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**CAREERS OF MANAGERS,
Comparison between ICT and Paper Business Sectors**

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Hatch (1999) uses musical terms in describing the concept of career. Traditional occupational and organizational careers share characteristics of scripted classical music. The contrasting image used to describe contemporary careers is a jazz metaphor emphasizing the improvisation, spontaneity and self-directed thematic development. Improvisation does not mean formlessness; great jazz improvisations need basic forms. Just as jazz players cycle and recycle material providing constant new experiences through the creative development of past themes, contemporary career actors spiral their way into new industries, occupations and opportunities.

ABSTRACT

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The purpose of this study is to increase understanding of how the managers build their early career in information and communication technology industry (ICT business sector) and pulp- and paper industry (paper business sector). The focus of the study is to explore the importance differing a business sectors have in influencing managerial careers. Business sectors can affect careers in several ways. Sectors have different history and traditions. Also the age structure of ICT personnel differs from the age structure of personnel in the paper industry. Managers in the ICT and paper sector are technically educated but in different disciplines. Differences exist also in ways of recruiting and developing commitment in personnel.

The target group of this research, middle management engineering personnel, work in Finnish ICT and paper companies. Research data were gathered in April-December 2002 in South-Karelia by interviewing 30 managers and six directors working in three Finnish ICT companies and in three paper companies. The research issue is approached on two levels: the individual level and the organizational level. The managers related their career stories in focused interviews. Directors, representing the organizations, described the generalities of the business sector and gave background information on company policies, human relationship practices, as well as career and human resource development.

Results of the study contribute to research discussions of career, life-span reasoning, socialization and commitment. Career is conceived as a series of positions including every kind of hierarchical mobility and all kinds of positions in work. A manager's career develops in interaction with the organization and it can be seen as involving a socializing process in an organization as a consequence of experiences and changes in positions. This research contributes to the understanding of the nature of career in the context of two business sectors. Universal career theories, for the most part, do not perceive the importance of business sector in determining career experience. This study concentrates on describing and understanding early careers in two different business areas, elements committing managers to particular business sectors and the actions of companies in that particular sector.

While career research began in the middle of 1950s, the theoretical basis of career research seems to be quite fragmented still. However, a dichotomy is consistently presented between traditional, hierarchical career research and boundaryless career thinking. In this research we examine how these old and new career concepts are evidence in the ICT and paper sectors. Careers are changing from formal, hierarchy-based structures to more fluid arrangements. The new boundaryless career concept captures territory from old career thinking. Mobility between employers, networks, and changing hierarchical structures in organizations, as well as personal and family reasons are theorized to bring changes to careers patterns in the future. However, the pace of this change in careers will vary between the ICT and paper business sectors.

Findings of this research indicate that business sector has an effect on how managerial careers develop. The environment where career is developed differs between ICT and paper sectors. Careers begin differently in the two environments and the speed of career progression is distinct. ICT careers are built within the business sector whereas paper careers are made inside one company. Also recruiting and socialization practices differ from one sector to the other.

Keywords: career, business sector, manager, director, organizational socialization, commitment

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My interest in careers used to be quite pragmatic. During this research project I have learned a lot of careers also theoretically. First, when working in the career and recruitment service, I found myself thinking: “Where will these students end up when they leave the university?” When working in paper and ICT industry I acquired some information on what happens to engineering graduates when they have finished their studies. After this working experience I read the dissertation of Professor Satu Lähteenmäki and became interested in careers also theoretically. As a result of these experiences I began to shape the research problem of this work and started my work with the thesis at Lappeenranta University of Technology. I thank warmly all the people who have contributed to this research.

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I feel relieved, this is finally done - now it's time for fun!

Lappeenranta, November 21st, 2004

Pia Heilmann

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ABBREVIATIONS

ADP	Automatic Data Processing
CEO	Chief Executive Officer
EUR	Euro
GNP	Gross National Product
HR	Human Relations
HRM	Human Resource Management
HRP	Human Resource Planning
ICT	Information and Communication Technology
Lic.Sc. (Tech.)	Licenciate of Science in Technology
MBA	Master of Business Administration
MIT	Massachusetts Institute of Technology
M.Sc. (Tech.)	Master of Science in Technology
NDA	Non-Disclosure Agreement
OOP	Object-Oriented Programming
SME	Small and Medium Sized Enterprise

1. INTRODUCTION TO THE STUDY

In this chapter I outline the reasons why it is important to study careers in two business sectors, and define the key concepts of the research.

1.1. Why Study Careers?

Career is made in interaction between a person and an organization. It is a question of matching individual and organizational needs (see Schein 1978). An individual develops his/her career path and the organization makes it happen. Both sides expect to receive advantage from the contract. Schein has divided the early organizational careers into three phases: entry, socialization and mutual acceptance. In this process an individual achieves a permanent membership in an organization and commitment hopefully happens. In this study the ICT (information and communication technology industry) and paper (pulp- and paper industry) business sectors represent two key-clusters of the Finnish national economy. Both sectors suffer, or will suffer in the near future, a shortage of competent employees.

A career is an interesting combination of different phases in life where the professional career is connected to other sectors of life. The career develops from a personal basis in interaction with the environment. The present research has been conducted from both a personal and organizational viewpoint: the most important parties involved in this research are managers and companies representing either the ICT or paper sector of business. I will concentrate on the early career of managers. Other issues in a person's life, like family and geographical working area, also influence the managerial career, but these are not central for this research.

During my work (1995 – 2000) as a career counsellor in the Career Services of Lappeenranta University of Technology I wondered what the careers of the students I advised would be in the future. What will their career path be like and what positions will they reach during their careers? The idea was forgotten for a while but rose again during my working periods in paper and ICT companies. There I noticed how career paths start and go forward after individuals finish their studies. Many of the students I had advised in the Career Services were now working as managers. Because of the differences of the ICT and

paper business sectors I became interested in finding out whether there are any differences in the career paths of the managers in these two business sectors. The framework of this research started to incubate in my mind.

1.2. Research Gap in Career Research

Organizations want to make use of people, but they are often unaware of what these people want for themselves. Companies expect commitment and performance, and think they can engineer it by performance-related pay and other material inducements. What they do not always realize is that it is individuals with whom they are dealing. Individuals differ in their aspirations, these aspirations change over the course of their lives, and there are great social movements afoot that will affect what is generally valued and what is not (Herriot 1992, 5).

There are different interesting ways to approach a career, but here the focus is on how managers construct their careers in interaction with organizations acting in the ICT and paper business sectors. This study concentrates on the interaction between a manager and a business sector and evaluates the importance of the business sector to manager's career. How does the career of a manager develop in the business sector and what are the commitment factors that keep a manager in that particular sector?

The theoretical framework of the study is built on career research where the dichotomy between traditional and boundaryless careers has previously been described. Careers made in ICT and paper business sectors are examined in the light of traditional and boundaryless career research. Behind the career of a manager lies life course regularities connecting to age, in this case the age 27 to 49. Factors orientating managers' careers are examined with the help of the concept of career anchors (Schein 1990). Career is never made only by a person him/herself but always in connection with one or more organizations. Therefore, theories relating to organizational socialization and commitment are also utilized in this study.

Research specifically connecting career to business sectors has not been conducted before. The business sectors chosen, the ICT and paper sectors, differ significantly. The ICT and paper sectors represent two key-clusters of Finnish national economy: the information and

communication cluster (ICT cluster) and the forest cluster. The paper sector has a long history and traditions in the Finnish economy; there are large mill constructions and ageing employees. The products of the paper sector are pulp, paper and paperboard. The ICT sector is a newcomer to the Finnish economy, traditions are just developing, employees are quite young and products abstract software applications. The contrast between these two sectors, both important to the Finnish economy, is profound.

Previous career research has been mostly focused on an individual's whole life (see e.g. Schein 1978). This study concentrates on the early phase of career. At the time of the interviews the managers were between the age of 28 to 49. Life course regularities were explored in order to outline the overall life phase where the managers were living and to determine possible implications this might have for the managers' careers.

This research attends to the discussion of traditional and boundary less career thinking. Is it possible to say that traditional or modern way of thinking about career prevails in either of these business sectors? Another area of discussion in this study is connected to commitment. What factors commit a manager to building a career in a specific business sector?

It is impossible for a person to decide the direction of his/her career alone, as the career is made in interaction with the environment. A person can make career plans of his/her own but the organization also has an extensive influence on the career. Career management is done on the organizational level on the basis of organizational needs. The organization enables career progression for a person. The career is initiated within the organizational socialization process where the person is, from the beginning of his/her employment contract, connected to the organization.

Because commitment is closely attached to the career, it is another topic in this thesis. The employee accepts the values and goals of the organization and the organization treats the employees as valuable associates in their business and wants employees to stay in the organization. In the end it is a question of how to maintain managers commitment. How does the concept of continuous commitment appear in the ICT and paper companies? It has not been necessary to call attention to the importance of recruitment and commitment of the personnel in the paper sector before. There have always been enough employees willing to

work in the paper industry. The ICT industry does not have that kind of long history, but they have a lack of competent employees. How does this different kind of organizational history affect commitment?

I have noticed that careers are in a process of change at the moment. A career is constructed and developed more individually than before. After a period of working in a particular position, a person wants to proceed in his/her career. More efforts are put in career counselling, successful recruiting and personnel development. Changes will occur in labour markets in the short run: because the big post war generations in the paper sector will soon be retiring, it will be possible for an employee to choose between different employers in the future. At the same time the ICT sector is suffering from a lack of competent workers. This will increase the competition for employees in the labour market. Because of these changes in the labour market, the employee will more often have a possibility to evaluate the risks, costs and profits of employment in the future.

Results of this research are mainly directed toward human resource (HR) scientists in universities, but also to decision-makers and HR developers in ICT and paper companies. This study can be utilized in recruitment services by career counsellors. Also, students in technical universities can benefit from this thesis when planning their careers. Career research has been done in the United States, England and even in Finland, in connection with managers, but with this research I aim to offer a new approach to the career research discussion by bringing in the business sector perspective. Commitment is strictly linked to careers. Employers enable the career development of an employee. This research brings more information to organizations about the career aspirations of managers working in the ICT or paper companies. The findings can influence the recruitment planning and career development process of employees. The purpose is to wake the organizations up to notice the importance of career development and commitment.

1.3. Key Concepts

Career

There are many ways to describe careers, but in this work a career consists of significant relationships between an individual and work (Hearn 1977, 275). In this study, a career is

seen as a series of positions including every kind of career mobility and every kind of positions in life. Career is treated as a neutral word: a career can move upwards, downwards or it can progress horizontally. A career consists of the sequential choices made by a person. A career can be seen as a development process of professional identity and personality. A career develops through successive career development phases directed by career anchors (Schein 1990) while trying to reach professional goals. Career can also be understood as a matching process where organizations select persons for jobs. A career develops in interaction with an organization, and it can be seen as a socializing process in an organization, and as a consequence of the experiences and changes of positions in an organization (Lähteenmäki 1995, 27 - 28).

Here a career starts from the first continuous work that is done regularly, permanently or in a part time contract. A career in this definition does not include summer jobs - work that is done on a fixed-term contract during summer vacations only. A career contains also the idea of time. The career connects the past and the present to the future, including our planning for and anticipation of the future, and also addresses how the future motivates action and the construction of meaning in the present (Young and Collin 2000, 1, Herriot 1992, 2).

Business sectors

In this study the focus is mainly on the two main business sectors of the Finnish economy: pulp- and paper industry (paper industry) and information and communication technology industry, especially software industry (ICT industry). These two sectors represent the most important clusters in Finnish economy. The ICT and paper sectors are very different fields of business. The paper sector has a long history, approximately 100 years (Reunala and Tikkanen 1998, 9 - 10), employees are relatively old and the industry is not influenced by rapid changes in economic situations. The ICT sector is a newcomer in the Finnish labour market, has young employees and is more vulnerable to changing economic conditions.

Directors

The directors act as informant in this research: they have provided insider information connected to the company and the business sector. A director is a person who represents an organizational approach to careers and works in the top-level of management in an organization. The directors in this research are persons who can provide background

information about the business sector and the organization, about managerial work and human resource development in the company. The director speaks with the voice of the organization. The director's own career is not evaluated in this work. The research target, the managers, were selected with the help of the directors. The directors were directors of units or human relations directors.

Managers

Managers were the target group in this study and they told their own career stories and described their future career plans. A manager has diverse tasks in an organization: he/she plans, organizes, motivates, directs and controls. A manager adds foresight, order, purpose, integration of effort and effectiveness to the contributions of others (Strong 1965, 5). Ensuring commitment and motivation of personnel to agreed upon goals is one of the most important challenges for a supervisory manager. Additionally he/she recruits new personnel, familiarizes employees with the organization, agrees on goals, makes networks, acquires, discards and decodes information, communicates, follows, encourages, demands, takes care of the atmosphere of the organization and listens to troubles. In addition to this: he/she is also a salesman (Kivimäki-Kuitunen 2000, 78 – 91). In this research, the manager is a person who is responsible for a certain area in the organization. He/she answers for the area of business, in certain competencies, e.g. personnel or budget. The managers studied represented the middle level in the organization and they can be considered as a knowledge workers (Gummesson 2000, 8, Drucker 2000, 163 – 164). The managers in this study have all had technological education. The average age of the managers is 37 years.

Organizational socialization

Organizational socialization concerns the relationship between an individual and the organization. It is usually defined as a process through which organizational culture is perpetuated, by which newcomers learn the appropriate roles and behaviors in order to become effective and participating members (Louis 1990). Organizational socialization is a continuous process and does not happen in the beginning of employment only.

Commitment

Commitment is a two-way contract between an employee and the organization. On the employee side it is a willingness to maintain membership in the organization, trust and

acceptance in the values and goals of the organization and willingness to struggle harder to benefit the organization (Curtis and Wright 2001). On the employer side commitment means treating employees as valuable associates in the business. The organization wants the best employees to stay, grow and prosper as the business succeeds, and there is a need to show signs of commitment to attract and keep workers (Bragg 2002).

1.4. Structure of the Study

This study considers the careers of managers working in middle-management, formed in an organization functioning in the ICT or paper sector. Career progression happens within an environment of organizational socialization. Organizations try to keep their personnel and therefore are interested in commitment. On the other hand the career is the manager's own and is also related to the general regularities of the person's life.

This introductory chapter has described the background of the study and clarified the key concepts. The research design with research questions, methodology and data collection methods, are introduced in Chapter 2. Managers and business sectors are the topic of Chapter 3. Chapter 4. sheds light on the terminology and theories of prior and present career research. Dimensions of life-course narration are explained in Chapter 5. Issues of organizational socialization and commitment relating to careers are defined in Chapter 6. Chapter 7. offers an interpretation of the research data before the key findings, implications and further research topics are proposed in the final Chapter 8.

Table 1. Structure of the Study

<p>1. INTRODUCTION TO THE STUDY Why Study Careers? Research Gap in Career Research Key Concepts Structure of the Study</p>
<p>2. RESEARCH DESIGN Purpose of the Study and Research Questions Qualitative Research Methodology Quantitative Research Methodology Methodological Background of the Research Data Collection and Data Analysis</p>
<p>3. ENGINEERING MANAGERS IN TWO BUSINESS SECTORS Working Life in Finland Clusters and Business Sectors Middle Manager and Managerial Work</p>
<p>4. DEVELOPMENT FROM TRADITIONAL CAREER TOWARDS BOUNDARYLESS CAREER THINKING Terminology of Career Research Earlier Career Research Career Theories in the Context of the Present Research</p>
<p>5. LIFE COURSE REGULARITIES BEHIND A PERSON'S EARLY CAREER Metaphors of Life Course Narration Age The Phase of Organizing (Age 20 to 40)</p>
<p>6. CONNECTING THE PERSON TO THE ORGANIZATION Organizational Culture and Socialization Commitment</p>
<p>7. RESEARCH FINDINGS Data Collection Arrangements Background Information of the Research Target Educational Background of Managers Careers in Change Values Orienting Manager's Career on the Basis of Career Anchors Socialization and Commitment Managers' Future Expectations Career Profiles Validity, Reliability and Limitations of the Study</p>
<p>8. DISCUSSION OF THE STUDY Goal of Research Summary of the Most Important Findings Theoretical Implications Managerial Implications Suggestions for Further Research</p>

2. RESEARCH DESIGN

In this chapter I present the research questions and define the research methodology. After that data collection through interviews and data analysis are presented.

2.1. The Purpose and Research Questions of the Study

Comparative career development research has not been conducted within the framework of business sectors before. The business sectors chosen for this study, the paper sector and ICT sector, represent two of the most important clusters in Finnish economy. Career is made in interaction between the manager and the business sector.

Previous career research has mostly focused on the whole life (see e.g. Schein 1978). This study focuses on the age of 27 to 49, the phase of early career.

The main themes of this research are: managers' careers, the role of business sectors in determining careers, and organizational socialization, including commitment. The purpose of this study is to examine managers' careers and compare the careers in ICT industry and paper industry. What is the reflection of the business sector in the managerial career? In a larger context it is a question of socialization and commitment to a business sector, company or the particular kind of work done in that sector. Individuals select organizations, organizations select and socialize people.

The purpose of this study is to compare managerial careers in two different business sectors and learn the importance of business sector to a managerial career. Another topic is connected to commitment to business sector. A career develops in interaction with an organization and it can be seen as a socializing process in an organization as a consequence of experience and change of positions (Lähteenmäki 1995, 27 - 28). Between these two components, person and organization, career development, organizational socialization and commitment to the organization occur. In order to elicit the organizational point of view for this study the opinions of key directors have been gathered. These conceptual elements of this study are presented in Figure 1.

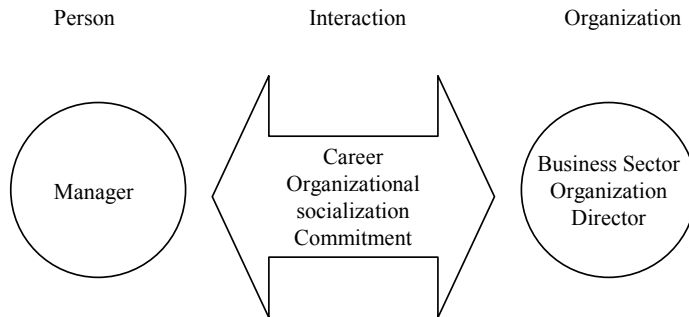


Figure 1. Conceptual Elements of the Research

There are several factors that affect managerial career. The factors in the context of this study are presented in Figure 2. Black arrows represent the main issues in this study, white arrows describe the factors influencing in the beyond the scope of this research.

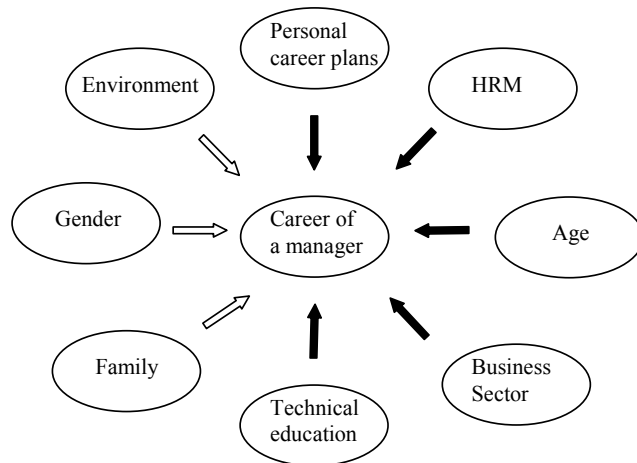


Figure 2. Factors Connecting to Career

In this research the careers of ICT and paper managers are approached from both the perspective of traditional career research and on the basis of a new, boundaryless career (see Mirvis and Hall 1994, Arthur and Rousseau 1996b) concept. Within traditional theory a career is viewed as professional advancement where career progression is limited and directed upwards in a formal hierarchy. The organization controls authority relations, the structure of work, work groups, pay and job security. Employment is a state of being employed, a person's regular occupation or business. Learning, according to the old understanding of career is acquisition of knowledge committed to memory, and something that happens at the individual level. Citizenship status in the organization is constructed through membership in the organization. Transitions according to the old career concept are something exceptional and happen as a movement between hierarchical stages. According to the new theory, however, career is the unfolding sequence of any person's work experiences over time. Boundaries, limits, are something to be crossed in career behavior. Organizing happens through networks and it is dynamic. Employment is a temporary state or represents the current manifestation of long-term employability. In groups the co-operation of individuals is important. Learning is a multilevel phenomenon. It includes creation and acquisition of knowledge, collective processes for shared interpretation, and patterns of adaptation and transformation. In the new meaning of career citizenship status is understood as community membership where entitlements are coupled with responsibilities. More than organizational membership competence is emphasized. Transition according to the new career concept is a continuous process (Arthur and Rousseau 1996b).

Another theoretical basis of this study is in the research literature concerning commitment. I approach the concept of commitment from both personal and organizational perspectives utilizing Allen and Meyer's (1990, 1997) theories of organizational socialization and commitment. Commitment and psychological contracting is also considered based on the research of Rousseau (1995) and Viljanen and Lähteenmäki (2002b).

The third basis for the study lies in life-span reasoning. Some life events happen in particular phases of life. I use the division of Dunderfelt (2000) and concentrate on the phase of organizing in his scaling (age 20 to 40).

My argument is:

The business sector has an importance on how managerial careers are constructed in the ICT and paper sectors.

The basic research question is:

- What kind of influence does the business sector have on managerial careers?

The sub-questions are:

- What factors commit managers to ICT and paper sectors?*
- How does paper and ICT organizations socialize the person into the organization?*
- What career anchors direct managers' careers?*

2.2. Qualitative Research Methodology

Answers to research questions in this study are approached using qualitative methods and methodology. The word qualitative implies an emphasis on the qualities of entities and on processes and meanings that are not experimentally examined or measured in terms of quantity, amount, intensity, or frequency (Denzin and Lincoln 2003, 13). Strauss and Corbin (1990) have delineated qualitative research as any type of research that produces findings not arrived at by statistical procedures or other means of quantification. The way in which people being studied understand and interpret their social reality is one of the central motifs of qualitative research (Bryman 1988, 8). In scientific research empirical observations are never “results”. The observations are *clues* that are interpreted in order to get “behind” the observations through a theoretical framework (Alasuutari 2001, 79). The understanding process begins with a certain preunderstanding about the project. Hermeneutics has been defined as ‘the science of correct understanding or interpretation’ with specific reference to the understanding of the meaning of texts (Polkinghorne 1983, 218). In this research the texts are the interview transcripts. The hermeneutic circle or hermeneutic spiral is an iterative process whereby each stage of the research provides us with knowledge. Therefore, we take a different level of preunderstanding to each stage of the research (Figure 3.).

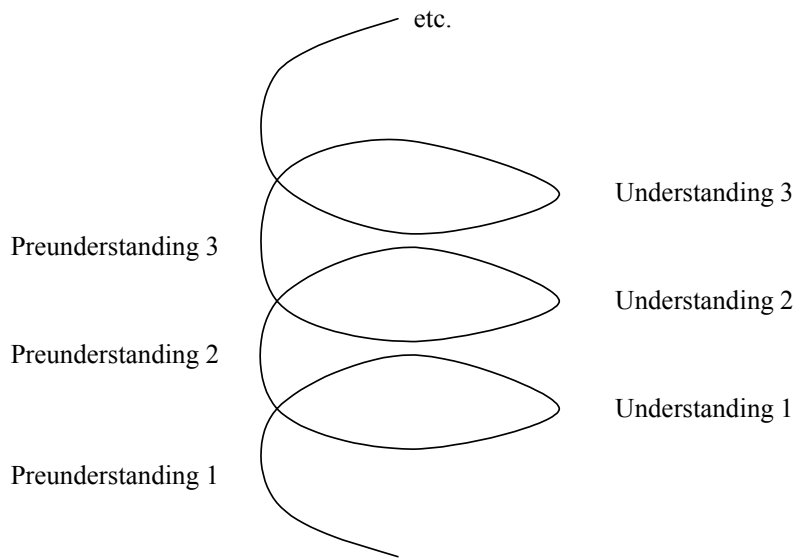


Figure 3. The Hermeneutic Spiral (Gummesson 2000, 71)

Gummesson (2000) has explained the process of understanding as shown in Figure 4. The individual's own personal experience from both private and working life is shown on the left-hand side of the figure. The knowledge that has been obtained via intermediaries appears on the right-hand side of the figure. The combination of one's own and other people's experiences constitutes a store of knowledge that represents the individual's preunderstanding at the start of a research project (Gummesson 2000, 67). The researcher approaches a project with certain preunderstanding. By means of access as a participant in the process, the researcher is able to gain certain insights of his/her own. At the same time, he/she possesses the methods that allow him/her to analyze and interpret the experiences of others (Gummesson 2000, 70).

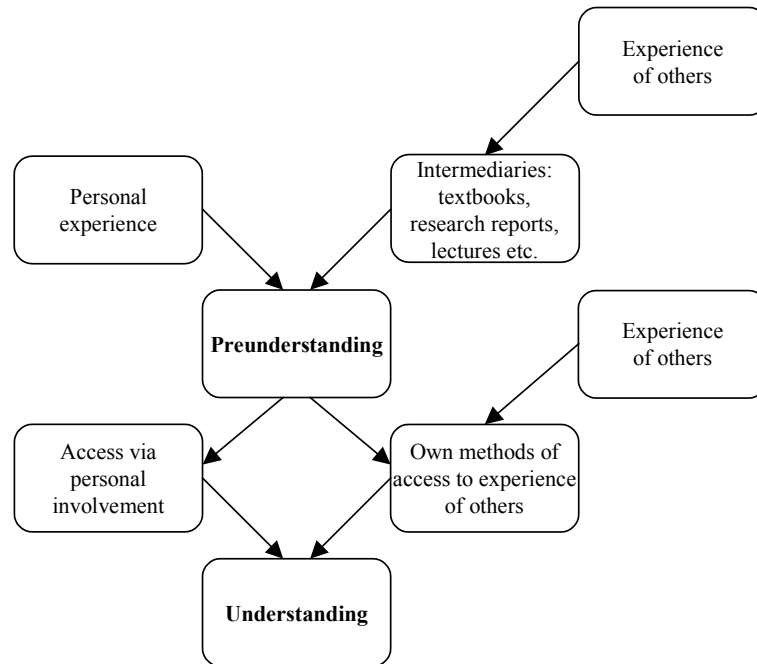


Figure 4. Sources for Preunderstanding and Understanding (Gummesson 2000, 67, 71)

Uusitalo (1991) presents the scientific process as a “wheel of science” with both deductive and inductive reasoning (Figure 5.). Induction looks for patterns and associations derived from observations of the world; deduction generates propositions and hypotheses theoretically through a logically derived process. However, both deduction and induction are involved at different stages of the qualitative research process (Snape and Spencer 2003, 23) Science is a conversation between the present research and the former theory. According to the wheel of science it is possible to start the research from observations and then make generalizations, proceeding to hypotheses and theories based on them. This kind of research is called inductive research (Uusitalo 1991, 36 – 37).

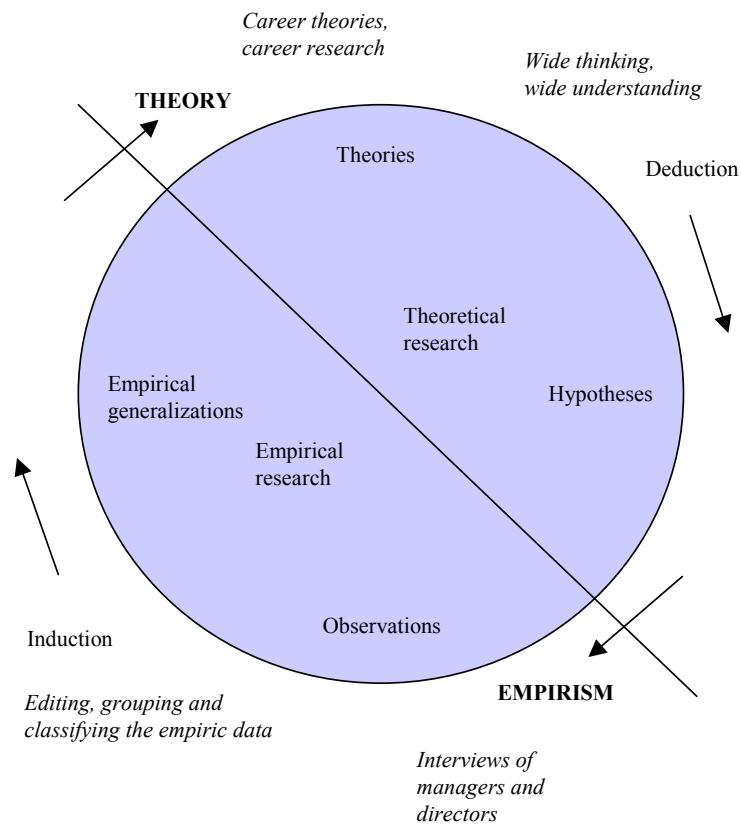


Figure 5. Wheel of Science (Uusitalo 1991, 36)

According to Alasuutari (2001), qualitative analysis consists of two phases: reducing the observations and solving the riddle. In the reduction of the observations the data are examined through a particular theoretical and methodological viewpoint. What is essential in that particular theoretical framework is important. Through use of the framework observations are reduced into a smaller quantity of “raw observations”. The next phase of reducing the observations is to unify them by features, denominators, or rules. Interpretation involves solving the riddle. The interpretation of importance is based on the clues and tips embedded in the phenomenon being examined. The clues are based on former research, statistics and the ways people express things.

Qualitative research is based on an inductive process (Creswell 1994): it proceeds from individual to general and is interested in several simultaneous factors affecting the final conclusion. Qualitative research is dynamic because the classification is formed during the research and the research is bound by context: the theories and patterns are built up in the hope of better understanding. Accuracy and reliability are achieved by verifying. In the present study theory and empirical findings were in interaction during the entire research process. First, existing basic theories were examined. In the interview and analysis phases knowledge of these theories encouraged the researcher to ask and find particular information from the interviews. Also the empirical data stimulated the effort to find connections with existing theories.

Qualitative researchers stress the socially constructed nature of reality, the intimate relationship between the researcher and what is studied, and the situational constraints that shape inquiry (Denzin and Lincoln 2003, 13). Qualitative methods can be used to describe a phenomenon (What?) and explain the issue (How?). According to Glesne and Peshkin (1992), qualitative research aims at contextuality, interpretation (hermeneutic) and understanding of the viewpoints of the actors. According to Strauss and Corbin (1990, 20) there are three major components in qualitative research: 1) data, 2) analytic or interpretive procedures and 3) written and verbal reports.

The managers in this study told their own career stories with all necessary details. In qualitative study it is assumed that the reality is constructed socially (see e.g. Glesne and Peshkin 1992) and there are as many realities as there are persons. A living organism is in interaction with the environment, and it is an open and adaptive system. A human being is a biological and social organism, a person grows up both quantitatively and qualitatively (see e.g. Hirsjärvi and Hurme, 2001). According to qualitative theory the object of research and the researcher are in interaction, which means that the researcher is also among the objects. Gummesson (1991) underlines the notion that the hermeneutic researcher accepts that his/her personality and emotions affect results of research, whereas representatives of positivism tend to believe that they can be separated. Glesne and Peshkin (1992) described an *emic*-perspective in qualitative study. The researcher takes part personally in the project and tries to understand the data empathically. Among hermeneutic researchers the separation between facts and values is blurred. Subjectivism is accepted. These notions are evidenced

in the qualitative descriptive reporting of research. Numeral indicators are rarely used. Qualitative research has been criticized for the lack of precision but there can also be precision without numbers. More important by far is the accuracy of interpretation (Hirsjärvi and Hurme 2001, 22 – 24)

2.2.1. Personal and Organizational Narratives

Narration is a typical way to clarify reality. Narration is close to normal speech. Ordinarily stories have a beginning, a middle, and an end. The human world is based on story-telling and listening. The characters of stories and tales have become a target of research (Eskola and Suoranta 2000, 22 – 23). Narrative is always an entire description where the narrator explains why his/her story should be told (Alasuutari 1999, 140). Interview is a method for collecting stories. In this study the interview is used in order to hear the person's own career narration.

In the case of this project two levels of narrations exist, personal and organizational. Firstly, the directors speak in the voice of the organization. They give background information and paint the view of career development possibilities in the organization. Secondly, the interviews of the managers represent a personal viewpoint over career. Personal narrative is the project of telling a life (Ellis and Bochner 2003, 220); in this case the managers tell their own career stories.

2.3. Quantitative Research Methodology as a Part of Analyzing Career Anchors

Quantitative analysis argues with figures and with systematic, statistical relations between them, (Alasuutari 2001, 34). Quantitative analysis deals with average connections, and quantitative study is based on the search for differences between variables. The units of analysis can be persons or groups of people. In quantitative analysis the researcher is looking after statistical regularity based on the way variables are connected to each other (Alasuutari 2001, 37).

It is possible to discriminate between qualitative and quantitative research analysis, but it is also possible to apply both in the same research and in the analysis of the same research

data, as in this study. The quantitative model aims at solving problems through the use of tools drawn from the natural sciences, whereas the qualitative model strives to solve riddles (Alasuutari 2001, 32). Both qualitative and quantitative research approaches provide a distinctive kind of evidence and used together they can offer a powerful resource to inform and illuminate policy or practice (Ritchie 2003, 38). In this research data connected with career anchors are analysed through qualitative and quantitative methods. The short questionnaire used in the study clarifies differences in values that are in the background of a person's career. Results of the questionnaire were analyzed with the Mann-Whitney Test.

2.4. Methodological Background of the Research

2.4.1. Interpretative Sociology in Social Theory

Burrell and Morgan (1998) have presented four paradigms for the analysis of social theory (Figure 6.). These four paradigms are: radical humanist, radical structuralist, interpretive and functionalist.

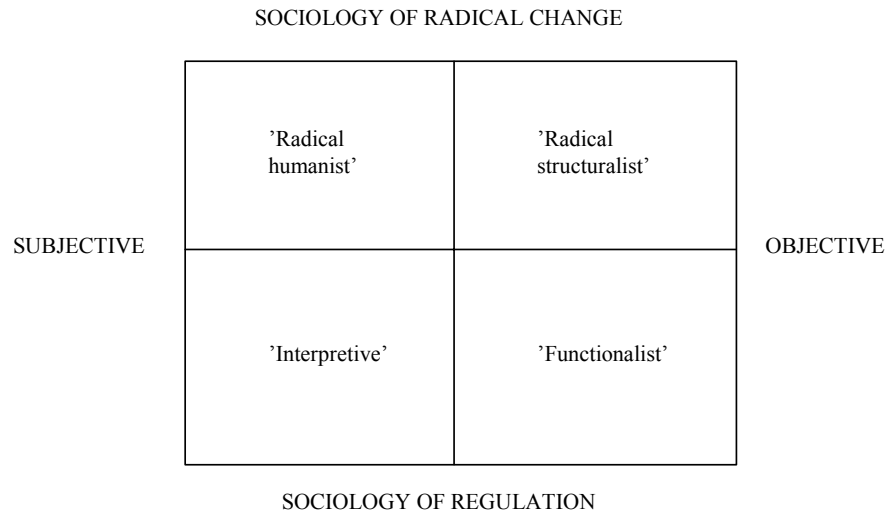


Figure 6. Four Paradigms for the Analysis of Social Theory (Burrell and Morgan 1998, 22)

The four paradigms define fundamentally different perspectives for the analysis of social phenomena. Burrell and Morgan's four paradigms provide a map for negotiating a given subject area, and offers a convenient means for identifying the basic similarities and differences between the work of various theorists and, in particular, the underlying frame of reference which they adopt. The paradigms also provide a convenient way of locating one's own personal frame of reference with regard to social theory and thus offers a means for understanding why certain theories and perspectives may have more personal appeal than others. Their scheme also provides a tool for mapping intellectual journeys in social theory. The four paradigms offer alternative views on social reality, and to understand the nature of all four is to understand four different views of society (Burrell and Morgan 1998, 23 - 25).

