described that a mobile phone that integrated a digital camera could be perceived as a fun product, but not yet as a necessity. In the above extract, a participant described how she did not think that a possibility to send digital images via a mobile phone would be a necessary feature for a user. She

emphasised her opinion by saying that no one thought it is needed, at least not yet. However, she admitted that the feature could become a necessity, if time changed needs of users. This way, she used the theme of a time factor to demonstrate that the development of needs was not in the hands of users.

As importantly as changing needs of an individual user, time also changes a social environment. The participants criticised that a user could not use new technology, if other users lacked the similar technology, because the lack of similar technology might prevent a user from communicating or share information with others. Hence, the diffusion of an innovation in a social system is important for a user, but the participants argued that an individual user could not affect it much. A change in a social environment can also make new technology more accepted socially than it originally was after its first introduction to the market. The issue is discussed in the following quotation:

> "P12: Yes, ten years from now you will find one of those in everybody's pocket; they might just look a little bit different.
> P13: If you think ten years backwards, almost nobody had a mobile phone."

In the above quotation, two participants discussed a change in a user group of a certain technology. One discussant said that today's newest technology would be in everyone's pockets in ten years. The other agreed and compared this to the situation of mobile phones. She told that mobile phones have become more and more popular during the last ten years. Before that, only a few had mobile phones. The excerpt constructs a user, who should be aware of changes that time causes. In the following extract, participants analysed social pressure that could cause someone to become a user of new technology:

> "P16: I actually experience social pressure to get one rather than that I shouldn't have one. From parents and friends who work in this field. People are used to it that quite many… At Nokia almost everybody has one in the work and also privately.
> P12: Are they starting to discriminate against you because of it?
> P16: They still accept me into their group."

Above, participants questioned whether social pressure could drive someone to become a user of new technology. An identified reason for social pressure was that family and friends were expecting that a user would use new technology that was common in her or his work field. A participant remarked that external forces could be potentially so great that they could cause discrimination among users. This was visible in P12s's question whether other people would discriminate P16, if he was not a user of latest technology. P16 did not carry on the definition of discrimination, but responded that he was not discriminated.

To summarise, the participants generally agreed that the development of new technology had been fast. When the participants compared needs that existed ten years ago with the situation of today, they argued that although a user's life as such would be much the same as ten years ago, the needs to use new technology

had been changed. Ten years ago, a computer and fax machine were something that represented the latest technology for a user. The participants evaluated that the development of new technology had been faster than the development of life in general. They demanded that a user should be critical towards external forces that shape the markets of new technology independently of users.

5.4.2 Doubtful Progress

The topic of a doubtful progress takes a critical position towards the development of new technology. It does not neglect the advantages of technological progress, but questions its consequences for a user. The topic argues that a critical user should take into account potential decrease of humanity, limited solutions of technological progress and hurry that can result from the use of new technology.

Decrease of humanity. The theme of decrease of humanity analyses the use of new technology and acknowledges that it can decrease capabilities of a user. The participants estimated that the most suspicious consequence was decrease of humanity. Thus, the participants questioned the whole basis of adopting new technology and becoming a user. The issue is discussed in the next extract:

> "P10: If my lifestyle demands an electrical calendar then I have to do something about my life. In a way this might be connected with the fact that in general I have kind of – P7 mentioned - lost all techno-optimism a long time ago so it's pretty much the same situation for me that I don't consider technology a necessity…a need is a wrong word for it, but it's not so… something which is a value in itself so that I would want to have it."

Before the quotation, the interviewer had asked how P10 would react, if he received a communicator from his employer. P10 answered with a counter-question. He asked why he should become a user of a communicator. He argued that consumers should understand that the use of new technology should not be intrinsic, although it was such for some users. He told that no one should become a user just for the sake of new technology, but, instead, new technology should give something for a user in return.

Earlier in the same discussion, the participants had appreciated the instrumental value of new technology, as they told that new technology could be used as a tool to control the life of a user. However, P10 criticised the instrumental value, as discussed above. He said that if a user did not control her or his life without new technology, something was wrong. This is, because life should be in control of a user also without new technology.

The quoted extract woke up defending addresses from the other participants about the use new technology. Other participants defended their choices of technological solutions by telling that they needed the solutions for work-related

purposes. Throughout the interviews, work-related tasks were considered to be acceptable reasons for a user to adopt new technology. Still, there were also contradictory opinions:

> "P6: I find it extremely annoying when you're not able to have some spontaneity in your life."

Above, a participant claimed that spontaneity was one of the characters of a user that could decrease, after a user had adopted new technology. She claimed that a loss of spontaneity was irritating. With this criticising statement, the participant pointed out that a user should be careful with the consequences of new technology adoption. Another potential change in humanity was a decrease a user's memory. The following extract demonstrates how the decrease is evident when a user tries to remember calendar events and phone numbers with and without an electronic notebook:

> "P5: Well let's look at it this way, that it creates the need in a way. In a way we did, we we're not completely lost before the communicator, we did occasionally go on time…
> P4:I agree completely, it's like if we go back even further before the mobile phones, every one of us had phone numbers memorized. Everyone could dial 30 phone numbers without checking, just from the memory. Now I can't remember a single one."

The participants said that they had noticed how a capability to remember phone numbers and meetings has decreased after the adoption of new technology. As an example, the participants described their lives before and after becoming a user of new technology. The participants told that they used to remember things better than nowadays. In addition, they compared a user of new technology with a consumer who has not adopted new technology. The participants gave the latter person greater chances to remember engagements better than a user. The following excerpts illustrate how a critical user could analyse the decrease of humanity:

> "P10: So I've lived without a phone memo and simply used my brain capacity. And I trust that when I use it in this way, it also stays in good condition. If I start to rely on all these extra memory functions, well then…soon I won't be able to live without them. As some of you have said. They are necessary.
> P7: Yes, that's exactly what happens.
> P10: And I don't want to end up in that situation."

> "P1: Do you get worse at remembering things so that you expect… that you rely too much on that alarm and in a way?
> P3: For sure. Exactly like that, that you don't have to concentrate on it."

In the excerpts above, the participants blamed new technology for the decrease of a user's memory. They argued that after starting to use the new technology, a

user would have difficulties to live without it. In the first excerpt, this was a reason for not adopting new technology for one of the participants. He argued that only by actively using the capacity of his brains, he could sustain the capacity. Another participant shared the opinion. In the second excerpt, a participant said that brains would become lazy, if a user let them become lazy. The final choice to use the full capacity of brains was left to a user.

The presented extracts illustrated how participants criticised that the use of new technology changed humanity not only by introducing new requirements, but also by changing the human characteristics of its users. The characteristics were, for example, spontaneity and brain capacity.

Limited solutions. The theme of limited solutions discusses how users can lose their faith in new technology because of negative experiences with it. Negative experiences can relate to, for example, non-mobility, non-standardisation and malfunctions of new technology. The participants told that these issues had caused them a feeling that the development of new technology has not fulfilled the expectations of consumers and that available solutions were limited.

The participants criticised the central drivers of new technology development with the theme of limited solutions. They argued that one of the drivers of development was the promise of mobility. Mobility would enable people to move and to be connected to other people regardless of time and place. The participants criticised that this was not the case in real life:

> "P8: By the way it's ludicrous, that there's the wire…Technique has been taken so far but they haven't been able to create a system to keep the wire somehow in a roll in a sensible way. Every time you take it out of your pocket it's in ten different knots.
> P10: Isn't it in general an absurd idea that if you have a wireless phone you need a hands free equipment which has a wire."

In the above extract, participants brought up a defect in relation to new technology. Although companies have been able to develop innovations, they have not been able to solve the basic dilemma of a cable that connects so-called wireless devices. Thus, a cable is still used with technological products. As an example of wireless solutions, people in Finland need a hands-free solution for their car phones. Some solutions using bluetooth, not cable, are already available for hands-free systems. However, the basic solution for a hands-free system still includes a cable. Therefore, a hands-free system often means that a user needs a cable. The participants criticised that the use of cables was frustrating, even dangerous. As a result, they as users were not satisfied with this solution. Participants also reported defects in the functionality of software and hardware:

> "P7: Isn't this similar to the fact that we've used computers for decades now, but still the ä and ö keys function only occasionally. My techno-optimism has disappeared with that a long time ago."

In the extract, a participant described that he had had problems with Scandinavian letters while travelling abroad. The reason was that different technological systems did not work similarly in different countries. The issue had disappointed the participant and he said he had lost his techno-optimism because of it. There were many discussions about malfunctioning technology during the interviews. For example, participants criticised the lack of standardisation and reliability. As an example, some participants said they were unable to synchronise or transfer information from one system to another.

> "P5: It was also a funny situation, almost embarrassing, that before you had the Windows 2000 and then came the Windows XP and suddenly I'm not able to synchronize them. It must have been like 1.5 years after the XP had been on the market. It took incredibly long."

In the above extract, a participant said that he had assumed that the development of new technology would bring new functionalities for a user. However, he had encountered problems with sophisticated, new operating systems, because the upgrading of older systems into newer systems had decreased interoperability between all the existing systems. This had caused him problems in data transfer and synchronisation. His opinion is an example of a critical user who has doubts about the solutions that a technological progress offers.

Users can be inhibitors of technological progress. The participants considered users as delaying elements, when they searched and defined reasons for the slow diffusion of innovations. There were two user-related issues that were identified as inhibitors. Firstly, lack of users can result in a situation where an individual user cannot use new technology, because there is no counterpart who she or he could communicate with. The diffusion of fax machines and imaging phones served as example of the case. Secondly, users can be the weakest links in the development of new technology, because they are possible reasons for security threats, for which new technology is sometimes blamed. Both cases are discussed in the following extract:

> "P16: That you didn't have a counterpart, with whom to…
> P12: Wouldn't have had… that's the other thing; there wouldn't have been anyone to communicate with, fax pictures from the work place.
> P16: Now it starts to be…
> P12: Now it begins to be more common… you send a lot of e-mails…
> P13: On the customer side… customers use e-mail a lot."

Before the extract, participants had compared the diffusion of imaging phones with the diffusion of fax machines. A participant told that it might have prevented consumers from adopting faxes that there were no counterparts to whom they could send a fax. Another participant agreed. He had earlier said that he had been among the first users of fax in his work field and he had encountered the same problem there. The participants agreed that the problem was already overcome nowadays, when companies commonly had fax machines. P12 added

that this was also the case with the use of email. JoP26 agreed that there are already many users of email. The next extract discusses the restraining role of a user from a different angle:

> "P7: I'd be worried about information ending up somewhere outside. Nowadays you pay so much attention to passwords that they are so difficult that no normal person can remember them and in a way this digital information security is handled with such care with virus checks and with everything but still… and the other extreme that the password is under one key. The user is the weakest link. Emphasize the weakest link. If the digital security is made too tight on one end then it starts to leak from the other."

Although new technology has developed during the last years, users can be the eventual limit for the development. As new technology develops, it places new requirements for users. One of the requirements is that users have to remember a lot of passwords for the sake of information security. In the above quotation, a participant criticised the fact that if users do not remember passwords, they could trust in measures like hiding passwords in obvious places where a thief could find them. The participant complained that this was a threat for information security. Besides, he claimed that there was not much research on the consequences of continuous use of new technology:

> "P7: I'm certain that these things radiate like Chernobyl so that I rather have a normal phone on my ear. If I have the choice I use a normal phone. We have at least some decades more research on it that at least it doesn't fry your brain. I really don't… I have this dislike that I don't want to have a radio transmitter in my head."

In the extract, P7 was critical about the health aspects that users of new technology confront. The participant wanted to point out that he had not seen enough research data about the consequences of mobile phone use. Therefore, he questioned whether mobile phones really are safe in the long run. Due to the lack of research reports, the participant told he had decided to use traditional phones rather than mobile phones.

With the theme of limited solutions, consumers can admit that there have been developments and technological progress in society, but that they are sceptic whether the developments are positive or negative. Thus, they ask users of new technology to critically examine the technological solutions they use. For example, a user can be identified as the weakest link, if she or he does not meet the expectations of new technology. The extracts that were displayed above illustrated how the consumers can use the interpretative repertoire of a critical user to discuss the limited solutions of technological progress.

Peace and quiet. The theme of peace and quiet criticises the constant rush that users are tied to. With it, the participants argued that since one of the main purposes of technological progress is to enable efficient working, new

technology should leave users more free time than before its adoption. They contrasted the assumption of users gaining more free time with the theme of peace and quiet. The following extracts are quotations from discussions, in which participants claimed that hurry influenced the everyday life of users:

> "P6: You have enough work and then you run around with a frown all over the place… You really have no time to start jumping because once you've finished something you already have the next thing to take care off.
> P3: No one… Well, okay, no one… that's not correct, but… but a large part, I'm sure…A communicator… like the users of any other phone, if they get the work done faster with that equipment, they wont go home after that."

In the first extract, a participant described users of latest technology by telling that they often have a lot of work to do. The excerpt claimed that although a user could accomplish tasks faster than before with new technology, she or he would not run out of work. Instead, the modern lifestyle and working atmosphere have created a feeling of continuous hurry, because there is always something new waiting for a user. Thus, users do not have time to play around, because work never ends, but there will always be new tasks to take care of. Using the theme of peace and quiet, the participant constructed a critical user of new technology. The critical user disapproved of the excessive work that the use of new technology might cause.

In the second extract, another participant returned to the issue of constant rush. He argued that users often have an endless amount of work to do. Although they might be able to do their work faster with new technology, they still would not have more free time, because they would not leave the job to go home any earlier than without using new technology. The same issue got more comments:

> "P10: I don't want to end up in a situation where I'm sending stuff from the Alps and thinking how they manage over there."

> "P13: I like to sit in peace and think; I could actually start using carrier pigeons. Not everything has to be so fast. Terrible, hectic all the time."

In the first extract, a participant said he did not want to be so tied to new technology that he would like to check on his work colleagues while he was abroad. Rather, he would enjoy his holiday without news from the work place. In the latter extract, a participant explained why she did not want to have a communicator. She said that a communicator would make her feel that she would have to reply to all emails as soon as they arrived. She told that she now worked with a computer during working hours and did not handle work-related issues during free time. She emphasised that as a private user of new technology, she did not want to be in a constant hurry. Instead, she enjoyed peace and silence. She compared hurry at work with hurry in leisure time. She said that she

could be ready to abandon new technology and start using traditional methods of communicating during her leisure time.

To summarise, the participants were able to construct a critical user with the theme of peace and quiet. With the theme, they criticised the way in which users of new technology had increased tempo, especially in working life. From a point of view of a critical user, users' own eagerness to gain more and more information in a short period of time has caused an overflow of information and a vicious circle of increased demands to be fast and efficient.

5.4.3 Overview of a Critical User

In conclusion, the interpretative repertoire of a critical user included two topics, which can be divided into five themes. Table 9 draws together the construction of a critical user by presenting the topics and themes that the participants used with the interpretative repertoire of a critical user. The typical terms and phrases of each theme are summarised to give an overview about the contents of the interpretative repertoire.

Table 9. *The contents of the interpretative repertoire of a critical user*

Interpretative repertoire of a critical user	**Topics**	**Themes**	**Typical terms or phrases**
	External control	Manufacturer domination	Need creation, cases of NMT & text message, marketing people decide, not to include all the functions into same device, big players decide operating systems, capitalism
		Time factor	Time changes needs, not needed yet, not available yet, product development, different needs 10 years ago, innovations
	Doubtful progress	Decrease of humanity	No intrinsic value, something wrong with the life, loss of techno-optimism, deterioration of brains, lack of spontaneity, cannot remember anymore
		Limited solutions	Critical mass, slow connections, wires, radiation, winning innovations are not necessarily the best solutions, standardisation, human as the limit
		Peace and quiet	Working hours, hectic, against hurry, privacy versus business

The topic of out of control included two themes that are called manufacturer domination and time factor. Together, they criticise the fact that a user has lost the control of technological progress to manufacturers. With the theme of manufacturer domination, the participants described how companies created needs so that consumers would adopt the latest technology. They mentioned that

the NMT-network, text messages and pocket-sized computers were originally ideas that manufacturers introduced to the markets, although consumers had not asked for these solutions.

The participants argued that marketers of big companies are those, who invent new technological needs. They argued that time changes the needs and the attitudes of users. The theme of a time factor enables consumer to contrast a situation several years ago with today's situation. Quoted group discussions illustrated that time not only brings out innovative products and services, but it also makes them more accepted socially.

The topic of doubtful progress was critical towards the development of new technology. Its themes were decrease of humanity, limited solutions and peace and quiet. The typical terms and phrases for the theme of decrease of humanity were, for example, decrease of memory capacity, as the participants argued that an excessive adoption of new technology would cause a user to lose some human characteristics. The development of new technology was also criticised in the theme of limited solutions. The theme judged technological progress by claiming that current solutions are not good enough. For example, wireless devices still need cables, network connections are slow and there have to be enough users before they can adopt new technology successfully. The theme of peace and quiet emphasised that a user should have enough free time and be able to enjoy quiet and peace.

The interpretative repertoire of a critical user emphasises that it is important that a user takes responsibility for her or his actions regarding new technology. The interpretative repertoire emphasises that users should not leave the power to decide about new technology to someone else, like manufacturers. Instead, it places a user to be the final authority to make decisions. The participants said they understood that marketers stitch stories and images to their brands that may have nothing to do with the brands' real history and consumption. Therefore, they critically looked for evidence that suggests that a brand has earned its place (cf. Holt, 2002). Consumers can pass judgment on the adoption of new technology with the interpretative repertoire of a critical user, but the criticism does not necessarily mean that speakers would be against the adoption as such. Rather, the interpretative repertoire points out that a user can use new technology, but with a careful reflection.

5.5 Reasoned, Shallow and Critical User

To validate the interpretations in a systematic manner, the amount of coded passages and the appearance of each theme in the different focus groups were counted. The rationale to create this kind of table about the appearance of coding was explained in the relation of Table 6, pages 77-78. Table 10 shows the results of the counting. It includes the number of coded quotations within each code. First, the interpretative repertoires are listed. After them, topics and themes are

presented on their own lines. These are then followed by remarks on the number of interviews the interpretative repertoires and themes appeared in. The interviews were numbered in the order they were conducted. Also, the table includes information about the number of coded passages for each theme.

Table 10. *The appearance of the interpretative repertoires and themes in the discourse of social distinction*

	Appeared in interviews	***Passages Coded***
Reasoned user		**55**
Just a tool		**19**
Serious work	1, 2, 3, 4	10
Rationality	1, 3, 4, 5	9
Normalisation of the user		**36**
Normalisation of use	1, 2, 4, 5	8
Average user	1, 2, 5	11
Mobile businessman	1, 2, 3, 4, 5	17
Shallow user		**42**
Making an impression		**24**
Bragging	1, 2, 3, 4, 5	18
Comments	2, 3, 4	6
Lack of functional use		**18**
Incompetence	1, 2, 4, 5	10
Toy & luxury	2, 3, 4, 5	8
Critical user		**42**
External control		**13**
Manufacturer domination	2, 4, 5	6
Time factor	1, 2, 3, 5	7
Doubtful progress		**29**
Decrease of humanity	4, 5	6
Limited solutions	1, 2, 3, 4, 5	17
Peace and quiet	2, 3, 4, 5	6

It can be seen from Table 10 that the amount of coding per interpretative repertoires of social distinction is near the amounts of coding in other four discourses, which were analysed in the previous chapter. The amount of coding per theme is smaller in the met discourse of social distinction than in other discourses, but on the other hand, the themes in it are divided into smaller units. The amount of coding per topic is near the amount of coding per a theme in other discourses that have been discussed in the earlier chapter. Thus, it can be concluded that the amount of coding in the discourse of social constructionism is somewhat similar with other discourses.