The interpretive paradigm is characterized by a concern to understand the world as it is, to understand the fundamental nature of the social world at the level of subjective experience. It seeks explanations within the realm of individual consciousness and subjectivity, within the frame of reference of the participant as opposed to the observer of action. It sees the social world as an emergent social process, created by the individuals concerned. The world

of human affairs is cohesive, ordered and integrated. The problems of conflict, domination, contradiction, potentiality and change play no part in the theoretical framework. The interpretive paradigm is orientated towards obtaining an understanding of the subjectively created social world 'as it is' in terms of an ongoing process. Interpretative sociology is concerned with understanding the essence of the everyday world (Burrell and Morgan 1998, 28 – 31). Theorists of all schools of thought within the interpretive paradigm tend to share a common perspective, in that their primary concern is to understand the subjective experience of individuals (ibid., 253).

In the present research the career stories are located in the area of the interpretive paradigm. The target of the study is to understand and interpret the careers of managers as constructed in the ICT and paper business sectors. In the interviews managers described their career stories and painted a view of their careers in the future. For example, there existed certain factors behind the career, like an interest in technology which encouraged the person to choose the direction of his/her education. A technical education enabled the individuals choosing a career in the ICT or paper industry. Again, personal interests directed the kind of career path the manager followed in that business sector, whether he/she was advancing in the career path of a general manager, specialist or project manager.

2.4.2. Social Constructionism and Career Research

According to positivism, interview data give access to already constructed facts, beliefs about facts, feelings and motives, standards of action, present and past behaviour and conscious reasoning. On the other hand, according to the constructionist view, interviewers and interviewees are always actively engaged in constructing meaning. A particular focus is on how interviewees construct narratives of events and people and the turn-by-turn construction of meaning (Silverman 2001, 87 - 88).

Berger and Luckmann (1994) clearly describe the concept of the social construction of reality. According to them the world is a human construct and socially constructed. Berger and Luckmann's ideas are based on a person's experiences and natural attitudes. They have also noted that the interaction between a person and society happens externally, first creating objectivity and finally internalized. Berger and Luckmann have introduced the idea that

institutions are shaped by persons, and products of external life experiences become objective in the institutions. The examination of social constructionism by Berger and Luckmann is based on the world of living, but it also includes examination of society and institutions. According to social constructivism, people consider their reality as given, but additionally create their social reality in everyday interaction (Berger and Luckmann 1994, 29 – 30). Czarniawska-Joerges (1994, 194) has crystallized these ideas with the observation that “humans are social constructors and organizations are social constructions”. Everything in an individual’s life surroundings depends on the unique experiences of that person. Understanding always contains numerous preunderstandings and interpretations. When a person’s life needs to be understood, then these preunderstandings and interpretations need to be taken into consideration. Language functions as a system that arranges individuals experiences (Berger and Luckmann 1994, 29 – 30).

Shotter (1993) has expanded upon the theory of social constructivism. In his theory of rhetoric social constructivism he emphasizes that the interaction of people happens in a two-way-direction when a person answers to speech of others, argues and gives reasons for his/her own arguments. Language is a tool for understanding others. In Shotter’s theory, in addition to the concepts “self” and “other”, “situations” happen between these two. Situations are not “mine” or “yours” but “ours”. Also Humphreys and Brown (2002, 422) describe organizations as being built among conversation networks and dialogs. People differ in their conceptions of the world and ability to understand, i.e. the worlds of different people are not alike even in the same social space.

Face-to-face-interaction between two persons is important in Berger and Luckmann’s thinking. Interaction enables the absorbing of two different horizons (Berger and Luckmann 1994, 39 – 40). A person can change his/her attitude towards the other person during the interaction. A person can help his/her thinking by making classifications according to different structures or types. The social reality of everyday life is experienced as a continuum of classifying by types (Berger and Luckmann 1994, 43 – 44). Berger and Luckmann consider creating marks as a crucial ability to produce objectivities. According to them, different marks make mark systems. Through an objective language a person resigns to law and objectifies and classifies his/her own experiences. A person is produced by him/herself with the help of education and interaction. The world with cultures and

psychological and social constructions is created in interaction with other people. Establishing human action to certain forms makes institutions. The process of continuous social interaction constructs the world because we do not only understand others' definitions of situations where we live but also define situations reciprocally. We identify the self to the world of others', and the interaction, like discussion, with others produces objective social reality (Berger and Luckmann 1994, 147 – 149).

Whereas the criticism of career theory was first expressed in terms of the need for a phenomenological approach, it has more recently been reframed in terms of contextualism and constructionism (Young et al., 1996) which, with narrative and hermeneutics, represented the post-modern turn in social sciences during the late 1980s (Savickas, 1995). All these approaches are concerned with the development of meaning in social interaction, the involvement of intersubjectivity, and the role of context in the construction of career (Young and Valach 1996, 363). Hence it can now be argued that career is an overarching construct that serves to frame and organize a complex pattern of intentional actions over longer segments of life (Young and Valach 1996, 364). These new approaches offer a revised construct of the individual, a key element in career theory. Rather than regarding the self as a passive entity determined by external influences, (Giddens 1991, 2) these approaches see a person as a reflexive project which the individual is responsible for, and which forms a trajectory of development from the past to the anticipated future. We are not what we are, but what we make of ourselves (ibid. 1991, 75 – 77).

People construct their concept of career in interaction with others. The concept of career is different to different people. Some people understand a career as something that leads only upward in the hierarchy of an organization. Career development can be excellent or unsatisfactory depending on the person. In interaction with other people a person forms the concept of "good" or "bad" career, and then compares his/her own situation to these concepts.

In this study managers offered facts concerning their careers, beliefs, feelings and motives. They described the phases of their careers. This narrative represents the conceptual base of the positivistic research tradition. On the other hand, career is always made in an interactive

situation, the career of an individual always relates to other people and environment. Hence, the constructionist research tradition is also present in this study.

2.4.3. *Objective, Subjective and Organizational Approach to Career*

The career concept can be approached from objective, subjective and organizational viewpoints. The *objective interpretation* of a career defines the career with the concept of career path. In this interpretation career is a question of a chain where often but not necessarily hierarchically linked positions are linked together. Through this chain the employee proceeds from one post to another or from one level of occupation to another. In this objective interpretation an individual's career stage is not essential, the focus is on different career constructions and career path models. According to *subjective interpretation* career development is a professional learning process going on through one's life that follows the development of the person's identity directed by his/her career anchors. The development of professional self-image is important. When subjective components are stressed components are in career research, the career development process is often connected to life-span reasoning. According to the *organizational interpretation*, careers are processes through which the organization renews itself. From the organization's point of view the problem of career development crystallizes in determining how personal career decisions can be influenced so that the organization can be led in the right direction and total competence strengthened with the ability to compete and renew itself (Lähteenmäki 1995, 29 – 30, 37 - 38).

As we understand the concept of career objectively in this study, it is conceptualised as a chain of posts through which a manager's career has developed. Managers described the progression of their careers in the interviews. Career defined in this way can be seen for example in a person's curriculum vitae. In this study, however, the concept of career is approached mainly through subjective and organizational viewpoints, i.e. how persons construct their career within and in interaction with the ICT or paper business sector.

In this study career is a neutral word, it is not evaluated on any scale of values. It does not make any difference whether the career is moving upwards, downwards in hierarchy or continuing horizontally (see Schein 1978, 36). The career is a continuum of different

positions in the service of one or more employers. The career path of a manager is based on a narrative where every phase of the career is explained to the researcher. The career is something that the manager owns and it is directed by the person's own values and choices in interaction with the environment. There can be numerous outside factors that influence a person's career, for example education, locality, family, job opportunities, work itself, gender matters in labor markets, and the business sector where the career takes place. In this study locality, family and gender matters are left out of the research focus. Important considerations are the influence of business sectors and the age of the manager. Here career is considered professional and it can be temporarily interrupted by such things as education, child caring or unemployment. A career can also be formed simultaneously with education. Lähteenmäki (1995) notes in systemizing terminology found in career research that the concept of career has been analyzed using a number of meanings that can be grouped either according to an objective or subjective idea of a career.

- a) career as series of posts, including every kind of mobility and every kind of posts in life (the chain of posts, career path, life career/objective)
- b) career as progress, when the career includes vertical mobility (career progress, career development/objective)
- c) career as a profession when vertical mobility only between particular posts is accepted to the career (professional career/objective)
- d) career as sequential choices made by a person (life career/both objective and subjective)
- e) career as progress and development in a profession that satisfies the person (professional career/subjective)
- f) career in an organization when only mobility within one organization is included in the career (organizational career/objective)
- g) career as a socializing process in an organization as a consequence of experiences and changes of post in the organization (organizational career/subjective)
- h) career as a combination and consequence of parallel and successive roles, child, pupil, citizen, employee, spouse, educator and so on (life span, career development/mostly subjective but also objective examination is possible)
- i) career as a consequence of a person's values and behaviour connected to the work experiences and posts gone through. Almost in the same way, career as a series of

experiences connected to roles, when it is possible to talk about for example the career of a full-time mother (life career, life time working experience)

- j) career as a development process of professional identity and personality. Career develops through successive career development phases directed by career anchors while trying to reach professional goals (career development, life career/subjective)

Points a), d), g) and j) in the following list of career terminology represent the viewpoint of this research. Common to the above interpretations is that in each of them career seems to be based on successive choices in different career decisions. In every case the definition of the career is directed by whether the career is considered from a subjective or objective point of view but also whether the career is approached from a personal or organizational point of view. When examined on a personal level, the career is seen as a personal development process (subjective), and when approached from an organizational or institutional basis the career is seen as series of positions (objective) (Lähteenmäki 1995, 27 – 28, Vanhala 1986, 12).

2.4.4. Theoretical Perspective to Career Research in Sociology and Psychology

A career arises from the interaction of individuals with organizations and society. It is, therefore, the legitimate concern of several disciplines and sub-disciplines, such as organizational psychology, counselling psychology, sociology, labour economics, organization and management studies. Each of these disciplines has their own viewpoint and focus on career, their own definitions, concepts, assumptions, methodology, language, discourse, applications and journals (Herr, 1990). At the same time, a career is not primarily a theoretical construct, it does not have a precise meaning, but it is rather used in meaningful ways, it is given meaning and it creates meaning (Young and Valach 1996, 362). It is an everyday term which people use to construct their daily lives. “Career” therefore, has a rich ambiguity, which makes it inherently challenging to study. There exist two main schools in the study and practice of career. The first is concerned with career choice, education and counselling (e.g. Osipow 1983). It has been fed by considerable research effort and theorizing, based largely in North American counselling psychology; the British contribution to this area has had a stronger sociological influence (Watts 1981, 3). The second area, influenced by organizational psychology and sociology and concerned with

organizational careers (e.g. Hall et al. 1986, Schein 1978, Van Maanen 1977, Hall 1976) has contributed to the instrumental practice of career management and career development in organizations. Despite their overlapping interest in career, there has been little interaction or collaboration between those working in these two areas. Career psychologists, for example, pay scant attention to the influence of the nature of organizations on career. The study of career, then, is not only diverse but also fragmented (Collin 1998, 413).

In this research the concept of career is approached from the perspective of psychology and sociology. Scholars in these camps disagree particularly with respect to the relative importance of different variables in the experience of career. Some claim that environmental factors are most important in career development, others make the same claim for intrapsychic factors (Kotter 1978, 99). However, in career research the viewpoints of sociology and psychology are strictly linked together when organizational careers are concerned. A person does not make his/her career decisions regardless of the environment, company, society, family etc. Therefore it is challenging to examine the influence of business sector to managerial career in isolation from other important variables.

The oldest, *psychological*, approach to career is generally known as the trait-factor approach. This system assumes that a straightforward matching of an individual's abilities and interests with the world's vocational opportunities can be accomplished, and once accomplished, it solves the problems of vocational choice for that individual. Some of the original trait-factor theorists who have influenced the thinking of vocational psychology are Parsons (1909), Hull (1928) and Kitson (1925). The vocational testing movement has grown from the trait-factor point of view. Currently, the trait-factor model has been absorbed into other approaches to vocational counselling (Osipow 1968, 10 – 11). The psychological perspective, based on developmental psychology, emphasizes the individual's choice in making his/her own career. Psychological literature focuses on the individual and the notion of the career as subjective, situated within the individual. In the oldest approach to career the importance of person-environment 'fit' leading to occupational stability as well as personality traits and their implications for occupational choice are emphasized. Psychological life-span research, where adulthood is broken down into different development periods, has also affected career research in vocational psychology. Career development theorists study the ways in which careers develop over the span of an

individual's adult life. For example Holland (1966), Levinson (1978) and Super (1957) define career in this manner.

The *sociological* approach to career development has as its central point the notion that circumstances beyond the control of the individual contribute significantly to the career choices he/she makes and that the principal task confronting the person is the development of techniques to cope effectively with his/her environment (Osipow 1968, 11). The sociological approach tends to look at society as a social structure consisting of various occupations. Careers are viewed as movement from one occupational level to another in social structure, stratified by status and by the occupational role expectations of a person in a given status (see also Boudon and Bourricaud 1994). The occupational level achieved in career development is seen in terms of a process of social causation. The prime determinants of occupational level can be the person's social class, education, expectations and internalised values. In addition to environmental factors (e.g. personal contacts), available financial backing and socio-economic conditions in society are also relevant (Kotter 1978, 99). In sociologically directed organizational studies subjective (personal) and objective (organizational) viewpoints have been the most common methods in career research. Subjective research emphasizes personal career experiences, that is the kind of meaning the career has for a person. Objective research stresses the organizational viewpoint toward career (Peltonen 1995b, 15). Inkson (1995) defines sociological approaches as framing the career as something that is organizationally based, planned, progressive and enacted by rational individuals. Sociological literature typically explores careers in terms of particular occupational paths, and as stages within organizations. Organizational ways to influence a person's career are, for example, recruitment, training and development, and performance evaluation. The career is objective and, external to the individual. For example Derr (1986) and Inkson (1995) are examples of sociological researchers in the career domain.

In this research I aim to explore the career in a more *holistic* way, as an on-going process where central is the relationship between the individual and the organization. Schein (1971) is a notable example of a holistic researcher in the area of career. He uses the anchor image to describe what he sees as the fundamental, unwavering and unchanging ideas around which individuals construct their careers. Careers are not static entities caught at a moment in time, but they unfold and develop through time (Redman and Wilkinson 2001, 271).

Schein (1971) has looked at career from three points: from the point of view of the person, the organization and an observing outsider. In the personal view career is a question of values, expectations, attitudes etc.; the organizational point of view refers to the allocation of human resources and internal transfers of work force. The outsider observes the career as an interaction process between a person and the organization, including different learning, socializing and performing operations.

Ahlstedt (1978) has presented the interaction of a person and an organization in the career context as follows:

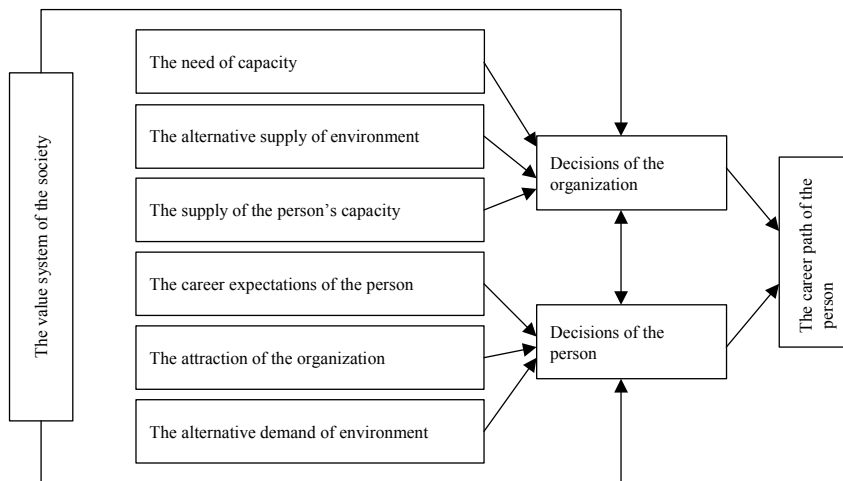


Figure 7. The Formation of a Person's Career Path (Ahlstedt 1978, 33)

The career process can be seen as a formation process of capacity which reflects the person's impressions of his/her success in work and, on the other hand, the limitations or possibilities made by his/her environment. Mobility during this process turns up as the person's career path (Ahlstedt 1978, 68). Career *mobility* describes the frequency of transitions from one position, function, organization or sector to another (ibid., 72). The *stage* of the career development is another way of studying the structure of a career path.

2.4.5. Career Development Spectrum

Figure 8. below presents the complex of human resource management and, as a part of it, the location of career planning and career management. Since career is composed in interaction between a person and an organization, individual careers are tightly connected to the human resource planning of an organization.

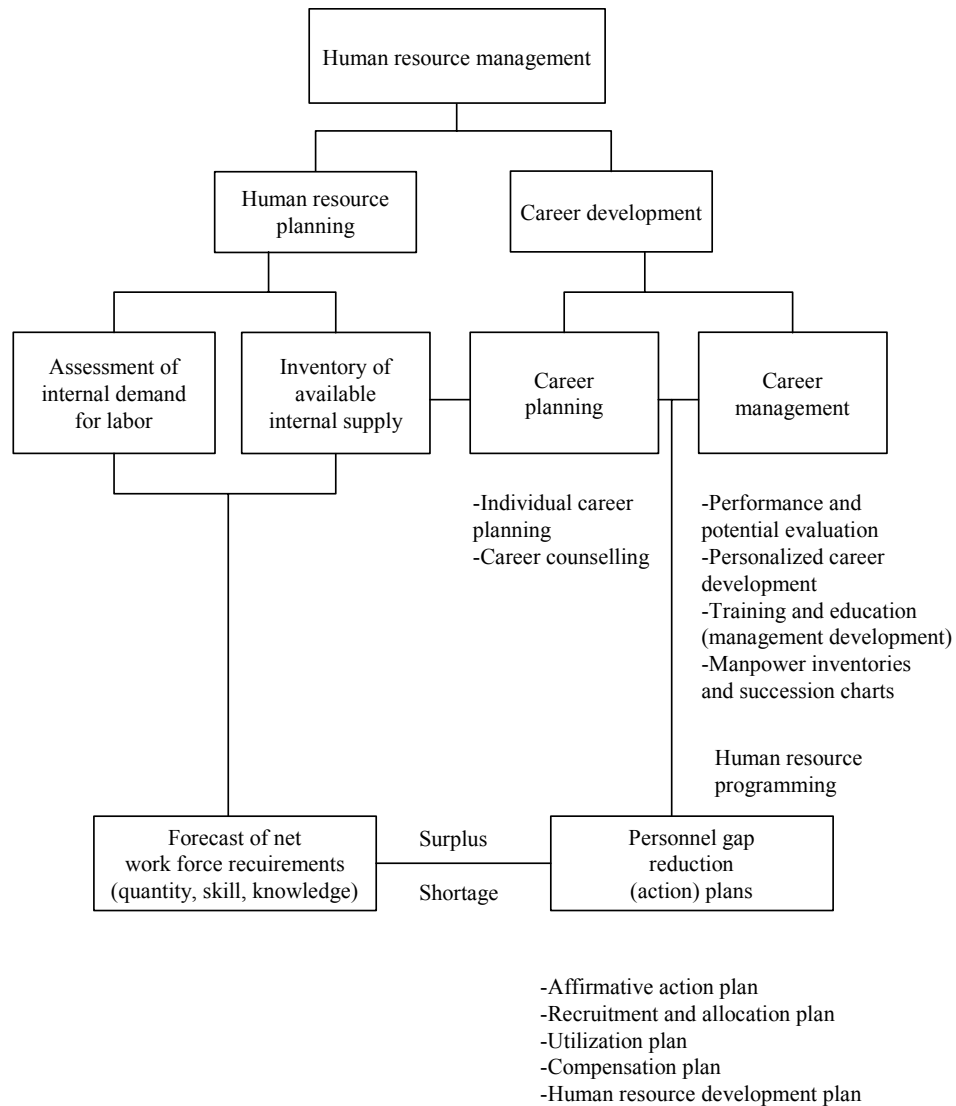


Figure 8. The Complex of Human Resource Management (Hall 1988, 57)

According to Hall (1988) career development can be considered from a personal or organizational point of view (Figure 8.). Two important facets appear in the career development process. The first is the work of the *individual employee* who is attempting to plan his/her career in a personally satisfying and productive manner. The individual-level approach is often called *career planning*. Career planning is a deliberate process of 1)

becoming aware of self, opportunities, constraints, choices and consequences, 2) identifying career-related goals, and 3) programming work, education and related developmental experiences to provide the direction, timing and sequence of steps to attain a specific career goal. The second facet of career development is related to the activities of the *organization* that will effectively select, assess, assign and develop employees to provide a pool of qualified people to meet future corporate needs. The organization-level approach is called *career management*. Career management is an ongoing process of preparing, implementing and monitoring career plans undertaken by the individual alone or in concert with the organization's career system. Organizational career development requires the use of both of these activities. These two activities can be described as ending points of a spectrum of career development activities as shown in Figure 9. The activities illustrate different points in the continuum of career development. In the career-planning end of the spectrum are individual activities. The person directs and controls his/her career development him/herself. At the opposite end of the spectrum is formal succession planning, which is typically done in secrecy by top management with no involvement of the individual. The organization has high levels of information and control in this process. In the middle of the career development spectrum are activities with equal involvement by the employee and the organization. Perhaps the best examples of this mutual focus are career coaching and counselling discussions between a supervisor and the employee. The objective here is career planning for the employee, with the supervisor providing input on company realities and assistance in implementing career plans within the constraints of the corporate environment (Hall 1988, 2 – 5).

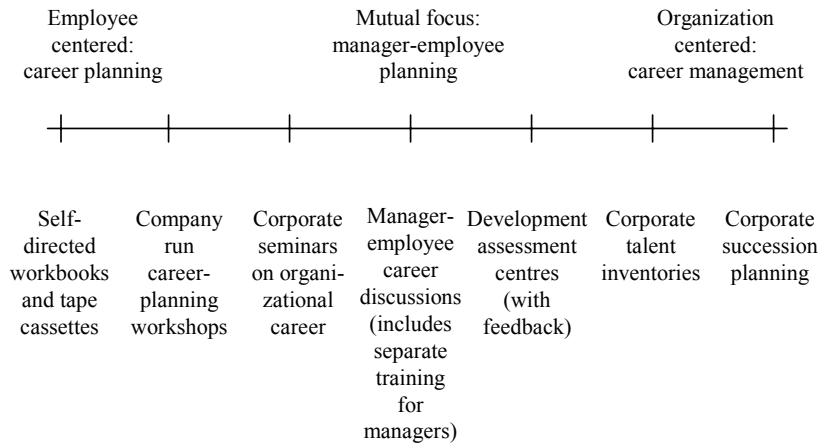


Figure 9. The Spectrum of Career Development Activities (Hall 1988, 4)

Career management can be thought of as attempts to influence the career development of one or more people. These attempts might be made by that person or those people themselves, or the attempts may be made by other people – for example bosses, human resource managers, professional associations or partners (Arnold 1997, 19). The theory and practice of career management are, according to Bratton and Gold (1994), based on two assumptions. First, a career should not, indeed could not in a business sense, be considered exclusively from within the context of an individual's subjective experience. The second assumption is that there exists a common, shared interest between the strategic aims and business objectives of the organization and the personal aspirations and ambitions of the individual (Arnold 1997, 19). There are many phenomena which can contribute to career management, for example 1) personal thoughts and actions such as reviewing one's past experience or seeking career guidance, 2) organized events such as career development workshops, and 3) policies laid down by organizations, e.g. employers, governments, on professional bodies (Arnold 1997, 19). Career management always has, or at least should have, defined goals. The notion of managing a career implies that they can turn out to be better or worse. The first step in career management involves the individual defining what counts as better or worse in any given context, and for whom. The second is to specify what 'better' means in terms of achievable and verifiable goals. The third is to plan actions geared to achieving these goals. The fourth is to put those actions into practice. The fifth step is to evaluate the success of career

management, and the sixth is to use the results of the evaluation to alter the goals or actions if necessary (Hirsh et al. 1995). Different stakeholders in the careers may have different aims. The career may be subject to various attempts at career management, and these attempts may be directed at different goals, or even contradictory ones. The management of careers also attempts to influence how individuals experience careers. We are dealing here with attitudes, opinions and emotions (Arnold 1997, 19).

Putting together an individual and organizational career is a complicated question. Organizations expect commitment and performance and think that they can engineer it by performance-related pay and other material inducements. What organizations do not always realize is that it is individuals with whom they are dealing. Individuals differ in their aspirations those aspirations change over the course of their lives, and there may be great social movements that will affect what is generally valued and what is not (Herriot 1992, 5).

Career planning

When examined subjectively, a career is seen from a mobile perspective, where the person sees his/her life in one entity and interprets the meaning of activities, his/her changing traits and past events (Hughes 1968, 17). Career development is seen as the particular way that an individual's career unfolds – i.e. how that career develops (Arnold 1997, 18). Schein talks about “internal career”, the stages and tasks of the career cycle as seen and experienced by the person in the career. All people develop some kind of picture of their work life and their own role in it (Schein 1978, 36 and Schein 1987, 155).

The person him/herself, his/her ambitions, competencies and environment are important concerning his/her career. Career can be seen as a rational action where the person looks after suitable ways to achieve his/her goals. It can also be seen as resulting from the person's decisions where his/her personal traits and orientations define the career decision according to a psychological framework. On the other hand, it is possible to trace personal socialization to the society, the meaning of culture and institutions (for example education and family) to personal decisions from a sociological basis (Aaltio-Marjosola 2001, 187 – 188).

According to Super (1990), different abilities, interests and personalities determine a person's career development. Occupations require a characteristic pattern of abilities,

interests and personality traits, with tolerances wide enough to allow both some variety of occupations for each individual and some variety of individuals in each occupation. The process of career development is essentially that of developing and implementing self-concepts; it is a synthesizing and compromising process in which the self-concept is a product of the interaction of inherited aptitudes, physical make-up, opportunity to play various roles, and evaluations of the extent to which the results of role-playing meet with the approval of superiors and fellows. Chance may be summed up in a series of life stages of growth, exploration, establishment, maintenance and decline. A short-term cycle takes place in transitions between jobs, involving growth, re-exploration and re-establishment (Arnold 1997, 127 - 128).

There is general agreement that a person's career development is determined by who the individual is now, especially with regard to the most central and least changing aspects of the person (i.e. the "core personality"). Other determinants are natural internal physiological and psychological development patterns (e.g. aging) that are common to all people and that have an impact on the individual over time. The interaction between the person and his/her environment can change the person over time. For most people (i.e. in a typical life style) the two most important environmental factors are job and family. Job opportunities available in the person's environment at specific points in time and career paths associated with those job opportunities affect the personal career development. Changing social, economic, and political forces that modify the structure of available jobs and careers over time affect career development. Also the individual's desire or ability to gain access to available opportunities has an influence on career progression. Additionally, the job and career decisions a person makes consciously or unconsciously over time (which determine the key aspects of his/her environment) affect the career (Kotter 1978, 99 - 100).

Career management

It has been suggested that in today's world of movement, diversity, flexibility and short-term relationships, organizations need to rethink their approaches to human resource development as well as career development (Redman and Wilkinson 2001, 276).

A person's career is developed in an organizational environment that is directed by markets, corporate vision, strategy and human resource management (HRM) practices. Vision portrays

the image of the future desired in a company. Vision is an outcome, while mission is a direction. Vision is crystalized from a process where future socio-economical and technical forces are arranged together (Kauppinen and Ogg 1999, 74). Drucker (1970) has stated that the vision of the organization provides an image rather than a fully worked-out plan. It is typically concerned with change and providing a general direction. It is the goal towards which all objectives of the divisions within the organization are directed. Business success is determined by how management allocates scarce resources to prioritised alternative uses. These resources are financial, physical and human.

Once corporate vision has been determined, then a corporate strategy can be developed. There are four main components in corporate strategy: 1) internal resources, 2) environmental trends, 3) corporate values, and 4) level of risk. Internal resources are represented by capital, manpower and financial factors. The proportion in which these internal resources are blended will result in the unique focus of the enterprise. Companies in the same business will often differ from each other as a result of this utilization of resources. At the heart of corporate strategy are human resources. The proper utilization of the human resources is the final determination of a company's success (Bowin and Harvey 2001, 70 – 71).

Strategy affects the overall direction and potential for the success of the organization, it is concerned with the fit between the environment and the organization. Strategy deals with non-routine activities and seeks innovation and change in the organization. It amounts to setting organizational objectives and then deciding on a comprehensive course of action to achieve those objectives. Business strategy is concerned with the efficient use of resources, as well as ensuring that the mobilization of those resources achieves maximum impact (McKenna and Beech 2002, 25).

HRM is an integrative general management activity that involves examining the organization's demand for human resources with particular skills and abilities. This includes the recruitment and selection of appropriate staff, training and development of staff and the management of the employment relationship including contracts, collective bargaining, reward systems and employee involvement (Capon 2000, 280).

Labour supply is the availability of workers who possess the required skills that an employer might need. Labour demand is the number of workers an organization needs. Estimating future labour supply and demand and taking steps to balance the two requires planning. Human resource planning (HRP) is the process an organization uses to ensure that it has the right number and the right kinds, of people to deliver a particular level of output or services in the future (Gómez-Mejía et al. 2001, 159). Bramham (1994) provides a four-part framework for understanding human resource planning. The first phase is analysis and investigation concerning the influence of the internal and external environment, a review of the key elements of the organization, and their impact on corporate strategy. Phase two examines techniques to assist in forecasting the demand for labour and the internal and external supply of labour, identifying potential human resourcing imbalance. Phase three establishes the key policy areas and offers a range of generic HR plans as to how this imbalance can be addressed. The final phase ascertains the ways in which the various plans can be implemented and controlled, with particular attention to the role of the organization's human resource information system (Williams 2002, 31).

Success of the human resource planning system depends upon three key factors:

- 1) Knowledge of the human resource environment. This provides information to answer the question "What has been and is happening to our human resources?" The answer resides in the collection and analysis of such factors as labour turnover rates, recruiting effectiveness, and levels of training. These three factors comprise what is called the human resource audit. Other human resource environment factors that need to be considered in the human resource audit are technological and economic changes. These changes, while difficult to quantify, must be identified and evaluated.
- 2) Knowledge of the present corporate human resources. This is a prerequisite for planning for the future. The HRM manager must know what skills and potential are presently available before beginning to plan. This initial inventory is called the human resource inventory.
- 3) Knowledge of the present and future objectives of corporate planning. This requires that business plans and objectives must be expressed in meaningful human resource terms. The preceding statement needs to be changed to meet HR's criteria by reducing the expressed needs into an expression of human resource required for each year of the planning cycle and

in terms of type and level of skill. This is essential, since such a statement of human resource requirements represents the central core of human resource planning.

These factors allow the corporation to develop short-term plans to cope with sudden changes in the environment and to anticipate future change. As a result, the corporation is prepared to handle expected changes arising from business plans, as well as unexpected changes resulting from rapid economic, political, and/or technical change (Bowin and Harvey 2001, 69 – 70).

Bowin and Harvey (2001) regard human resource planning as the optimum utilization of currently employed human resources and the provision of future human resource needs in the areas of skills and numbers.

Basic HRP objectives can also be summarized in another way (see also Williams 2002, 28):

The right *number* of employees
with the right *level* of talent and skills
in the right *jobs* at the right *time*
performing the right *activities*
to achieve the right objectives
to fulfill the corporate vision (Bowin and Harvey 2001, 70 - 71).

The definition of “right” cannot be found in the literature, but should be taken to mean “what is right for a particular organization” (Williams 2002, 28).

Dessler (2002) has explained that employment or personnel planning, is the process of deciding what positions the firm will have to fill, and how to fill them. Personnel planning is an integral part of a firm’s strategic and HR planning processes. Changes in the firm’s strategies influence the types of positions the firm will need to fill. One big question is whether to fill projected openings from within or from outside the firm. Current employees may require training, development, and coaching before they are ready to fill new jobs. Going outside requires deciding what recruiting sources to use, among other things. When planning employment requirements, there is usually a need to forecast 1) personnel needs, 2)

the supply of inside candidates and 3) the supply of outside candidates (Dessler 2002, 90 - 91). A variety of approaches can then be used to increase the labour supply available to a specific firm. These include training or retraining existing workers, grooming current employees to take over vacant positions, promoting from within, recruiting new employees from outside the firm, subcontracting part of the work to other firms, hiring part-timers or temporary workers, and paying overtime to existing employees (Gómez-Mejía et al. 2001, 160).

With the human resource planning model, career development is the formal approach taken by an organization to ensure that people with the proper qualifications and experience are available when needed. Career development helps organizations avoid the dangers of an obsolescent, unacceptable workforce. Currently, employers no longer promise job security in return for loyalty. Instead, more employers offer opportunities for development and continuous learning in return for high performance and productivity during an employee's stay (Zheng and Kleiner 2001, 33).

Organizations can help the individual by creating more flexible career paths, incentive systems, and reward systems to meet a wider range of individual needs, even within a particular job category. Organizations can also stimulate more self-insight and self-management, starting with managers themselves, that is, ask managers to analyze their own career anchors, manage their own careers more actively, and only then ask their subordinates to do the same. Organizations can assist a person by being clearer about what the organization needs from the individual. If career seekers and job incumbents can be given a more accurate picture of the work to be done in a given job and of career patterns overall, they will be better able to set a constructive course for themselves. Implied in this is also clearer performance appraisal and career relevant feedback (Schein 1987, 170).

Arnold (1997) identifies a number of organizational interventions designed to develop individuals' careers. (Table 2.)