It can be interpreted from the table that all themes in the discourse of social distinction were brought up in more than one focus group, although there were some differences between the groups. Other themes were shared in five or four groups, but the themes of average user, comments and manufacturer domination appeared in only three groups. The theme of decrease of humanity was discussed

in only two groups. To compare, all the focus groups discussed the theme of bragging and also includes a relatively large amount of coding. The notion indicates that some themes might not be as popular as other themes in the user construction or that it is not a custom to discuss them.

As it can be seen from the table, the interpretative repertoire of a reasoned user was often used during the interviews. This can be understood in the light that the construction of a rational user is traditionally strong in the context of new technology (Pantzar, 1996, p. 2000). Particularly, the participants often discussed the topic of normalisation of a user. This could tell about the participants' need to reason their use of new technology. It shows that the construction of a reasoned user is not taken for granted, but requires justification. The topics of making an impression and normalisation of a user have a close relation, because the participants often normalised a user by explicitly emphasising that she or he did not brag, but rather, was a normal and rational user.

To continue with the topic of normalisation, as the selection of TV programs (Alasuutari, 1991), also being and acting as a user of new technology can be a moral question. Thus, consumers are coupled with an overall feeling of having "good taste" in their choices (Langer, 1997). Maybe the success of mobile phones can be explained with the desire of individuals to belong into social groups and to be connected (Maffesoli, 1995). In addition, validation that a user can have fun with new technology might have gained a different approval, if the interviews would have focused on, for example, home theatre systems or Internet gaming. Differences between the validations of various new technologies might result from a reason that some technological solutions, like a communicator, are not as common as some other solutions. Thus, rarely used technologies need more justifications and clarifications about their users.

The idea of rationalisation and social acceptance can be compared to the theory of normalisation of consumption. The theory is important in the commercial promotion of ordinary items and in the legitimatory strategies of more marginal goods (Sassatelli, 2001, p. 94). The historical approach of normalisation argues that during an induction phase, a product is publicly perceived to be a toy or a luxury product. Its consumption is driven by sensation because of novelty, pleasure and status of the product. During the following standardization stage, a product is perceived to be tool, necessity and serious commodity. It is consumed on an individual and routine basis. Furthermore, functional needs and routines emerge. In the last phase, consumption of a product as such is often criticized. Consumers may show discriminative consumer behaviour like ecological considerations. The normalization process can be described with contrasting terms like from "toys to tools", "luxuries to necessities", "pleasure to comfort" and from "sensation to routine". (Pantzar, 1996; 2000)

Unlike the historical approach that examines normalisation over time, the findings of this research indicate that different interpretative repertoires and discourses co-exist at the same time. Some meanings appear more often in

discussions, because their associations are more firmly institutionalized (Gramsci, 1971). For example, it was easier to justify the use of new technology as a reasoned tool than as an instrument for personal pleasure in the focus group interviews. Nevertheless, the definition of proper use of new technology can be changed over time, as happened to a telephone. In its early days, a telephone was for business and for household management, and women's conversations on a telephone were considered to be abuse of the technology (Mackay, 1997, p. 273).

To conclude, the interpretative repertoires in the discourse of social distinction construct different types of users, as they perform social distinction between socially accepted and non-accepted users of new technology and between the grounds and justifications for being and acting as a user of new technology. The interpretative repertoire of a shallow user constructs a user who is not socially accepted and the interpretative repertoire of a reasoned user constructs a socially accepted user. The interpretative repertoire of a critical user questions socially accepted reasons to be a user and act as one.

6 CONCLUSIONS

6.1 Bundles of discourses

The purpose of the research was to develop a multifaceted view of the construction of a new technology user. First, the research reviewed earlier studies on technology consumption and came into conclusion that they offered contrasting views on new technology consumption. The theoretical framework especially noticed and discussed the tension between two perspectives, from which one argues that technology shapes a user and the other argues that a user shapes technology. These perspectives were examined, because they both offered theoretical grounds to understand new technology consumption. The comparison of these two perspectives enabled the researcher to identify a research gap.

Based on the literature review, it was possible to argue for an interpretative approach to research the social construction of a user. Therefore, social constructionism was chosen to be the research methodology. A methodological chapter was included in the study to describe the process of data acquisition and discourse analysis. This gave a transparent view on the research process.

The findings of the research argue how a user can be constructed from several perspectives, using different interpretative repertoires. The interpretative repertoires were based on researcher's interpretation and on the terminology of the interviewees. First, the interpretative repertoires were identified from the research data and their contents were examined. Answering the first sub-question "what discursive practices can be used to construct a user of new technology?" led to the identification of five discourses that included several interpretative repertoires. Together, they portray the discursive practices that can be used to construct the user of new technology.

Answering the first research question led the research process to pay more attention to the process of social distinction. Answering the second sub-question "how is social distinction of a user constructed interpersonally" resulted in the analysis of discursive practices that are used to socially distinguish the user of new technology. The emphasis was on understanding how the distinction was made discursively with the three identified interpretative repertoires.

The findings argue that social distinction can be done with three interpretative repertoires that construct a user as reasoned or shallow or criticise grounds and reasons to be and act as a user. The interpretative repertoire of a reasoned user constructs a user who has, as the interviewees interpreted it, the right grounds for performing use-related activities or possesses the right user-

based attributes. For example, a reasonable user can be constructed to be a mobile businessman, who needs new technology for work-related tasks and to whom new technology is a tool.

It is important to notice that the interpretative repertoires are interrelated, because each of them creates a meaning for the other by delineating what it is not. Since the interpretative repertoires make sense in relation to each other, it is necessary to bring them together. Although all the discourses and interpretative repertoires are socially constructed, there are differences in their perspectives. Thus, the identified discourses and interpretative repertoires can be reviewed according to the perspective they take on user's position in relation to other people. There are three perspectives on user's position. Firstly, a user can be perceived as an individual. Secondly, an individual user can belong to a group of people. Thirdly, a user can be perceived as a part of larger society. Accordingly, the perspectives are named individual, interpersonal and societal. The three perspectives of user construction are presented in Table 11.

Table 11. *Perspectives of user construction*

Perspective:	Discourse:	Interpretative repertoires:
Individual	Experience	Affect, Preference, Involvement
	Self-extension	Premises for use, Adjustments, Achievements
Interpersonal	Social distinction	Reasoned user, Shallow user, Critical user
Societal	Fundaments of a society	Technological progress, Shared values, Connections to people
	Fragmenting society	Position in a development, Patterns of life, Human factors

From the individual perspective, a user experiences new technology and uses it as an instrument for self-extension. The discourse of experiences pays attention to encounters that a user goes through with new technology. It constructs an experiencing user. The interpretative repertoires of the discourse deal with affect, preference and involvement. With these interpretative repertoires, consumers

can, for example, discuss how a user can experience frustration or pleasure or get addicted to new technology. The discourse of self-extension constructs a user who extends herself or himself with new technology. The discourse includes interpretative repertoires called premises for use, adjustments and achievements. These interpretative repertoires construct a user who, for example, uses new technology as an instrument, modifies it or has negative consequences due to new technology.

From the interpersonal perspective, a user is socially distinguished in relation to other people. The interpretative repertoire of a shallow user claims that some users do not have the right grounds for use or doubts that some users do not use new technology properly. For example, a shallow user can be constructed to be a person who does not know the functionality of new technology well or is not interested in using it for goal-oriented tasks, but for fun. For a shallow user, new technology is means to have pleasure or to impress others. The interpretative repertoire of a critical user challenges the grounds to be a user and to act as a user of new technology. For example, a critical user can be constructed to be a person who is concerned about the results of a technological progress.

From the societal perspective, a user is a part of society and influenced by the fundaments and changes in society. The discourse of the fundaments of society discusses socially shared principles and assumptions. It constructs a user who is part of society. The interpretative repertoires of the discourse deal with technological progress, shared values and human factors. They go through the history of technological development, compare the importance of individualism and collectivism or describe a user's connections to other people. The discourse of fragmenting society pays attention to changes in society and in human life. It constructs a user who acts in fragmenting society. The interpretative repertoires of the discourse pay attention to a user's position in technological development and discuss human factors and patterns of life.

Importantly, the discourse of social distinction stitches together the individual and societal perspectives. From the interpretative point of view, not only consumers, but also society around them, regulate new technology consumption, because different local and moral norms can be deployed to evaluate consumer practices, their worth and propriety. There is a delicate balance between pursuing user's own desires and considering the boundaries of appropriate social behaviour. This is, because there are a number of social conventions surrounding the user of new technology and the discursive negotiations are struggles that appropriate distinctive user constructions.

To conclude, the identified interpretative repertoires show how the user construction is rooted in the notion of an individual user and broadened to interpersonal and societal levels. The findings demonstrate how consumers can construct the user of new technology from various perspectives. The findings argue that the concept of a user is a multifaceted and dynamic social construction and that consumers play a relevant role in shaping it. This perspective goes will with the post-modern consumer theory that perceives consumers as producers, who themselves create new innovations in relation to new product or service

usage. The notion further suggest that consumers are not merely passive end-users, but should be seen as co-producers and innovators in a product development process.

Validity, generalisability and reliability of this research should be assessed by the terms and methods suitable for qualitative studies. An approach based on social constructionism does not reject the concepts of validity, generalisability and reliability, but reconceptualises them in a manner that is relevant to the selected research approach. The selected approach views that the concepts of knowledge and truth are relative to a specific theoretical framework and culture. The knowledge gained with the selected approach should not be evaluated with the dimension of objective truth, but with the dimension how interesting it is theoretically and how coherent it is.

The transparency of a theoretical background is important, because it provides a perspective, through which a studied phenomenon is seen. The connection between the research and the theoretical background was introduced in chapter two that described the theoretical positioning of the research. Discussion with existing theories was also done after the data analysis, in the same chapters where the interpretations were presented to the reader. This was done to increase the coherence of the research.

An important criterion for reliability in discourse analysis is how well the indicated interpretations are justified and argued. This is called the transparency of the data. Therefore, the methodological chapter included an explicit description of the research process. The analytical paths of data analysis were described for the reader to show how the conclusions were drawn. In addition, the aim of the data analysis in chapter four and five was to achieve as coherent analysis as possible with systematic and comprehensive use of the chosen analytical concepts that were discourses, interpretative repertoires and themes.