Table 2. Organizational Interventions of How to Develop Individuals' Careers (Arnold 1997)

Internal vacancy notification	Details about jobs available within the organization prior to external advertising. Should include necessary experience and qualifications, and a description.
Career paths	Information about the sequence of jobs that people can do, or competencies they can acquire within the organization, with details of how high the path goes, potential lateral moves, required qualifications/skills/experience.
Career workbooks	Exercises designed to guide individuals in analysing their own strengths and weaknesses, identifying opportunities and assessing action necessary to achieve goals.
Career planning workshops	Deal with similar issues to workbooks, but in a more 'managed' way, offering opportunities for discussion and feedback. Sometimes include psychometric testing.
Computer-assisted career management	Packages which help employees to assess their skills, interests, and values, and translate these into employment options. Sometimes these are organization specific.
Opportunities for training and development	Information, financial support and sometimes delivery of courses. Could be within or outside of the organization. Designed to enable employees to update, or to acquire new skills and knowledge. Often used in preparation for seeking promotion.
Personal development plans	Statements of how an individual's skills and knowledge might develop, given a particular employment context and timescale. Often arise from performance appraisal or development centre assessment.
Career action centres	Resources (paper, video and electronic) available to employees on a drop-in basis. Sometimes also offer counselling.
Development centres	Employees are assessed on the basis of their performance in a number of different exercises and

	tests. Focus on identifying an individual's strengths and weaknesses for the purpose of development.
Mentoring programmes	Attaching employees to more senior colleagues who act as advisors, advocates, counsellors.
Job assignment/rotation	Careful use of work tasks can help a person to stay employable. Organization will benefit from staff adaptability, flexibility.
Outplacement	The purpose is to support people who are leaving the organization, to help them clarify future plans. May include a variety of the above interventions.

Arnold (1997) concludes that career management interventions are most likely to have a desired effect in situations where, first, there is openness and trust. Second he suggests that the goals of career management processes must be clear and explicit. Third, the way in which these processes are managed and delivered is crucial. Finally, it is essential that career management interventions are not perceived as only available to a select few: rather, organizations should be seen to take an interest in the careers of all their employees.

The organization benefits from understanding career orientations in several ways. The organization is able to tailor career interventions appropriately and offer opportunities congruent with an individual's orientation. It is possible to design appropriate and targeted reward, promotion and recognition systems. The organization can increase the understanding of managers on what drives internal career satisfaction and understand the overriding career culture in the organization. Noticing career orientations is a way of structuring career discussions, and particularly exit interviews (Yarnall 1998, 58).

2.5. Data Collection and Data Analysis

2.5.1. Considered Sample in Selecting Managers

A sample is a small-scale representation of the population from which it is selected. Because it includes merely a part, not all, of the parent population, it can never be an exact replica of that population (Hedges 1978, 57). In a qualitative study questions always exist concerning

what constitutes a theoretical or appropriate sampling or a considered sample. This study is based on a sufficient number of cases to be appropriate (Eskola and Suoranta 1998, 61) and the sample is based on consideration (Pirttilä 1979, 36 – 37). Qualitative samples are usually small in size. Three main reasons for that are: first, if the data are properly analysed, there will come a point where very little new evidence is obtained from each additional fieldwork unit. Second, statements about incidence or prevalence are not the concern of qualitative research. Third, the type of information that qualitative studies yield is rich in detail (Ritchie et al. 2003, 83).

In the beginning of the data gathering process access to the companies was negotiated with persons in high organizational positions, (e.g. Chief Executive Officer, Unit Manager or HR Manager). In this study these persons are named as *directors*. They were provided clear information about the purpose of the study in a telephone conversation. In all six companies contacted, the researcher's project was accepted.

First, the directors were interviewed in every company in order to gather basic information concerning the organization and to find out the organizational viewpoint of career development on the managerial level. Then the target group, five suitable *managers* in each company, were picked up with the help of the directors. The determining factor in selecting the interviewees was the diverse career development of those engineering managers selected. Thus, the data of this study have been gathered by a considered sample. After obtaining the list of potential managers the researcher contacted them by e-mail or telephone and arranged a date for the interview. Despite some re-arrangements in scheduling the interviews, all managers accepted the request.

The total number of interviews conducted was 36, consisting of 30 managers and six directors. The interviews were held in three companies from the ICT sector and three companies from the paper sector.

2.5.2. Focused Interview as the Method of Obtaining Information

The interview is a conversation, the art of asking questions and listening (Denzin and Lincoln 2003, 48). Individual interview is probably the most widely used method for

gathering information in qualitative research. The key feature of interview is the ability to provide an undiluted focus on the individual. Interview provides an opportunity for detailed investigation of people's personal perspectives, for in-depth understanding of the personal context within which the research phenomena are located, and for very detailed subject coverage. Interview provides a tool for clarification and understanding (Ritchie 2003, 36).

The research interview is a theoretical method, it is a goal-oriented interaction that aims at gathering information, and it is planned beforehand. The researcher is familiar with the target both theoretically and in practice. The interview aims at finding reliable information in areas that are relevant concerning the research problem. The interviewer begins and directs the interview and the interviewee usually has to motivate the interviewee and keep up his/her interest. The interviewer knows his/her role but the interviewee learns that during the interview. The interviewee has to be able to trust that the information given is treated confidentially (Hirsjärvi and Hurme 1991, 25 - 26). The great advantage of an interview compared to other methods of gathering data is that in an interview the researcher can adjust the gathering with the situation and conform to the interviewees. The topics can be rearranged and also there are more possibilities to interpret the answers than in a mail inquiry. Interview has been the method in a number of previous studies e.g. Aaltio (2002), Blomqvist (2002), Aaltio-Marjosola (2001), Tervonen (2001), Peltonen (1998) and Lähteenmäki (1995).

The research method of this research is the interview because:

- 1) It reflects the idea that a person is a *subject* in the research occasion. There is a possibility to talk about his/her matters as freely as possible. The person is a *creative* and *active* part in the research. The managers in this research have made their own careers, in the interviews they explained phases of their careers to the researcher.
- 2) It is a question of a *slightly charted* and *unknown* area. It is difficult to know beforehand the directions of the answers.
- 3) The researcher wants to place the result (or speech) into a *larger context*. It is possible to see the respondent, his/her expressions and gestures. The interviewee can also reflect on the topic more widely than the researcher can anticipate. Here the results are connected to former career research. The citations bring the interviewee nearer to the reader.

- 4) It is known beforehand that the subject of the research will bring up *complex* answers and go into *many directions*. In this study the comparison between two sectors can bring up different opinions and viewpoints concerning career.
- 5) The researcher wants to *clarify* answers given. If the question is understood wrongly it can be corrected immediately. During the interviews in this study one question was once understood wrongly and it was easily corrected straightaway.
- 6) There is a possibility to deepen the given information by asking more precise questions.
- 7) There exist sensitive or difficult topics, here for example values connecting to career anchors (Hirsjärvi et al. 2001, 192 – 193).

The interview style used in this research is *the focused interview* (Merton et. al., 1956). Silverman (2003) has used the term *open-ended interview*. It represents a more discussing method of interview where the interview is wrapped around particular topics (Eskola and Suoranta 1998, 79). A focused interview is one modification of the half-structured interview method. The topics are known beforehand but the strict design and order of questions that is typical to structured interview is missing (Hirsjärvi and Hurme 1991, 36, Eskola and Suoranta 2000, 86). Patton (1990) has called this kind of interview *the general interview guide approach*. In the focused interview basic knowledge exists that the interviewees have really experienced in a particular situation. The researcher has identified important parts, structures, processes and entities beforehand drawn from previous research. Through this analysis certain assumptions and facts about the phenomenon can be determined leading to an interview framework. The interview is then directed to the interviewee's subjective experiences of the predetermined topics (Merton et al. 1956, 3 – 4).

The interview framework was designed around certain topics and then checked and commented on by the instructor and colleagues prior to the first interview. In each of the interviews the questions were the same for every manager, but answers were in free format. The subject matter and themes, were fixed beforehand, but the answers were not necessarily in strict form or order. The interviewer took care, however, that every theme was covered. The order and the length of answers varied in the different interviews (Eskola and Suoranta 1998, 87, Hirsjärvi et al. 2001, 195). Data gathered by a focused interview is usually generous but the interview as a method brings the researcher to the depth of the interviewee's range of thoughts.

There were two kinds of interviews in this study: interviews with managers and directors. In the managers' interviews basic personal information was gathered first and then the managers were free to give their own description concerning their education, career, career anchors behind the career, future plans and commitment. The conversation was directed through particular topics by the interviewer. As a part of the interview there was a short questionnaire which contained questions about the manager's *career anchors*. The interviewees were given a questionnaire where eight career anchors were valued from 1 to 5 depending on the importance of the anchor (1 = not important, 5 = very important). The interviewee chose the appropriate value based on his/her current position and explained the choice verbally.

The directors of the companies acted as informants and were the source of organizational background information. They were asked to describe basics about the size of the company, number of personnel and work done in the company. Directors explained career possibilities given to a manager and whether there existed any kind of prepared career paths that a manager can follow in his/her career. In the directors' interviews there was an opportunity to gather information on ways in which the organization recruits people and develops and keeps and commits the personnel. Finally, the representatives of the companies described future expectations in the particular business sector. The directors' own careers were not within the scope of this research.

In the interviews with the managers the researcher was informed about the facts of the individual's career. But behind the career talk, factors affecting the career of a person were also in evidence. These factors included the encouragement of parents, willingness to show one's capabilities, competition between siblings or workmates and willingness to test the boundaries of one's competence.

The data were gathered through interviews people in Finnish ICT and paper company sites or mills in South-Karelia during April-December 2002. The time spent in the managerial interviews varied from 17.19 minutes to 97.53 minutes. The average time of a manager's interview was 47.11 minutes. The interviews were held either in a negotiation room or the interviewee's own office. The division of managers grouped by company, position, age and sex can be seen in Table 3. below.

Table 3. Interviewed Managers

Company	Person's position	Age and sex
Software company A	Technology Manager	27, male
Software company A	Project Manager	41, male
Software company A	Team Manager	30, male
Software company A	Program Manager	31, male
Software company A	Technology Manager	27, male
Software company B	Project Manager	27, male
Software company B	Testing Manager	31, male
Software company B	Testing Engineer	31, male
Software company B	Documentation Manager	27, female
Software company B	Project Manager	34, male
Software company C	Team Leader	37, male
Software company C	Department Manager	40, male
Software company C	Team Leader	37, male
Software company C	Team Leader	43, female
Software company C	Department Manager	49, female
Paper company D	Manager	39, female
Paper company D	Project Manager	42, female
Paper company D	Mill Manager	46, male
Paper company D	Line Manager	34, male
Paper company D	Sales Manager	32, male
Paper company E	Line Engineer	30, male
Paper company E	Production Manager	45, male
Paper company E	Production Manager	34, male
Paper company E	Development Manager	42, male
Paper company E	Mill service Manager	39, male
Paper company F	Production Manager	41, male
Paper company F	Maintenance Manager	42, male
Paper company F	Project Manager	41, male
Paper company F	Line Manager	45, male
Paper company F	Unit Manager	44, male

2.5.3. Analysis

Qualitative 'raw' data come in various forms but most commonly is, comprised of verbatim transcripts of interviews (see Ritchie et al. 2003, 220). This was the method employed in the present research. In the analysis the researcher classifies and categorizes the data. In the synthesis the aim is to form a general view and depict the phenomenon in a new perspective (Hirsjärvi and Hurme 2001, 143. Hirsjärvi et al. 1988, 54). Analysis requires a mix of

creativity and systematic searching, a blend of inspiration and diligent detection (Spencer et al. 2003, 199). The connection of analysis and synthesis is demonstrated in the Figure 10.

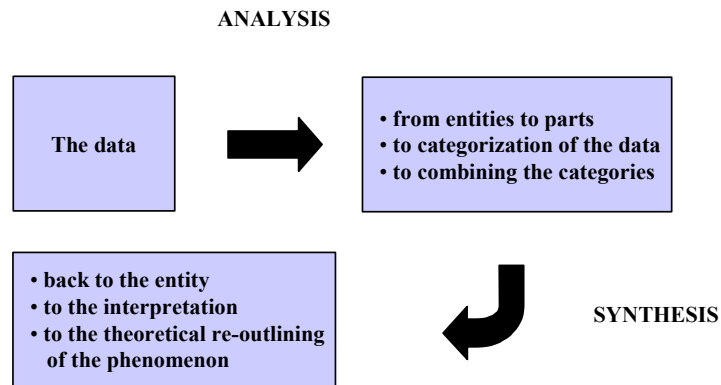


Figure 10. From Analysis to Synthesis, Interviewed Data (Hirsjärvi and Hurme 2001, 144)

In qualitative research the data is analysed entirely and holistically. All aspects considered reliable should be explained so that they do not conflict with the interpretation. According to Alasuutari (1999), in qualitative research the data is examined through particular theoretical and methodological viewpoints. During the analysis the attention is drawn only to what is essential on the basis of the theoretical framework and the research questions. In this study the managers' career paths were examined from within the context of two business sectors.

Analysis in this study was based on pre-existing career theories, theories of commitment and life course narration. Analysis followed from the beginning of the research. The theoretical framework was drafted at the time the structure of the interviews was planned. (e.g. the use of the career anchors (Schein 1990) was planned from the beginning). Theories helped to frame appropriate questions. The theoretical framework was also shaped during the research process because the information derived from the interviews provoked the researcher to find more robust theories explicating the findings. (e.g. the career tournament model of Rosenbaum 1984) and theory of career of a professional (Sveiby and Risling 1987). This study, therefore, has characteristics of grounded theory, where new theory is built on the basis of research data, but it does not represent the grounded theory approach purely. In

grounded theory studies phenomena are explained in the light of the theoretical framework that evolves during the research itself (Strauss and Corbin 1990, 49) Grounded theory is discovered, developed and provisionally verified through systematic data collection and analysis of data pertaining to that phenomenon. Data collection, analysis and theory stand in reciprocal relationship with each other (ibid., 24) The main purpose in using the grounded theory method is the development of a theory (ibid., 37).

Data management involves deciding upon the themes or concepts under which the data will be labelled, sorted and compared. Eskola and Suoranta (1998) distinguish three ways to analyze interview material: 1) the data is broken up and the analysis will follow, relying on the researcher's intuition, 2) data is broken up, coded and then analyzed, 3) the breaking up and coding (see also Thomas 2004, 217) are bound together and the analysis follows. Hirsjärvi and Hurme (2001) outline the analysing of qualitative data as follows: 1) The analysis begins in the interview. When the researcher acts as the interviewer him/herself, he/she can make observations over the phenomenon based on frequency, continuity, segmentation and special cases. It is possible to classify and sketch models from the observations and collect more data if necessary to re-examine the hypothesis or model (see also Mäkelä 1995, 45 – 46). 2) The data is analysed "close" to the material and the context. 3) The researcher uses *inductive* or *abductive* reasoning. 4) The methods of analysis are diverse and there are many different ways of analysis. In qualitative analysis there are few standardized techniques and there does not exist one best analysing practice. Compressing of implication means that the meanings presented by the interviewee are abridged to a shorter verbal form. Narrative structuring arranges data by time and social perspectives. In qualitative analysis there is often the intention to interpret the implications. The researcher aims at finding something that is "behind" the text, aspects that are not said straight. The interpretation is more or less speculative. The researcher has a particular viewpoint concerning the data and he/she interprets the interview through that viewpoint.

In the current study the interviews were recorded on mini-discs and then transcribed immediately and completely by the researcher, except for five interviews that were transcribed by a research assistant. The whole data set consisted of 274 transcribed pages. The data was transcribed to a computer, broken and bunched up, coded with the help of excel tables, and then analyzed. The analyzing was started during the interviews when the

researcher made observations about the phenomena. After the interviews the data were first read through completely in order to gain a general overview. Then every topic was coded using excel tables or by cutting the particular data from different documents and uniting in order to compare and distinguish the occurrence of particular topics (see Eskola and Suoranta 2001, 175 – 176). After that inductive deductions were made leaning on the data.

Thematizing is recommended in solving some practical problem of data management. With the help of thematizing it is possible to get out answers and results that are common to the given questions. In this research thematizing followed the themes made in the focused interview. (Eskola and Suoranta 2001, 179 – 180, Hirsjärvi and Hurme 2001, 173) Classifying the data helps to identify the common aspects in the data. Classes can be attached differentially during the analysis. In this case, for example the managers were classified in three groups: 1) general managers, 2) specialists and 3) project managers. Citations are used to support the interpretations the researcher has made. The citation can describe the data as an example and bring the interviewee closer to the reader. The citation can also enliven the text as it allows the reader to estimate the interpretations of the researcher. It is also possible to simplify compressed stories (according to Savolainen 1991, Eskola and Suoranta 1998, 176). The basic principle of qualitative analysis is the absoluteness of observations: the rules should be based on individual observations that are valid in the whole data set. Meta-observation is based on the combination of many raw observations. Through direct citations as examples it is possible to describe how the meta-observations appear in the data (Alasuutari 2001, 191). The observations are answers to the question “What?” Solving the riddle in analysis is answering to the question “Why?”

3. ENGINEERING MANAGERS IN TWO BUSINESS SECTORS

In this chapter I will first explain the working environment where the managerial careers of the participants are pursued. After that I will describe the managerial work and roles at the middle level of organizational hierarchy.

3.1. Working Life in Finland

3.1.1. *The Finnish Labour Market Situation*

In the beginning of the 1990s the Finnish economy plunged into a deep economic crisis and a lengthy recession (Tainio and Lilja 2003, 75). Companies had difficulties, denouncements occurred, recruitment stopped. People with an employment contract learned to be grateful but at the same time on the alert. Young, educated people had trouble entering the labour market. Starting a career in the beginning of the 1990s was difficult.

Although the present study concentrates on Finland, there are some elements that prevail in working life in general. Tienari (2000) has specified three forces of change in future working life: 1) the speed of communication will increase and channels of communication will become more versatile, 2) global, real-time monetary and capital markets will make it possible to follow improvement of profit more strictly, 3) owners will be more active. All these forces will have an influence on future working life in Finland.

In the whole western industrial world the average age of labour will rise during the next 20 – 30 years. This situation will change the structure of labour in at least three ways: general improvement of working conditions, a greater value will be placed on the working ability of ageing people and, at the same time, a demand for young educated labour will prevail. Young and well-educated Finnish people have the possibility for a strong contribution in the labour market of this millennium. 80 % of the present young age group are professionally educated. In 2000 40 % of the employees in the age group 55 – 64 had only a basic level education and in the age group 45 – 54 the share was 30 % (Statistics Finland 2000, Työvoimatutkimus). When the big post-war generations retire, the average education level in the labour force will rise rapidly. Until then, however, a great educational disparity will prevail between age groups in the labour market. This difference may lead to a selection process where young

people are directed specially to professions demanding high technical knowledge. When the big generations retire, therefore, there will be shortage of labour especially in jobs where less education is demanded (Vuori 1999, 32). One of the directors in the paper industry interviewed for this project indicated that the education level in paper companies will rise in the near future due to this shift.

A Finnish economic periodical, *Talouselämä*, conducted a research in April-May 2002 concerning perceptions among directors and specialists (N=567) concerning security of their positions. According to the research just 14 % considered their jobs secure. In the last two years the attractiveness of fields of activities has shifted. Traditional industry, for example the forest industry, banking and companies providing services to business have become more attractive for employees. The ICT sector, on the other hand, has seemed less attractive due to bad news of smaller information technology and telecommunication companies. ICT companies are still the most attractive sector of business but the lead has decreased. People will not take risks nowadays if they have a secure job. A better income is not a sufficient incentive to change jobs. HRM-directors in *Talouselämä*'s research underline that the pay should be fair between the standard and the level of skills demanded in the task, but the relative importance of salary to those surveyed has decreased. One director of human resource development stated that in ICT companies employees are offered the possibility for mental and professional development. Employees in the ICT field are mostly specialists and they tend to relate more to their professional identity than to a given company. The trend in the Finnish labour force is clear: old and stable is appreciated. On the other hand the public sector is not viewed so attractive despite its reputation as a secure employer (*Talouselämä* 2002).

According to *Talouselämä* (2002) the ten most important reasons for changing a job are:

1. More interesting tasks
2. Better working atmosphere
3. Possibility to affect the contents of the job
4. Better total income
5. Better superiors
6. The target and strategy of the company

7. More interesting sector of business
8. Reasonable workload
9. Good possibilities for training and developing
10. The job is safe and secure

When a person decides to change his/her job there is often more than one of the above factors influencing his/her decision (Talouselämä 2002, 21 – 25). Many of the factors listed above such as the characteristics of the working atmosphere or the possibility to affect the contents of a job are difficult for an outsider to evaluate. Often publicity and advertising lead to inaccurate preconceptions.

Juuti (1996) found out that the most appreciated element in work in Finland in 1986 was continuity. In 1989 the order was 1) fair treatment, 2) interesting work and 3) continuity. In 1996 fair treatment held first place while continuity was in the second place. In the research of Talouselämä conducted in 2002 the interviewees indicated that the workload in ICT companies was too heavy while in paper industry companies it was the most reasonable. Unto Kariniemi from ICL Invia Oyj indicated in the seminar “Change of Work and Welfare in Information Society” (20.03.2002) that professionals in information technology need regular respect and feedback. He underlined the importance of balance in life; controlling one’s life is important. A well-balanced life between work and leisure time guarantees a person’s positive contribution in a productive organization. Thus, there exist general elements that prevail in working life but also elements connecting particular to the Finnish economy. Anyhow, a person him/herself always decides where he/she wants to work.

3.1.2. Work in the Future

Work is changing in many ways. The labour force is ageing. The work environment will become more diverse, there is no more a one and only place where work is done. Also the form of employment is changing; non-typical employment relationships where work is done for several employers or part-time are increasing in number.

By 2015 the Finnish population will have begun to decrease, the population of working age people will be smaller, while the proportion of old people will increase rapidly. The ageing

population will change both the structure and functioning of the labour market. The need for various private and public services will increase, but it will become more difficult to find the workforce needed in these sectors. The threat of a labour shortage will become a reality in the new ICT sector as well as in traditional welfare services (Suomi 2015, 16).

Cohorts of Finns born between 1945 and 1950 were large but after the 1960s the birth rate has remained low. Therefore, the age structure in organizations will become unbalanced over the next 20 to 30 years. There will be fewer people subsidizing the retiring big generations. In the late 1990s the average age of personnel in Finnish companies was between 40 to 50 years. The rise of the average age can be seen in the ageing of working age people: in 1985 the majority of the labour force was under 40, whereas in 2000 the majority were 45 to 54 years old. The rise of the average age is true in both professional groups and the personnel of companies (Ilmarinen 1999, 38 - 39). In particular positions, for example in the industrial and public sectors, there is already a shortage of labour force. In such situations there is a need to divide the workload more evenly between all age groups (Ilmarinen 1999, 39). This current problem has forced companies to develop different methods of managing and developing knowledge in the organization.

The portion of the labour force consisting of over 45 is divided quite extensively into different professions and posts. Young people, however, are interested in working in the area of new information technology and services. This can cause a situation where older people remain in traditional professions and younger workers seek position to the new professions. The improvement of the educational level of young people over time will necessarily lead to an improvement in the content of traditional professions, if they are expected to attract younger people. Professional differentiation by age groups should be prevented by supporting the development of the professional competence of older people, for example by training (Ilmarinen 1999, 40 – 41).

Information-based technologies are radically changing both the physical work environment and relationships between management and labour. These changes occur in both industrial/manufacturing workplaces and in offices. They involve shifts in the capital/labour mix, job contents and skills, ergonomics, health and safety, stressors and the social environment of work. ICT can both improve and adversely affect the working environment

and prospects for employment. Since a significant proportion of new jobs are expected to be generated by ICT, this presents a special challenge and opportunity. The work of the future may need to be designed with a human-centred focus and radical organizational changes where the role of labour in choosing and implementing ICT will be important and indispensable (Ashford 1996, 62).

In the information society, where the most important product of the economy is information, an increasing proportion of the work will be mental rather than physical, and vocational skills will have to be increasingly versatile. Technology and innovations are the motors of the new economy. Companies and employers will become increasingly dependent on their employees. In such a situation, people's ability to adapt to change becomes crucial, together with their ability and willingness to learn new things and apply them in practice. An employer in the information society will no longer have his/her main investments in machinery or buildings, but in human and social capital. This is both a resource and a challenge for companies, employees and the labour market organizations representing them. Human capital is mobile and may just choose to 'vote with its feet' at any time (Suomi 2015, 11 - 12).

Julkunen and Nätti (1995) define 'normal employment' as work done for one employer with full time contract and continuing for a time. However, there are over half a million Finnish wage-earners in non-typical employment, in fixed term or part-time jobs. The number of fixed term jobs have increased strongly over the last few years; many young people work for a fixed term and change their jobs often. The generation born between 1965 and 1975 can be called the "generation of stagnation". They have had difficulties in transferring to job markets and have been forced to assume part-time employment contracts. This generation of stagnation has learned to consider part time employment as normal employment. They have learned to save and be careful. The retirement of the big generations does not guarantee a job for everyone in the generation of stagnation. Employers prefer a young educated workforce instead of exhausted 40-year old job seekers. The generation of stagnation and ICT have a lot in common: both are working hard part time, are estranged from trusteeship systems and trust only in themselves (Rantanen 2003, D1). In 1989, 39 % of employees were in fixed term contract for in under one year, whereas in 1997 the percentage was 62. The reasons for fixed term employment contracts are: that the volume of orders has become harsher, competition

has become stronger, uncertainty has increased and the threshold for employing permanent personnel has risen (Lindström 1999, 47 – 48). According to a vice president of one ICT company, the digital economy is highly impulsive. Digital employment can mean a job where a person is working in many different places, less in the office and more at home, in the summer cottage and in public transport. The pace of change can cause stress to people. Internationalization will increase because communication networks cross national boundaries easily. It was estimated in one ICT company that more than half of the gross national product in industrial countries can be produced and consumed digitally after 20 years. Technically this is possible already, but such development will also require a change of attitudes. Right now companies are building the infrastructure for communication networks, which will then shift work requirement to continuous development and maintenance. The first sectors that will transfer their operations to the net are finance, communication, media and entertainment. According to ICT vice president quoted earlier heavy industry and the perishable goods sector will have more difficulties in transferring operations to the net. In the future there will be more work than employees in the information and communication sector.

Fixed term contracts seem to be one solution for an organization looking for flexibility in personnel costs. Fixed term contracts and the number of positions needed in an organization depend on the business cycles at least in the private sector. An individual's lifestyle and phase of life determine partly what kind of job possibilities a person considers suitable for him/herself (Lindström 1999, 49 - 50). A person can start his/her career in a fixed term job. However, when he/she sets up a family or takes a loan for example to buy a residence, continuity in work seems to become more important.

Individuality in the work force has increased. Unsteadiness in employment seems to bring pressure for continuous training. A person should invest in education, keep his/her knowledge, competence and motivation up-to-date in work (Lindström 1999, 50). Lindström indicates that markets are becoming more international and free, and that the after effects of the depression in the 1990s continue to have an impact on Finnish working life. In the future there will be a need to develop a way of thinking that enables a person to plan his/her life more carefully. Signs of long term and stable development will increase a worker's faith in the future. This will also increase economic activity. Multiplicity in employment will increase in the future. The number of fixed term jobs increased during the depression, but

part time work will become common only in the long term. Part time work requires flexible combination of work with other sectors of life. Employees will work more on projects and in private service. Remote work will bring diversity to its timing structure. All this will cause an increase in non-typical employment.

Lindström states that many work units are in the middle of structural change or transition. Change is usually both a challenge and a threat to a person and an organization. The changes in a work unit force the people and the organization to orient themselves to the future, fit together new and old cultures, change the roles of the superior and the whole work unit, and fit together work and other sectors of life in a new way.

The question “what shall we do next?” is typical in post-modern society. Personal responsibility and the search for different opportunities in the environment regulate activities in the society. This kind of life style is suitable in a situation where there exist enough jobs and activities. The basic idea is that the markets create new possibilities all the time and people use their own creativity (Lindström 1999b, 96).

Himanen (2001) has described how the Protestant Ethic (Weber 1990) is moving towards the Hacker Ethic (a “hacker” is a person who is an enthusiastic programmer vs. a “cracker” who uses a computer to damage information systems). Himanen uses information technology work as an example but the idea can be also adapted to other business sectors. Torvalds (2001) separates three kinds of motives: 1) coping, 2) socialization and 3) entertainment. Firstly, every organic creature aims at surviving. Secondly, social factors, like family, country or religion can be important motivators for living. Thirdly, entertainment can be described as developing one’s own intelligence. Entertainment has power. According to this “Law of Linus”, development is ascending from coping towards socialization and entertainment. Hackers become motivated by the highest two levels: they use a computer socially – E-mail and the Internet create their community - but the computer represents also entertainment for them. Hackers want to do something they consider interesting and can be shared with others (Torvalds 2001, 13 – 15).

3.2. Clusters and Business Sectors

Clusters are used to describe networks of organizations, in which competitive advantage grows from dynamic interaction between actors. Cluster relations cross the boundaries of sectors, and spur innovation and upgrading through spillovers and knowledge transfer. A cluster is described as a unity made of closely related business sectors or companies where companies are in co-operation or competition with others (Paija 2001, 11, Lammi 2000b). A cluster can also be defined as a “network of networks”, which has economic importance at the macro level (Ali-Yrkkö et al. 2000, 20). The network dynamics causes positive effects on companies’ competitiveness.

Key clusters have an important impact on the national economy. Production and employment in key clusters are increasing. There are nine key clusters in the Finnish national economy: the information and communication cluster (ICT cluster), forest cluster, metal processing cluster, mechanical engineering cluster, foodstuffs cluster, business services cluster, construction cluster, energy cluster and healthcare cluster (<http://www.etla.fi>, 2002). The wellbeing of the nation depends heavily on the success of these clusters and of their key industries – on the increase of production, on the employment trends and on the export revenues they acquire (Hernesniemi et al. 2001). This research focuses on the ICT and forest clusters.

Mega-trends influencing every cluster are: 1) global integration, 2) know-how as a designer of work, 3) increasing environmentalism, 4) technological forces of change, 5) the turning point of the service society and 6) an aging population. These mega-trends will have a significant effect, in one way or another, on all the clusters and will create new competence requirements. (Hernesniemi et al. 2001) The world is shrinking because of the development of communication technology. Concurrently more and more people can consider themselves as knowledge-workers instead of manufacturing professionals. Increasing environmentalism can be especially seen in the paper sector where the environmental issues like nature conservation have become important. Ageing of the population and the increasing need for services are tightly linked together.

3.2.1. ICT Cluster, a Newcomer in Finnish Economy

The pace of growth in the Finnish electronics industry was extraordinary over the 1990s. It led to an industrial restructuring in which knowledge replaced capital, raw materials and energy as the dominant factor in production. The change of the Finnish economy to a high-technology economy has long roots. The development began in the 1800s when individuals, organizations, society and politics began to pave the way for the development of information technology. Nowadays not only by size but also by influence, Nokia is the core firm in the Finnish the ICT cluster (Ali-Yrkkö et al. 2000, 20). While Nokia's role in the Finnish economy is considerable, there are a large number of other actors in the ICT sector: hundreds of small and medium-sized (SME) fast growing companies networking and co-operating with Nokia. Many of them are Nokia's suppliers and partners having information-technology know-how. The strong ICT sector is largely the outcome of mutually enforcing, dynamic cluster relations, which were intensified during the 1990s (Ali-Yrkkö 2001, 82). Nokia took advantage of the Finnish talent pool, supported by a strong educational system, but it did not only utilize the Finnish institutional context; it also contributed significantly to the recovery of the Finnish economy in the 1990s (Tainio and Lilja 2003, 79). The biggest share of co-operation between Nokia and SMEs is concentrated on production (Ali-Yrkkö and Hermans 2002, 15). Paija (2001b) states that there are three factors behind the ICT companies' willingness to co-operate: 1) need to concentrate on basic areas of competence, 2) division of risks typical to the ICT sector and 3) utilization of knowledge.

In Finland the main areas of the ICT cluster are manufacturing communications equipment and service provision. These areas have increased their share in the information and communication cluster (Hernesniemi et al. 2001, 11). Around the key industries are those industries that are considered to harbour special potential in enhancing the competitive advantage of the system through innovative applications on ICT, or through improving its functional preconditions (Paija 2001, 15). The growth of the ICT cluster is not only connected to the growth of the markets in question, however. It is also connected to the general rise of the technical level in production and society (see Koski et al. 2001, 62). The ICT cluster is depicted in Figure 11. below.

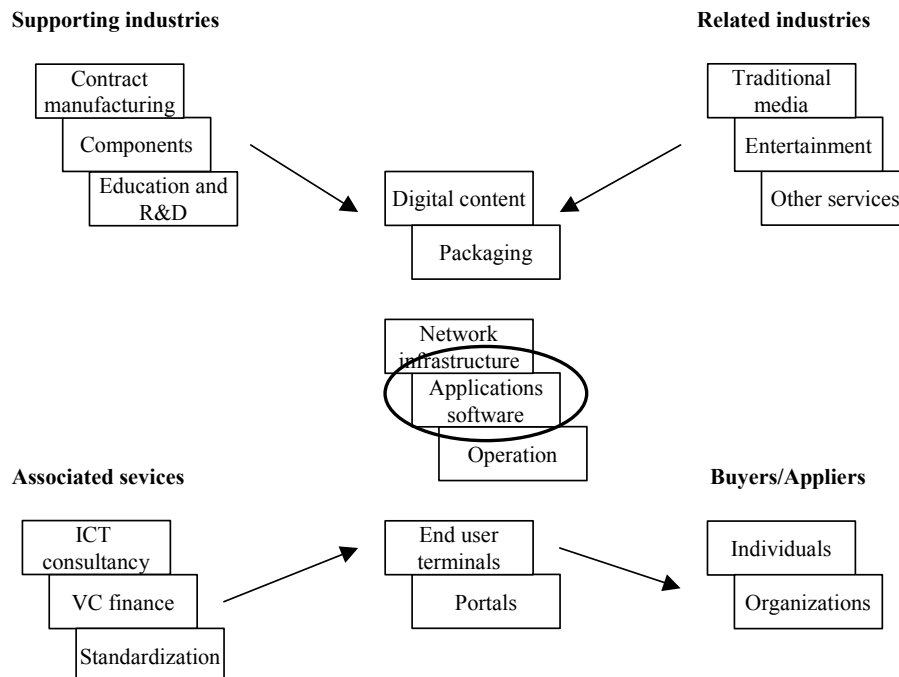


Figure 11. ICT Cluster Framework (Paija & Rouvinen, ETLA, Ali-Yrkkö 2001, 17) *The Target Group of the Research Is Located in the Circled Area*

According to Statistics Finland the gross value of the ICT cluster in 1999 was EUR 21.4 billion. Manufacturing of equipment and electronic components dominated the cluster, representing 70 % of the value. The share of software and ICT services was nearly 14 % and the telecommunications represented 17 % of the overall value. In 1999 the ICT cluster exported 62 % of its goods and services production. With 83 000 employees, the ICT cluster accounted for 3.6 % of total employment in 1999. Since the economic slump of the first half of the 1990s, the ICT cluster has been able to maintain much higher employment rates than the economy as a whole. Finnish ICT cluster firms are relatively small; only Nokia is a leader on its own.

The information and communication cluster, based on competences and technical development, has become the second most important basic cluster together with the forest cluster. It has been able to offer new job opportunities (<http://www.etla.fi>, 2002). The ICT

sector is a sector of young men; in over half of the Finnish ICT companies the majority of employees are males under 35. Only in one out of four Finnish companies generally is the personnel as young as this (Kandolin and Huuhtanen 2002, 81).

Because the ICT industry went through a very dynamic expansion during the 1990s, there was a big demand especially for young ICT professionals who had not only the necessary technical skills but who could also understand the needs of customers within the new economic environment (Ruohonen et al. 2002, 9). Universities and research institutes have been successful in producing competent human resources and world-class research and development to support the development of the cluster. The supplier industries, most particularly the electronics industry, in turn, have become highly specialized over the last decade to meet the needs of the key activities of the sector. The venture capital market, as an example of associated services, has emerged as a new and important source of funding that has greatly enhanced preconditions for growth in the cluster (Paija 2001, 15 – 16).