The interpretations have been persistently checked to validate them. The process of interpretation included checking the data for and against interpretations and critically evaluating the interpretations. They were also discussed with colleagues in several workshops. Discussions with colleagues introduced new viewpoints that elaborated interpretations. Plenty of quotations from the interview data were included in the study so that a reader could estimate the validity of interpretations and assess the quality of conclusions. The analysed focus group discussions were true in a specific environment, experienced and presented by certain participants. It would be hardly possible to repeat the conversations literally. The capability to repeat the study in qualitative research means that the analysis of the data and the ways, in which it was interpreted, are described so explicitly that another researcher can agree with the interpretations.

6.2 Theoretical Implications

The research gives insights to understanding consumers, which is a fundamental issue in marketing. It has theoretical implications, as it expands research in marketing by utilising a combination of theories of technology consumption with an interpretative research approach. The research supports those consumer behaviour theories that are based on product characteristics and benefits. On the other hand, it implies that technology holds a role as an instrument for social acceptance and distinction. Since the consumer's thoughts about new technology are formed in an interaction with other consumers, the consumer behaviour is socially and culturally dependent. In the case of this particular research, the findings form a multifaceted view on the central elements of new technology adoption and use in a Finnish cultural context.

The theoretical framework of the research included and compared different theoretical perspectives. The research critically reviewed the assumptions and grounds of the theoretical frameworks that have been commonly used in technology-related studies earlier. The strength of the research was its capability to develop a new mode of understanding through a debate generated by this juxtaposing. It was argued in the literature review how and why the selected research approach could be beneficial for the marketing theory. One of the main reasons was that this kind of research offers a distinct view on new technology consumption. As an example of the literature review, the research discussed how literature gives definitions on how a user can be defined and how her or his use can be studied and measured. The theoretical framework of studies on new technology consumption was noted to often base on technology acceptance and adoption models. It was argued in the literature review that this kind of categorisation has limited theoretical contributions, because it does not allow the research to follow and deconstruct the paths of discursive and interpersonal user construction. Rather, the user concept (i.e who is user and who is not) is fixed prior its empirical measurement.

Although the relevance of knowing and understanding a user has been amply documented in previous research, the discursive practices that are used to construct a user, have received less attention. Based on these findings from the literature review, the research argued for a closer examination of the user concept without denying the value of current literature. The research was built on the view that the user concept is socially constructed. Thus, the aim of the research was not to group users according to theoretical presuppositions or to examine the formation of user categories in a market place. Instead, the theoretical contribution of the research lies in studying how consumers themselves discursively construct the user of new technology.

The results of the research were compared to earlier findings about the users of technology. From the individual perspective, the findings support the existing theories that users face emotions from pleasure to frustration, which causes them dilemmatic experiences. The user's relationships with new technology can be

linked to theoretical categories of relationships of consumers and their brands, because the interpretative repertoires open up the possibilities to discuss how and why users are or are not involved with certain technologies. From the theoretical point of view, the discourse of self-extension can be compared to the concept of extended self, which sees that consumers regard possessions as parts of themselves. The majority of the themes in this discourse, like convenience, costs and efficiency, play central roles in the marketing theories that explain the consumers' value-seeking behaviour.

From the interpersonal perspective, the interpretative repertoire of a critical user emphasises that it is important for the user to take the responsibility of his or her actions regarding new technology and not to let the power new technology manufacturers. This way, the consumers themselves emphasise their role as active users and co-producers of new technology. The traditional picture of rational users was reinforced, as the rational rhetoric was commonly used in the interviews. The gender was not argued to discriminate users of new technology, but, on the other hand, the discussion that separated female and male users both maintained and constructed gender differences and hierarchies.

From the societal perspective, the normalisation process of innovations was also visible in the findings of the research. There were interpretative repertoires that standardised or questioned the use of new technology. A variety of innovative products and services were described to be normal in Finland and that being a user of basic new technology is an ordinary issue. Unlike in the historical approaches that examine normalisation over time, the findings of the research emphasise that different interpretative repertoire and discourses exist in the same time, they do not overrule each other, although some may gain more dominance over the others. Also being and acting as a user of a new technology can be a moral question and users are coupled with an overall feeling of making the right and good taste in their choices. The power struggle of discourses makes it possible that the definition of proper use of new technology can change over time.

The choice of new technology is vast, contributing to the fragmentation of users. The issue that some consumers stay behind the technological development is not necessarily a negative issue, although the media is often concerned about it. In this research, staying behind the development was described to be a strategic and deliberate choice of an individual consumer, who does not want to be among the first users who test and learn new solutions.

The societal issues are important, because new technology connects consumers with each other. The participants contrasted, for example, individualism and collectivism, connectedness to other people and dependence on them and the blurring boundary between the leisure and work time. The similar themes have been reported in earlier studies, too. However, the findings did not support the earlier findings of work on materialism that suggest that possessing more and more things may lead people to be more self-centred and less concerned with relationships with others. Instead, the findings of this

research suggest that users appreciate the collective use of new technology and how it allows them to be connected to other people.

One way of responding to the findings of the research might be to suggest that different consumers could be drawing upon different prototypes of the user of new technology or upon cultural frames of classification. The variety of interpretative repertoires would then merely be a consequence of variable individual prototypes. However, it can be noted from the data analysis that the variation of the user construction was pervasive even within the talk of the same participants. There is no consensus on the use of the identified interpretative repertoires in the sense that some consumers would always use only certain repertoires. Instead, they use interpretative repertoires flexibly to construct a user in different ways. Thus, the concept of a user is not a fixed, but a complex and often conflicted set of constructions that are reinterpreted and negotiated socially. Though the research is open to multiple interpretations and yields to multiple interpretations, the researcher is able to form certain and conclusive constructions.

Another type of response to the findings could be to argue that the variability of the user construction is a consequence of different levels of categorisation operating. Then, there would be different subtypes of the user, like, for example, female and male users or novice and expert users. This inconsistency only appears if the researcher assumes that the participants were constructing one main construction of a user. This means that there would be one main construction, under which there would be different types and hierarchies of users. Importantly, the interpretative research approach provides a different explanation of the variations. It gives room to all the variations, without trying to force them to be included in fixed user categories.

To conclude, the research encourages a shift from the pre-determined definition of a user concept to its social construction. The findings suggest that such a shift will enable researchers to portray the complex and multiple perspectives that construct a user of new technology. This way, the research contributes to the theoretical stream of consumption studies.

6.3 Methodological Implications

The research was based on social constructionism and, therefore, emphasised understanding and differences. The research approach based on social constructionism made it possible to answer the research question “how is a user of new technology constructed discursively”, because the approach called for and enabled a close examination of the user concept. Since social constructionism shares the notion that empirical research is valuable, the studied concept was loosely defined before the data analysis and its definitions rose from the research data.

The use of focus groups as a research method was a successful choice for the purposes of the research. The participants talked and responded to each other, compared experiences and reacted to what other people in the group said. In a focus group, a debate is open and accessible to all and, therefore, it can represent the public sphere. To this extent, a focus group offers a more genuine social interaction than an in-depth interview. Debates in the focus groups were based on rational discussion, but the idea of rational was not that of logic and unemotional. Instead, the debates were exchanges of views, ideas and experiences. Based on the experiences from this research, the use of focus groups is a lucrative method for research that is based on social constructionism, as social constructionism emphasizes the importance of social reality and its construction.

The research can be questioned for its capability to capture what participants 'really' think or whether discourses and actual behaviour match each other. However, the problem goes deeper than this. It can be questioned whether people actually have definite, unambivalent conceptions or values and attitudes that can be explicitly expressed at all. A particular strength of the selected research paradigm is that it recognizes both the constitutive force of discursive practices and, at the same time, it recognizes that people are capable of exercising choice in relation to those practices.

Social constructionism and discourse analysis emphasise variability through particularisation, not only consistency through categorisation. This means that instead of trying to understand user construction in terms of the operation of the single processes of categorisation, the use of discourse analysis makes it possible to examine both categorisation and its opposite process of particularisation. Thus, the methodological contribution of the research is its capability to both construct and to deconstruct the user concept. Construction and deconstruction can be seen as an iterative process, where a user concept is fractured and interpreted. The arrows in Figure 4 indicate the flow of the process of interpretation.

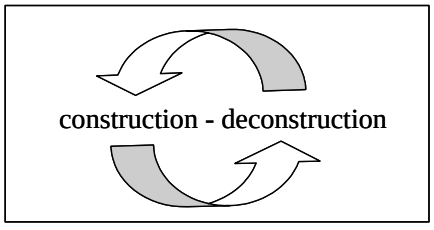

Figure 3. *The process of construction and deconstruction*

Deconstructuring means that a researcher traced paths of user constructions from the research data. In the research, deconstructing included rearranging the structure and foundation of the user concept, as the interviewees were invited to define it themselves. Then, their constructions were analysed. Therefore, the user concept was not a fixed definition given prior the data analysis, but the

researcher constructed it by interpreting the interviews. In the interpretation, construction and deconstruction were iterative. This is important, because the use of previously negotiated and accepted theoretical concepts easily guides the analysis to the recycling of familiar understanding about reality. By combining the process of construction and deconstruction, the selected methodological approach enables a researcher to bring out issues that might not be accessed with other methodological approaches. Thus, the selected approach enabled a researcher to develop new and versatile ways of interpreting the user concept.

6.4 Managerial Implications

The findings of the research can be used in practice to find out how consumers themselves define the user of new technology, to understand the diversity of socially shared user constructions and to improve marketing communications related to new technology. Understanding the consumer in a cultural and social context is important for the marketing practice, as it has been argued that the winning brands succeed, if they create a deep connection with culture. Therefore, a research based on social constructionism is valuable, because it can offer a marketing practitioner knowledge that is tied to cultural and social contexts.

Firstly, the research can be used in practice to offer marketers understanding how consumers define user constructions discursively. As it was argued in the research, defining the user of new technology is important from the point of view of marketing practice. The manufacturer can use different user representation techniques. There are, for example, market surveys, prototype testing and feedback gathering, during which the potential adopters might be integrated into the development process of new technology. These user definitions are often based on statistical studies that are based on the sales of existing products. The findings are then compiled to identify potential target populations and needs of user for a new, improved product or service. This kind of user definition is certainly correct in the sense that it measures the actual and existing user characteristics of customers who use new technology.

However, as argued in this research, looking at the user concept from manufacturer’s point of view offers only one-sided possibilities for user construction, as it measures fixed user characteristics. This research offered a more varied view on user concept, as it allowed the consumers to create user construction. Thus, the method used in this research offers a potentially new way to conduct consumer interviews, for example qualitative user group interviews. The results show that these kinds of user constructions are multifaceted, because the user concept could be approached from several perspectives that were not tied fixed use-related activities or user-based attributes in advance.

What is comes to innovative products and services, their first users could provide the marketers with first-hand experiences and user feedback. The first users are important for the company, because they often innovate new ways of

technology use. They often also act as opinion shapers among rest of the users. On the other hand, the potential and reluctant buyers could form a suitable user group for an interview for those products and services that have been on the markets already for a while and seek to expand their customer base with improved customer understanding that the interviewing of late adopters could provide. The results can be used already in a product development phase, when companies are defining their offering portfolio and internal positioning of the offering. The selected marketing messages can then be tested before new products enter the markets and, finally, feedback can be collected with the same research approach from the actual buyers and users of the product. This way, the consumers are involved and act as co-producers through the whole process of developing an idea to a new product or service.

Secondly, the research offers marketers understanding of the diversity of socially shared user constructions. These social structures were identified and discussed through the analysis of interpretative repertoires and themes of user constructions. The research noted that the existing social structures could constrain the way new technology is interpreted and implemented in a society. Therefore, it is important to understand how marketing practitioners can affect the social market structures in and through language. The research offers managerial implications on this area, as the discursive user constructions were the focus of it.

Although the constructions emphasised the consumers' interpretations of a user concept, they can serve as a basis for user concepts that a marketers want to use in the market place. Importantly, not only the marketers and marketing communication affect the socially shaped user construction, but the consumers are involved in defining the socially accepted way to new technology use. Being able to control the user concept is particularly important for a marketing practitioner during the introduction of new technology, because consumers will get the first experiences through language: in product announcements, press releases, advertising and word of mouth communication. Studying the discursive practices offers marketing practitioners concrete knowledge what discourses are dominant in the market place and how consumers use them to create certain meanings. This, in turn, helps in fine-tuning the marketing messages targeted to those customers.

It is sometimes difficult to measure the effectiveness and successfulness of marketing communications. Conducting discourse analysis among the customers can be one solution. With interpretative research approach, marketers can examine whether the marketing messages they have applied have diffused into the language of their customers. For example, a product like communicator is advertised to be a tool for businessmen. The markets seem to agree with the message, because it is a dominating discourse in the industry magazines and reports and among both the communicator user and non-users, like showed in this research. Nevertheless, a dominating discourse can also be a burden, if a company tries to increase its market share. In communicator case, some of the potential users are reluctant to buy to product that they perceive is too business-

or even yuppie -like for their own, personal use. It seems that the manufacturer has noticed the same, as they are now marketing the newest communicator-type of product, Nokia 9300, under the category of smartphone. Nokia is advertising that the Nokia 9300 is not only a business tool, but an important part of personal life and style.

Thirdly, the findings serve as a tool to improve marketing communications related to new technology marketing, because marketing practitioners can use marketing appeals that position their products as socially desirable. Given that the attributes of a product are under the control of marketers, then an understanding of the knowing consumers' perspective comes interesting and valuable information. With this information the marketing managers may tailor product demonstrations, marketing efforts and training programs to positively emphasize the most important user constructions that consumers interpret. Selecting the most important discourses and emphasising them in both internal and external marketing material could lead to more unified marketing message. It could also help to train sales personnel, as the discourses are socially shared and, thus, relatively easy to communicate to others. Since, the discourses are culturally dependent, global marketing programs should fine-tune their messages according to local area, although the core idea of the marketing message would still remain the same. This, in turn, should increase the likely effectiveness of marketing actions.

Advertising is one of the areas of marketing were the results of this kind of research can be beneficial. Understanding different user constructions is important, as advertising is a centre, from which discourses can be distributed to the large public. The use of discourses in advertisements can influence socially shared constructions among consumers, although consumers can redefine meanings that are offered to them through advertising metaphors. For example, many advertisements for new technology products of new technology portray users as isolated individuals, who have more interaction with technology-based objects than with other people. However, the findings of the research indicate that consumers do not consider this as socially desirable.

The results of the research demonstrate how especially the discourses of experience and self-extension were popular among the consumers and could be emphasised in marketing of new technology, too. These discourses constructed the user from an individual perspective. They focused attention to use experiences and concrete benefits of new technology use. Although the individuality-emphasised discourses seemed to be dominant, there were interpersonal and societal perspectives as well. They should not be neglected in new technology marketing, because also these perspectives are important for consumers. To summarise, the results argue for a closer examination and understanding of the discursive constructions in order to advance marketing in practice.

6.5 Directions for Future Research

Future research on new technology consumption includes possibilities to study how consumers perceive different products and services. The measures need to explicate how consumers understand, evaluate and appreciate consumption objects and their use, rather than just to describe the patterns of object ownership and activities related to that. A product does not just carry certain meanings, but discursive practices are used to construct the meanings of a product. Thus, a technological product can be approached through the processes of interpretation.

Since products acquire social meanings, future research could study the extent to which the building and maintenance of social relationships and the expressions of cultural values are factors in understanding the brand choice of consumers. Future research could be expanded into different cultures. Especially non-western societies could offer an interesting point of comparison with the results of this research. In addition, language is only one part of communication, which also includes emotions and senses.

Discourse analysis has focus on variation and how language is used to achieve goals. This makes it a useful in exploring areas of persuasion and conflict in marketing. Understanding the materialisation of the antecedents of behaviour would be useful research area in relation to discourse analysis, because discourse analysis could be used to explore how different interpretative repertoires are linked to behavior. Then, the findings could be related to the theory of motivation, ability and opportunity. Another potential area for future research is the consumer value-chain theory. It provides opportunities to research the role of product attributes, consequences, benefits and values in new technology adoption.

In future research, the ways, in which new technology companies use language in company reports and marketing material, could be analysed to illuminate the discourses of consumer focus and market orientation. Studies of what marketing does in practise could be enriched by insights from discourse analysis in the area of new product development, utilisation of marketing research and marketing management. It could be beneficial to compare the user constructions of this research with the constructions gained from practitioners, who are involved with new technology marketing.

The selected approach introduces opportunities for studying how managers of a new technology company construct their perspectives of the user. Managers could be interviewed individually or in a group. The text for analysis could also be gained from the marketing material of the company. As the Internet increasingly becomes a means to communicate, the text of company homepages could be analysed for how they construct varying accounts. In comparison, the selected approach offers possibilities to study how consumers construct their views on organisations and products in addition to their construction of the user. This way, the future research could find different, interesting consumer segments or develop models to explain the adoption and use of new technology.

The subjective worldview is not the only suitable approach the research consumption of new technology. As the literature review of the related studies has shown, the phenomenon has been traditionally approached with the perspective of realism. This strong basis of the research tradition could well be the basis for future research, too. Overall, combining the results gained with different methodologies could advance the marketing theory. They could offer new viewpoints to look at phenomena and bring new outlines and interpretations, which could be used to approach the phenomenon in practise.

REFERENCES

Akrich, M. (1992). The de-scription of technical objects. In: W. E. Bijker, & J. Law (Eds), *Shaping technology, building society* (pp. 205-244). Cambridge: London.

Alasuutari, P. (1991). TV-ohjelmien arvohierarkia katsomustottumuksista kertovien puhetapojen valossa. In: M. Kytömäki (Ed.), *Nykyajan sadut* (pp. 232-285. Jyväskylä: Gummerus.

Alba, J. W., & Hutchinson, J. W. (1987). Dimensions of consumer expertise. *Journal of Consumer Research*, 13 (4), 411-454.

Albrecht, T. L., Johnson, G. M., & Walther, J. B. (1993). Understanding communication processes in focus groups. In D. L. Morgan (Ed.), *Successful focus groups: Advancing the State of the Art* (pp. 51-64). Newbury Park, CA: Sage Publications.

Alvesson, M., & Sköldberg, K. (2000). *Reflexive methodology. New vistas for qualitative research.* London: Sage.

Arndt, J. (1985). On making marketing science more scientific. *Journal of Marketing*, 49 (3), 11-23.

Arnould, S., & Fisher, E. (1994). Hermeneutics and consumer research. *Journal of Consumer Research*, 21 (1), 50-70.

Arnold, E. J., & Price, L. (1993). River magic: Extraordinary experience and the service encounter. *Journal of Consumer Research*, 20 (1), 24–46.

Arnould, E.J., & Wallendorf, M. (1994). Market-oriented ethnography: Interpretation building and marketing strategy formulation. *Journal of Marketing Research*, 31, 484-504.

Ashmore, M. (1989). *The reflexive thesis: wrighting sociology of scientific knowledge*. Chicago: University of Chicago Press.

Askegaard, S., Jensen, A. F., & Holt, D. B. (1999). Lipophobia: A transatlantic concept? *Advances in Consumer Research*, 26, 331-336.

Barker, C. (2000). *Cultural studies: Theory and practice*. London: Sage.

Bass, F. (1969). A new product growth model for consumer durables. *Management Science*, 15 (5), 215-227.

Bauer, M. W., & Gaskell, G. (2000). *Qualitative researching with text, image and sound: A practical handbook*. London: Sage.

Belk, R. W. (1988). Possessions and the extended self. *Journal of Consumer Research*, 15 (2), 139-168.

Belk, R. W., Ger, G., & Askegaard, S. (2003). The fire of desire: A multisited inquiry into consumer passion. *Journal of Consumer Research*, 30 (3), 326-352.

Belk, R., Wallendorf, M., & Sherry, J. F. (1989). The sacred and profane in consumer behavior. *Journal of Consumer Research*, 16 (1), 1-38.