The overall economic impact of ICT is likely to be even more powerful on the demand-side, since innovative applications of the technology are about to revolutionize traditional business models and increase productivity. So far economies of scale have benefited mainly the production side of ICT in Finland. A critical question for the future, then, is related to Finland's capability to exploit the advanced technology on the user side to enhance productivity in the rest of the economy (Paija 2001, 15 – 16).

In the ICT cluster (in areas of telecommunication implements and telecommunication) 12 % growth during the years 2001 – 2005 is predicted and in the long term growth is predicted be 8 % (see also Hernesniemi et al. 2001). Thus the growth predicted in product quantity will increase the demand for labour in the medium term. Gradually the speed of production development will abate and the demand for labour in the ICT cluster will decrease. The business services cluster is in many functions connected to other clusters. In this research the business services cluster is tightly connected to the ICT cluster because data processing services are a central part of the business services cluster. The ICT cluster has an increasing impact on employment, but the shortage of employees may limit development in the future (Rantala 2001, 48).

Information technology will challenge the forest cluster through the creation of paperless communication. The software sector will grow from a 'nerd business' into a professional business. In the future, diverse skills relating to internationalization, especially experience in business management associated with international trade, language skills, negotiation skills and knowledge of different cultures and administrative bureaucracy will be in great demand. In terms of personal skills visionary capabilities, the ability to perceive matters in their entirety and to concentrate on essentials, communication skills, project and teamwork skills, adaptability, the ability to manage change, creativity and courage will be emphasised. Strategic expertise will focus especially on network-related capabilities and on understanding the changes brought by the new economy and value chains within the digital economy. Eclectic scientific knowledge, the ability to integrate and master international networks and teams consisting of persons with diverse skills, creativity and ability to visualise and innovate are needed. (Hernesniemi et al. 2001, <http://www.etla.fi>, 2002). Some have questioned whether we are really approaching the paperless office. Despite the growth of information technology it appears that every office has a printer of its own. Therefore, it is probable that paper consumption will not radically decrease in the near future. More likely expanded development of information technologies and paper consumption will correlate positively.

The environment of software business development will be typified by 2010 by the following characteristics: high speed of growth, especially rapid growth of particular companies, internationality and rapid development of new business and technologies. Changes in the global environment will happen fast and be continuous. For this reason simultaneous great challenges and threats exist for Finnish software companies. By 2010 software and services will have integrated, software and equipment will become unified and processes cultivated (Rautkylä-Willey and Valtakari 2001, 109 – 111).

The need for wider and multifaceted competence in the software business is increasing. In addition to software-based technical and product competence, there are business and marketing competence needs. Knowledge of law, international competencies and an understanding of the meaning of production based on customer needs are all essential. There is also a need for comprehensive understanding of new challenges and opportunities created by the network and digital economy. Basic technical competence in the area of programming (e.g. skills of C++ and Java-programming languages) will remain important. In addition to

these competencies the demand for general and personal competencies will increase. In addition to personal learning, the strategic learning of the organization and strategy management connected to it will increase (Rautkylä-Willey and Valtakari 2001, 114).

Highly qualified employees, the central factor behind the Finnish ICT cluster development, started to show signals of exhaustion in the latter half of the 1990s. The sustained lack of employees has compelled firms to explore overseas labour markets and to locate research and development activities abroad. The liberalization and consequent growth of the capital market have been among the most noteworthy contributors to the growth of the ICT cluster. The development of the capital market has enabled, in the form of stock options, the creation of new tools for employee compensation and motivation (Paija 2001, 50).

Information professionals are rapidly increasing not only in numbers, but also in respect in modern companies, which places new demands on compensation and career development policies. Companies are still facing a clearly exceptional labour market situation where there is a continuous shortage of competent information professionals. The attractive labour market and biased compensation structure risks the commitment of professionals and leads to high turnover rates. As a result of this, not only company attractiveness and the working climate need to be developed, but also exceptional recruitment methods need to be introduced. Due to the pace of technical advancement, the developmental needs of information professionals are of a scale of their own. With the aging workforce this challenges the HRD and career planning of the company. Because of scarce human resources, hard workload and developmental need, work exhaustion prevails, which in turn calls for application of new and flexible working practices (Holm et al. 2002, 335–336).

Kivistö and Kalimo (2002) have analysed the work, resources and wellbeing of ICT professionals. Work in the ICT sector was experienced by these professionals as demanding but also quite secure. Matters affecting a person's wellbeing most were found to be personal resources, good self-esteem, skill of balancing work and home matters and good education. In terms of external resources the security of work, satisfactory contents of work, and developing and influencing possibilities at work were mentioned. According to the research of Kivistö and Kalimo the work of an ICT professional was quite challenging, knowledge intensive and secure in 2001. The work demanded great mental strength (power of

concentration, persistency, self-esteem, cooperation skills and ability for independent work), many-sided expertise and the ability to manage problems. Intensity of information was typical in the ICT sector, new information was mostly used in research, product development and education. The ICT professional worked in an information flood where picking up and adopting the essential information was difficult. ICT personnel experienced more rush than workers in other fields. Work in ICT businesses was experienced as more secure than among workers on average. The threat of losing one's job was perceived as quite small in spring 2001. The security of knowledge-based work in the ICT sector was guaranteed more often than in other sectors. Those researched experienced security as regards employment, because they believed that if one job fails, something new will be found for a highly educated employee. Uncertainty was caused by organizational arrangements, unforeseen changes and changes in ownership, mergers etc. According to the research work in the ICT sector was physically less, but mentally more, strenuous than among workers in average. The tasks done in the ICT sector may be experienced as almost too complex and that situation is seen to be one reason for stress and burn out.

Because of the need of change in work conditions, changes occurred in HRM practices also in Nokia when during the 1990s, the nature of human resource policy changed. The number of personnel and their level of education rose rapidly, job descriptions became more flexible and career changes more rapid, and the average age of the personnel fell. At the same time the pay policy was made more diverse and included more steps (Häikiö 2001, 154).

It seems in the current research that the manager should be self-assured in managing his/her workload and working time. Interesting tasks involved with ICT work may cause an individual to get carried away and can easily steal too much time from his/her life. He/she should be aware and conscious of how to divide the hours of the day between work and leisure. Many managers have recognized the need for rest and have managed to adjust their work. In recent writings the need for rest and play in the ICT sector has been emphasized (see e.g. Kivimäki-Kuitunen 2000, 26). It is obvious that younger workers will want to commit extra hours to work in order to demonstrate their abilities and competences and ascertain future employment and career possibilities in the organization. Results of this research project indicate that time management is created in harmony between the person and the organization. Both sides agree upon the importance of rest and recreation and also call for

flexibility. When private life needs more time of the manager then he/she is allowed direct time towards the family. On the other hand, the family gives way to business when needed. It seems to be the birth of children that makes the division of work and leisure more clear. It is not possible to work long days anymore, if one wishes to stabilize life (see also Kivimäki-Kuitunen 2000, 28, 33, 42, 46).

Interviews for this research were done in 2002, after the explosion of “the great ICT bubble” when many companies in the ICT sector were caught up in difficulties, re-arrangements and bankruptcies. The difficulties in the sector forced the companies to concentrate production to the most important businesses and cut down others. The hard times have forced ICT companies to make business more effective and drop incapable companies out of markets. Nowadays it is agreed that the ICT business must be rational and operations profitable. Concurrently with that, the working place should be pleasant and enjoyable. According to a vice president of an ICT company it is possible to join these two aspects (Talouselämä 2003/23, 34 - 40). During the interviews for this research the atmosphere in the ICT companies was peaceful and hardworking; people were concentrating on doing their tasks instead of the former busy “hype”-feeling in ICT companies when parties, fun making and free cokes were an important part of work (see e.g. Valtonen 2001).

3.2.2. Forest Cluster with a Long History

The forest cluster is based on the extended processing of wood. In the Finnish forest industry and economy, centralized industry and production constitutes the forest cluster. The interaction between producers, customers, and research and development makes it possible to create innovations and to succeed in the markets. In Finland the forest cluster includes: forest economy, pulp, paper and paperboard industry, timber industry, the producers of machinery, the automation and chemicals needed in this industry, packaging industry, graphics industry, energy industry, logistical and consulting companies as well as research institutions and universities (Metsäteollisuus ry. 2000, 21 – 23). The most important areas are pulp, paper and timber (Lammi 2000, 1, Lammi 2000b, 13). The forest cluster employs 200 000 people. The turnover of the forest cluster is EUR 26.9 billion. The forest cluster grows by 3 to 4 % per year and it is estimated that it will remain the strongest cluster in the future despite the strong growth of information technology (Metsäteollisuus ry. 2000, 21 – 23). In South-Karelia the

forest cluster employed 9,000 people in 1995. This south-eastern area of Finland can be considered as the center of the forest cluster (Lammi 1998, 194). In addition to the importance as employers, forest sector firms have also played a significant role in building Finnish society, in shaping institutional infrastructures, state policies, and the life of local communities early in Finnish history (Tainio and Lilja 2003, 70, 80).

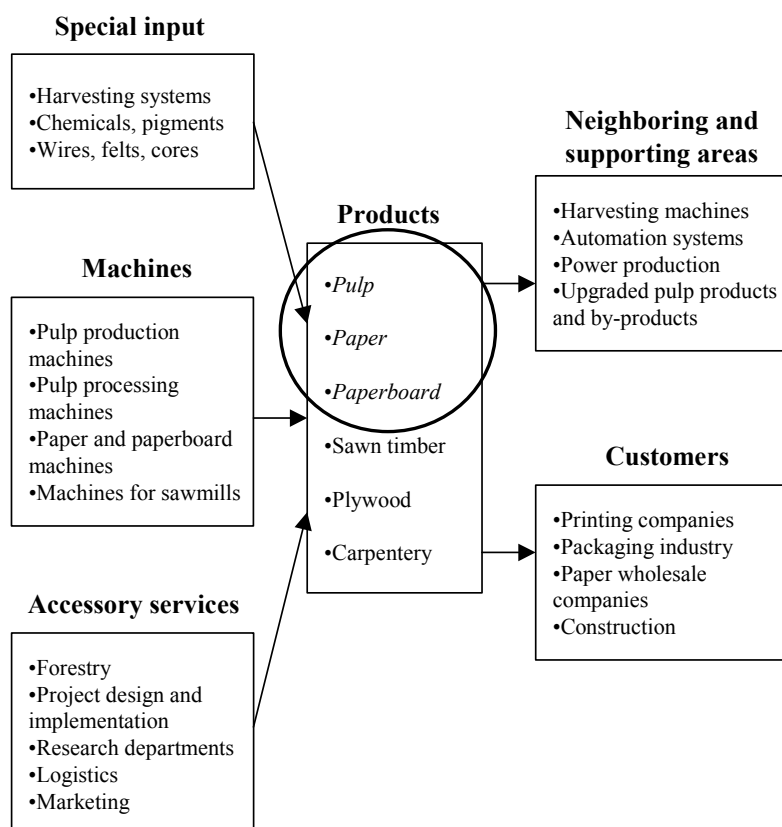


Figure 12. The Most Important Parts of the Finnish Forest Cluster (Lammi 1994) *The Target Group of the Research Is Located in the Circled Area*

90 % of the products of pulp and paper, produced in Finland, was exported in 1999; the value of the exports was EUR 11.1 billion. The Finnish paper industry is competitive, technical competence and quality are high. Market advantages are based on the high quality of manufactured papers. Paper and paperboard products have been developed to serve the need

of customers better and more effectively. For example in the future there will be “intelligent” paper and packaging available, a combination of regenerated fiber material and information technology (Metsäteollisuus ry. 2000, 27).

The forest cluster is an extremely widely developed cluster. In the forest cluster global utilization of competence offers better return on investment than developing activities in the native country. International experts have considered the most important trends in the forest cluster as follows: global competition, technology development and utilization, availability of lumber and changes in demand. Demand for organizational culture development, increased purchasing of companies, alliances between companies and the development of new business possibilities set requirements for strategic competence. In the forest cluster there is a trend from a raw-material based approach to customer-based competence. By 2015 operations in successful companies in this cluster will be customer-oriented (<http://www.etla.fi>, 2002). The main question in the future for the Finnish forest cluster will be whether there will just be production lines of international companies in Finland or whether research and development and technological competence centers will remain as well (Seppälä 2001, 92).

Finnish forest companies have experienced a radical transformation during the last two decades. Companies have been purchased, there have been mergers, operations have become more international and companies have renounced some business areas (Alajoutsijärvi and Lilja 1998, 18-19). According to Donner-Amnell (2000) the way of action in the forest industry has been changed most because of the actions of domestic trustees, investors, consumers, organizations of citizens, some supranational organs and location in new countries. Each of these actors must be kept satisfied for the sake of the company image. The success of forest companies will be dependent on market knowledge, competence and control of the whole chain. The strong internationalization in the forest sector has not decreased productivity in Finland. Domestic production has risen, but the importance of forest companies as an employer has decreased. In the future, the greatest changes in the forest cluster will occur in four areas: in global competition, development of markets, development of ICT and raw material markets. Human competence will be the most scanty and most valuable element of production. The educational level within the forest cluster has risen more rapidly than in other industries. In 1970s the level of education among all employed personnel was lower than in other industries. The rise of educational level in the forest sector

is a result of two factors: recruiting of more highly educated personnel and attrition of older, less educated staff (Lammi 1998, 193 – 194).

Technical development has caused growing demands for competence. Because of this development the number of employees has decreased in the forest sector, but because of aging the need for recruitment is rapidly increasing (Metsäteollisuus ry. 2000, 57). There exists a threat of a lack of sufficient educated workers available for the forest sector. The greater attraction of the ICT sector makes it difficult to recruit competent personnel. Despite reforms made in forest sector companies young people do not consider the forest industry attractive. The share of women in the forest cluster is only about 25 %. Increasing the proportion of female workers would help in the labour shortage. The forest cluster should not be seen anymore as a “guys’ area” though (Lammi 2000c, 31). Companies of the forest sector have been too slow to change their organizational culture (Rautkylä-Willey and Valtakari 2001, 85). Paper organizations are facing the fact of continuous change but change will not happen rapidly. Human resource development occurs over a long-span of time and must be a systematic process. It is essential to make a change before it becomes necessity. The new management system at Botnia, based on processes, is a reflection of change at that company (Me botnialaiset 2002, 18, Botnia Annual Report 2001, 19). Change is inevitable, as the directors of product areas stated in Stora Enso in 2003 when the organization was remodelled on the basis of paper products, paperboards, timber products and pulp (Staffin Stora Enso 9/2003, 10). UPM-Kymmene has recognized the future attrition of big generations of employees and has therefore, intensified career management and internal recruitment efforts. Development discussions are used between subordinates and superiors. These direct competency development. HRM policy is created and carried out based on national and local factors. Also the new HR-data system helps in HRM-matters (UPM-Kymmene Annual Report 2002, 43).

According to specialists of forest companies the forest cluster should prepare for global competition by developing organization culture with the help of effective production development, mergers, alliances, and by networking the marketing, production and distribution of organization. The conservative culture of the forest sector should be made transformed using organization development functions. Building a senior-junior education system in co-operation with universities has been suggested. The education system should be

connected to the strategic development system. The change of service culture can be promoted by the introduction of electronic commerce and business applications. With the help of job control and an international support system it could be possible to promote change in information and experience concerning successful business decisions and promote the forest companies' multi-cultural identity. Wide international rotation of personnel in different tasks promotes the diffusion of innovations and effective decision making in the international organization (Rautkylä-Willey and Valtakari 2001, 88). The future of the cluster will be more dependent on human capacity than on wood and steel. Therefore, investments in research and product development as well as the courage to seize upon new business opportunities are key factors in future success (TEKES 2002). HRM policy must be based on organizational strategy and challenges, but also the personal development needs of personnel should be considered. The wellbeing of the company is based on the wellbeing of the personnel (Botnia Annual Report 2001, 19). The vision of Stora Enso is to build an organizational culture and atmosphere supporting every employee to use his/her own know-how and skills in order to reach the best results. HRM is trying to identify key areas where development is most important to the company. Self-assessments, inquiries, the quality management system, the competence management system and measurements are important in developing both the business and HRM. Long-term success is based on "what people can do" (Stora Enso Annual Report 2001, 26 – 27. 2002, 36).

The paper sector represents mainly the traditional, hierarchical career development format. There exist formal organization charts with boxes of positions in the organization. A manager planning his/her future career development can easily discover possible positions in the organization. Open positions are usually announced in internal or external job markets. The development of competences is common and desirable also in the paper industry. Managers begin their career in a specialist role in some area of industry and then usually grow upwards and towards general management tasks. However, technical managers seem to be devoted to certain types of knowledge achieved through studies, so they long for these kinds of concrete tasks even after having achieved a high position in the area of general management. When a person is for example in a position of maintenance or production manager, he still misses those days when he purchased pumps for the mill. Career development carries the manager from concrete tasks to more abstract duties both in the ICT and paper sector. In the beginning

of his/her career the manager takes care of particular, accurate things and is more responsible for administration later on.

Paper companies participating this research project are producing paper, paperboard and pulp. Personnel of the company are experienced and aging. Technical knowledge is very important. In office work the weekly working hours are 40 and in the mill the working hours are 40 with 3-shifts. Normal processes and production are done during normal working hours and there is generally no need to work extra hours. For the most part the future of the paper sector is seen positively. Possibilities for future expansion in the paper sector are seen in Asia; the European market is already saturated. Some mergers and acquisitions in the paper sector may still occur. According to directors interviewed for this project there is no serious threat for paper products. Information technology in the form of electronic books, and chemical technology (e.g. in the form of plastic packages) are not seen as a menace. On the contrary, the so-called paperless office has increased the demand for copier paper. Although the demand for different paper products varies according to business cycles there is a certain stability in the paper business (information from interviews with directors). According to Hetemäki (2000), despite the growth of ICT technology, paper has maintained its position in communication. The consumption of printing and copier paper products has almost doubled from the beginning of the 1980s. Information in the future will be more often in a digital format and the consumption of paper is based on print-on-demand. On the other hand the lower costs of production and consuming information will feed the supply of information and for that reason the amount of printed documents will increase. Despite the paper sector's strong trust in paper's future, alternative, competing applications are developed continuously. According to Heilmann (1999), competing applications, such as thin displays loaded through the Internet or telephone channels are developed simultaneously and will gradually displace the consumption of paper. Also the combination of television and computer, third generation mobile phones and the enlarging of e-business will decrease paper consumption. The development of digital technology will most likely first affect the demand of certain types of paper, like newsprint and filing paper (Hetemäki 2000, 86).

3.3. The Middle Manager and Managerial Work

3.3.1. Manager's Roles

Because the target group of this study consists managers working middle management it is necessary to consider common managerial roles. The world of the manager is complicated and confusing. The manager plans, organizes, motivates, directs and controls. The manager adds foresight, order, purpose, integration of effort and effectiveness to the contributions of others (Strong 1965, 5). The manager works among diverse challenges. The multiple roles of a manager are described by Kivimäki-Kuitunen (2000, 78 - 91) as follows. First, assuring the commitment and motivation of personnel to agreed upon goals is one of the most important challenges for a supervisory manager and a premise for success. Additionally he/she recruits, familiarizes, agrees on goals, makes networks, acquires, discards and decodes information, communicates, follows, encourages, demands, takes care of the atmosphere of the organization and listens to problems. In addition to all this he/she is also a salesman.

Barnard (1966) claims that executive work is not that *of* the organization, but the specialized work of *maintaining* the organization in operation. Mintzberg (1980) divides a manager's roles into 1) interpersonal roles, 2) informational roles and 3) decisional roles. In the interpersonal role a manager can be a *figurehead*. Because of his/her formal authority, the manager is a symbol, obliged to perform a number of duties. He/she can also be a *leader* who defines the atmosphere in which the organization works. Leadership involves interpersonal relationships between the leader and the led. The leader's role is clearly among the most significant of all roles, and has received far more attention than any other. The *liaison* role of the manager deals with the significant web of relationships that the manager maintains with numerous individuals and groups outside the organization that he/she heads. Informational roles are related to the receiving and transmitting of information. The manager as a *monitor* is continually seeking, and being bombarded with, information that enables him/her to understand what is taking place in his/her organization and its environment. The manager's special access to information allows playing the important role of a *disseminator*, sending external information into his/her organization and internal information from one subordinate to another. While the disseminator role looks into the organization, in the *spokesman's* role the manager transmits information out to his organization's environment. The manager is often called upon to speak on behalf of his/her organization. The third category of managerial

roles are the decisional roles. These roles involve the manager in the strategy-making process in his/her organization, in the process where significant organizational decisions are made. In the *entrepreneur's* role the manager acts as an initiator and designer of much of the controlled change in his/her organization. Whereas the entrepreneur's role focuses on voluntary action by the manager to bring about controlled organizational change, the *disturbance handler's* role deals with involuntary situations and change that is partially beyond the manager's control. The manager can also act as a *resource allocator*. Resource allocation is the heart of the organization's strategy-making system. The manager must oversee the system by which organizational resources are allocated. The manager's final role is that of a participant in *negotiation* activities. From time to time, the organization finds itself in major, non-routine negotiations with other organizations or individuals. It is frequently the manager who leads the contingent from his/her organization. It has been claimed that managers are essentially generalists in organizations of specialists. This is only partly true. Managers are generalists when considered in terms of the set of specialist functions performed by their organizations. But when compared with other kinds of work, managerial work is also specialized. Managers must perform ten roles outlined that involve their own kinds of specialized behavior (Mintzberg 1980, 58 – 94).

Gosling and Mintzberg (2003) have presented five managerial mind-sets, five ways in which managers interpret and deal with the world around them. Each has a dominant subject, or target, of its own. For reflection, the subject is the *self*, there can be no insight without self-knowledge. Collaboration takes the subject beyond the self, into the manager's network of *relationships*. Analysis goes a step beyond that, to the *organization*; organizations depend on the systematic decomposition of activities, and that is what analysis is all about. Beyond the organization lies what we consider the subject of the worldly mind-set, namely *context* – the worlds around the organization. Finally, the action mind-set pulls everything together through the process of *change* – in self, relationships, organization, and context. The practice of managing, then, involves five perspectives: managing the self (the reflective mind-set), organizations (the analytic mind-set), context (the worldly mind-set), relationships (the collaborative mind-set) and change (the action mind-set) (Gosling and Mintzberg 2003, 56).

Bailyn (1980) has studied engineering graduates at MIT (Massachusetts Institute of Technology) and found eleven occupational categories where graduates were working at

mid-career. Most of the persons studied had degrees in electrical engineering, mechanical engineering or chemical engineering. The occupational categories were:

1. Entrepreneur
2. General manager
3. Functional manager
4. Science manager
5. Engineering manager
6. Staff scientist
7. Staff engineer
8. Business staff
9. Science professor
10. Engineering professor
11. Consultant

More than half of Bailyn's research subjects were working as staff engineers (23 %), engineering managers (17 %) or functional managers (12 %) (Bailyn 1980, 6 – 16).

Drucker (2000, 163 - 164) has studied the work of a knowledge-worker. The productivity of a knowledge-worker depends on the following facts: 1) Characteristics of the work assignments; 2) Autonomy of the knowledge worker; 3) Constant innovativeness; 4) Constant learning and teaching; 5) Balance of volume and quality; 6) The knowledge worker's commitment to the organization (see also Ruohonen et al. 2002, 13). Many knowledge-workers do both knowledge-work and physical work: these are called technologists (Drucker 2000, 171). In the present research the ICT managers represent technologists. They have very strong theoretical know-how about information and communication technologies but they also themselves develop software applications.

For example Kahn et al. (1964) have noticed that managers are often faced with the conflicting demands and expectations of multiple constituencies, and this conflict can hamper managerial effectiveness. A role consists of the typical behaviours that characterize a person in a specific social or organizational context. A role conflict is the simultaneous occurrence of two or more sets of pressures, such that compliance with one would make it more difficult

or even impossible to comply with the other. Role conflict may result from a person's different role sets (inter-role conflict), or from the pressures associated with each of the different roles the person occupies within a single role set (intra-role conflict). Studies of role conflict in organizations have generally emphasized the former. For instance, a manager may have difficulty simultaneously fulfilling the expectations associated with his/her roles as supervisor to subordinate employees, subordinate to a boss, a cross-functional team member, and husband or wife to a spouse at home (Greenhaus and Beutell, 1985).

Huy (2001) found in his research that middle management significantly contributed to the change in the organization. This was expressed in four ways:

- 1) Middle management had many useful and realizable ideas and it was willing to fulfil these. Middle management was influenced by operative action, employees and customs and therefore had a wide variety of thoughts and opinions.
- 2) Middle management took care, better than senior management, of informal networks in the company, enabling large and enduring changes.
- 3) Middle management was more aware of the emotional needs caused to personnel by change.
- 4) Middle management was constantly balancing between change and time. Making large changes too quickly will lead to chaos – moving too slowly with little changes will cause freezing of the organization.

Middle managers have not always been seen positively (Huy, 2001). Their location is in the middle of an organization, and may not create profit for the company. Competing anticipations come from the top and bottom of the hierarchy. Middle managers do not necessarily have inadequate technical competence. When organizational hierarchy has been flattened they may have difficulties in career progression. In organizational reorganizations middle management is an easy target.

Carter (2003) delineates three groups of managers with regard to change: action-oriented, apathetic and atrophied. The action-oriented managers see the full picture and are willing to get involved in influencing change. The apathetic managers appear not to care either way if the agenda moves forward. They come to work every day, do the job that is required of them

and then go home. The atrophied managers are those who waste away. They once were the action oriented movers and shakers who had great ideas and championed new initiatives. They have become eroded and emotionally emaciated. It is at times an overwhelming challenge for HR professionals to encourage apathetic and atrophied managers to participate in the groups, committees and teams that are necessary to move a plan forward.

3.3.2. Career Paths of Managers

Sipilä (1996) presents a “dual-ladder”-system of career (Figure 13.). According to this theory there are two different paths of progression in a career, the career paths of general management and specialist. In the first category Sipilä’s career ladders are administrative, general management ladders. The career of a general manager goes upwards from group manager-level to unit manager-level and still to the highest top level of administration. The general manager has a view over the organization, he/she is responsible for strategy, finance and personnel. The general manager usually represents the organization with external interest groups. He/she has authority and he/she usually is appreciated. The other ladders is that of a specialist. Dual-ladder career system allows a specialist to continue specialist career. The specialist represents expert knowledge and he/she may be responsible for example for research and development. When advanced he/she may have the role of a consultant in the organization. The specialist can concentrate on his/her own tasks and be responsible for only the result of his/her own work. The specialist has the possibility to do interesting and developing work with a high level of freedom. Authority of the specialist over the organization seems to be low and there is not always high appreciation of his/her expertise in the organization. As the advanced specialist manager cannot achieve top positions in the general management side and seldom wants to be a general manager, he/she usually wants to maintain his/her know-how in the area of special competences. At the midpoint of the career ladders a change between the two categories is possible; it is possible to seek one’s position in the organization by changing from specialist to general manager or vice versa. The specialist reaches the top earlier than a manager in general management ladders because the specialist ladders are lower than those of general managers. Sipilä states that the specialist often reaches the maximum salary in the level of the first or second step in the general manager’s career path (Sipilä 1996, 145).

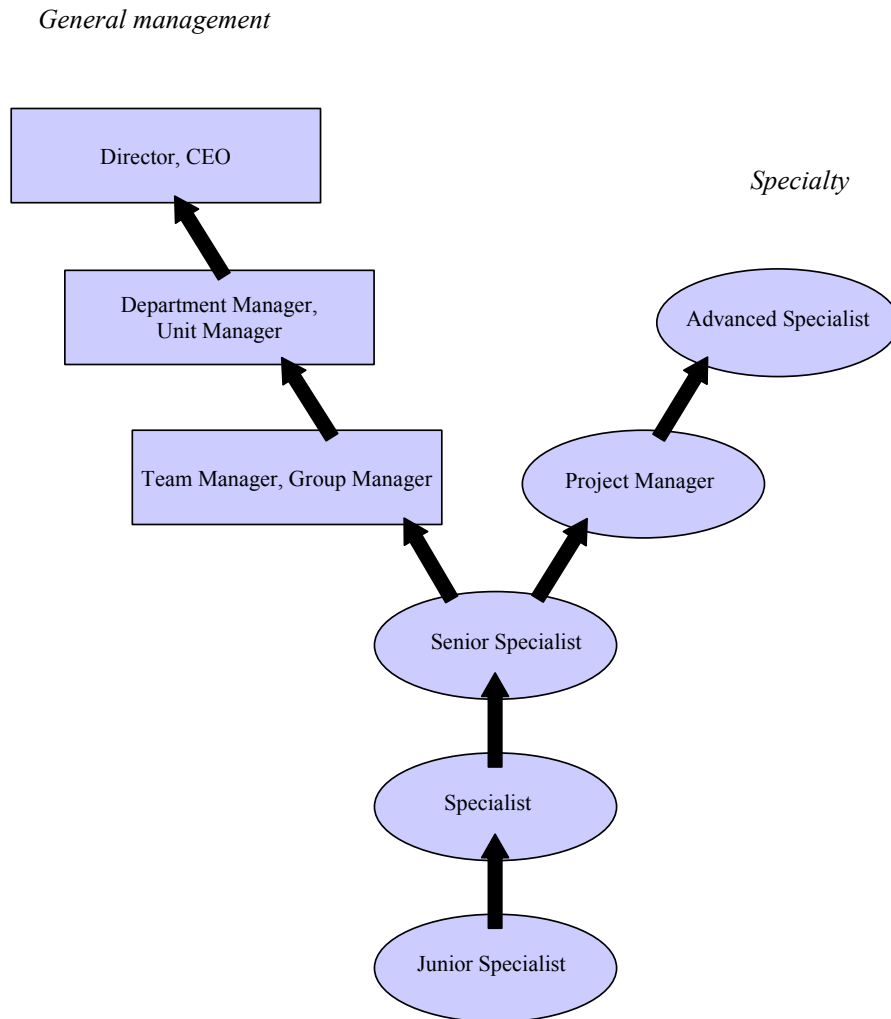


Figure 13. The Dual-Ladder Career Model (according to Sipilä 1996, 146)

Thompson and Price (1977) have identified four distinct career stages in specialist careers:

1. *Apprenticeship*. At this stage the person works under the supervision of a more senior professional on part of a project. He/she is not responsible for the project as a whole. Instead, he/she carries out the detailed and routine work.

2. *Independence*. People at this stage are considered experts in one or more areas of work. They are responsible for projects or significant parts of them, and work independently of a supervisor. They gain a reputation amongst other professionals for their work.
3. *Mentoring*. Specialists at this stage work in more than one area of expertise, and/or on more than one project. They develop a breadth of skills and also knowledge on how to apply them. They deal with other organizations on colleagues' behalf and they help other more junior specialists to develop.
4. *Strategic*. Specialists at this stage influence organizational decisions and directions, and provide strategic insights. They have considerable power and may also be involved in sponsoring promising individuals. (Arnold 1997, 198)

4. DEVELOPMENT FROM TRADITIONAL CAREER TOWARDS BOUNDARYLESS CAREER THINKING

In this chapter first an overview of career and career research terminology are presented, followed by description of different viewpoints from which the concept of career can be examined. Next existing career research connected to this research is presented. Finally, a new career concept, unlike that of the traditional career, is introduced.

4.1. Terminology of Career Research

The latin word 'carriara' means a road or a racecourse. When pursued in labour market research or behavioral sciences, career as a focus of study usually refers to a linear track leading into some ideal goal or destiny (Peltonen 1995, 13). A career is the sequence of employment-related positions, roles, activities and experiences encountered by a person (see also Ahlstedt 1978, 29, Arthur Hall and Lawrence 1989). It is in a sense a possession of a person. The career has a subjective element. The career is ours (see also Herriot 1992, 3). It is partly the product of our own ways of viewing the world. We are concerned with how an individual's positions, roles, activities and experiences unfold over time, are connected to each other (or not), change in predictable or unpredictable ways, match (or not) a person's changing skills and interests, and enable (or not) a person to expand his/her skills or realize his/her potential. In other words, the positions, roles, activities and experiences that feed into or result from the person's employment are part of a career. A career is not necessarily confined to one occupation, nor does it necessarily involve promotions or other indicators of increasing status such as income (Arnold 1997, 16 - 17). Herriot (1992) defines organizational careers as relationships over time between individuals and their organizations. According to Van Maanen (1977) a career can be glorious, non-satisfactory, a success or failure.

Ahlstedt (1978) explains that a career means generally the progress in a profession or more accurately a chain of posts or a career path. A career path is the chain of posts of a person that is realized in a particular moment. The career path is characterized by the quantity, durability and order of the posts. Lähteenmäki analyzed in her doctoral thesis terms linked to career research. These are career, professional career, organizational career, life career, career progress, career phase, career development phase, career step. Partly the terms are

synonymous, partly separate. Mostly career is the whole working life including every kind of transformation between jobs (Lähteenmäki 1995, 25).

When reflecting on our own careers, and those of others, our language is metaphorical: successful careers are described in terms of climbing ladders or pyramids to the top, reaching targets and being at the pinnacle, while unsuccessful careers are attributed to losing one's sense of direction, getting lost or hitting the glass ceilings. Inkson (2002) states that 'journey' metaphors are very common among individuals describing their own careers. These assumptions are typically based on notions of career as external to the individual, organizationally based and prescribed, linear and hierarchical (Redman and Wilkinson 2001, 271, Herriot 1992, 1 – 2). Lampikoski (2003, 25) describes career planning with vehicle metaphors like jet plane, hornet, hydroplane, glider, model plane, balloon, alternative flying vehicle or broken-winged.

Career can be continuous or broken. Usually factors behind a broken career consist of studies, unemployment, child care or illness. Behind the shape and phases of a career there can exist conscious choices or compulsory changes of circumstance (Varila and Kallio 1992, 57). Figure below illustrates different careers. In this study career is approached neutrally; career is relation between a person and work. It makes no importance on what direction career leads or if any temporary interruptions in career exist.

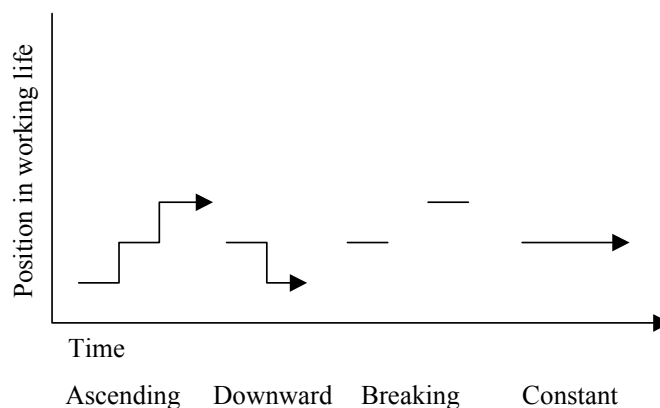


Figure 14. Possible External Careers of a Person (Varila and Kallio 1992, 57)

4.2. Earlier Career Research

The theoretical basis of career research seems to be quite scattered. A dichotomy exists between traditional, hierarchical career research (or “corpocratic” by Kanter 1992, 305) and the concept of a new and boundaryless career model (Mirvis and Hall 1994, Arthur and Rousseau 1996, 1996b). Careers are changing from traditional, hierarchical, linear and organizationally bound models to more fluid arrangements. Universal career theories do not perceive the importance of business sector in determining career. Business sectors affect in careers several ways as evidenced in the contrast between the ICT and paper sectors in Finland.

Career research began in the middle of the 1950s as writings in American scientific journals. Career research literature can be divided into at least nine groups: 1) general and career development, 2) career transitions/crises, 3) boundaryless/new careers, 4) methodology, 5) critical research, 6) career and family, 7) career and gender, 8) international careers and 9) literature in related social science. Traditional career research has been conducted in an to be the first group initially based in psychology and later in organizational development. New career research with the concept of boundaryless career began to be published in 1994 with the writings of Mirvis and Hall, and it continues to take place. Theoretically, basis of this research comes from general career research and new, boundaryless career research. Career crisis, career and family, gender matters or international careers are not in the focus of this study but there are some findings in the research applicable to these areas of career research. An overview of career research is presented in Table 4. below.

Table 4. Earlier Career Research**1) General Career Research and Career Development**

Blau P. M. et al.	1956	Occupational Choices
Roe A.	1957	Early Determinants of Vocational Choice
Super D. E.	1957	The Psychology of Careers
Holland J. L.	1966	The Psychology of Vocational Choice
Osipow S. H.	1968	Theories of Career Development
Sjöstrand P.	1968	Karriärens Utveckling - en Socialpsykologisk Analys av Yrkesval
Super C. E. and Bohn M. J.	1970	Occupational Psychology
Laaksonen O.	1972	Yrityskuva ja työpaikan valinta
Holland J. L.	1973	Making Vocational Choices: A Theory of Careers
Dunkerley D.	1975	Occupation and Society
Hall D. T.	1976	Careers in Organizations
Van Maanen J.	1977	Organizational Careers. Some New Perspectives
Ahlstedt L.	1978	Erikoistuminen ja liikkuvuus liikkeenjohtajan urakehitystekijöinä
Schein E. H.	1978	Career Dynamics. Matching Individual and Organizational Needs
Rosenbaum J. W.	1984	Career Mobility in a Corporate Hierarchy
Salminen E. O.	1989	Elämän ja uran ankkurit
Schein E. H.	1990	Career Anchors, Discovering Your Real Values
Häyrynen Y-P.	1992	Elämänura ja ammatinvalinta
Salminen E. O.	1993	Urakehityksen ankkurit
Lähtenmäki S.	1995	"Mitä kuuluu - kuka käskää?". Yksilöllinen urakäyttäytyminen ja sitä ohjaavat tekijät suomalaisessa liiketoimintaympäristössä - vaihemallin mukainen tarkastelu
Krumboltz J. D.	1996	A Learning Theory of Career Counselling
Super D. E. et al.	1996	The Life-Span, Life-Space Approach to Careers
Yarnall J.	1998	Career Anchors: Result of an Organizational Study in UK
Savickas M. L.	2000	Renovating the Psychology of Careers for the Twenty-First Century
Storey J. A.	2000	'Fracture Lines' in the Career Environment
Arnold J.	2001	Careers and Career Management
Anand N., Peiperl M. A. and Arthur M. B.	2002	Introducing Career Creativity
Iellatchitch A., Mayrhofer W. and Meyer M.	2003	Career Fields: A Small Step Towards a Grand Career Theory?

2) Career Transitions/Crises

O'Connor D. and Wolfe D. M.	1991	From Crisis to Growth at Midlife: Changes in Personal Paradigm
Lähtenmäki S.	1992	"Mikä sille nyt tuli" eli työura ja sen kriisivaiheet urakäyttämisen yksilöllisten erojen kannalta tarkasteltuna
Zheng Y. and Kleiner B. H.	2001	Developments Concerning Career Development and Transition

Ibarra H.	2003	Working Identity. Unconventional Strategies for Reinventing Your Career
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3) Boundaryless/New Careers

Mirvis P. H. and Hall D. T.	1994	Psychological Success and the Boundaryless Career
Arthur M. B. and Rousseau D. M.	1996	The Boundaryless Career
Weick K. E.	1996	Enactment and the Boundaryless Career: Organizing as We Work
Arnold J.	1997	Managing Careers Into the 21st Century
Hall D. T. and Moss J. E.	1998	The New Protean Contract: Helping Organizations and Employees Adapt
Arthur M. B., Inkson K. and Pringle J. K.	1999	The New Careers. Individual Action & Economic Change
Cavanaugh M. E. and Noe R. E.	1999	Antecedents and Consequences of Relational Components of the New Psychological Contract
Cohen L. and Mallon M.	1999	The Transition from Organizational Employment to Portfolio Working: Perceptions of 'Boundarylessness'
Gratton L. and Hope Hailey V.	1999	The Rhetoric and Reality of 'New Career'
Gunz H., Evans M. and Jalland M.	2000	Career Boundaries in Boundaryless World
Peiperl M. et al. (eds.)	2000	Career Frontiers
Pringle J. and Mallon M.	2003	Challenges for the Boundaryless Career Odyssey

4) Methodological

Cochran L. R.	1990	Narrative as a Paradigm for Career Research
Herr E.	1990	Issues in Career Research
Young R. A. and Borgen W. A. (eds.)	1990	Methodological Approaches to the Study of Career
Collin A.	1998	New Challenges in the Study of Career
Cohen L. and Mallon M.	2001	My Brilliant Career?: Using Stories as a Methodological Tool in Careers Research

5) Critical

Fournier V.	1998	Stories of Development and Exploitation: Militant Voices in an Enterprise Culture
Dyer S. and Humphries M.	2002	Normalising Workplace Change Through Contemporary Career Discourse

6) Career and Family

Hämäläinen P.	1991	Rakkaani - työn sankari. Perheen ja työn tasapainoa etsimässä
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Hochschild A. R.	1997	The Time Bind - When Home Becomes Work and Work Becomes Home
Burke R.	1999	Are Families a Career Liability?
Baines S. and Wheelock J.	2000	Working for Each Other: Gender, the Household and Micro-business Survival and Growth
Sallinen M., Kandolin I. and Purola M.	2002	Elämisen rytmi - Kohti tasapainoa työn ja muun elämän välillä
Kovalainen A. and Känsälä M.	2003	Perheen ja yritystoiminnan yhdistäminen
Valcour P. M. and Tolbert P. S.	2003	Gender, Family and Career in the Era of Boundarylessness: Determinants and Effects of Intra- and Inter-Organizational Mobility

7) Career and Gender

Eskola I. and Haavio-Mannila E.	1972	The Careers of Professional Women and Men in Finland
Wajeman J.	1983	Women in Control
Hesse-Biber S.	1984	Male and Female Students' Perceptions of Their Academic Environment and Future Career Plans
Nordgren N.	1985	Career Hopes and Plans of Female and Male MBA Students
Vanhala S.	1986	Liikkeenjohtajien uraan vaikuttavat tekijät. Tutkimus taustan, koulutuksen ja työkokemuksen vaikutuksesta mies- ja naisjohtajien urakehityksessä
Jacobson S. W.	1991	Careers in Cross-Cultural Context: Women Bank Managers in Finland and in the United States
Alvesson M. and Billing Y. D.	1997	Understanding Gender and Organizations
Davidson M. and Burke R. J.	2000	Women in Management: Current Research Issues
Aaltio-Marjosola I.	2001	Naiset, miehet ja johtajuus
Aaltio I.	2002	Gender, Identity and the Culture of Organizations
Kauppinen K.	2002	Gender-Based Analysis of Work
Vanhala S.	2002	Under the Glass Ceiling
Riska E.	2003	The Career and Work of Pathologists: A Gender Perspective
Tienari J. et al.	2003	"We Need more Women in Managerial Jobs". Gender, Equality and Management in Nordic Context: Deconstruction and Critical Perspectives

8) International Careers

Peltonen T.	1998	Expatriate Experience and Career Studies on Cross-Cultural Transfers, Modern Ordering and the Limits of Career Management in Multinational Corporations
Peltonen T.	1999	Finnish Engineers Becoming Expatriates: Biographical Narratives and Subjectivity
Peltonen T.	1999	Repatriation and Career Systems: Finnish Public and Private Sector Repatriates in Their Career Lines

9) Related Social Science Literature

Goffman E.	1961	The Moral of the Mental Patient
Kanter R. M.	1977	Men and Women of the Corporation

Career research can be divided into different theories based on personal traits (open models) and developmental theories (period models) that emphasize career process (Salminen 1993). Traditionally organizations have been the context of career research, but changes in organizations and ways of working are making the situation more complex (Iellatchitch et al. 2003).

The first existing approach to careers was done from a psychological point of view. Research of *horizontal career orientation*, i.e. to what area or profession a person is oriented, began in the middle of the 1950s. Career choice was considered a very solitary event. First career researchers were Super (1953), Blau et al. (1956) and Holland (1966), who attempted to explain the choice of profession through personality traits and the ego of a person. Roe (1957) began his career research based on experiences of child. Career research has over time developed towards a sociological viewpoint where professional orientation is directed by a person's social background, the professions of the parents and the influence of the environment (see e.g. Super 1957, Holland 1966, Häyrynen 1967, Sjöstrand 1968, Super and Bohn 1970, Laaksonen 1972 and Holland 1973).

Vertical career orientation has been explained also through social and personal factors. In addition the regulative influence of social factors towards the level of career aspirations has also been recognized (Roe 1957, Häyrynen 1967a and 1967b, Sjöstrand 1968, Laaksonen 1972, Dunkerley 1975 and Hall 1976). Osipow (1968) summarized theories of career development. Schein studied career dynamics and presented 'career anchors' (1971, 1978, 1987, 1990). Ahlstedt (1978) examined the effects of speciality and mobility to the career process of a manager.

Hesse-Biber (1984), Eskola and Haavio-Mannila (1972) and Nordgren (1985 and 1985b) analyzed differences between female and male levels of career aspirations and career expectations. Rosenbaum (1984) studied career mobility and presented the 'career

tournament model'. Wajcman (1983) wrote about working-class women who had taken control of the factory. Vanhala (1986) analyzed the impact of background, education and work experience on the career development of female and male managers. Gender-based career research was continued by Jacobson (1991). Holland (1992) wrote about making vocational choices. Schein's career anchors have been used by Salminen (1993) who examined the success of managers and Yarnall (1998) who applied career anchors in an organizational study in the United Kingdom. Mirvis and Hall (1994) presented the concept of 'boundaryless career'. Boundaryless career has also been the target of Arthur's (1996) research. Lähteenmäki (1995) in her doctoral thesis, analyzed the variance of individual career behaviour, the change occurring during a career, and the factors explicating these differences in the Finnish business environment. Krumboltz (1996) presented a theory of career counselling. Peltonen (1998) clarified the experiences and careers of expatriates in multinational corporations. Gratton and Hope Hailey (1999) examined the change of career. Recent career studies have been made e.g. by Savickas (2000), Storey (2000), and Zheng and Kleiner (2001). Aaltio-Marjosola and Jacobson (2001) analyzed the career of women managers in diverse cultures. Anand, Maury, Peiperl and Arthur (2002) have been studying career creativity. Alvesson and Billing (1997) and also Davidson and Burke (2000) have considered gender as the topic in their research. Aaltio (2002) and Vanhala (2002, 2003) have continued with gender-based organizational research. Gender aspects in work have also been one of the research focuses in the Finnish Institute of Occupational Health (Kauppinen 2002, 2002b, 2002c). Tienari et al. (2002) have made a cross-societal comparison concerning organizational reforms, 'ideal workers' and gender orders. Tienari et al. (2003) have also written about the need of women in managerial jobs. Ibarra (2003) has recently written about career transitions.

4.3. Career Theories in the Context of the Present Research

Only a few career orientation models have gone on to become available in commercial test form and have consequently had a greater impact on both research and practice. Those that have done this include Schein's (1978) career anchor questionnaire, Super's (1988) career concerns inventory and Derr's (1986) career success map. In Schein's and Derr's models the particular advantage is that they recognize the need for a balance between the individual and the organization, rather than having a purely individual focus. Despite being widely used

within organizations and widely cited in management texts few research studies exist to back up Schein's original work (Yarnall 1998, 58).

4.3.1. Career Anchors Guiding and Constraining Career Decisions

Developmental theories picture the stages of adult life. They map out the tasks that people face and the psychological processes involved in dealing with them. A different approach is to concentrate less on the stages, and more on the content of the career and lifestyle preferences people develop. An example of this alternative perspective is Schein's work on career anchors, representing one of the main career theories supporting the present research. "Career anchor" is the self-image that a person develops around his/her career, which both guides and constrains his/her career decisions (Schein 1987, 155). As the career progresses every person develops a self-concept that embraces some explicit answers to the following questions:

- 1) What are my talents, skills, areas of competence? What are my strengths and weaknesses?
- 2) What are my main motives, drives, goals in life? What am I after?
- 3) What are my values, the main criteria by which I judge what I am doing? Am I in the right kind of organization or work? How good do I feel about what I am doing?

This self-concept is built on whatever insight individuals have acquired from the experiences of their youth and education, but, by definition, no mature self-concept is possible until they have had enough occupational experience to know what their talents, motives, and values really are. Talents, motives and values become intertwined as we learn to be better at those things that we value and are motivated to do, and at the same time, learn to value and be motivated by the things we are good at. As people accumulate work experience, they have an opportunity to make choices, and it is from those choices that they begin to learn what is really important for them. With the accumulation of work experience and feedback come clarification and insight, which provide a basis for more rational and managed career decisions.

Schein has presented a theory of career anchor categories. The concept of “career anchors” originally arose from a study designed to help understand how a managerial career evolved and how people learned the values and procedures of their employing organizations. Schein defined eight anchors to which a person can be attached in his/her career. The anchors are fixed points in a career path and a permanent part of self-concept, values and motives. A person will not give up of these anchors even in the moment of a difficult choice. In the present career research the managers explained their career orientation with the help of a short questionnaire developed from Schein’s career anchor-model and completed their description with verbal comments from the location of their present position. Schein’s career anchors are:

- 1) **Technical/functional competence.** Some people discover as their careers unfold that they have both a strong talent and high motivation for a particular kind of work. What turns them on is the exercise of their talent and the satisfaction of knowing that they are experts. This anchor concerns the development and use of particular skills and expertise in a particular kind of work. This is not necessarily technical or scientific. People with this anchor value above all using their expertise in challenging tasks. If the work does not test the individual’s ability, it quickly becomes boring. They are anxious to share in goal setting but once goals have been agreed upon, they demand maximum autonomy in execution. They expect to be rewarded for their expertise, and do not want to be promoted into general management tasks. They value recognition from their professional peers rather than from members of management.
- 2) **General managerial competence.** Some people discover as their careers progress that they really want to become general managers. People who adhere to this anchor value management for its own sake. They tend to be ambitious and seek status, income and responsibility. This anchor involves 1) analytical competence, the ability to identify, analyze and solve problems under conditions of incomplete information and uncertainty, 2) interpersonal and inter-group competence, the ability to influence, supervise, lead, manipulate, and control people at all levels of the organization toward organizational goal achievement, and 3) emotional resilience, which includes the capacity to be stimulated by emotional and interpersonal issues and crises, the capacity to bear high levels of responsibility and the ability to exercise power and make difficult decisions without guilt or shame. Managerially anchored people want high levels of responsibility, challenging,

- varied, and integrative work, and leadership opportunities to contribute to the success of their organization. The recognition sought by people with this anchor is usually promotion to higher levels of responsibility; they expect to be very highly paid. Specialization is to be avoided.
- 3) **Autonomy/independence.** The need to do things one's own way to one's own standards unrestricted by formal and informal rules is at the heart of this anchor. A person who subscribes to this anchor will often be happy with contract work on a project, as long as he/she is left to achieve the project goals in his/her own way. They find organizational life restrictive, irrational, or intrusive into their own private lives, and therefore prefer to pursue more independent careers on their own terms. They can be teachers or consultants or they end up in those areas of work where autonomy is relatively possible even in large organizations: research and development, field of sales offices, plant management, data processing, market research, financial analysis and so on. The most desired form of recognition is being granted more autonomy, and/or portable things such as prizes or letters of commendation.
 - 4) **Security/stability.** This anchor has two closely related but not identical variants: security of tenure and security of location. The personal motive here is safety and security in the form of a predictable future. Obviously, long-term employment preferably with good pay and pension provision is a priority. Job challenge is less vital. There are at least two kinds of people whose careers are anchored in security concerns. One kind becomes strongly identified with a given organization and turns over all responsibility for career management to the employer. The other kind of security-oriented person links him/herself to a particular geographic area, putting down roots in the community, investing in a house and a stable life-style. Preferred recognition is for loyalty and steady performance within a system with published grades and ranks. He/she wants also to be paid in steady predictable increments based on length of service.
 - 5) **Entrepreneurial creativity.** The entrepreneur's creative urge is specifically toward creating a new organization, product, or service that can be identified closely with his/her building efforts. Income and profitability are the key signals that this is being done successfully. They have both talent and an extraordinarily high level of motivation to prove to the world that they can do it. Often an older member of the family has already established him/herself as a successful entrepreneur. People with this anchor are obsessed with the need to create and they tend to become easily bored. They also tend to seek the

- limelight. They would want the power and the freedom to move into whatever roles would meet their personal needs. For these people ownership is the most important issue.
- 6) **Service/dedication.** This anchor is apparent when people enter work that upholds values that are important to them. The specific skills and activities required may be less important. Obvious examples of occupations that attract people with this anchor are the helping professions, but not everyone in those professions has this anchor, and some people elsewhere also have it. The chance to reflect the organization's mission, and influence it if necessary, is important. These people want "fair" pay for their contribution and portable benefits, because they do not have an a priori organizational loyalty, but money per se is not central to them. More important is a promotional system that recognizes their contribution and moves them into positions where they can have more influence and the freedom to operate relatively autonomously. They want recognition and support both from their professional peers and from their superiors, and want to feel that their values are shared with higher levels of management.
 - 7) **Pure challenge.** This anchor expresses a desire to overcome the odds by winning against apparently invincible opponents or solving difficult problems. The exact nature of the challenge is less important than its level of difficulty. Some athletes may show this anchor, as may some managers, for example those who relish turning around ailing enterprises. These "warriors" prove to themselves and to the world their own superiority in competitive combat. The managerial issues involved in motivating and developing such people are intrinsically complex. On one hand, they are already highly motivated to develop themselves and probably very loyal to an organization that gives them adequate opportunities for self-tests. But they can also be very single-minded and can certainly make life difficult for others around them who do not have comparable aspirations.
 - 8) **Lifestyle.** For people having this anchor it is not enough to balance personal and professional life, it is more a matter of finding a way to integrate the needs of the individual, the family and the career. They want flexibility in employment relationships, but unlike a person with an autonomy career anchor, they are happy to work for a long period in an organization that offers the kind of flexibility that is desired. Examples might be paternity leaves, sabbaticals, day-care options, variable hours or opportunities to work at home. (Schein 1987, 162 – 170 and Schein 1990, 20).

Francis (1994) has presented a description of “career drivers” that are based on Schein’s career anchors. Francis has divided the career drivers into nine groups: 1) material rewards, 2) power and influence, 3) search for meaning, 4) expertise, 5) creativity, 6) connection, 7) autonomy, 8) security and 9) status.

The career path of a person is anchored to the job description in an organization and to organizational norms. On the other hand the career path is anchored also to personal needs and motives. Anchors reflect motives, attitudes and values and they reign in the individual if he/she aims too far from that he/she really wants (Ahlstedt 1978, 54).

Katz (1984) built a three-skill approach on the ideas of Schein. The three-skill approach describes the skills of an effective administrator. These skills are technical skill, human skill and conceptual skill. Technical skill implies an understanding of and proficiency in a specific kind of activity, particularly one involving methods, processes, procedures or techniques. Technical skill relates to Schein’s concept of the technical/functional competence anchor. The second skill outlined by Katz, human skill could be an executive’s ability to work effectively as a group member and to build cooperative effort primarily concerned with working with people. This skill relates to Schein’s anchor of general managerial competence particularly leadership skills. Human skills are also part of the service/dedication anchor. Conceptual skill involves the ability to see the enterprise as a whole, it includes recognizing how the various functions of the organization depend on one another and how changes in any one part affect all the others. Conceptual skill extends to visualizing the relationship of an individual business with its industry, the community and political, social and economic forces in any nation as a whole. This skill is close to Schein’s general managerial competence anchor in terms of management (Katz 1984, 33 – 36).

4.3.2. Social Learning Theory of Career Decision Making

Krumboltz presents a social learning theory of career decision making. Matters influencing a career can be divided to four factors: 1) genetic endowment and special abilities, 2) environmental conditions and events, 3) learning experiences and 4) task approach skills. Genetic endowments and special abilities are inherited qualities that may affect people’s ability to acquire certain educational and occupational preferences and skills. Environmental

conditions and events affecting career decision making include social, cultural, political, and economical forces, as well as such forces as natural disasters and the location of natural resources. Each person has a unique history of learning experiences that results in a chosen career path. A person who, for example, wants to help people usually gets positive rewards from his/her helping efforts. The interaction of learning experiences, genetic characteristics, special abilities, and environmental influences results in task approach skills. These skills include performance standards, work habits, perceptual and cognitive processes, mental sets, and emotional responses (Mitchell and Krumboltz 1996, 237 – 242). Genetic endowments, special abilities, environmental conditions, learning experiences and task approach skills have all had an impact on careers of the managers in the present study.

4.3.3. Career Tournament Model as an Example of a Career Selection System

Rosenbaum has presented a career tournament model describing a career selection system (system for matching employees with jobs based on employees' career histories) as a series of implicit competitions which progressively differentiate a cohort of employees throughout their careers, each time further defining their opportunities for future attainments. The tournament model is a dynamic mechanism that may operate over changing historical circumstances, and social and economic forces may have different effects on careers at different stages and for different employee groups. This general model provides an overview of the career incentives that career systems hold out to employees through various phases of their careers. It is commonly accepted that individuals are also affected by their past experiences and their future expectations (Rosenbaum 1984, 26 – 27, Salminen 1993, 14 - 15).

4.3.4. Career of a Professional, Development from Junior to Ambassador

Sveiby and Risling (1987) have presented a model to describe the career of a professional. The model is structured using terms junior-partner-senior-mentor-ambassador to describe an individual's career progress as a career span. These roles follow each other from the novice careerist to the pensioned person. The professional development of a person is connected to his/her personal development and the development of the organization. Sveiby and Risling's model can be discovered in the data of this study.

4.3.5. *Fracture Lines Affecting Work and Career*

Storey (2000) presents eleven 'fracture lines' or aspects that will affect work and career in the future. Each of these fracture lines has the potential to alter careers significantly in some way.

- 1) Globalization, in terms of major developments in the internationalization of markets and competition, has the potential to impact heavily on careers because of its effects on organizations and the nature and form of work.
- 2) Deregulation of labour markets has the potential to reduce job security and notions of the permanency of employment and, in terms of impact on careers, can be seen as a contributor to the demise of lifetime employment and an intensification of the need to maintain employability.
- 3) The effects of deregulation have also been experienced in the public sector through privatisation of public utilities and national institutions. Privatisation has effects on careers as reduction of job security and the need to adapt more flexible forms of working. This has also reduced employment opportunities.
- 4) Technological advances, advances in communication and information technology, allowing the almost instantaneous transmission of information world-wide, have facilitated the internationalization of organizations. Technological advances have led to radical changes in organizational structures, as well as in working methods.
- 5) Employment patterns are changing. More flexible forms of work, particularly temporary and part-time work and self-employment will increase.
- 6) Organizational forms and structures are changing. The prevailing trend for many organizations over recent years has been towards 'downsizing' and 'delaying' i.e. reducing both the size of the workforce and the number of hierarchical tiers within the organizational structure. This leads from large bureaucratic structures towards more fluid structures such as 'network' and 'cellular' organizations. Network structures describe a number of interrelated independent firms in a specific value chain, each contributing their own area of expertise. A cellular structure consists of a number of individual 'cells' e.g. self-managing teams, autonomous business units that could exist independently but by interacting with other cells can produce a more potent and competent organism.

- 7) Demographic and labour market changes. The population is aging and this is impacting the labour force. Household structure changes include a significant increase in the number of single person households, dual-career couples, and single parents. Many women are delaying having children or choosing not to have them at all. The aging population has led to a rise in the number of people with elderly dependants.
- 8) There appears to be a trend towards viewing work as just one component of life. The demands of permanent employment and steady progression up a career ladder are not so attractive. Organizational attempts to offer career-break schemes and sabbaticals that allow individuals to develop themselves by undertaking some non-work activity, such as travel.
- 9) The concept of a psychological contract refers to the implicit mutual expectations of employer and employee, i.e. the promise of job security in exchange for loyalty to the organization, towards a more short-term 'transactional' contract, based on more explicit negotiation between individuals and organizations. As time has gone by, the traditional contract between the employer and the employee has changed in some fundamental ways. People are no longer expected to work for one company for their whole career (see also Storey 2000, 21). The loyalty that the employer and the employee once expected from each other has disappeared. Replacing it is a new and still-developing set of expectations that has broad implications for the way we plan our careers, our lives, and even our working week.
- 10) The organizational downsizing and delayering of the 1980s and early 1990s increased fears over job security.
- 11) There has been a rise in the level of educational attainment and the expansion in higher education. These changes have been accompanied by increased complexity in labour markets (Storey 2000, 22 – 33).

4.3.6. Bureaucratic and Boundaryless Career Concepts

Career has long been considered as a series of related jobs through which a person moves in a sequential manner (Wajcman 1998, 79). Under this definition there often lies an assumption of going upwards in corporate hierarchy, gaining one position after another by serving only one organization (Lepistö and Heilmann 2004).

There is a growing consensus that careers are changing from traditional, hierarchical, linear and organizationally bound models to more fluid arrangements, based on the accumulation of skills and knowledge and the integration of personal and professional life. Arthur and Rousseau (1996b) have defined old and new meanings of career vocabulary as presented in Table 5.

Table 5. Old and New Meanings of Career (Arthur and Rousseau 1996b)

	Old meaning	New meaning
Boundary	A limit. Division between familiar and hostile territory. World inside the boundaries is a safe haven for employees.	Something to be crossed in career behavior, or in taking on complexity.
Career	A course of professional advancement; usage restricted to occupations with formal hierarchical progression.	The unfolding sequence of any person's work experiences over time.
Organization	A legal entity defining authority relations and property rights. A formal structuring of work, performed and owned by the firm in exchange for pay and sometimes job security. Formal hierarchy.	Organizing through networks, value chains etc.; a more dynamic, process-centered usage. Organization processes reflect the entire value chain producing goods and services and builds teams across functions and across suppliers, producers, distributors and customers.
Employment	The action of employing a person or making use of a thing; a state of being employed; a person's regular occupation or business.	A temporary state, or the current manifestation of long-term employability.
Group	Interdependent individuals within a social unit such as a firm.	Interdependent individuals who identify psychologically with one another.
Learning	Acquisition of knowledge committed to memory, typically by individuals. Individual-centred.	A multilevel phenomenon, includes creation and acquisition of knowledge, collective processes for shared interpretation, and patterns of adaptation and transformation.

Civility	The status of citizenship; state of being civilized, freedom from barbarity.	Community membership where entitlements are coupled responsibilities; an infrastructure sustaining and enhancing social and personal relations.
Transition	The movement between stages. Something exceptional.	The now prevailing cycles of change and adaptation, including stages of preparation, encounter, adjustment, stabilization and renewed preparation. Continuing process.

Innovative organizational structures in newer industries provide many variations in managerial career paths. Highly decentralized organizations with matrix structures of project assignments tend to provide general management responsibilities for many more people, much earlier in their careers, thus giving them a taste of the entrepreneur's profit-and-loss orientation. At the same time, a consequence of flattening the hierarchy is that other managers will remain "professionals" for much longer in their careers. In neither case is promotion up a long ladder of jobs the most important factor in determining "rewards". At the same time traditional career ladders are being built at the bottom, the higher rungs are being lopped off. More people at lower levels have *theoretical* access to promotion while the *actual* number of slots "above" is declining. The corporate ladder is collapsing because it can no longer carry the weight (Kanter 1992, 307 – 309).

Kanter (1992) has presented a career classification scheme in which she divides careers into three categories: corporate, professional and entrepreneurial. For much of the recent past, the idea of a career in the business world meant to most people a series of almost-automatic promotions to bigger and better jobs inside a company. Such a bureaucratic career pattern involves a sequence of positions in a defined hierarchy of positions. "Growth" is equated with promotion to a position of higher rank that brings with it greater benefits; "progress" means advancement within the hierarchy. Thus, a "career" consists of formal movement from job to job – changing title, tasks, and often work groups in the process. These elements also describe the career systems of traditional, large companies, systems that can be called "corporatic" (Kanter 1992, 305).

Career growth in a professional career, where the career structure is defined by a craft or skill, does not necessarily consist of moving from job to job, as it does for “corpocrats”, and “advancement” does not have the same meaning. Instead, those on professional career tracks may keep the same title and the same nominal job over a long period. Opportunity in the professional form, then, involves the chance to take on ever-more-demanding, challenging or rewarding assignments that require greater exercise of the skills that are the professional’s stock in trade. “Upward mobility” in the professional career rests on the reputation for greater skill. Professional careers do not necessarily unfold within a single organization. Professionals may be highly or weakly organizationally embedded. One job-hopper manager in biotechnology commented: “We are all gypsies. You work for an industry, not a company”. In such cases, careers are produced by *projects* rather than by the hierarchy of jobs in a single organization. The key variable is *reputation*. Reputation counts for both those people pulling projects together, so that they can attract the best talent, and those professionals who want to find the best projects. Each project, in turn, adds to the value of the reputation as it is successfully completed. People are more committed to projects than to employers. When occupations “professionalize”, their members not only command greater remuneration for services because of their enhanced collective reputation and the skills monopoly they can enforce through associations that provide “credentials”, but they also exhibit a weaker attachment to employers, expect perhaps for firms of fellow professionals. Firms of professionals can flourish precisely because of portable skills. Because of the portability of reputation – and the relationships with clients of project formers that flow from it – talent raids of professionals are common in some industries (Kanter 1992, 309). This situation has forced companies to draw up protection agreements (e.g. non-disclosure agreements, NDAs and non-competition contracts) between persons and companies (Jauhiainen et al. 2003, 13). The professionals’ reliance on reputation stands in great contrast to the anonymity of the bureaucrat. Professionals have to “make a name for themselves”; for corpocrats, the “name” that confers status is the company name. The determination of career fate by fellow professionals through peer review also stands in great contrast to the determination of a corpocrat’s fate by hierarchical “superiors”. The mobility of the professional career depends upon establishing a value in the external marketplace that is reputation-based. The creation of star quality is a hallmark of the dynamics of a professional career. In an increasing number of circumstances, then, the corporate career model has been replaced by more professional career structures (Kanter 1992, 309 – 313).

The third major career pattern is the classic entrepreneurial one. An entrepreneurial career is one in which growth occurs through the creation of new value or organizational capacity. If the key resource in a bureaucratic career is hierarchical position, and the key resource in a professional career is knowledge and reputation, then the key resource in an entrepreneurial career is the ability to create a product or service or value. Instead of *moving up*, those in entrepreneurial careers see progress when *the territory grows below* them – and when they “own” a share of the returns from the growth. The risk in entrepreneurial careers is certainly greater than in corporate careers or even in professional careers but they can also capture a much higher proportion of the returns if they succeed. In general, the entrepreneurial career pattern offers many of the elements often found to be associated with motivation for high productivity: control over one’s own work, ability to set one’s own pace, the joy of seeing something emerge out of nothing, monetary rewards tied directly to what one has accomplished. Careers shaped by professional and entrepreneurial principles fit the needs of businesses to compete effectively in the corporate Olympics. The skill of the professional and the innovation of the entrepreneur are important assets for the economy as a whole. According to Kanter, more and more people will find their careers shaped by how they develop and market their skills and their ideas – and not by the sequence of jobs provided by one corporation. Some post-entrepreneurial careers will still unfold within the embrace of a large corporation, but they will be marked less by promotion to greater administrative responsibility and more by project opportunities blending professional skills and innovative ideas. A formal title and its placement on an organization chart have less to do with career prospects and career success in a post-entrepreneurial world than the skills and ideas a person brings to that work. According to Kanter, the entrepreneurial model can produce a world-class athlete in Olympic contests for corporations that know how to develop and tap skills, wherever they are found. This model can open vast opportunities for people as well, if training, coaching and financial backing is available to help them move with their skills and their ideas. But this model is also fraught with risks and uncertainties. The changing shape of careers produces its own set of corporate balancing acts (Kanter 1992, 313 – 319).

Kanter (1989) sees that the bureaucratic forms of organization are beginning to wane, and so also are bureaucratic careers. Bureaucratic careers are characterised by the logic of advancement. They involve a sequence of positions in a formally defined hierarchy of other positions. Growth is equated with promotion to a position of higher rank and progress means

advancement within the hierarchy. In a typical bureaucratic career, all of the elements of career opportunity - responsibilities, challenges, influence, formal training and development, compensation – are closely tied to rank in the organization. In a professional career it is a question of craft or skill. The career development for professionals does not necessarily consist of moving from job to job. Opportunity in the professional form involves the chance to take on ever more demanding, challenging, important or rewarding assignments that involve greater exercise of the skills that define the professional's stock-in-trade (Kanter 1989, 508 – 511) A professional's relationship with his/her organization is more complex than that of a bureaucrat. An individual can ask how he/she is able to fulfil his/her career aspirations within the organization. From the organizational perspective questions arise about how to best manage the career development of professionals in order to fulfil both individual and organizational aims and objectives. The third way of seeing career is the entrepreneurial career. In this form growth occurs through the creation of new value or new organizational capacity. The key resource in an entrepreneurial career is the capacity to create valued outputs (Kanter 1989, 515 – 516). Kanter's suggestion that we need to know more about these forms and the ways in which they are enacted in the organizational context is a significant issue for HRM. Bureaucratic careers are seen as less and less likely, but they are also less and less appealing. People are encouraged to weaken their links with organizations, and to develop relationships based on short-term contracts and financial arrangements. The boundaries between work and other aspects of people's lives are changing. Career patterns are based on cyclical rather than linear patterns of movement, periods of re-skilling, of lateral rather than upward movement and of change of job/company/occupation.

Mirvis and Hall (1994) have introduced the term "boundaryless career" to describe this kind of fluidity (Redman and Wilkinson 2001, 274 – 275, Gunz et al. 2002, 61). The old meaning of the word "boundary" is a "limit"; a division between familiar and hostile territory. The new meaning is something to be crossed in career behavior, or in managing complexity (Arthur and Rousseau 1996, 371). The old meaning of the word "career" according to Arthur and Rousseau is a course of professional advancement; the use is restricted to occupational groups with formal hierarchical progression, such as managers and professionals. The new meaning of "career" is the unfolding sequence of any person's work experiences over time. "Organization" used to mean a legal entity defining authority

relations and property rights. In the new meaning organizing is done through networks, value chains, more dynamically (ibid. 371 – 372). The new boundaryless career models in which people develop competences not bound to any particular organization increase creativity in the organization (Gunz et al. 2002, 58). Companies are often organized in horizontal, process-oriented ways, the use of project organization is very frequent, and networks and virtual organizations are abundant. Increasing numbers of employees can choose to work on a consultative basis, and many employers are trying to find forms to enable employees to work from their homes or to apply flexible working hours (Södergren 2002, 36).