Berger, P. L., & Luckmann, T. (1967). *The social construction of reality: A treatise in the sociology of knowledge*. New York: Doubleday.

Bijker, W. E., Hughes, T. P., & Pinch, T. (Eds.) (1987). *The social construction of technological systems. New directions in the sociology and history of technology.* Cambridge: MIT Press.

Billig, M. (1990). Collective memory: Ideology and the british royal family. In D. Middleton & D. Edwards (Eds.), *Collective remembering* (pp. 60-80). London: Sage.

Bloor, M., Frankland, J., Thomas, M., & Robson, K. (2001). *Focus groups in social research*. London: Sage.

Borgmann, A. (2000). The moral complexion of consumption. *Journal of Consumer Research*, 26, (4), 418-423.

Bourdieu, P. (1984). *Distinction: Social critique of the judgment of taste*. Cambridge: Harvard University Press.

Bowers, J. & Iwi, K. (1993). The discursive construction of society. *Discourse & Society*, 4 (4), 357-393.

Burman, E. & Parker, I. (1993). *Discourse analytic research: Repertoires and readings of texts in action.* London: Routledge.

Burr, V. (1995). *An introduction to social constructionism*. London: Routledge.

Callon, M. (1991). Techno-economic networks and irreversibility. In: J. Law (Ed.) *A sociology of monsters: Essays on power, technology and domination* (pp. 132-161). New York: Routledge.

Carson, D., Gilmore, A., Perry, C., & Kronhaug, K. (2001). *Qualitative marketing research*. London: Sage.

Catterall, M. & Maclaran, P. (1997). Focus group data and qualitative analysis programs: Coding the moving picture as well as the snapshots. *Sociological Research Online*, 2 (1). Retrieved June 2, 2003, from http://www.socresonline.org.uk/socresonline/2/1/6.html.

Collins, P. (1998). Negotiating selves: Reflections on 'unstructured' interviewing. *Sociological Research Online*, 3 (3). Retrieved June 5, 2003, from http://www.socresonline.org.uk/socresonline/3/3/2.html.

Csikszentmihalyi, M. (1991). *Flow: the psychology of optimal experience*. New York: HarperPerennial.

Cockburn, C. & Ormrod, S. (1993). *Gender and technology in the making*. London: Sage.

Coogan, K. & Kangas, S. (2001). *Nuoret ja kommunikaatioakrobatia. 16-18-vuotiaiden kännykkä- ja internetkulttuurit.* Nuorisotutkimusverkosto ja Elisa Communications. Elisa tutkimuskeskus, raportti nro 158.

Dant, T. (1999). *Material culture in the social world: Values, activities, lifestyles*. Buckingham: Open University Press.

Davies, B. & Harre, R. (1990). Positioning: The discursive production of selves. *Journal of Theory and Social Behavior*, 20 (1), 43-63.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13 (3), 319-340.

Deleuze, G. (1986). *Foucault*. Paris: Éditions de Minuit.

Denzin, N. K. & Lincoln, Y. S. (2003). *The landscape of qualitative research: theories and issues*. Thousand Oaks: Sage.

Denzin, N. K. & Lincoln, Y. S. (2000). *Handbook of qualitative research* (2nd edition). Thousand Oaks: Sage.

Dholakia, R. R., Mundorf, N, & Dholakia, N. (1995). *Information technology in the home: Demand side perspectives.* Mahwah: Lawrence Erlbaum Associates.

Dickerson, M. D. & Gentry, J. W. (1983). Characters of adopters and non-adopters of home computers. *Journal of Consumer Research*, 10 (2), 225-235.

Douglas, M. & Isherwood, B. (1979). *The world of goods: Towards an anthropology of consumption*. New York: Basic Books.

Downing, C. E. (1999). System usage behavior as a proxy for user satisfaction: An empirical investigation. *Information and Management*, 35 (4), 203–216.

Edley, N. (2001). Analysing masculinity: Interpretative repertoires, ideological dilemmas and subject positions. In M. Wetherell, S. Taylor, & S. J. Yates. *Discourse theory and practise: A reader* (pp. 218-227). London: Sage.

Edwards, D. (1997). *Discourse and cognition*. London: Sage.

Edwards, D. & Potter, J. (1992). *Discursive psychology*. London: Sage.

Elliott, R. (1996). Discourse analysis: Exploring action, function and conflict in social texts. *Marketing Intelligence & Planning*, 14 (6), 65-68.

Engeström, Y. & Middleton, D. (1998). *Cognition and communication at work*. Cambridge: Cambridge University Press.

Eriksson, P. & Moisander, J. (2002, May). *Consumption as knowledge production - Narrating the use of the Communicator*. A paper presented at the EURAM Conference, Stockholm, Sweden.

Eriksson, P., Oksanen-Särelä, K., & Pantzar M. (1998). *Just a tool. Metaphors of personal computers in advertising texts*. Helsinki: Kuluttajatutkimuskeskus.

Eskola, J. & Suoranta, J. (1998). *Johdatus laadulliseen tutkimukseen*. Jyväskylä: Vastapaino.

Fairclough, N. (1992). *Discourse and social change*. Cambridge: Polity Press.

Featherstone, M. (1991). *Consumer culture and postmodernism*. London: Sage.

Firat, A. F. (1992). Fragmentations in the post-modern. *Advances in Consumer Research*, 19 (1), 203-207.

Firat, A. F. & Schultz II, C. J. (1997). From segmentation to fragmentation: Markets and marketing strategy in the postmodern era. *European Journal of Marketing*,31 (3/4), 183-207.

Firat, A. F. & Venkatesh, A. (1995). Liberatory postmodernism and the reenchantment of consumption. *Journal of Consumer Research*, 22 (3), 239-267.

Fischer, E. & Arnold, S. (1994). Sex, gender identity, gender role attitudes and consumer behavior. *Psychology and Marketing*, 11 (2), 163-182.

Fisher, R. J. & Price, L. L. (1992). An investigation into the social context of early adoption behavior. *Journal of Consumer Research*, 19 (3), 477-485.

Foucault, M. (1972). *The argaeology of knowledge*. London: Routledge.

Fournier, S. (1998). Consumers and their brands: Developing relationship theory in consumer research. Journal of Consumer Research, 24 (March), 343–374.

Fournier, S. & Yao, J. L. (1997). Reviving brand loyalty: A reconceptualization within the framework of consumer-brand relationships. *International Journal of Research in Marketing*, 14 (5), 451-472.

Frey, J. & Fontana, A. (1993). The group interview in social research. In D. Morgan (Ed.), *Successful focus groups: Advancing the state of the art* (pp. 20-34). Newbury Park: Sage.

Gatignon, H. & Robertson, T. S. (1991). Innovative decision processes. In T. S. Robertson & H. H. Kassarjian (Eds.), *Handbook of consumer behaviour* (pp. 316 – 348), Englewood Cliffs: Prentice Hall.

du Gay, P., Hall, S., Janes, L., Mackay, H., & Negus, K. (1997). *Doing cultural studies: The story of the Sony Walkman*. London: Sage.

Gergen, K. J. (1994). *Realities and relationships: Soundings in social construction*. Cambridge: Harvard University Press.

Gergen, K. J. (1999). *An invitation to social construction*. London: Sage.

Giddens, A. (1984). *The constitution of society*. Los Angeles: University of California Press.

Gilbert, N. N. & Mulkay, M. (1984). *Opening Pandora's box: A sociological analysis of scientists' discourse*. Cambridge: Cambridge University Press.

Gill, R. (1993). Justifying injustice: Broadcasters' accounts of inequality in radio. In E. Burman & I. Parker (Eds.), *Discourse analytic research: Repertoires and readings of texts in action* (pp. 75-93). London: Routledge,.

Gilly, M. C. & Zeithaml, V. (1985). The elderly consumer and adoption of technologies. *Journal of Consumer Research*, 12, (3), 353-357.

Goffman, E. (1963). *Behavior in public places: Notes on the social organization of gatherings*. New York: Free Press.

Goffman, E. (1974). *Frame analysis: An essay on the organization of experience*. Cambridge: Harvard University Press.

Gramsci, A. (1971). *Selections from prison notebook.* London: Lawrence and Wishart.

Grint, K. & Woolgar, S. (1997). *The machine at work: Technology, work and organization*. Cambridge: Polity Press.

Guba, E. G. & Lincoln, Y. S. (1985). *Naturalistic inquiry*. Beverly Hills: Sage.

Gubrium, J. F. & Holstein, J. A. (1997). *The new language of qualitative method*. New York: Oxford University Press.

Gummesson, E. (2000). *Qualitative methods in management research*. Thousand Oaks: Sage

Hall, S. (1997). *Representation: Cultural representations and signifying practices* London: Sage.

Hall, S. (1999). *Identiteetti*. Tampere: Vastapaino.

Heath, C. & Luff, P. (2000). *Technology in action*. Cambridge: Cambridge University Press.

Heritage, J. (1984). *Garfinkel and ethnomethodology*. Cambridge: Polity Press.

Hine, C. (2000). *Virtual ethnography*. London: Sage.

Hirschman, E., Scott, L., & Wells, W. (1998). A model of product discourse: Linking consumer practice to cultural texts. *Journal of Advertising* 27, 33-51.

Hoffman, D. L. & Novak, T. P. (1996). Marketing in hypermedia computer-mediated environments: Conceptual foundations. *Journal of Marketing*, 60, (3), 50-68.

Holbrook, M. B. (1995). *Consumer research: Introspective essays on the study of consumption.* London: Sage.

Holbrook, M. B. & O'Shaughnessy, J. (1988). On the scientific status of consumer research and the need for an interpretive approach to studying consumption behavior. *Journal of Consumer Research,* 15 (3), 398-402.

Holstein, J. A. & Gubrium, J., F. (1995). *The active interview*. Thousand Oaks: Sage.

Holstein, J. A. & Gubrium, J. F. (1997). The active interview. In D. Siverman (Ed.), *Qualitative research: Theory, method and practice* (pp. 113-129). London: Sage.