The boundaryless career does not characterize any single career form, but rather a range of possible forms that define traditional employment assumptions. The “bounded”, or organizational, career view saw people in orderly employment arrangements achieved through vertical coordination in mainly large, stable firms. The meaning of careers, and their influence on the economy, was subordinated to those firms: getting along meant doing what the firm wanted; getting ahead meant being grateful for opportunities the firm brought your way. The organizational career appeared to be the dominant employment form through the mid-1980s. It is not dominant any more. Firms today cannot promise a lifelong career, people can no longer expect such a prospect (Arthur and Rousseau 1996, 3 – 4). The old picture of stable employment and the organizational career associated with it, has faded, and a new picture of dynamic employment and boundaryless careers calls for attention. There are six meanings associated with the notion of boundaryless careers:

- 1) The career moves across the boundaries of separate employers.
- 2) The career draws validation – and marketability – from outside the present employer.
- 3) The career is sustained by external networks or information.
- 4) Traditional organizational career boundaries, notably those involving hierarchical reporting and advancement principles, are broken.
- 5) A person rejects existing career opportunities for personal or family reasons.
- 6) The sixth meaning depends on the interpretation of the career actor, who may perceive a boundaryless future regardless of structural constraints (Arthur and Rousseau 1996, 6).

Iellatchitch et al. (2003) have created a typology of different “career fields” where *company world* is a field representing traditional organizational career. Employees working with different customers represent *free-floating professionalism*. People working outside organizations represent a field of *self-employment*. *Chronic flexibility* is somewhat like free-floating professionalism, where employers are changed but also professions, such as the sector or industry. While the number of employees representing company worlds may be decreasing, the number are increasing in other forms. Fields are affected by basic questioning of the significance of work. Family, leisure and self-fulfilment may increase in importance.

The world of career is clearly changing and such concepts as creativity are gaining momentum. Poehnell and Amundson (2002) have been looking at career realities from the perspective of ‘craft’ – the art of career, more than just the ‘management of career’. From this perspective craft complements management, it does not replace it. *Career craft* is a new paradigm for a new career reality. This new career reality must be seen in the context of the global economy characterized by global economic competition, technical innovation, smart technology, advanced telecommunications and changing demographics. In contrast to the old workplace, where the entitlement ethic emphasized primarily loyalty, endurance and hard work, the ever-changing workplace is now characterized by more fluidity, less job security, fewer full-time positions, more temporary staff, more competitiveness, flexible and customized production, increasing emphasis on being more self-directed in lifelong learning and career planning, more multi-skilled workers, broader responsibilities, more flexible supervisors who act as ‘coaches’, fewer supervisors, grater teamwork, more emphasis on performance rather than seniority, the sharing of risks by both employer and workers, and the need to be able to solve problems and create new opportunities (Poehnell and Admundson 2002, 106 – 107). Hatch (1999) uses musical terms in describing the new career concept. Traditional occupational and organizational careers have characteristics of scripted classical music. The contrasting image of present-day careers is a jazz metaphor emphasizing improvisation, spontaneity and self-directed thematic development. Improvisation does not mean formlessness, great jazz improvisations need basic forms. Just as jazz players cycle and recycle, providing constant new experiences through the creative development of past themes, career actors spiral their way into new industries, occupations and opportunities.

Changes in the future of the career – in the way individuals engage in society through work – and in its relationship with other life roles prompt a re-examination of values and personal meanings in role involvement. Values are constructs that cannot be observed but they are recognised in life, such as physical and mental health, security (including financial security), social status, and self-fulfilment (Patton 2000, 69 – 71). Super (1995) has developed a model distinguishing needs, values and interests. He defines needs as ‘wants’, manifestations of physiological conditions such as hunger, and they are related to survival. Values are the result of further refinement through interaction with the environment. The need for help thus becomes love, and the need to help becomes altruism. Interests are the activities within which people expect to attain their values and thus satisfy their needs (Super 1995, 5). According to Super individuals can fulfil important life values in different roles, e.g. achievement can be gained at work, altruism satisfied in the community, nurturing fulfilled in the family and creativity expressed in hobbies. Work values are constructed by individuals as they make meaning of the experience of work in their lives (Patton 2000, 71 – 72). Holland (1992) affirms the idea that interests grow out of values, and that individuals seek out work environments which are compatible with their attitudes and values and allow them to use their skills and abilities.

Career can no longer be controlled and manipulated through the exercise of professional expertise, power and patronage. Instead, energy and resources are diverted to addressing those contextual factors and influences that shape the career (Doyle 2001). Future success may now depend less on the efficacy of the relationship between the subordinate and the boss and the mentor and the protégé, and more on a reconfigured approach that is founded on a greater sense of co-learning in a spirit of mutuality and reciprocity in which both parties would benefit from being in connection with each other (Hall et al. 1996, 142).

We are in an era of unprecedented changes, on both global and local levels, which have the capacity to transform the nature and structure of careers. Castells (1998) has stated that in the future the career will be affected by three independent processes: the information technology revolution, the economic crises of capitalism and the nation state, and their subsequent restructuring, and the blooming of cultural and social movements, such as libertarianism, human rights, feminism and environmentalism. These processes have brought into being a new social structure, the network society, a new economy, the informational global economy,

and a new culture, the culture of real virtuality (Castells 1998, 336). Giddens (2000) emphasizes four aspects to globalization: first and most important, the world-wide communications revolution; second, the 'weightless economy' with financial markets leading the way; third, the demise of the Soviet Union, and finally, the growing equality between women and men. When planning one's career, it is becoming more important to stay generalised as opposed to specialised. Successful individuals will be those who have the ability to do a variety of things as the society moves forward. The globe is shrinking and forcing us to learn about and deal with the rules of different cultures. There is no geographic isolation anymore. Computers are now doing many jobs formerly done by people. Under the new rules, we must constantly upgrade and update our skills. Adult education and retraining may be required for virtually all jobs in the future. The employer's commitment to workers is now temporary, lasting only so long as there is work to be done. Employers value workers' skills, but when the job is done, the workers have to move on. Likewise, workers no longer expect a traditional employment contract. Instead, workers make a commitment to their own craft, or portfolio of skills. Trends toward multiple employment will continue; a person will work perhaps three days a week at one job, one or two days at a second job, and perhaps be writing a book or doing some other freelance work on the side.

For an individual career means a search for and maintenance of professional identity. The career path in an organization provides only the infrastructure for the individual's competence growth and for moving from one assignment to another (Lähteenmäki 1999, 3). The goal of the individual is to understand his/her options and choose those options on the basis of some plan. A person has to take responsibility for his/her career. A key point is to realize that taking responsibility for the career is an ongoing process, not an event. No matter how sophisticated our communication technology becomes, there is and always will be a strong need for interpersonal relationships in the workplace. Therefore there is need to develop people's skills in general, but especially communication skills. No matter what stage of the career one is in, one needs to examine what 'the rules' are today and will be tomorrow, to understand what new circumstances exist in the world and in the person's own life which govern the choices available. Most workers will need to be flexible enough to work well either independently, or in teams or under direct supervision. The key is also one's ability to shift and change as the rules change, and to actually embrace the new rules. It is important to keep on learning, take courses and after them advanced courses. Presently driving forces in

organizations are marketing and costs, and these may require new training and aptitudes. When considering a company one might want to work for, it is important to find out its corporate 'style' or behaviour. Perhaps the most important lesson we can learn is that one can get better and better at a particular thing, but still must keep one's head up to see if that thing is going to be needed in the future.

Organizations are breaking middle management rungs off the career ladder, thereby destroying the career ladder itself. Instead of looking up, employees are being taught to look over to colleagues and to move diagonally across departments. Tenure as a form of life-time employment is being replaced by five-year contracts (Savickas 2000, 57 – 58). We need to remove from our minds the idea that 'up' is the only direction to win recognition and greater pay. Lateral movement is just fine and sometimes more advantageous. Developing multiple capacities and flexibility will be the keys needed to navigate through all the tremendous changes in the uneven career terrain ahead. Lähteenmäki (1999) states that the career should not be seen too narrowly, as simply climbing upwards in the hierarchy of the organization. The career should be seen as a lifelong ongoing professional learning process where it should be possible to gain deserved rewards. Therefore a lateral, even bumpy career where professional competence can be developed, should be seen more attractive.

An organization can offer a number of activities to employees to enhance their careers. For example, many organizations are disseminating more complete and accurate information about career opportunities in their firms. It is a matter of human resource planning to insure that when job openings occur, management has access to a list of all employees who have the appropriate skills for the position available. The organization can also offer career counselling options. It is necessary to plan job sequences for employees more carefully. Employees can be moved in a logical way, transfers and promotions can be done more systematically. Organizations are beginning to use assessment centres to help in the career development of middle and late career employees. Organizations are providing more and more training for employees lacking specific skills needed for job movement. First line supervisors are sometimes the ones charged with responsibility for career development (Zheng and Kleiner 2001, 34 – 36).

Gratton and Hope Hailey (1999) have summarized the rhetoric and reality of the ‘new career’ (Figure 15.) The rhetoric of the ‘new career’ embraces a wide variety of assumptions and conditions underpinning the informal career bargain or implicit contract. Underlying this rhetoric there are assumptions about enabling ‘new career’ architecture, the perceptions of individual employees, and the role of line management.

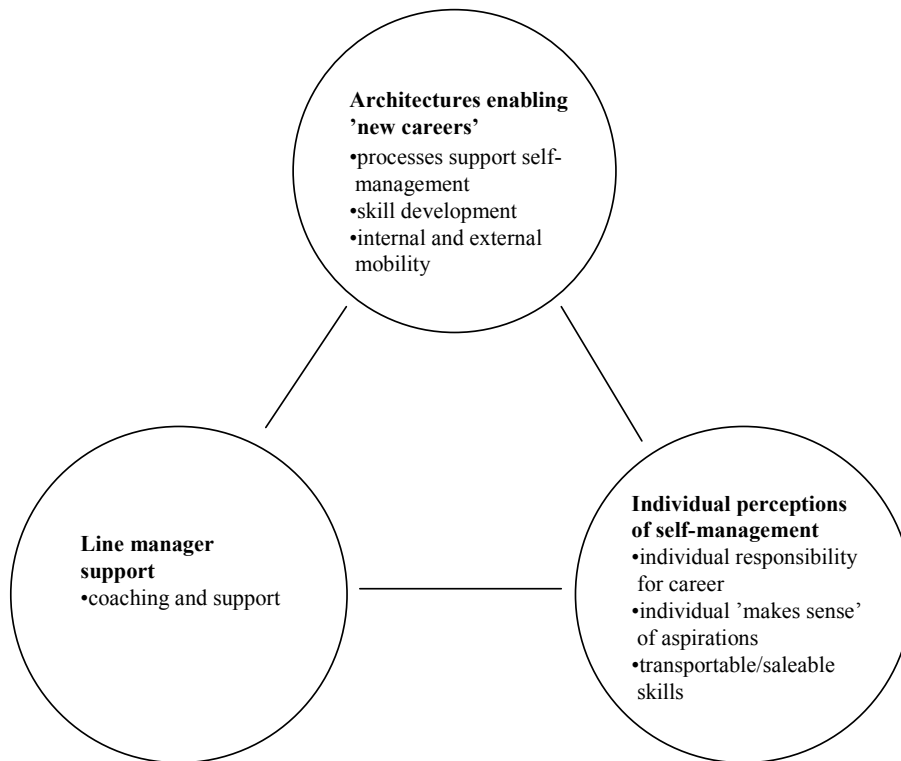


Figure 15. The New Career (Gratton and Hope Hailey 1999, 81)

Lifetime job security is a thing of the past. The cornerstone of the new career is that individuals may not be guaranteed a job for life, but the company will offer a contract of ‘employability’. The realization of this employability contract depends in part on the supporting architecture of processes and policies. These include processes supporting self-management, the investment in employees’ skill development to enhance their employability outside the company when their skills are no longer required, and the provision of an active internal job market capable of providing information about the organization (Gratton and

Hope Hailey 1999, 81). Kanter (1989) notes that today's and tomorrow's knowledge workers have one main career concern, that they want to increase their marketability in the labour market by adding to their knowledge and skills and keeping them up to date.

In the emerging employment compact, employees are urged to view themselves as 'self-employed', the employers being their customers. Because employees can anticipate losing several jobs (or working for several customers) during their working lives, they must focus on developing and maintaining skills that enhance current performance and help them get the next job. This means that to maintain their employability, contemporary workers must manage their own careers, with resumés becoming a list of transferable skills and adaptive strengths. For their part, employers should provide constructive feedback about employee performance and offer developmental opportunities. Given this transformation in society and its occupations, life-time employment must become life-time employability (Savickas 2000, 57).

The concept of employability is underpinned by two further assumptions. The first is that organizations will be able to offer their employees access to training and development tailored to their individual needs. This assumes that employees can envisage or predict which skills it is appropriate for them to obtain in order to be employable; it assumes that organizations will give employees equal access to training and development regardless of their long-term perceived worth to the organization; and finally, it assumes that all organizations have the resources available to provide this investment (Gratton and Hope Hailey 1999, 81 – 84). The stress of maintaining employability has formed a need to develop the learning of skills, interest, beliefs, values, work habits and personal qualities that enable each person to create a satisfying life within a constantly changing work environment (Krumboltz 1996, 61). The second assumption underlying the concept of employability is that mobility, both within the organization and in the external labour market, can occur. The notion of mobility supports self-management and employability, since without mobility the other two are rendered redundant. Underlying the 'new careers' architecture is the notion that individuals, rather than the organization, are expected to take primary responsibility for their career development. The third assumption is that the key players in organizations, particularly line managers, will provide active support for the concept of the new career (Gratton and Hope Hailey 1999, 81 – 84).

5. LIFE COURSE REGULARITIES BEHIND A PERSON'S EARLY CAREER

In this research careers are analyzed through the narrations of managers. The whole life of a person influences his/her career. Because age has an important role in limiting the research group different theories connected to life course narration are described in this chapter. First the terminology of life course narration is explained and then the age and life phase of the target group is considered more closely. What kind of regularities there are in the life of a manager, which affect the career?

5.1. Metaphors of Life Course Narration

There are a variety of metaphors in the field of life course narration. Life course is symbolized by a circle, arc or line metaphors. Additionally, tree, path and flow have been used to picture life. The circle metaphor is usually connected with wheels and cogs. The arc-form is depicted with an arch or arched bridge, ladders, or rainbow etc (Tuomi 2000, 14). Vilkkö (2000) has divided the metaphors of life course narration into three groups: 1) arc as a landscape of life, 2) life course as a time continuum and 3) events of life as a miscellaneous mass that has to be gathered together and arranged in order to understand the personal life course.

Life course narration refers to an ongoing process where the life of a person is developed from one stage to another via trajectories. Life course narration includes psychological and sociological components. There are the inner factors of a person but a person's life is also influenced by the environment. The concept of "life-span" is considered as a psychological approach to life and "life course" is a more sociological and social term. These concepts seem to overlap when life course narration is examined, and therefore both are used in this research.

5.1.1. *Life-Span, Psychological Approach to Life*

Life-span theories examine the flow of life of a person from the viewpoint of time. These theories pose answers to the question "What are the challenges and demands time brings to human life (Varila and Kallio 1992, 38)? In life-span research the goal is to explain the

development of a person as a whole. According to life-span reasoning 1) the development of a human being is continued during his/her whole life, also in the phases of adulthood, maturity and old age regenerating abilities and strengths can arise; 2) the life of every person constructs an individual entity; 3) general developmental legalities can be found in the life-span of a person, despite individual differences; 4) development of a person can be best understood, despite of in what live stages it is dated, when it is proportioned to general legalities of development (Dunderfelt 1996, 10 – 13). There are four basic viewpoints in life-span research: 1) the biological viewpoint concentrates on the growth, development and atrophy of a biological organism; 2) according to the social approach our life course is always shaped in a society in context with a particular epoch and culture. The chief interest is in interaction between the person and the culture; 3) in accordance with the psycho-social viewpoint psychological life-span research is begun when the researcher is particularly interested in childhood learning and interactive experiences and their effects on human development. The tight interaction between the person and the environment continues when test our characteristic limits are tested as independent and responsible persons in new life situations; 4) from the point of view of individualism the personality and ego of a person follow him/her through the whole life (Dunderfelt 2000, 158, Nurmi and Salmela-Aro 2000, 87).

The life-span concept describes how changes in life are dependent on personal factors, life experiences and life history. Life-span refers to the importance of a person's inner factors in his/her life course. (Marin 2001, 28) In life-span research thinking begins on the individual-level. Persons become more diversified, appropriate and wiser when getting older. Life-span research has been conducted by Levinson (1978) and Erikson (1963). In Levinson's theory life contains phases and living is moving from one phase to another. There is always a possibility for a crisis. According to Levinson life phases have a specific structure and every now and then demand for reformation of this structure surfaces. Life consists of alternation between transformation phases and fixed life phases. Erikson's development theory is a psychological approach where the life course is viewed through different tasks and transformation phases. Progression happens in an orderly way through development tasks to the next phase. The phases in Erikson's theory have a particular order, guaranteeing success in the next phases and avoiding life crisis.

Dunderfelt (1996) divides the life-span into four phases:

- 1) phase of basic development (age 0 to 20)
- 2) phase of organizing (age 20 to 40)
- 3) phase of individual goals (age 40 to 60/65)
- 4) phase of maturity (age 60/65 +) (Dunderfelt 1996, 45)

Life-span thinking in career research has been criticized on grounds of determinism: when the career has reached the top of the curve at a certain age, it can only be directed downwards (Hurme 1985, 127 – 128). Adopting the life-span analogy may cause negative attitudes towards age. The life-span analogy makes generalizations that are too strong, for instance that all people lose their abilities when they grow old (Juuti 2001, 15).

5.1.2. Life Course, a Sociological Approach to Life

The concept of life course joins age, lifetime and events to each other (Vilkko 2000, 75). Life course concepts consider the individual course of one's life. The life course approach traces the chain of such important life events as birth, beginning of school, beginning of work, getting married, motherhood/fatherhood, migration, job removals and retirement. Life course terminology emphasizes procedural, dynamics and diversity, and it has almost displaced the term life-span, which stresses the deterministic certainty of cycles and recurrence of different life phases (Antikainen 1998, 101, Vilkko 2000, 78). The life course is understood as a series of phases following each other. Different life areas or circles can be analyzed as paths or trajectories in which important events of life represent junctures, often implying transition from one position or role to another (Antikainen 1998, 101). Life course thinking is more procedural and sociological than life-span. The concept of the life course adds to the life-span approach concepts such as age norms, effects of one's cohort, history and all social elements affecting the person's possibility to create a life course of his/her own (Marin 2001, 28). The life course as a socially produced structure and social institution attempts to model the central life areas of every life phase and bring normative behavior and predictability to life (Vilkko 2000, 75).

According to Elder (1997), the life course consists of four basic factors: 1) historical principle concerning time. Historical time and experiences form the life course of a person, 2) the principle of timing of life. The effect of a life event or transition depends on its timing in the person's life, 3) entwined principle. Individuals are connected and dependent upon each other. Social and historical effects are expressed through these relation networks and 4) the principle of human agency. Individuals create their life courses by choices and actions of their own in current historical and social circumstances. Elder (1980) has promoted a "career viewpoint" where life events are connected with each other, not detached. People affect on their own life course by changing the most important factor of their own development: their direct life situation. In this chain biological, psychological and social processes are in interaction. Individuals always have a personal and active effect on their lives, appearing as personal orientation, hopes based on interest, goals and plans (Häyrynen 1992, 114).

A person directs his/her own development and chooses developmental environments in areas of age, challenges, culture, society and historical time (Nurmi ja Salmela-Aro 2000, 97). Giele and Elder (1998) have presented the paradigm and elements of life course research as follows:

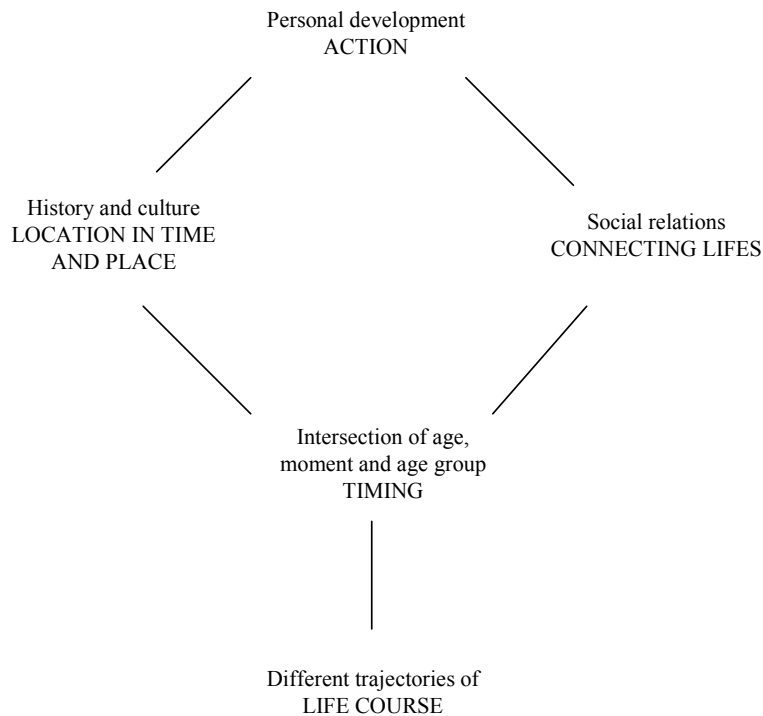


Figure 16. Paradigm and Elements of Life Course Research (Giele and Elder 1998)

The message of Figure 16. is that the individual and his/her life exist in time and place, which affects one's experience. Therefore, an individual life takes shape both socially and personally. An individual does not live alone, but his/her life is connected to lives of others. Action refers to the goals that a person has set for him/herself. Timing is connected to strategic adaptation and integration. Location, action, connecting lives and the timing of different events produce different life course careers, through which the personal life course progresses (Giele and Elder 1998, Jyrkämä 2001).

One's life course is a product of an individual in interaction with continuous life experiences. Elements affecting development and the life course are usually categorized in three connecting factors: normative age-graded, normative history-graded and non-normative, surprising, factors. These can be categorized further by biological, socio-cultural and historical factors (Antikainen 1998, 112, Nurmi and Salmela-Aro 2000, 86).

Clausen (1986) delineates the following terms in the life course: stages, transitions, sequences of social roles, and sense of purpose and identity. Clausen groups structural factors into four categories: 1) inherited or gained traits, 2) sources of socializing, support and control, 3) opportunities and barriers offered by the environment, 4) personal resources, investments and efforts.

Life course and personal development are more affected by social factors than is usually supposed. In the beginning and at the end of life the biological organism is in focus. Life begins in helplessness and interdependence and ends in losing the capacities that social participation and action assume and reward. The life course between these two points can be described and analyzed with the help of social roles and identities (Antikainen 1998, 114). Usually family, ancestry and origin form the background of one's life course, but nowadays individuals form their close relationships themselves and choose important communities according to their own interests and goals (Vilkko 2000, 83).

In the early phase of a career, usually between the ages of 20 and 35, people make deep initial commitments to a type of work, an organization, and a non-work life style. It is usually an exciting period, in which one begins to fulfil the expectations about the "professional me" that have been developing through education for two decades. In this phase the person adopts the position of an employee in a complex human organization and gets established in his/her work or organization and achieves some initial success. At the same time the person establishes some type of a workable relationship between his/her career and the non-work aspects of life. During this period the person calls into question initial career and non-career choices, most people go through this questioning around the age of 30 (Kotter 1978, 177).

Between the ages of approximately 35 and 45 many people experience a difficult period associated with career, physical wellbeing, family, or the like, which can range in intensity from mild to very severe. During this period people often get divorced, change jobs, or significantly alter their relationships with their families and their work. The severity of the so-called "midlife crisis" seems to be a function of how many problems converge with what intensity on a person's life at the same time. By age 35 to 40 most professionals know whether they will achieve the vague or specific career objectives that they have set for themselves. It is not only career "failure" that often produces a problem at midlife, but also

“success”. It would seem that the narrower a person’s definition in career-oriented terms of success in life is, the greater are the chances that he/she will experience this component of the midlife crisis. Many people become increasingly aware of their physical aging at midlife. At midlife people often find that they are physically unable to do some things anymore. These losses, combined with the recognition that at 40 they are probably in the second and last half of their lives, hit some people like an unexpected fist in the face. A person’s family can, and often does, also contribute to a crisis at midlife. Problems can occur with teenage children or the relationships between spouses sometimes explode at midlife. To cope with a crisis we need the understanding, the empathy, the sympathy, and the support of other human beings to help us keep things in perspective and to help us move toward a realistic resolution of our problems. This means “a personal support system”. A major theme in the mid-careers of most healthy, happy and successful people is creativity. Managers achieve creativity by building organizations, by coaching younger managers, and by serving as mentors to still others. It is not uncommon for a successful business person to spend the early career involved in personal achievement, to get to the point where he/she is running the business around the age of 40, and then after a mild to moderately intense crisis period shift activities more and more to developing and managing others who in turn run the business (Kotter 1978, 185 – 187). Longitudinal career studies tracking people over ten-year intervals for the past three decades show that, despite growing barriers to employment in certain occupations, there has been an outstanding potential for job mobility among those in their mid-30 to mid-40s (Sonnenfeld 1984, 226).

Most professional jobs in organizations, especially managerial jobs, make an individual dependent on numerous others, who often have different or conflicting objectives. Complex interdependencies and conflict are facts of life in most organizations. Individuals who cannot or will not find a way to effectively manage their own dependencies are in for a hard time. Young managers will often find themselves dependent on the cooperation of subordinates, a boss, other senior officials, various service departments, and possibly even outside suppliers, customers, and regulators. Managers use a wide variety of techniques to cope with their complex dependencies, sometimes influencing those on whom they are dependent to cooperate in certain ways, and sometimes gaining power over the dependencies. The faster a young employee learns to use these techniques effectively, the more successful he/she will generally be in the early career. The larger and more complex the organization, the more time

has to be spent managing interdependencies. For most professionals, the early career is a period directed toward personal achievement. Most professionals develop two key commitments during their twenties – a commitment to an off-the-job life style with or without a spouse, with or without children. The demands made on an individual by these two commitments periodically change in ways that conflict and put strain on the individual. Young professionals whose spouses also are pursuing careers often find it even more difficult to establish and maintain a workable relationship between their two jobs and an off-the-job life style. Most professionals seem to go through a period of questioning their initial work, organization, family and lifestyle choices after about five to ten years. As a result, some people abandon their initial commitments and make new ones; they sometimes change organizations, go back to school, start over in a new line of work in a new city, or get married or divorced. Even people who are fundamentally satisfied with their lives seem at least to pause and ponder their life situation around the age of 30. After the period of questioning is over, or after a change has been made, people generally plunge back into their careers with increased dedication and energy. For five to ten years they focus again on achievement in their chosen profession (Kotter 1978, 177 – 180).

Many people within particular age groups face the same types of problems and opportunities. Schein has examined control of life through the theory of life cycles (1978). In this theory Schein presents three cycles: biosocial life cycle, work/career cycle and family or procreation cycle (Figure 17.). Through this theory it is possible to understand the phase of life in which a manager lives. In every cycle there occur periods of crisis.

EXTERNALLY DEFINED CYCLES IN A GIVEN SOCIETY

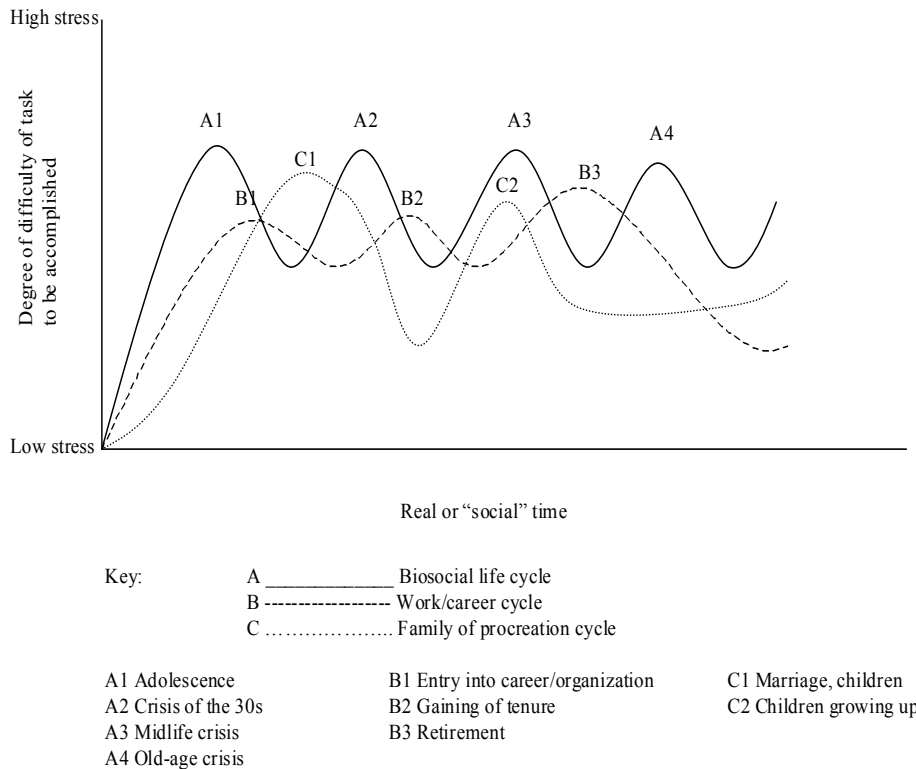


Figure 17. A Model of Life/Career/Family Cycle Interaction (Schein 1978, 24)

Schein (1978) has used the term "life cycle" when dividing individuals' life-spans to a bio-social span, work and career span and to a family and regeneration span. Each one of these spans is represented by a wavy line; at the top of the wave stress is strong and at the bottom stress is mitigated. The bio-social span demonstrates crises in different age periods of life. The work and career span describes entering, being in and departing labor from the market through retirement. The span of family and regeneration portrays the phases of family life, getting married, having children, and the children leaving home. These three spans can wax and wane simultaneously but when stress exists coincidentally in various spans it can course many problems for the person.

Super presented the five-phase career model in 1957. He (1988) brought together life-stage psychology and social role theory to convey a comprehensive picture of multiple-role careers, together with their determinants and interactions. He uses a picture called the Life-Career Rainbow to graphically portray the life-span, life space career development. The rainbow has two primary dimensions, life-span and life space or, more simply, time and space. The life space dimension depicts life theatres and roles. Super sorts out seven life roles: child, student, leisurite, citizen, worker, homemaker and maintenance person. The space dimension addresses the social situation in which an individual lives. The life-span dimension of the rainbow depicts life stages and demarcates them to coincide with childhood, adolescence, adulthood, middlecence and senescence. The time dimension adds a developmental perspective that focuses on how people change and make transitions as they prepare for, engage in, and reflect upon their life roles, especially the work role. Together, life-span and life space can be used as coordinates with which to recognize an individual's current status and from which to recognize an individual's career trajectory (Super et al., 1996, 126 – 127). In Super's theory life roles interact and shape each other. To understand an individual's career, it is important to know and appreciate the web of life roles in which that individual is embedded as well as his/her career concerns. Individuals make decisions about work-role behaviour, such as occupational choice and organizational commitment, within the circumstances imposed by the constellation of social positions that give meaning and focus to their lives.

5.1.3. Other Terms of Life Course Narration

Other terms connected to lifeline have been analyzed less from the sociological viewpoint. Life curve is connected to the cyclical time concept where the phasing of life can appear as cycles of day, week, year, lifetime or historical eras. Also life track and life career can be used in outlining the life course. These refer more to a one-way progression of life that has been determined from outside of the person or by the person self. The concept of life path emphasizes the choices and opportunities confronting a person. In life path thinking it is possible to depart from common resolutions, there can be detours and the goal can be unknown (Marin 2001, 28- 29).

A life event is both a social and psychological phenomenon. It is a social event because it is permitted or forbidden, expected or avoided. It is standardized or controlled. A life event is also a psychological event: it is experienced and it has importance for a person. A life event has an exterior dimension: it can be a social fact like marriage that an individual can choose or not (Marin 2001, 34). Danish et al. (1980) have presented six relevant dimensions of life events: timing, duration, orderliness, context to age cohort, contextual linkage and probability.

Key concepts of “life career” are: sudden or slow processes that change our appreciations or through which our life situation is changed. This kind of changes can some times be affected consciously by a person self. He/she can learn from his/her earlier life and adapt experiences to future life situations. According to the traditional view a “career” is a chain of life occasions connected to each other (Häyrynen 1992, 114).

5.2. Age

5.2.1. *Different Definitions of Age*

Age denotes landmarks in the life course. Individuality is emphasized in impressions about age (Paloniemi 2003, 199 – 200). Age can be considered chronologically, biologically, psychologically, developmentally, socially, institutionally. It can be examined through law, action, personality, subject, body, rituals and symbols. The concept of age varies according to history, culture, society, social conditions and individuals (Rantamaa 2001, 52).

Chronological age means the calendar age, the length of life. It is considered as a trouble-free, objective, “accurate” age that western modern individuals have. Age is used as a basis for evaluations, categorizations and definitions, but consideration of age only is not adequate when differences between individuals are evaluated. *Biological age* is connected to physical and physiological changes happening in a person when he/she grows up and gets older. The biological approach shows the many levels of age. Characteristics of age are different in women and men from childhood. *Mental age* is connected to different phases and sides of development. For example control of feelings is believed to be age-based. *Social age*, can usually be related to the life phases of individuals or to the position of an individual and

group in the society. The social age concept can be approached from the perspective of roles and norms. Social roles in the life course can be assumed to be determined through chronological age and age phases. The age-connection of social roles defines a social schedule according to which a person is assumed to progress in life. The life course of a person shows up as transitions from one role to another. Roles connected to a particular age become visible when they differ from what is generally thought to be appropriate. A person can exist at different ages biologically, psychologically and socially. Personal age is defined on the basis of the age experienced by the person. A person can be young or old depending on the progress of life and targets achieved. Age can be determined also by the environment, i.e. interpersonal age. Subjective age is additionally connected to a more private and existential experience of self and life, including philosophical considerations of age and life (Rantamaa 2001, 51 – 63). Despite the different arrangement of methods to consider life phases it is wise to define the target group of this research by chronological age since chronological age is the same concept for everyone.

Havighurst (1974) has defined developmental tasks connected to age. These tasks are normative challenges and demands set on a particular age. Fulfilling these development tasks brings satisfaction and allows for further development. According to the development task point of view people in every culture have a congruent view of a life course, that is what should be done in each age. These tasks renew the prevailing culture and offer life managing models to individuals.

When age is examined in the context of professional competence, personal characteristics are experienced as more important than chronological age. When age, competence and the development of competence are examined, the target should be in the quality of work tasks, in the meaning of experience and in the relation between experience and age (Paloniemi 2003, 193). More important than one's age in work is the person's personality, willingness to develop, and to use and share experiential knowledge (ibid., 200).