Holt, D. B. (1995). How consumers consume: A typology of consumption practices. *Journal of Consumer Research*, 22, (1), 1-15.

Holt, D. (1997). Poststructuralist lifestyle analysis: Conceptualizing the social patterning of consumption in postmodernity. *Journal of Consumer Research*, 32, (4), 326-350.

Holt, D. (1998). Does cultural capital structure American consumption? *Journal of Consumer Research*, 25 (1), 1-25

Holt, D. (2002). Why do brands cause trouble? A dialectical theory of consumer culture and branding. *Journal of Consumer Research*, 29 (1), 70-91.

Holt, D. (2003). What becomes an icon most? *Harvard Business Review*, March, 43-49.

Hutton, R. B., Mauser, G. A., Filiatrault, P., & Ahtola, O. T. (1986). Effects of cost related feedback on consumer knowledge and consumption behavior: A field experimental approach. *Journal of Consumer Research*, 13 (3), 327-336.

Jokinen, A., Juhila, K., & Suoninen, E. (1999). *Diskurssianalyysi liikkeessä*. Jyväskylä: Vastapaino.

Juhila, K. (1999). Kulttuurin jatkuvasti rakentuvat kehät. In: A. Jokinen, K. Juhila, & E. Suoninen, *Diskurssianalyysi liikkeessä* (pp. 160-219). Jyväskylä: Vastapaino.

Julier, G. (2000). *The culture of design*. Thousand Oaks: Sage.

Kahle, L. R., Beatty, S. E. & Homer, P. (1986). Alternative measurement approaches to consumer values: The list of values and life style (VALS). *Journal of Consumer Research*, 13 (3), 405–409.

Kamakura, W. A. & Mezzon, J. A. (1991). Value segmentation: A model for the measurement of values and value systems. *Journal of Consumer Research*, 18 (2), 208–218.

Kamakura, W. A. & Novak, T. P. (1992). Value system segmentation: Exploring the meaning of LOV. *Journal of Consumer Research*, 19 (1), 119–132.

KaraP26, E., Straub, D. W., & Chervany, N. L. (1999). "Information technology adoption across time: A cross-sectional comparison of pre-adoption and post-adoption beliefs. *MIS Quarterly*, 23 (2), 183-213.

Kekre, S., Krishnan, M. S., & Srinivasan, K. (1995). Drivers of customer satisfaction for software products: Implications for design and service support. *Management Science*, 41, 1456-1470.

Kelle, U. (1995). *Computer-aided qualitative data analysis: Theory, methods and practice*. London: Sage.

Keso, H. (1999). *Suomalaisen lentokoneteollisuuden sankarit ja konkarit: Osaamisen diskursiivinen rakentuminen*. Acta Universitatis Tamperensis, 9, Tampere: Tampere University Press

Kraut, R., Rice, R. E., Cool, C., & Fish, R. S. (1998). Varieties of social influences: The role of utility and norms in the success of a new communication medium. *Organization Science*, 9, 437-53.

Krueger, R. A. (2000). *Focus groups: A practical guide for applied research*. Thousand Oaks: Sage.

Koivunen N. (2003). *Leadership in Symphony Orchestras. Discursive and Aesthetic Practices.* Acta Universitatis Tamperensis; 227, Tampere: Tampere University Press.

Kopomaa, T. (2000). *The city in your pocket: Birth of the mobile information society*. Helsinki: Gaudeamus.

Kvale, S. (1996). *Interviews: An introduction to qualitative research interviewing*. Thousand Oaks: Sage.

Lamb, R. & Kling, R. (2003). Reconceptualizing users as social actors in information systems research. *MIS Quarterly* 27 (2), 197-235.

Langer, J. (1997). What consumers wish brand managers knew. *Journal of Advertising Research*, 37 (6), 60-65.

Latour, B. (1992). Where are the missing masses? The sociology of a few mundane artifacts. In W. E. Bijker & J. Law (Eds.), *Shaping technology /building society: Studies in sociotechnical change* (pp. 225-228). Cambridge: MIT Press.

Lee, R. M. & Fielding, N. (1996). Qualitative data analysis: Representations of a technology: A comment on Coffey, Holbrook and Atkinson. *Sociological Research Online*, 1 (4). Retrieved May 27, 2003, from http://www.socresonline.org.uk/socresonline/1/4/lf.html.

Legris, P., Ingham J., & Colloretta, P. (2003). Why do people use information technology? A critical review of the technology acceptance model. *Information & Management*, 40, 192-204.

Leudar, I. & Antaki, C. (1996). Discourse participation, reported speech and research prctices in social psychology. *Theory & Psychology* 6 (1), 5-29.

Lull, J. (1988). *World families watch television*. Newbury Park: Sage.

Lury, C. (1996). *Consumer culture*. Cambridge: Polity Press.

Lyon, D. (1999). *Postmodernity*. Buckingham: Open University Press.

Mackay, H. (1997). Consuming communication technologies at home. In H. Mackay (Ed.), *Consumption and everyday life* (pp. 259-308). London: Sage.

MacKenzie, D. & Wajcman, J. (Eds.) (1999). *The social shaping of technology: How the refrigerator got its hum.* Milton Keynes: Open University Press.

Maffesoli, M. (1995). *Maailman mieli: yhteisöllisen tyylin muodoista*. Helsinki: Gaudeamus.

Mahajan, V., Muller, E., & Bass, F. M. (1990). New product diffusion models in marketing. A review and directions for research. *Journal of Marketing* 54 (1), 1-26.

Mannak, J. J. & Schoormans, P. L. (1999). I'm in control. In E. Antonides & W. Raaij (Eds.), *Cases in consumer behavior* (pp. 59-65). Sussex: John Wiley & Sons.

Marshall, H. & Raabe, B. (1993). Political discourse: Talking about nationalization and privatization. In E. Burman. & I. Parker (Eds.), *Discourse analytic research: Repertoires and readings of texts in action* (pp. 35-51). London: Routledge.

Mason, J. (2002). *Qualitative researching*. London: Sage.

McCracken, G. (1986). Culture and consumption. A theoretical account of the structure and movement of the cultural meaning of consumer goods. *Journal of Consumer Research*, 13, (1), 71-84.

McCracken, G. (1988). *Culture and consumption: New approaches to the symbolic character of consumer goods and activities*. Bloomington: Indiana University Press.

McDonagh-Philp, D. & Bruseberg, A. (2000). Using focus groups to support new product development. *Institution of Engineering Designers Journal*, September, 2-7.

Mick, D. G. (1986). Consumer research and semiotics: Exploring the morphology of signs, symbols and significance. *Journal of Consumer Research*, 13 (2), 196-213.

Mick, D. G. & Fournier, S. (1998). Paradoxes of technology: Consumer cognizance, emotions and coping strategies. *Journal of Consumer Research*, 25 (2), 123-143.

Midgley, D. F. & Dowling, G. R. (1978). Innovativeness: The concept and its measurement. *Journal of Consumer Research*, 4 (4), 229-242.

Miller, D. (1987). *Material culture and mass consumption*. Oxford: Blackwell.

Mills, S. (1997). *Discourse*. London: Routledge.

Moisander, J. (2001) *Representation of green consumerism: A constructionist critique*. Acta Universitatis Oeconomicae Helsingesis, A-185, Helsinki: Helsinki School of Economics and Business Administration.

Moisander, J. & Valtonen, A. (2002). Tietoyhteiskunta – tehoyhteiskunta: Helpommin, nopeammin, tehokkaammin. In L. Uusitalo (Ed.), *Kuluttaja virtua*alimarkkinoilla (pp. 224-249). Helsinki: Edita.

Moore, G. C. & Benbasat, I. (1991). Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information Systems Research*, 2 (3), 192-222.

Morgan, David L. (1997) Focus groups as qualitative research. 2nd edition. Thousand Oaks: Sage.

Morgan, D. L. & Krueger, R. A. (1993). When to use focus groups and why. In D. L. Morgan (Ed.), Successful focus groups: *Advancing the state of the art* (pp. 65-85). Thousand Oaks: Sage.

Mukherjee, A. & Hoyer, W. D. (2001). The effect of novel attributes on product evaluation. *Journal of Consumer Research*, 28 (3), 462-472.

Mäenpää, P. (2000). Digitaalisen arjen ituja. Kännykkä ja urbaani elämäntapa. In T. Hoikkala & J. P. Roos. (Eds.), *2000-luvun elämä: Sosiologisia teorioita vuosituhannen vaihteesta*. Helsinki: Gaudeamus.

Nikander, P. (1997). Diskursiivinen käänne sosiaalipsykologiassa. *Psykologia* 32 (6), 404-414.

Nokia (2004). *Nokia 9210 Communicator*. Retrieved April 6, 2004, from http://www.nokia.com/phones/9210.

Norman, D. A. (1999). *The invisible computer: Why good products can fail, the personal computer is so complex, and information appliances are the solution. London*: MIT Press.

Oksanen-Särelä, K. & Pantzar, M. (2001). Smart Life, version 3.0: Representations of everyday life in future studies. In J. Gronow & A. Warde (Eds.), *Ordinary consumption* (pp. 199-218). London: Routledge.

Oropesa, R. S. (1993). Female labor force participation and time-saving household technology: A case study of the microwave from 1978 to 1989. *Journal of Consumer Research*, 19 (4), 567-579.

Pantzar, M. (1996). Kuinka teknologia kesytetään. Kulutuksen tieteestä kulutuksen taiteeseen. Helsinki: Hanki ja Jää.

Pantzar, M. (2003). Tools or toys: Inventing the need for domestic appliances in postwar and postmodern Finland. *Journal of Advertising*, 32 (1), 83-93.

Parker, I. (1992). *Discourse dynamics: Critical analysis for social and individual psychology*. London: Routledge.

Parker, I. & Burman, A. (1993). Against discursive imperialism, empiricism and constructionism: Thirty-two problems with discourse analysis. In A. Burman. & I. Parker (Eds.), *Discourse analytic research: Repertoires and readings of text in action* (pp.155-172). Routledge: London.

Patton, M. Q. (1990). *Qualitative evaluation and research methods*. Newbury Park: Sage.