5.2.2. Life is a Journey

The life course is chronological, it is divided and splitted into shorter chronological age phases. Age creates crises or challenges causing a person to consider his/her life not only in

the age of 50 but also at 25, 30 or 40. Life phase structure seems to have been somewhat lost in postindustrial and postmodern culture. Because age limits between education, working life, family and retirement have become more flexible, it is difficult to define beginnings and ends of life phases on the basis of chronological age. More often people make choices where different life phases are overlapping and alternating during the life course, and transitions between phases have become more flexible. Changes in people's behavior affect the assumptions for correct timing of life events and phases. When planning life it is still common to lean on conceptions of what should be done in a particular age and how life should go on. Ideal models of life phases do not dictate the choices of a person but they make a construction against which one's own choices are mirrored. Everybody has the permission and duty to build up his/her individual life course and life history (Rantamaa 2001, 69 - 72). Because the demarcation points of life events are more flexible than before it is more difficult to say whether the behavior of a person is correctly timed or abnormal.

5.3. Phase of organizing (age 20 to 40)

There are several ways to divide a person's life. In the western world life has usually been divided into 3 to 7 different consecutive phases. Common to early life phase theories is that they are based on ancient philosophy, science, biology, physiology and astronomy where a person's growth and development is divided into 3, 4 or 7 phases. Aristoteles and Dante Alighieri, for example, divided life into three stages of life: growth (adolescence), sustainability (middle-age) and deteriorating (old age). Pythagoras used four age stages, each containing 20 year periods according to four "seasons". Five-phase delineations have been used less because the number five is not analogical with planets or seasons. The theory of six life phases is based on the biblical history of the creation of the world in six days with the seventh day dedicated to rest. Division into seven phases of life is based on the multiplication table of number seven where the ages 7, 14, 21, 28, 35 - 49, 56 define the phases of a person's life. In this scheme life is divided into ten phases of seven years. Human life has been compared also to the moments of the day where the age of 35 represents the noon (Tuomi 2000, 17 - 31). Levinson et al. (1978) presented the seasons of a person's life dividing adulthood to three parts: early adulthood (ages 15 to 42), middle adulthood (ages 40 to 65) and late adulthood (62 -). Seifert et al. (2000) also divided adulthood into the same three phases. In terms of Levinson's scale the majority of the target

group for the present study is located in early adulthood. Dunderfelt (1996) has divided the phases of adulthood more precisely. Because most of the managers interviewed were between the ages of 20 to 40 Dunderfelt's scaling (age 20 to 40) is more appropriate for use in understanding characteristics of the sample.

5.3.1. Ages 20 to 27, Social Activity and Communal Responsibility

In this age adulthood begins, and it brings lots of social activities at work, with family and friends, and hobbies. A person seeks such a place in the society where it is possible to use his/her abilities and aptitudes. Education, work, forming one's own family and traveling are observable elements of this developmental phase. According to Havighurst (1974), at this age the life-companion is generally chosen followed by marriage and family with children. At the same time household management needs to be agreed upon. The nature of work changes from fun towards work for one's living as the family is formed. Between the ages of 20 to 27 a person begins to take communal responsibility. At that age the person finds groups where he/she wants to be a member.

According to Dunderfelt (1996) typical questions in the life of a young adult are:

- What am I capable of in my life?
- Will I manage alone without the support of my family?
- Can I choose the right and appropriate profession?
- Why do I feel and react like this?
- Who am I actually?
- Why cannot I do anything to change my life?

In the life phase of 20 to 27 feeling is important. Central virtues are spontaneity and genuineness towards self and others. There is a need to confront life directly, freely and independently without the rules of the older generation. Also this cohort believes that big matters should be resolved immediately and ideals should be brought into practice. Alongside inner unrest strength and courage exist; the person is open-minded, energetic and full of effort. The life of a young adult is very self-centered (Dunderfelt 1996, 92 – 96).

In the middle of this period the whirlwinds of life usually begin to calm down. Studies and student life come to an end and there is a need to concentrate on the most important matters and hobbies. The person comes across finding a job, calming down, and accepting a regular rhythm of life. A baby can also change the life of a young adult. At this age life is sometimes reconsidered and redirected. It is possible to make a totally new decision and change life direction. At the latest by the age of 27 to 29 some kind of re-evaluation has been accomplished at least in thoughts, feelings and values (Dunderfelt 1996, 98 – 99).

Between the ages of 20 to 27 things are usually done according to the model the parents have given or, on the contrary, totally against it. A person wants to be independent and free to do what he/she wants, just the way he/she wants but in the thinking, feeling and action habits he/she is not free and autonomous. There is an attempt to stand on his/her own feet and find the real self. Self-knowledge is painful but one of the most important challenges (Dunderfelt 1996, 101 – 103).

The working population is between the ages 15 and 64. However, in Finland only 40 % of 20-year olds and 70 % of 25-year olds are in the labour market. After the age of 35 the percentage of working people rises to over 80 %. Periods of education have become lengthy in contemporary life and some people have not succeeded in finding a job promptly (Ilmarinen 2000, 173). The beginning of working life is one of the biggest changes in the life of a young person. Economic dependency on home and on parents decreases and the person becomes more independent. Individual life styles receive a new rhythm, the work community is added or substituted for former social networks. As a result, attitudes towards self and friends change. It has been estimated that it takes several years to gain competent membership in a work community. Successes and learning of new things raise the self-esteem and errors tell the individual that everything will not go as imagined (ibid., 2000, 175 – 176). When the working attitudes of young people are examined, a strong working orientation generally exists with high expectations of work contents. Work content is seen as more important than wages or relationships between employees (Vuori 1999, 33). Work becomes more central in the lives of young people. Today they demand more from their work than did the earlier generations. Due to this a danger exist that monotonous and empty professions will become more visibly perceived as “second class work” therefore advancing

inequality in society. In order to develop the contents of work a young person should be taken along into the planning process (Vuori 1999, 35).

In the future labour markets in Finland will become more and more markets of young people because of the gradual retirement of baby-boomers. Satisfied employers will need to hold and commit the young generation more and with better benefits than earlier. Information technology will offer both unlimited possibilities and unlimited strain for young people whose experience is not adequate to control stress. Extreme examples in the ICT sector are the “bit-widows”, overnights in the work place and huge monthly working hours. The youngest burnt out persons have been 28 years old and the burning out has taken only six months. Additionally one fourth of persons of age 25 to 34 has some long-time disease verified by a medical doctor. Young persons have neither unbounded health nor endless capacity. According to legislation, the employer is responsible for the overload of an employee. Therefore leadership, particularly in the ICT sector needs wisdom and knowledge in planning work and motivating employees. There is also a need for leisure and hobbies helping a person to keep him/herself fit. A healthy life includes also healthy eating habits; in the busy rhythm of life there is not always time to concentrate on what to eat. This phase of organizing, the first decade of adhesion to labor markets, includes different new situations in life. For this reason young people need flexibility and safety from the employer (Ilmarinen 2000, 176 – 178).

5.3.2. Transition of the 30-Year Old – Entrance to Adulthood

The transition at the age of 30 includes external changes connected to children, spouse and work, and internal changes such as reappraisal of personality. Very often in this stage of life a person rethinks the goals, norms, values and attitudes adopted in adolescence. In this phase the rhythm of life, the way and the style of life are usually reevaluated (Dunderfelt 2000, 162). According to Dunderfelt (1996), life changes where the person meets the self and world are usually concentrated round the age 27 to 30. This phase is also called “the port of 28”. At the approach to the age of 30 a person may find out that he/she has not broken free from the past but carries it with him/her internally, psychically. Life round 30 years of age is a period of becoming internally independent. It is a time to find an autonomous and

conscious relationship towards self, particularly to one's feelings, thoughts and values (Dunderfelt 1996, 117).

Typical developmental features in the transition of 30-years olds according to Dunderfelt (1996) are:

1. The world of values and thoughts

A person can feel that he/she is not able to do several different things in life and is looking after deeper reasoning to what he/she is doing in life. Lots of philosophizing and questioning exist: What am I doing? Why do I think like this? Are these thoughts really my own or am I thinking according to the values of someone else? Do I want to follow the values of my work organization? Appraisal of environmental aspects and prioritizing of money, work and leisure also take place. Earlier values can give way to new ones.

2. The world of feelings and experiences and human relations

The confrontation of one's own feelings can appear in a form of irritation and anxiety, and that ambivalence is easily understood as being caused by someone else. In this life phase there is challenge in learning to say "no" by making barriers round one's self without being harsh towards others or punishing him/herself too much.

3. Habits, routines and direction of acts

Internal development may appear in changes of habits and routines. Certainties will vanish from life and inherited gifts will disappear or change. The interests in focus will change. What was meaningful earlier is not so any more.

4. Social position

Many people have built a family or at least tried to live as a couple by this time. Studies are over and the person has placed him/herself in working life, maybe changed position once or twice. But the person at the age of 30 may feel that nothing is interesting and he/she cannot find at place of his/her own. Social pressure to attach to society and to stabilize life exists. Social position can be a great support to the development of a person but it can also make the person's life passive. A lack or unsteadiness of social position can cause difficulties sooner or later.

5. Physical development

The hair is getting thinner, wrinkles are appearing on the face. Sight is getting poorer and the back is getting stiffer. The maintenance of health demands more effort than before (Dunderfelt 1996, 103 – 107).

5.3.3. *Anchoring to Society and to One's Own Innermost Values (ages 30 to 40)*

According to Dunderfelt the ages of 30 to 40 are the most active time in work and family. It is the time when a person shows what he/she can do. One's own physical and psychical limits become more clear. The age of 30 is a strong watershed in human life. The egocentricity of a young person decreases, but on the other hand the vanishing of illusions may cause diminishing of imagination, lack of prospects and irony towards all that is not clearly concrete and "scientifically proved".

According to Dunderfelt (1996), personal forces come up. Confusing thoughts and unclear feelings are not present all the time. Action is more concentrated. The individual knows better what he/she wants and how he/she wants to live. Age also creates dangers: the strength of individuality may turn to harshness and egoism. At this age a person finds his/her place in life but also creates it consciously. The willingness to become rooted and find a clear framework for life is a challenging and terrifying issue. A person can feel powerlessness and guilty about weak self-awareness. He/she may feel weakness and that other forces, like the society or the family, control his/her choices. As backlash to this experienced powerlessness a person can cuddle up inside his/her shell.

At the age of 30 to 40 a person concentrates his/her strengths toward external worlds events. A woman senses easier feelings and finds managing human relations more comfortable. A man can have difficulties if he does not consciously develop himself towards thoughts and feelings and accept the importance of these in building relationships between individuals. This kind of difference in the internal worlds of men and women can create difficulties. A man's attachment to work can become emphasized at his age. The man constructs self through work; it is important to him to see how his ideas and plans become visible and this can help him to establish pride and self-esteem. Family is still important to both sexes but the wife and family often remain in the background in a man's life. A woman is usually

more attached to family because of children. Wherever she goes she remembers the needs of home and family. At the same time the woman has a desire to develop herself. A strong identity crisis can occur for women at this life stage: who am I among all these obligations? Could there be something else? There is a great temptation to get absorbed in work where the person knows him/herself to be effective and to avoid contacts with other more difficult situations in life. Family life can become polarized: one person takes care of the home and family and the other brings in the money. In such a situation, life together with the spouse and sharing experiences will be less interesting. Consciousness of the situation, discussions, listening and dealing with the spouse's needs, wishes and fantasies will help in an unsatisfactory situation. The world could also be seen through the viewpoint of the spouse (Dunderfelt 1996, 113 – 117).

The employment rate is highest at the age of 30 to 53. Despite this working life is not steady, safe and easy. Typical to this period are continual changes in work. The diversity of employment increases: projects, fixe-term employment, part time employment, distance working, temporary work and relief work make employment more fragmented than it used to be. Changes occur also in the contents of work and the working environment. Changes are more rapid than before and there can be different overlapping projects affecting the organizational culture, working habits and targets. Internal changes in work usually rise from demands in work. The tasks become more diverse, demands for effectiveness and quality increase and the pressure of time grows. The work community in change is a demanding environment for all members. The health of an employee is more and more dependent on the health of the working community. There exist, for example, a risk for mental problems in unhealthy environments (see Lehtinen 2000, 247). Healthy organizations are the basic premise for a good life course. The steady and unchanging work of the past will in future be more often a period of continuous change. Transition brings new challenges and threats, risks and pressure. Stress symptoms are common. Changes in values may be required. In the new working organization personal strengths, life balancing, mental health, working capacity and communication skills are emphasized and are growing premises for wellbeing (Ilmarinen 2000, 178). An important change connected to the working age is mental growth, where e.g. cognitive skills strengthen. Strategic thinking, brightness, prudence, wisdom, ability to ruminate, ability to argue, comprehensive perspective skills and control of language are all cognitive skills which are necessary and which develop over

time. Positive changes from the viewpoint of working life are commitment towards work and loyalty to the employer. It has been noted that learning motivation can be high if skills and knowledge are essentially connected to an individual's work tasks (Ilmarinen 2000, 182).

5.3.4. Turning Point of Life – Age 35

In most life-span theories the age of 35 to 40 is one of the most important and challenging periods in life. Changes occur on various personal levels. Physical weakening begins, great challenges may appear in professional work, children grow more independent and at the same time managing as a couple comes to the focus. One's relationship toward oneself is also under appraisal (Dunderfelt 2000, 163 - 164).

After the age of 30 a person begins to be interested in things that before, 8 to 10 years ago, were signs of stagnation and stiffness. Instead of worldwide matters, most important things are local, day care for children or the organizational change of the company. The place in working life is now established and the schooling and daycare of children is arranged in the best way. Life as a couple has taken its shape; the man and the woman have schedules and interests of their own. Development goes on: children grow up, work can end, health can become worse, a relative gets sick or dies. People experience different life phases in different ways. Some live through the strongest and richest time in life and because of that they can take matters in a more relaxed way and enjoy doing and inspiration. The age of 35 to 40 is the most active period of life, but still a person can feel a gaping emptiness in his/her innermost center of being. Things seem to have happened more easily in adolescence. The world does not treat the person as gently as before and he/she will experience more self-criticism and sense of loss when noticing his/her own plans are not realized. This phase is hard especially for those who do not have a grasp on their own life (Dunderfelt 1996, 121 – 124).

Increasing independency at this age promotes power. A person feels free but his/her decisions affect the lives of others. Power is closely connected to money. How much is enough? The man and the woman may have a different relation to money and to the use of it. Sexuality is a 'temptation' at this age. People usually live as couples but it is not

guaranteed that sexual passions are directed towards one person only. Taboos and limits are falling, the moral limits accepted in childhood and adolescence remain at some level however and personal evaluation of these matters can be a challenge. The sexuality of a couple may need renewal (Dunderfelt 1996, 130 – 131).

5.3.5. Towards the Transition of 40

At the age of forty people usually ask: "Who am I, what is good in me, what bad, what is morally right and what is wrong?" (Dunderfelt 2000, 164). An internal and external demand for change often exist. The slogan of this period is "now or never!" So far the person has faced a multifaceted world and accomplished tasks dutifully both at work and home. Questions like "What do I actually want to do?" are common at the age of 37 to 38. While there may be a need for changes in life they are not so easy and painless as they used to be in adolescence (Dunderfelt 1996, 131 – 132).

5.3.6. Transition of 40, an Important Watershed

The age of 40 marks an important watershed in human life between what went before and what comes after. After the age of 40 the person generally has a new grasp of self and life and has left behind a useless part of his/her own history (Dunderfelt 2000, 165). It is not unusual for a person to ask more profound questions, thoughts may actually turn to the area of religion for the first time. The physical body is not necessarily as strong as it used to be and dying is no longer something that happens to others. Many ideals of adolescence have or have not been achieved but the feeling is not such as it was thought to be. The person is asking whether there is life besides the physical, social and own limited psychological understanding.

Challenges of age 38 to 42 are:

1. Confronting own self on the level of thoughts and feelings, and on a deeper level maintaining basic feelings
2. Finding communal and social place in relation with family and friends and work and society

3. Making a relationship with the purpose of life: recognition and development of individuality, and the relationship towards life as an entity, to Earth as a part of cosmos and to God, both mental and religious (Dunderfelt 1996, 137 – 138).

6. CONNECTING THE PERSON TO THE ORGANIZATION

In this chapter I will concentrate on socialization in organizations. Socialization happens in an organization when individuals select organizations and organizations select and socialize individuals and when people learn from experiences. What happens when a person is integrated to an organization and how do organizations socialize employees? Is socialization a process that happens once or is it an ongoing process during the whole career? I see commitment as an important part of the socialization process: after integrating follows commitment.

6.1. Organizational Culture and Socialization

According to Schein (1992, 12) culture is primarily what is passed on to new generations of group members. In culture can be discovered three levels: 1) basic underlying assumptions like unconscious, taken-for-granted beliefs, perceptions, thoughts and feelings, 2) espoused values like strategies, goals, philosophies and 3) artifacts like visible organizational structures and processes (ibid., 17). Schein (1987) defines organizational culture as a model that a group has invented, found or developed after the group has learned how to handle with problems concerning external integration or internal unification (Schein 1987, 26, Schein 1992, 12). Organizational culture refers to a model that teaches a person to understand suitable and desired behavioral models in the organization and what are not (Nikkilä 1986, 19, Schein 1987, 13). An organization is more than a number of roles placed on the organizational map. Every organization has a particular “personality”. When newcomers learn the habits of an organization they concurrently learn the particular organizational culture. Organizational culture contains important assumptions and norms like membership, values, actions and goals (Nikkilä 1986, 19). When critical events in the socialization process transmit the organizational culture to a newcomer, the socializing reactions of the newcomer define the results of the socialization process and the consequences in the long run (Jurvansuu 1996, 81). The culture existing in the working place, the model of behavior, directs action more effectively than precisely pronounced or written instructions (Kivimäki-Kuitunen 2000, 22). Schein (1987) has stated that an effective socialization process aims at making newcomers effective and participating members in an organization, which should lead to innovations and spontaneous co-operation.

Historically, the systematic study of socialization is rooted in several fields: psychology, psychoanalysis, sociology and anthropology (Brown 1976, 6). Socialization or the process of socializing is traditionally defined to be the research target of educational sociology. The meaning of socialization then is to socialize, making social when new generations of children and young people are adopted into parts of society. The aim and contents of socialization are to transfer the culture from one generation to another so that despite the change of individuals and generations, particular continuity in the society is maintained. Socialization happens in interaction between generations. The new generation is therefore not only the target of socialization but also an opponent to socializing efforts who can fight against some socializing ambitions and reform the contents of culture in the long run (Takala 1995, 10 – 11, see also Brown 1976, 9). Socialization occurs in interaction with people when learning experiences accumulate and affect a person. These learning experiences can be linguistic, informational, symbolic or normative (Antikainen 1998, 103 – 105).

6.1.1. Primary and Secondary Socialization

Primary socialization happens in childhood when a child becomes a member of society. We talk about secondary socialization when a person is led to another sector of social reality in his/her society after primary socialization (Berger and Luckmann 1995, 149). Secondary socialization occurs when an employee is integrated into an organization. Secondary socialization involves internalizing institutional world-parts. These parts usually are partial realities when compared to the “basic world” accepted in primary socialization. The reality internalized in early childhood is more constant than secondary socialization and serious shocks are needed to break down primary socialization (Berger and Luckmann 1995, 157 – 163).

The literature concerning organizational socialization has long suffered from a lack of coherent theory. To fulfill this need Saks and Ashforth (1997) have developed a model of organizational socialization. When entering a new work place a newcomer confronts socializing factors from three directions: from the organization, from a group and from individuals. The model of Saks and Ashforth concentrates on information and learning. According to the model socialization is first of all a learning process. Socializing factors, on the level of the organization (socializing tactics, familiarization), group (social learning

process, socializing tactics and support) and individual (proactive strategies and activities), are influenced by situational factors (exterior and interior factors, group and work/role factors). These factors are also in interaction with each other. Secondly, the socializing factors together with a cognitive thinking process have a direct effect on acquiring information. Thirdly, acquiring information decreases the uncertainty of the newcomer and promotes the learning of different socializing factors. Fourthly, learning is supposed to create primary outcomes, for example, clarifying the role, appropriateness of motivation and fitness between the person and the organization. These primary outcomes affect secondary outcomes on levels of organization (stronger culture, higher morale, more stable membership, better effectiveness and reputation), group (stronger sub-culture, more coherence, more stable membership, higher effectiveness and reputation) and individual (lower stress, more contentment, higher commitment, lower turnover of employees, fewer absences, organizational citizenship, better achievement and clarity of role) (Saks and Ashforth 1997, 238 – 241).

6.1.2. Organizational Socialization, Becoming a Member of an Organization

Organizational socialization is the process through which organizational culture is perpetuated, and by which newcomers learn the appropriate roles and behaviors to become effective and participating members of organizations (Louis 1990). Van Maanen and Schein (1979) presented organizational socializing as a process where a new employee acquires certain attitudes, models of behavior and knowledge that are needed when taking part as a member in the functions of an organization. According to Morrison (2002), organizational socialization is a process where an individual learns the attitudes, models and knowledge of behavior that are needed when attending to organizational action as a member. This process is important in two ways. First the process can have extended effects on the behavior and attitudes of the new employee, and second, socialization is one of the most important ways through which the organizational culture is maintained. Socialization seems to happen in interaction between the newcomer and other employees (see also Fisher 1986, Van Maanen and Schein 1979). The topic has been discussed from various perspectives, including socialization stages (e.g. Feldman 1976, 1981, Wanous 1992), socialization tactics (Van Maanen and Schein 1979), person-situation interactionism (Jones 1983), newcomer sense making (Louis 1980), symbolic interactionism (Reichers 1987) and stress (Nelson 1987).

Effective organizational socialization has been linked to a number of important organizational outcomes, including increased organizational commitment, job involvement, role orientation and tenure (Allen and Mayer 1990, Bauer et al. 1998 and Fisher 1986).

According to Nikkilä (1986), socialization begins with anticipatory socialization when newcomers are still outside the organization. They foresee the experiences of the organization they intend to join. This phase occurs during the recruitment process (Nikkilä 1986, 42 – 44). The information given during recruiting is interpreted through one's own expectations. However, realistic preconception of work will increase the quality of performance. This emphasizes the role of the employer in informing the applicant about the work and organizational situation (Kjelin and Kuusisto 2003, 126 – 127). These messages coming from the employer can be seen as a part of the socializing process even before the decision of hiring a new employee is done.

When a person enters an organization he/she becomes a newcomer but not yet an insider. This period is often called “rendezvous” and during it the preconceptions of the newcomer are tested through the reality of new work experiences (Nikkilä 1986, 45). Social information about the organization gives the newcomer the tools for perceiving and interpreting events. The newcomer forms his/her conceptions about the new organization on the basis of formal and informal communication. Impressions and conceptions develop on the basis of the person's own inner schemas (Jurvansuu 1996, 71 – 73). Formal, hierarchically vertical communication is usually expressed through some instrument (e.g. handbook of a newcomer). This kind of information usually strengthens existing conceptions about the organization (Nikkilä 1986, 52 – 53). Informal communication is social and mostly implicit and it occurs in stories, special professional language, metaphors, ceremonies and rituals. Informal communication can be parallel or non-parallel with the formal communication. This kind of implicit information is one possible way of transmitting culture to the newcomer. Aspects of the informal communication come mainly from the superior and workmates (see also Morrison 1993) and this kind of information is more important in the socializing process than formal channels. Workmates transmit collective assumptions and values to the newcomer, usually in a symbolic form. They help the newcomer to interpret role demands and everyday events, they help in his/her learning the nuances of rules, and they teach

informal networks so that the newcomer can work independently in different situations (Jurvansuu 1996, 72 – 73).

Morrison (2002) has discovered that what the workmates are doing is important for the socialization process (i.e. producing information, communicating etc.) but the structure of the networks where they are in contact with the newcomer are also important. The presence of networks can affect the success of a person's integrating process within the organization. The newcomer needs an information network in order to get different types of information and a network of friends in order to feel like he/she belongs to the organization and the group.

Van Maanen and Schein (1979) have proposed six tactics that organizations can use to structure the socialization experiences for newcomers. They argue that socialization tactics influence the role orientations that newcomers ultimately adopt. The tactics are: 1) the tactics of collective (vs. individual) socialization refers to grouping newcomers and putting them through a common set of experiences; 2) formal (vs. informal) socialization is the practice of segregating a newcomer from regular organization members during a defined socialization period, as opposed to not clearly distinguishing a newcomer from more experienced members; 3) sequential (vs. random) tactics refers to a fixed sequence of steps that leads to an assumption of the new job role, compared to an ambiguous or changing sequence; 4) fixed (vs. variable) socialization provides a timetable for the assumption of the role, whereas a variable process does not; 5) a serial (vs. disjunctive) process is one in which the newcomer is socialized by an experienced member, compared to a process in which a role model is not utilized; 6) investiture (vs. divestiture) affirms the incoming identity and personal characteristics of the newcomer rather than denying them and stripping them away (Ashforth and Saks 1996, 150).

According to Van Maanen and Schein, socialization reactions can be divided into three groups:

- 1) Harmony, when the newcomer accepts the traditional values and norms of an organization and expectations toward his/her role.
- 2) Revolt, when the newcomer dismisses most of the values and norms and tries to redefine the contents of his/her role.

3) Creative individuality, when the newcomer accepts the most important values and models of behavior but dismisses secondary, less important models. He/she can make enhancements and changes to the contents of the role.

Creative individuality seems to be the most suitable alternative socialization reaction. In such a scenario the individuality of the newcomer promotes new and better ideas for organizational needs. If organizational socialization processes are not flexible and pluralistic enough, promoting individuality and diverse working styles, they are likely to produce rebellious reactions (Jurvansuu 1996, 84 – 87). Harmony can be seen as a sort of failing in socialization, “over-socializing”, when a newcomer learns and accepts every little thing about the organizational culture. Harmony causes total adaptation and lack of innovation and sensitiveness. Also rebelling can be seen as failing because the newcomer does not learn central and important basic assumptions in the organization and feels alienated, uncomfortable and useless. Even if organization wishes to keep the newcomer, this kind of feelings can cause the newcomer to change the jobs (Schein 1987, 58 – 59).

Chao (1994) has defined six dimensions required for effective socialization:

- 1) Professional skills. Knowledge, skills and competences demanded for performance.
- 2) People. Good relationships towards others in the working place.
- 3) Politics. Procedures. Knowledge of the formal and informal power relations in the organization.
- 4) Language. Understanding of the technical language, slang or phrases used in organization, work and profession.
- 5) Goals and values. The ability of an employee to understand and define formal and unwritten goals and values.
- 6) History. Understanding organizational traditions, habits, myths, tales and rituals (Chao 1994, Saks and Ashforth 1997, 249).

The socializing process is usually examined from the organizational viewpoint, but it is as important to evaluate it from a personal point of view as well. The socializing process is a two-way-process.

The socialization process has been the topic in many organizational studies. The socialization process does not stop when a person becomes employed; after entry continuous socialization is required. Hence, the socialization process in an organization is closely connected to the concept of organizational commitment (see e.g. Moore 1971, 876).

6.2. Commitment

Organizational commitment is commonly conceptualized as an affective attachment to an organization characterized by shared values, a desire to remain in the organization, and a willingness to exert effort on its behalf (Mowday et al. 1979). Reichers (1985) conceptualizes commitment as side-belts (the rewards and costs of organizational membership), attributions (the “binding” of the individual to behavior over a period of time) and goal congruence between the employee and the organization. Most theorists agree that organizational commitment can be seen in terms of two dominant dimensions: affective and calculative, or continuance commitment. Affective commitment is an attitudinal phenomenon related to personality traits and job-related factors, and leads to the willingness of an employee to support organizational goals. Calculative or continuance commitment is the result of an employee’s perception that organizational membership will serve his/her self-interest and results in the continued participation of the individual in the organization. Commitment to an organization and its goals as well as the intent to stay with the organization are seen as desirable outcomes promoting positive organizational citizenship behaviour, reduced turnover, increased productivity and job satisfaction (Mir et al. 2002, 189).

Employees have begun to understand that hardly anybody has a lifelong career in one company. The employee cannot trust that if he/she serves the employer well salary will continue to be paid every month. Loyalty between the employer and the employee is changing. The psychological contract, the informal, unwritten understandings between the employer and the employee have changed (see also Arnold 1997, 39 and Lindstöm 1999, 51). The conditions in business have become more crude, the role of an enterprise is often solely to bring profit to the owners. There is no need to take so much care of continuing employment contracts. Uncertainty about secure contracts makes people develop their competencies continually. Younger employees have accepted this change more easily than older ones.

The Finnish Ministry of Labour has predicted that in the next 10 to 15 years the labour markets will face labour shortages because of the retirement of the baby boomers and the high turnover of labour. The shortage will concern both basic labour and those of top know-how (Ministry of Labour, 2002). In a situation of labour shortage the employees will have more possibilities to choose between employers. Organizations will then face a core question: of how to keep the personnel in the organization? Labour shortage will be the reality in both business sectors of the present study in the near future. The ICT sector already suffers from a lack of qualified personnel and the paper sector will be confronted with labour shortage when the generations will retire. However, the labour shortage will affect the paper sector's professional fields differentially.

6.2.1. Employer Commitment, Organizational Willingness to Keep Employees

Commitment has an important role in organizations. Whitener (2001) has stated that organizations with committed personnel have achieved higher degrees of production, as well as better profits and effectiveness compared with organizations where the turnover of workers is higher (see also Bragg 2002). King (1997) has presented a reaction chain where the efficacy of commitment leads the employee to improve the quality of his/her work, which enhances productivity in the organization. High productivity lowers costs and enriches the quality of working life. From the savings based on productivity it is possible to pay better wages and offer more training for personnel. This loop increases commitment.

Employer commitment comes in four types: want to, have to, ought to and non-committed. Employers who want to be committed to their employees do what is necessary to create an attractive working environment. They value employees and treat them as valuable associates in the business. They want the best employees to stay, grow and prosper as the business succeeds. Other employers are committed to their employees only because they have to show some signs of commitment to attract and keep workers. These employers satisfy the legal requirements for compensation and safety and do what is necessary to stay competitive. Most employers fall into this category. Because the competition for employees is hard, employers often feel trapped by legal obligations for treating workers well. Some employers are committed to their employees because they think they ought to. They feel obliged or they believe that commitment is the right thing to do. A fourth category is employers that are non-

committed. These employers run sweatshop operations where the employees are treated as pieces of equipment necessary to get the job done. Although many factors affect employee commitment to employers, three contributors stand out as primary drivers: fairness, trust and concern for employees. They are also prerequisites for employee commitment and loyalty (Bragg 2002, 19 – 20).

The goal of HRM is to ensure that the quantity and quality of personnel meets the needs of the organization and that the personnel is motivated and strives towards the company's goals (Vanhala et al. 1997, 210 – 211). The HRM function has the responsibility for finding and developing new ways of attracting, retaining, motivating and developing skilled knowledge workers (Despres and Hiltrop 1995). In order to gain the contribution of an employee, he/she should be willing to deliver it to the organization. Pardon and Kleiner (2000) state that the right way to commit personnel is recruiting right persons, training existing personnel and making necessary adjustments. Open communication and sympathy are the keys to the whole process. In order to get an employee committed to an organization he/she should be emotionally attached to the organization and feel that departing will be a personal sacrifice and that he/she has a responsibility to stay in the organization (Curtis and Wright, 2001). Maybe the oldest way to improve commitment is to offer an adequate reward, but this seems to be losing its effect. Payment is only one hygiene or extrinsic factor in motivating people, the real motivators are a sense of achievement, recognition, work itself, responsibility, advancement and personal growth (Brooks 1999, 57).

It is important to decide the necessity of external recruitment or whether it may be possible to use existing personnel through training and job circulation. A second decision in recruitment is whether to hire persons to open positions or hire them to a reserve in order to pick potentials and locate them later to a particular post (Vanhala et al. 1997, 237 – 239). The type of employment, whether it is permanent or fixed term work, may have an effect on the person's commitment towards the organization. In the present study all of the managers had permanent contracts so this dimension is not evaluated. The organization can help the employee in the beginning of the employment by using a sort of induction process in order to familiarize the person with the organization. By increasing the employee's self-esteem and offering a motivating environment the organization can provide the birth of strong commitment (Allen and Meyer 1997, 72 – 73). Human resource development aims at

maintaining and enhancing the activity and level of achievements of personnel. Activities of human resource development that an organization can arrange are training, job circulating, acting as a deputy, working in projects, self-education, or coaching (Vanhala et al. 1997, 242, Jalava 2001, 68).

In this study employer commitment is understood as a way an employer value employees. The manner of treating employees, particularly entry level employees, is assumed to be important in determining eventual employee commitment. Are employees treated as valuable associates in the business from the beginning of the employment?

6.2.2. Employee Commitment, Personal Willingness to Stay in an Organization

There are several definitions of commitment. According to Buchanan (1974), commitment to an organization is

- 1) identifying, adopting the goals and values of an organization
- 2) internalizing, understanding and adopting the tasks of the employer
- 3) loyalty, attachment to an organization and the feeling of belonging

Porter et al. (1974) define commitment as follows:

- 1) strong belief in and acceptance of the organization's goals and values
- 2) a willingness to exert considerable effort on behalf of the organization
- 3) a definite desire to maintain organizational membership

Curtis and Wright (2001) have cited Mowday et al. and divided commitment to three parts:

- 1) willingness to maintain membership in an organization
- 2) trust and acceptance in the values and goals of the organization
- 3) willingness to struggle harder, benefiting the organization

Bragg (2002) states that employee commitment, like employer commitment comes in four types: want to, have to, ought to and non-committed. The best type is "want to" commitment. In the extreme, these are the truly dedicated and loyal employees. "Have to" commitment is another type of employee commitment. People who have to work for their employer are trapped employees. They stay for many reasons. Some stay because they cannot find other

jobs or because they are not employable elsewhere. Trapped employees would leave if they could, but they feel they cannot. The third type is “ought to” commitment. These are the people who stay because they feel obliged to their employer. Perhaps their employer gave them a job when they badly needed one or they have a value system that says staying with their employer is the right thing to do. The non-committed are not committed to staying and are actively looking for other employment. These workers are halfway out of the door. In today’s market, they make up about 25 to 30 % of the workforce (Bragg 2002, 19).

Allen and Meyer (1997) have identified common features in the different definitions of commitment to an organization. They define commitment as a psychological condition that describes the employee’s relation towards an organization. This condition has an impact on the decision to maintain membership in the organization. Allen and Meyer have presented a three-dimensional model of commitment. The three components of the model are affective commitment, which represents a person’s emotional attachment to the organization, normative commitment, which is based on a person’s obligation to the employer organization, and continuance commitment, which refers to transactional costs of leaving the organization.

Factors that affect the commitment of a person are personal characteristics (e.g. sex, age, marital status, education, duration of stay in organization, character, values, expectations), working experience (e.g. fulfilment of expectations, reward system, career progression possibilities, personal relations in the organization, personal ranking in the organization), work role (wide and challenging tasks, interest, autonomy, significance, responsibility and power in the organization, clarity of work role) and organizational structure (organization’s age, managerial traditions, size of the organization, control system) (see e.g. Allen and Meyer 1997).