Peter, J. P. & Olson, J. C. (1996). Consumer behavior and marketing strategy (4th edition). Boston: Times Mirror Higher Education Group.

Pietiläinen, T. (2002). Moninainen yrittäminen: Sukupuoli ja yrittäjänaisten toimintatila tietoteollisuudessa. Acta Universitatis Oeconomicae Helsingesis A-207. Helsinki: Helsinki School of Economics.

Ploffe, C. R., Vandenbosch, M., & Hulland, J. (2000). Why smart cards have failed: looking to consumer and merchant reactions to a new payment technology. *International Journal of Bank Management*, 18 (3), 112-123.

Polkinghorne, D. E. (1988). *Narrative knowing and the human sciences*. Albany: State University of New York Press.

Potter, J. (1996). *Representing reality: Discourse, rhethoric and social construction.* London: Sage.

Potter, J. & Wetherell, M. (1987). *Discourse and social psychology. Beyond attitudes and behavior*. London: Sage.

Potter, J., Wetherell, M., Gill, M., & Edwards, D. (1990). Discourse: Noun, verb or social practice. *Philosophical Psychology*, 3, 205-217.

Pulkkinen, M. (1997). The breakthroughs of Nokia Mobile Phones. Acta Universitatis Oeconomicae Helsingesis A-122. Helsinki: Helsinki School of Economics.

Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. New York: Simon & Schuster.

Rakow, L. (1992). *Women making meaning: New feminist directions in communication.* New York: Routledge.

Reingen, P. H. & Kernan, J. B. (1986). Analysis of referral networks in marketing: Methods and illustration. *Journal of Marketing Research*, 23, 370-78.

Richards, L. & Richards, T. (1994). From filing cabinet to computer. In A. Bryman& R. G. Burgess (Eds.), *Analyzing qualitative data* (pp. 146-172). London: Routledge.

Richins, M. (1994). Special possessions and the expressions of material values. *Journal of Consumer Research*, 21, (3), 522-533.

Richins, M. L. & Dawson, S. (1992). A consumer values orientation for materialism and its measurement: Scale development and validation. *Journal of Consumer Research*, 19 (3), 303-317.

Ritson, M. & Richard, E. (1999). The social uses of advertising: An ethnographic study of adolescent advertising audiences. *Journal of Consumer Research*, 26, (3), 260-277.

Rogers, E. M. (1995). *Diffusion of innovations* (4th edition). New York: Simon & Schuster Inc.

Sassatelli, R. (2001). Tamed hedonism: Choice, desires and deviant pleasures. In J. Gronow & A. Warde (Eds.), *Ordinary consumption* (pp. 93-106). New York: Routledge.

Schouten, J. (1991). Selves in transition: Symbolic consumption in personal rites of passage and identity reconstruction. *Journal of Consumer Research*, 17, (4), 412-425.

Shih, C. F. & Venkatesh, A. (2004). Beyond adoption: Development and application of a use-diffusion model. *Journal of Marketing*, 68 (1), 59-72.

Silverman, D. (2000). *Doing qualitative research: a practical handbook*. London: Sage.

Silverman, D. (2001). *Interpreting qualitative data: Methods for analysing talk, text and interaction*. London: Sage.

Sironen, E. (1989). Urheilu ja kulttuurinen aikatietoisuus. In. P. Heiskanen (Ed.), *Aika ja sen ankaruus* (pp. 22-34). Helsinki: Gaudeamus.

Slater, D. (1997). *Consumer culture and modernity*. Cambridge: Polity Press, 1997

Stubbs, M. (1983). *Discourse analysis: The sociolinguistic analysis of natural language*. Oxford: Blackwell.

Söderqvist, M. (2002). *Internationalisation and its management at higher-education institutions: Applying conceptual, content and discourse analysis.* Acta Universitatis Oeconomicae Helsingesis A-206. Helsinki: Helsinki School of Economics.

Templeton, J. F. (1994). *Focus groups: A guide for marketing and advertising professionals.* Chicago: Probus.

Thompson, C. J. (1996). Caring consumers: Gendered consumption meanings and the juggling lifestyle. *Journal of Consumer Research*, 22 (4), 388–407.

Thompson, C. J. (2003). Natural helath discources and the therapeutic production of consumer resistance. *The Sociology Quarterly*, 44, (1), 81-107.

Thompson, C., Locander, W., & Pollio, H. (1989). Putting consumer experience back into consumer research: The philosophy and method of existential phenomenology. *Journal of Consumer Research*, 16, (2), 133-146.

Tuusjärvi, E. (2003). Multifaceted norms in SMC export cooperation: a discourse analysis of normative expectations. Acta Universitatis Oeconomicae Helsingesis A-226. Helsinki: Helsinki School of Economics.

Uusitalo, L. (2002). Kuluttajasta merkitysten tuottajaksi –verkkoyhteisöllisyyttä hakemassa. In L. Uusitalo (Ed.), *Kuluttaja virtuaalimarkkinoilla* (pp. 212-223). Helsinki: Edita.

Vaara, E. (1999). *Towards a rediscovery of organizational politics: Essays on organizational integration following mergers and acquisitions.* Acta Universitatis

Oeconomicae Helsingesis A-149. Helsinki: Helsinki School of Economics and Business Administration.

Valtonen, A. (2004). *Rethinking free time: A study on boundaries, disorders, and symbolic goods*. Helsinki School of Economics Series A-236.

Veblen, T. ([1899] 1994). *The theory of the leisure class*. New York: Penguin Books.

Vehviläinen, M. (1997). *Gender, expertise and information technology*. Department of Computer Science University of Tampere A-1. Tampere: University of Tampere.

Venkatesh, V. & Davis, F. D. (2000). Theoretical extension of the technology acceptance model: Four longitudinal field studies, *Management Science*, 46 (2), 186-204.

Venkatesh, V. & Morris, M. G. (2000). Why don't men ever stop to ask for directions? Gender, social influence, and their role in technology acceptance and usage behavior. *MIS Quarterly*, 24, 115-139.

Venkatesh, A. & N. F. (1997). New technologies for the home-development of a theoretical model of household adoption and use. *Advances in Consumer Research* 24, 522-528.

Venkatesh, A. & Vitalari, N. (1992). Emerging distributed work arrangement: An investigation of computer-based supplemental work at home. *Management Science*, 38, 1687-1706.

Wettherell, M. (1998). Positioning and interpretative repertoires: conversation analysis and post-structuralism in dialogue. *Discourse and Society*, 9, 387-412.

Wetherell, M. & Potter, J. (1988). Discourse analysis and the identification of interpretative repertiores. In C. Antaki (Ed.), *Analysing everyday experience. A casebook of methods* (pp. 168-183) London: Sage.

Wetherell, M. & Potter, J. (1992). *Mapping the language of racism. Discourse and the legitimation of exploitation.* New York: Columbia University Press.

Wetherell, M. & Taylor, S., & Yates, S. J. (2001). *Discourse theory and practice: A reader*. London: Sage.

Wikström, S. (1996). The customer as co-producer. *European Journal of Marketing*. 30, (4), 6-19.

Wright, M. & Chariett, D. (1995). New product diffusion models in marketing: An assessment of two approaches. *Marketing Bulletin*, 6, September, 32-41.

Ylikoski, T. (2003). *Access denied: Patterns of consumer internet information search and the effects of internet search expertise.* Helsinki School of Economics Series A214.

APPENDICES

Appendix A. List of Interview Participants

Date	Name	Occupation	User of a communicator
01.03.2003	Hanna Teronen	Teacher	No
01.03.2003	Miia Saarinen	Marketing Assistant	No
01.03.2003	Kaarina Ahola	Student	No
01.03.2003	Ville Keskinen	Product Group Manager	Yes
24.03.2003	Markku Penttinen	Telecommuniations Mechanician	Yes
24.03.2003	Terttu Penttinen	Dental Assistant	No
24.03.2003	Marjut Pekkarinen	Musician, Student	No
24.03.2003	Petri Salminen	Software Engineer	No
24.03.2003	Tommi Penttinen	Customer Servant	No
24.03.2003	Katri Penttinen	Bartender	No
28.03.2003	Tommi Kaasalainen	Business Development Manager	No
28.03.2003	Per Janssen	Dentist	Yes
28.03.2003	Teemu Irri	Unemployed	No
28.03.2003	Johanna Tevalin	Entrepreneur, Building Trade	No
28.03.2003	Seppo Tevalin	Entrepreneur, Building Trade	No
06.04.2003	Teijo Makkonen	Publishing Manager	Yes
06.04.2003	Matias Laine	Assistant	No
06.04.2003	Juhana Lamberg	Store Manager	Yes
06.04.2003	Erkki Karvonen	Senior Assistant	Yes
06.04.2003	Pasi Kytöharju	Project Manager	Yes
12.04.2003	Maria Lehtonen	Communications Coordinator	No
12.04.2003	Arttu Lipsonen	Project Manager	Yes
12.04.2003	Pekka Aaltonen	Project Coordinator	No
12.04.2003	Anssi Lipsonen	Managing Director	No
12.04.2003	Mika Huotari	Production Manager	Yes
12.04.2003	Pia Kivijärvi	Director of Business Relations	No

Appendix B. Interview guide

1. Introduction
Please, introduce yourself to other participants.

2. Nokia 9210 Communicator
How do you experience a communicator?

User:
How did you adopt a communicator?
Is the actual use different than what you expected it to be?
How do others regard you as a user of a communicator?
What would it be like to live without a communicator?

Non-user:
What do you like or dislike in a communicator?
If you got a communicator, how would it make you feel?
What would you do or not do with it?
How would others regard you as a user of a communicator?

3. Social relations
What kinds of people use a communicator?
When and where?
When is it not suitable to use a communicator?
Are there embarrassing situations that a user could get involved in?

4. Defining a communicator
What characteristics of a communicator?
How is the use of a communicator different from or similar to a mobile phone?
How is the use of a communicator different from or similar to a computer?

5. Showing a brand picture of the Nokia 9210 Communicator
What is the picture about?
How does it relate to a communicator?
Are there other issues that you would like to discuss?