Curtis and Wright (2001) have defined different factors influencing commitment. Group cohesion is important because a person wants to be a team member. The most common reason for leaving an organization is a conflicting situation between the employee and the supervisor. Therefore the supervisor should have leadership education and training in resolving conflicts. The employee should know his/her responsibilities and should receive feedback and appreciation. Employees should be allowed to take part in organizational work,

when their ideas appreciated they will express them more willingly. Creating self-managed teams and allowing employees to answer for decisions creates responsibility within the employees. Certainty of employment is one signal of an employer's commitment to employees. Recruitment increases commitment by informing personnel that only the best applicants will be selected. Incentives and relatively high rewards connected to organizational performance assist in a person's commitment to the organization. Organizations that invest in education improve the commitment of personnel. Decrease of status differences will increase the commitment level in the lowest level of the hierarchy, but it can also decrease it on the higher level. Open communication will enhance organizational commitment. Better pay and career opportunities can enhance commitment to the organization. Loyalty to the employing organization appears to be also highly dependent on professionals' opportunities for career advancement and the criteria used in the distribution of rewards, such as pay and promotions. Being a professional typically involves a life-long career, and if the employing organization does not facilitate the advancement of one's professional career, then professionals are less loyal to the organization (Wallace 1995). Viljanen (2001) divided organizational commitment into three parts: commitment to career, work or work community. Career commitment reflects people's expectations and demands towards their careers as well as intentions to live up to those expectations (Chang 1999).

Mir et al. (2002) have examined changing employee-organization relations. According to them "the new age employees" have substantially different expectations from organizations – stemming from their own articulateness about their career needs, as well as mistrust of organizational loyalty in the aftermath of the recent waves of organizational downsizing. New age employees are expecting more equitable treatment in the workplace and have the potential to transform the workplace landscape for the better. Such employees want to be responsible for their work and the results produced, they want acknowledgement for their contributions and they want their tasks to be matched to their strengths. Employees now require training on a continual basis, information on how the organization is performing, constant feedback on their progress, proper tools to assist them in achieving their goals, and reward systems that are commensurate with the tasks they are performing. They also demand and receive higher compensation for their work. However, entry level professionals are increasingly prepared to settle for lower wages in favor of a quality social life. The new age employee will quickly become disenchanted if the employer does not keep recruiting

promises; they expect honesty and understanding of their values. In addition the new age employee will be self-motivated to develop a career path. The new workforce is quite articulate about their needs and expectations in the workplace, focusing on dependable childcare, health and retirement benefits, opportunities for advancement and fair compensation. At the same time they display scepticism about their expectations regarding employer commitment (Mir et al. 2002, 187 – 188).

In this study employee commitment is understood as willingness to maintain membership in an organization. An important question is: are employees truly dedicated and loyal to organizations? Also, what makes employee to commit to organization?

6.2.3. Psychological Contract as an Invisible Glue Between Individual and Organization

Commitment and loyalty are two-way contracts. Commitment is connected to a *psychological contract* between the employer and the employee. The concept of the psychological contract can be defined as an exchange agreement of promises and contributions between two parties, an employee and an employer (Janssens et al. 2003, 1350). Chris Argyris (1960) is originally responsible for the concept of psychological contract. Psychological contracting between an individual and an organization is the process which holds the whole organizational enterprise together. It is the invisible glue which binds individuals to the organization over time. The individual's objective, external career is the sequence of the positions he/she holds in the organization, but his/her subjective internal career is the process of psychological contracting (Herriot 1992, 6). Psychological contracts in employment are the belief systems of individual workers and employers regarding their mutual obligations (Figure 18.) (Rousseau and Schalk 2000, 11). From the employees' point of view, the psychological contract is the agreement that they have with their employer about what they will contribute to the employer through their work, and what they can expect in return. A relational contract refers to a long-term relationship based on trust and mutual respect. The employees offer loyalty, conformity to requirements, and commitment to their employer's goals, and trust that their employer will not abuse their goodwill. In return, the organization is supposed to offer security of employment, promotion prospects, training and development and some flexibility about the demands made on employees if they are in difficulties. However, global competition, new technology, downsizing, delayering and the

rest have put an end to all this. Many employers no longer keep their side of the bargain. Instead of a contract being based on a long-term relationship, it is much more likely a short-term transactional, economic exchange (Arnold 1997, 39).

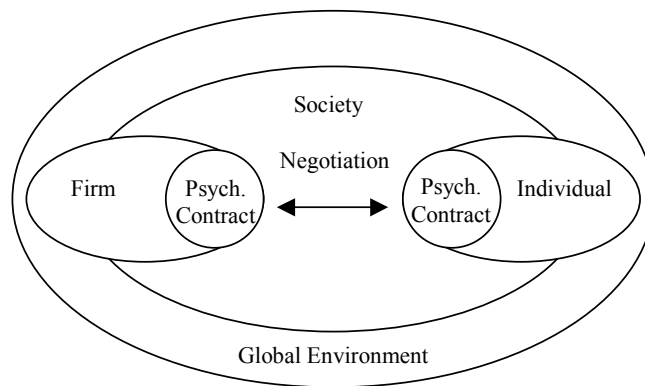


Figure 18. Key Contexts for Psychological Contracting (Rousseau and Schalk 2000, 2)

Psychological contracting according to Herriot (1992) incorporates the parties' beliefs, values, expectations and aspirations. Development of this contract by the organization without reference to the individual or, on the other hand development by the individual without reference to the organization, can both lead to dead ends. The organization perceives job moves as a way of getting the right people in the right positions to best achieve its objectives and developing them through a sequence of jobs so that they learn from a variety of experience. It is a question of psychological contract: what sort of career development will meet the needs and the expectations of both the individual and the organization.

According to Rousseau (1995) the psychological contract and organizational commitment are key concepts when improving a company's competitiveness. The psychological contract in this context can be defined as covering employees' beliefs regarding the terms of their employment. The concept is partly overlapping with the concept of organizational commitment, which refers to an employee's "psychological bond to an organization as an affective attachment and identification" or "involvement in a particular organization" (Legge

1995, 180). Organizational commitment thus appears to be a broader concept, as it includes both willingness to stay within the organization and beliefs regarding how beneficial this would be. What differentiates the psychological contract from organizational commitment seems to be the employees' trust of the employer's willingness to pay back their loyalty (Viljanen and Lähteenmäki 2002b, 6).

Rousseau's (1995) model of psychological contracts provides a unifying framework for simultaneous analysis of both managerial and individual views. In terms of psychological contract both the type of employee commitment and degree of trust between the employer and the employee seem to be relevant. Rousseau's (1995) 2 x 2 model (Table 6.) contains a time frame, which refers to the duration of the employment relationship and the performance requirement dimension. Performance requirements represent the degree of specificity in performance demands. Two basic terms of psychological contracts, and also the ends of a contractual continuum, are transactional and relational. A transactional contract is based on a close-ended time frame and mutual profitability. A transactional contract exists when a company recruits for example college graduates, who are willing to work for long hours in low-level jobs. A relational contract, on the other hand is based on an open-ended time frame, confidence, stability and high commitment. Relational contracts are typically found in organizations with a long history and strong traditions. Mutual loyalty, commitment and continuity describe the employer-employee-relationship in an organization holding relational contract. A transitional contract usually occurs in an unstable situation that is likely to create certainty among employees. A fourth model of contract is a balanced contract. They can be found in organizations, where both the employer and the employees share the same values and are mutually committed. In addition to this, there is a need to carry on productive business and attain specific business goals (Viljanen and Lähteenmäki 2002b, 6).

Table 6. Types of Psychological Contracts (based on Rousseau 1995)

PERFORMANCE TERMS		
	Specified	Not Specified
DURATION Short term	Transactional Low ambiguity Easy exit/high turnover Low member commitment Freedom to enter new contracts Little learning Weak integration/identification	Transitional Ambiguity/uncertainty High turnover/termination Instability
Long term	Balanced High member commitment High integration/identification Ongoing development Mutual support Dynamic	Relational High member commitment High affective commitment High integration/identification Stability

Viljanen (2001) has studied the commitment of ICT professionals. She has found that the company's most important resource is committed personnel. The importance of commitment is especially emphasized in knowledge-intensive organizations where the knowledge of personnel is the most central resource in the organization. Locating skilled personnel and a high turnover are common problems in the ICT sector. The high turnover of personnel is expensive for an employer because of high recruitment and familiarization costs of new personnel. Ready-made ICT-personnel are impossible to find, therefore the importance of continuous commitment, familiarization and training are emphasized in the ICT sector. Viljanen divided organizational commitment into three parts: commitment to career, work itself or work community. She discovered that commitment to work and career were emphasized more than commitment towards the organization. She discovered that the most important factors in developing commitment among ICT personnel were interesting tasks, challenges and development possibilities. ICT professionals appreciated especially self-fulfillment, demonstration of their own strengths and professional development in their work. Also diversity and autonomy in tasks were appreciated among ICT personnel. Viljanen also

identified negative aspects of commitment. Difficulties in an organization may appear when an ICT professional is highly committed and solely concentrates on work neglecting the other sectors of life. That situation may cause stress, exhaustion and burn-out. Viljanen proposed that the golden mean of commitment would represent the best practice. Viljanen (2002) has also studied work values in ICT field. ICT personnel's values and working culture differs from those prevailing among more traditional industry workers (see also Himanen 2001, Ruohonen et al. 2002).

Viljanen and Lähteenmäki (2002b) have studied the best HRM bundles for ICT personnel in ICT companies and ICT departments in more traditional companies or in the public sector. In their study there is a question of commitment to occupational group or company. They discovered in their study that in ICT companies the psychological contract tends to be transactional or at best balanced. However, in the public sector and traditional manufacturing industry the psychological contract between ICT professionals and company most often is relational. In ICT companies the professionals identify themselves with the occupational group whereas in the ICT departments identification is both with the company and the professional group. Viljanen and Lähteenmäki noticed also that junior professionals in ICT companies were clearly more satisfied with their career prospects than the senior professionals working in the ICT departments of public sector and traditional industry.

The psychological contract between the employer and the employee seems to be changing. Employers can no longer offer job security and long-term career opportunities but they are responsible for providing their employees with an environment for growth and learning so that the employees gain the experience and training needed to be employable in the organization or elsewhere (Janssens et al. 2003, 1350). Traditionally the psychological contract embodied values of mutuality and reciprocity. However there is a move towards contracts that represent a more calculative and instrumental relationship between employees and their work organizations. One effect of this new contract has been that traditional on-wards-and-upwards planned, accessible, and secure careers are being replaced by an 'over-to-you' philosophy where ownership and responsibility for career management are transferred or delegated to the individual employee (McDougall and Vaughan 1996, McCarthy and Hall 2000). Mir et al. (2002) assume that the dominant paradigm of the employee-organization relationship has begun to shift from a psychological contract to a

model of economic exchange, where individual self becomes responsible for his/her own career (McDougall and Vaughan 1996, McCarthy and Hall 2000).

Retention and loyalty have often been used to mean commitment. Here commitment is used to explain both the employee's commitment, the appropriate loyalty towards an organization, i.e. commitment on personal level and employer commitment, how an organization keeps and commits personnel.

7. RESEARCH FINDINGS

In this chapter I will give an overview of the data this study is based on. The methods of data collection, background information about the target group, their educational background, career development, values behind their careers, socialization and commitment, and their future expectations are explained. Finally reliability, validity and limitations of the study are discussed.

7.1. Data Collection Arrangements

This research is qualitative by nature. The research data were gathered in April-December 2002 by interviewing 30 managers and six directors. The interviews were done in three Finnish ICT companies and in three paper companies in South-Karelia. The managers' interviews also contained short questionnaire concerning the managers' values which orientated their careers.

At the outset the director representing the company was interviewed in each company in order to get basic background information about the company and the business sector. The director's own career was not evaluated. In the same interview the target group, five appropriate managers, were chosen with the help of the director. All the 30 managers, accepted the request to being interviewed. The interviews were done in the managers' working place, either in their office or in a negotiation room. The interviews were recorded on mini-discs, and the average duration of the interviews was 47.11 minutes; in the ICT companies 41.80 minutes and in the paper companies 52.42 minutes.

7.2. Background Information of the Target Group

The average age of all interviewed managers was 36.93 years. 87 % of all interviewed managers lived in a permanent relationship. 63 % of all the interviewed managers had children. The managers in both sectors were interested in sports.

The managers had finished their studies and they had a regular rhythm of life connected to children, spouse and work. The age group of the managers is the most active one in the work

and family sectors of life. In this research male persons' attachment to work was noticeable, especially of with the paper managers. Some were living the strongest and richest time in life, and were relaxed and enjoyed work (Dunderfelt 1996). The managers in the present research were acting in independent, mentoring and strategic roles in their organizations (see Arnold 1997, 198).

ICT

The ICT managers' titles were: Technology Manager, Project Manager, Team Manager/Leader, Department Manager, Program Manager, Development Manager and Testing Engineer.

- *We are developing, making new properties and maintaining systems. (ICT manager) –*
- *My job is to be a project manager. I'm responsible for projects, what our team does in these. (ICT manager) –*
- *I coordinate and lead a project including several sub-projects where software is developed for one customer. (ICT manager) -*

The average age of the ICT managers was 34.13 years. The ICT managers were 5.60 years younger than the paper managers. ICT managers' life course was near the 30 year old transition. Only seven of the ICT managers were married and six of them had children. The majority of the interviewees were male, in the ICT companies only three women were interviewed. In the ICT sector floorball was popular, and also computers were often mentioned as a hobby. Eight ICT managers had subordinates; two out of the three female managers had subordinates.

Paper

The titles of the paper managers were: Production Manager, Line Manager/Engineer, Project Manager, Maintenance Manager, Sales Manager, Mill Manager, Unit Manager and Development Manager.

- *My work is connected to the interface between the end product and the customer. (Paper manager) –*

- *The work contains production, quantity, quality, effluents, personnel and cost efficiency. (Paper manager) –*
- *My duty is to convey customer demands to our own organization, and on the other hand tell about our wishes and developmental thoughts to the customer's organization. (Paper manager) –*

The paper managers were 39.73 years old. 14 of the paper managers were married and 13 of them had children. Also in the paper sector the majority of the interviewees were male; two of paper managers were women. Among the paper managers computers were not considered as a leisure time activity. In the paper sector the family, homecraft and gardening were considered as hobbies, though these were not mentioned in the ICT sector at all. In the paper sector sector-related hobbies seemed to be forestry and hunting. In the paper sector twelve managers worked in the position of a superior. Neither of the two female paper managers had subordinates.

7.3. Educational Background of the Managers

Kanter (1989) has noted that today's and tomorrow's knowledge workers want to increase their marketability in the labour market by enhancing their knowledge and skills and keeping their competences up to date. This can also be seen among the ICT and paper managers. The managers in both sectors appreciated continuous learning by training and accepting challenging tasks. In this study the managers were asked about their basic education and about the further development of their competences.

7.3.1. Academic Degree Appreciated

The organizations in both sectors appreciated academic degrees in managerial positions. The managers were highly educated. 70 % of all the managers had an academic degree, 16.7 % were engineers, 10 % undergraduates in technical sciences, and 3.3 % had a degree from a school of technology. In both sectors 11 managers had an academic degree, mainly that of a Master of Science in Technology.

ICT

The managers with academic undergraduate degrees worked in the ICT sector and one ICT manager had an engineering degree. Those with undergraduate degrees had studied at a university of technology. The technical knowledge of ICT managers was connected to software development, planning, programming, testing and general management.

Paper

In the paper sector one of these 15 managers had a degree of Licenciante of Science in Technology. There were no undergraduates in the paper companies in positions of managers, but three paper managers had an engineering degree and one was a technician. The area or expertise was broader in the paper sector than in the ICT sector. Large paper companies require knowledge connected to paper production, maintenance, research and development, sales and general management.

In the paper sector interviews the managers mentioned that the average education level in the sector will rise in the near future when the big generations retire. These post-war generations have not necessarily been professionally educated. Nowadays professional education is a condition for hiring new employees.

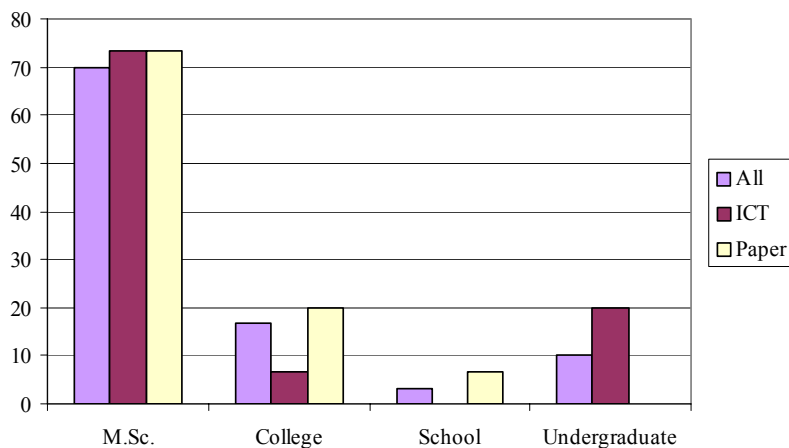


Figure 19. Percentage Distribution of the Education of the Target Group

7.3.2. Initiating Careers and Completing Education

ICT

There is an apparent overlap of education and work in the ICT sector. The life phase structure (see Dunderfelt 1996, 98 - 99) differs from the traditional “first education, then work”-structure. The transition between phases of education and work has become more flexible (see Rantamaa 2001, 69). Because the ICT sector suffers from a lack of competent workers, regular work usually begins when studies are still going on. Therefore, it is necessary for employers to hire undergraduate personnel from universities and colleges and continually socialize them within the organization. Both the employer and the employee sides need to be flexible in this situation. The employee should have the possibility to finish his/her studies while working. On the other hand, the employee must manage to do his/her work and concurrently continue with his/her studies. Graduation may be delayed but finished studies and a degree are appreciated in both employer and employee sides.

Paper

In the paper sector full-time working begins with thesis work or after graduation. Before the first full-time contract the paper manager has been working only during summer vacations. The same kind of overlap of education and work, that is seen in the ICT sector, does not exist in the paper sector.

7.3.3. From Technical Courses to Leadership and Management Education

The managers have developed their competences by participating in different courses. 73 % of all the managers had taken part in courses to update their education. Reading and learning by doing were also important learning methods. On the basis of the research data the managers in both sectors seem to take part in technical courses in their early career. The managerial career in engineering work in both sectors starts with tasks where technical know-how is needed. The manager’s duties are then connected to certain special competence. During the progression of the career path the manager’s tasks will become more linked to general management, and therefore management and leadership courses are later more in demand.

ICT

In the beginning of their careers the managers took part in different technical courses connected to software development. Later on they needed updating education in leadership, project management or customer service.

- *I have attended professional updating education such as technology courses and project management courses. (ICT manager) –*
- *Courses have connected to technical know-how and to customer service. (ICT manager)-*

Paper

Four paper managers enrolled in a further training entity (e.g. an MBA-degree program or post-graduate studies at a university). The courses were usually technical, management/ leadership or language courses.

- *I have attended leadership and language courses. And of course special courses connected to the business. (Paper manager) –*
- *I have participated in management courses aimed at young managers. (Paper manger) -*

7.4. Careers in Change

Södergren (2002, 38) poses the following questions: Are we seeing the emergence of a new kind of knowledge-based careers (Bird 1996), where careers are concerned with the content and meaning of work experiences rather than with shifts in formal status? Or is the industrial, hierarchical, ‘bounded’ perspective on careers still dominant?

The change of careers is topical at the moment. Career is constructed in dialog between a manager and an organization but more often the manager him/herself is the active part and takes the responsibility for promoting the career of his/her own. He/she gathers knowledge and work experiences and considers his/her future. After working in one position for five years or less, he/she negotiates with the organization about new challenges. An emphasis on being more self-directed in lifelong learning and career planning (see Poehnell and Amundson 2002) can be seen in results of this study.

7.4.1. *Traditional vs. New Career Thinking in the Research Data*

Traditional and new career thinking are represented in the research data, but it is not possible to make the generalization that the paper sector is purely traditional and ICT would represent only new career thinking. Arthur and Rousseau (1996) have defined old and new meanings of career vocabulary. These concepts are presented below in connection with the research data.

Traditionally the term *boundary* is understood as a limit between familiar and hostile territory. According to new career thinking a career moves across the boundaries of separate employers. In the paper sector the career develops inside one organization, while in the ICT sector more transitions between different organizations occur. The paper sector can be seen as representing the old meaning of boundary, while careers in the ICT sector typify the new meaning of the boundary concept.

- I began my work doing software in the Windows-environment in another company. It took one and a half years. (ICT manager) -

The old meaning of *career* is a course of professional advancement leading upwards in hierarchy. According to the new meaning career is understood as an unfolding sequence of any person's work experiences over time, where career draws validation and marketability from outside the present employer. In the paper sector the career is made inside one organization where open positions exist and are visible in organizational networks. The paper sector can be understood to represent the old meaning of career thinking, while the ICT sector represents the new career concept. In the ICT sector working experience is grown in different companies and positions. Paper companies are large entities offering multiple alternatives for career development inside one organization. Transitions can happen inside the organization, whereas the ICT companies are rather small-sized organizations. In the ICT sector competence is increased by utilizing available possibilities at the present employer but also by changing the employer inside the business sector. In this research transitions between organizations were found to be concentrated in the early phase of the career. When an appropriate organization and suitable work are found, a person settles down and becomes committed to the organization.

- *After the graduation I changed my residence to Helsinki. It was easy to get work from there, in the area of information technology. First I got into a small company, where I worked for one year. Then I started working as an ICT consultant. It took three years. Then we moved here and I got a job in a small company in the Technology Center. Because of the experience achieved in Helsinki, I got larger responsibilities here. Then there came hard times for that company and I started searching for a new job. After 2.5 years I gave my notice and began working here. Then I participated in a project with the university and after two years came back here. (ICT manager) –*
- *After my graduation I started working in a pulp mill project. After three years in that project I came here (inside the company) and started building another pulp mill. I worked as a Project Engineer during the project, after the start of the mill I was promoted to Line Manager, and here I am. (Paper manager) -*

A paper company is *an organization* structure through hierarchical authority relations where work is formally defined. However, there is progress within the industry towards more dynamics in interaction with customers, subcontractors and distributors. The paper sector cannot be seen as a pure representative of the old meaning of an organization. Because of the history and size of the organizations the change towards more dynamics action and interactions is slow. The new meaning of the organization emphasizes the importance of networks between employees and the entire value chain. Interaction between colleagues and customers is continuous. The ICT sector can mainly be understood as a representative of the new organization concept. However, some sort of hierarchy can also be observed. Career progression usually leads upwards in organizational hierarchy, which can be noticed in expressions of extending responsibilities, better income and recognized titles.

In the paper sector a career is followed mainly inside one company, and thus it can be seen as a traditional career where the career progresses usually towards more demanding tasks and upwards in the organizational hierarchy. Reflections of a boundaryless career (Mirvis and Hall 1994) can be seen in the ICT sector: the career proceeds in several companies in different positions not necessarily directing upwards; progression on lateral or horizontal level, even downwards, is possible. If a person changes his/her position from top general management back to the role of a specialist it can be seen as moving downwards when thinking about power and influence in the organization, but the work may be more

challenging and rewarding to the person. Usually the growing competence of an ICT manager pushes him/her upwards in the organizational hierarchy. Thus the traditional hierarchical career model has not totally vanished from the ICT sector.

Traditionally *employment* is seen as a state of being employed. It is the permanent, regular occupation of a person. According to the new meaning employment is temporal, representing the current manifestation of long-term employability. Despite the fact that all the ICT-managers in this research had permanent employment contracts, they followed continuously the development of the ICT labour markets. The ICT sector can be considered as representing the new meaning of employment. The paper managers mainly represent the old meaning of employment but in the research data there can be found managers' rising thoughts of possibility of changing employer. Progress is toward the new meaning of employment also in the paper sector. The target group represents the early career phase. These technically educated managers both in the ICT and paper sectors are accustomed to utilizing multiple information channels, so they can easily update their knowledge of the changes happening outside their present organizations.

Rapid changes in the ICT labour markets have been common in the past. ICT personnel have had to adjust to ambivalence. In that situation the ICT managers have learned to count on the employability of the ICT business sector and their own competences. Because of the know-how achieved in the area of software development and the lack of competent ICT personnel the ICT managers will manage to get a new job within the ICT business sector should they happen to become unemployed.

- I don't know what commits me to the organization. Nothing directly. Colleagues, of course, and locality. It is not impossible to work elsewhere, in another company. But this company has a good image. Anyway, everything is on sale, I haven't made a lifetime contract with this firm. (Paper manager) -

A *group*, in the old meaning, is made by the organization. A group consists of interdependent individuals within a social unit like a company. The paper organization can mainly be considered as a representative of the old meaning, but relationships with customers, subcontractors and distributors bring more dynamics to the concept of the group.

Hence, a group is not defined purely traditional way in the paper sector anymore. A group can include persons from different organizations (e.g. customers). The nature of work in the ICT sector is team work, software is developed together with colleagues in the organization and in interaction with the customer. The group in the ICT sector is based on the management of customer projects. A feeling of togetherness can be observed in the ICT sector when ICT personnel maintain contact with colleagues also during the leisure time. The same kind of togetherness was not discovered among the paper managers. The time of paper managers was divided more clearly between work and leisure.

Traditionally, *learning* is individual-centered, whereas the new meaning of learning emphasizes a multilevel phenomenon including creation and acquisition of knowledge, collective processes for shared interpretation and patterns of adaptation and transformation. Learning in the paper sector seems to be mainly individual-centered. Then manager finds and attends suitable courses in order to develop his/her competences. The need for learning is driven from the needs of the person's work. Learning in the ICT sector is based on organizational learning and education of a team. The members of a team solve problems together and for that reason everyone in the team takes care of the appropriateness of their own competence.

- *I attend different courses. Technical courses, such as courses connected to telephone exchange technologies or object-oriented programming (OOP) and C++ -courses. (ICT manager) –*
- *In our company we have good possibilities for training. After having changed my tasks I have gained more training by courses or by reading. But I haven't taken any courses in schools or universities. I have attended leadership and language courses. When working in the laboratory the education was connected to that area. I have also studied environmental matters. (Paper manager) -*

Civility, in the old meaning, is the status of citizenship, state of being civilized, freedom from barbarity. In the paper sector this means organizational membership. It appears that in the paper sector citizenship is based on the feeling that the manager is one member in that particular paper company. The new meaning of civility is community membership where entitlements are coupled with responsibilities. In this case the ICT sector represents the new

meaning of civility, success depends on competences and interaction with colleagues. Managers have entitlements to projects but they are also responsible for results. In this research data there appeared a tight community inside the ICT companies. The managers in the ICT sector worked in interaction with colleagues but also associated with each other in their private lives.

- *I play the guitar. We have a band in our company. We just had a practice session in the morning. (ICT manager) –*
- *We play floorball. (ICT manager) -*

Transition is traditionally understood as a movement between different stages, and it happens only exceptionally. Transition in a paper manager's career happened when the person got a new job after applying for it. The new concept of transition is the now prevailing cycles of change and adaptation, including stages of preparation, encounter, adjustment, stabilization and renewed preparation. Transition is a continuing process that can easily be seen in the career process of the ICT sector. New positions are not readily available but formed in interaction with the manager and the organization. One ICT manager had started his career as an entrepreneur during his studies, after that he changed to the role of an employee in connection with an acquisition. Growing experience and competence connected to the ICT and paper sector attached managers to these business sectors. Transition from business sector to another happened very rarely. In this research data transition from a different educational background toward information and communication technologies happened in three cases. These three managers were first educated in the disciplines of energy technology and chemistry but later started working in the ICT sector. After the entry to the ICT company they gained updated education in information and communication technologies.

- *These finance negotiations led to the conclusion where my company was bought by company A. (ICT manager) –*
- *Information technology appears interesting to me. After my graduation there were many open positions available in the area of ICT. ICT companies hired then recently graduated personnel. It made no difference for them what the major subject you had studied was or what your education was. (ICT manager) -*

ICT

In the ICT sector there appear to be more new career conceptions, the work is done in a more boundaryless manner. But also in the ICT sector there can be seen a sort of hierarchy behind career progression. Usually the ICT careers unfold upwards. Clear levels of organization are not necessarily visible, but growing competencies, increasing responsibilities and elevated titles are signs of upward development.

In the ICT sector the development process of the career (movement) is important. A person is first hired to the post of a Software Engineer, and then his/her career progression is based on his/her growing competence and working experience. New positions are made for the employee in interaction with the organization, positions are neither ready and visible nor available for everyone.

Paper

The paper sector has a hierarchical structure affecting career development, but there can be seen signs of new career thinking in the form of taking care of one's own competencies and following what happens in the labour market outside the present company.

Career development in the paper sector seems to be more fixed and inflexible than in the ICT sector. In the paper sector managers are committed to the organization and being in a position (existence) in that particular company is emphasized. A paper manager can count on the employment opportunities within the company. There are different possibilities for employment in big paper companies. Career development proceeds through formal positions that are first open and then applied for. The positions are situated in a hierarchical organization chart.

In the research data there can be seen elements of a very interesting theory which might be called a theory of convergence. The paper and the ICT sectors are converging towards a shared reality but are doing so from opposite directions. The paper sector is adopting characteristics of the new career thinking. Concurrently the ICT sector has some adopted structures of traditional career.

A summary of the old and new meanings in career vocabulary (based on Arthur and Rousseau 1996b) is demonstrated from the viewpoints of the paper and ICT sectors in Table 7.

Table 7. Old and New Meanings of Career in Paper and ICT Sectors (based on Arthur and Rousseau 1996b)

	Old meaning	New meaning	Paper sector	ICT sector
Boundary	A limit. The division between familiar and hostile territory. The world inside the boundaries is a safe haven for employees.	Something to be crossed in career behaviour, or in taking on complexity.	One organization, one position, accurate roles and responsibilities.	In early career boundaries between companies can be crossed to get more working experience. Later career is made inside one company.
Career	A course of professional advancement; usage restricted to occupations with formal hierarchical progression.	The unfolding sequence of any person's work experiences over time.	Career is made inside one organization. Open positions are visible in the organization.	Career can be made inside the sector, in different companies. Career progression leans on growing competences.
Organization	A legal entity defining authority relations and property rights. A formal structuring of work, performed and owned by the firm in exchange for pay and sometimes job security. Formal hierarchy.	Organizing through networks, value chains etc.; a more dynamic, process-centered usage. Organization process reflects the entire value chain producing goods and services and builds teams across functions and across suppliers, producers, distributors and customers.	Organization has a long history. Mainly accordant with an old meaning of organization but progression toward more dynamics in interaction with customers, subcontractors, distributors is visible.	Organization newcomer in labour market. Working in networks and teams. Continuous interaction with colleagues and customers. However, some kind of hierarchy in organization can be seen.

Employment	The action of employing a person or making use of a thing; a state of being employed; a person's regular occupation or business.	A temporary state, or the current manifestation of long-term employability.	In this research all managers had permanent jobs. Rising thoughts of possibility to work elsewhere.	In this research all managers had permanent jobs. However, managers were following what was happening outside the company.
Group	Interdependent individuals within a social unit such as a firm.	Interdependent individuals who identify psychologically with one another.	Old meaning of group. Dynamics comes from interaction with customers, subcontractors, and distributors.	Importance of colleagues and teamwork. Individuals cooperate. Togetherness also in private life.
Learning	Acquisition of knowledge committed to memory, typically by individuals. Individual-centered.	A multilevel phenomenon, includes creation and acquisition of knowledge, collective processes for shared interpretation, and patterns of adaptation and transformation.	Mainly individual-centered. Learning is mainly based on needs of work.	Learning of an individual but also an organization. Teams aim to solve problems together. Learning is based on needs of work. Continuous need for learning.
Civility	The status of citizenship; state of being civilized, freedom from barbarity.	Community membership where entitlements are coupled responsibilities; an infrastructure sustaining and enhancing social and personal relations.	State of being civilized, organization membership.	Entitlements are coupled responsibilities. Continuous interaction with colleagues. More than organizational membership competence emphasized.
Transition	The movement between stages. Something exceptional.	The now prevailing cycles of change and adaptation, including stages of preparation, encounter, adjustment, stabilization and renewed preparation. Continuing process.	Transition happens when a manager gets a new job after applying for it.	Continuous process. New positions are formed in interaction with manager and organization.

7.4.2. Duration of Career

The career in this research starts from the point where continuous work is done regularly in permanent or part time contracts. With this definition a career does not include summer jobs. All the managers were working in permanent, full-time contracts in their organization when interviewed. In many cases the direction towards a particular sector or particular work had started during summer jobs. Most of the interviewed managers did not see themselves as “careerists”. They were not consciously making a career, they were confronting interesting and challenging opportunities in their working life, and career was being formed at the same time.

- *I haven't thought about that at all. So far my career development has happened after noticing that it would be nice to do something else. When I have been ready for the next step. Just now I don't feel so. (ICT manager) -*
- *I think that I will reach the top of my career development in the age of 40 to 50. (ICT manager) –*
- *I haven't ever systemically thought where I should reach. I don't exactly know what I will become when I grow up. I think I'm waiting for a work in line organization again. You can't do anything to the fact that this kind of projects will always end. (Paper manager) –*
- *I don't know. The future will show it. I guess I will be doing the same kind of work in a larger environment and be responsible for production. I don't like project work. (Paper manager) -*

An attitude toward time and duration of posts is different in the ICT and paper sectors. Many paper managers talked about a period of five years as being significant:

- *If person's working tasks **are not changed** in five years in the ICT sector, it denotes that something is wrong with the person. If in the paper sector a person's tasks **are changed** in five years, it means that something is wrong with the person. (Paper manager) –*
- *I think that five years is a good time, maximal period, in one assignment because of one's own development. It takes two years to learn the tasks and area in order to get close to them. Then for two years you use this learning and during the fifth year you are going to rut. (Paper manager) -*

ICT

The shortest career in this study lasted one year in the ICT sector. The longest career duration was 28 years and that manager also worked in the ICT sector. The average career duration in the ICT sector was 9.53 years. (Figure 20.)

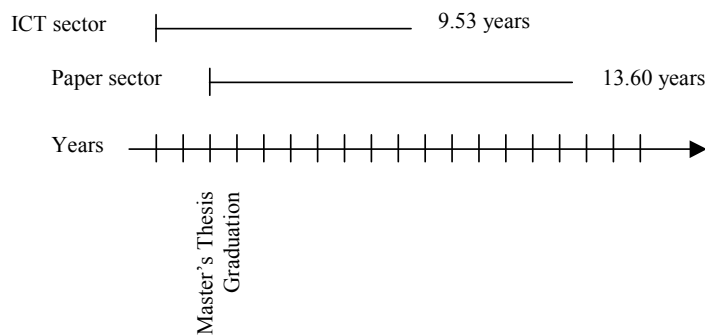


Figure 20. Beginning and Duration of Average Career in the ICT and Paper Sectors

It seems that a typical feature of the ICT managers' career was that the careers had begun when their studies were not yet finished. Three of the ICT managers were undergraduates at the time of the interview. Work and studies overlap in the ICT manager's life.

The career path progresses through transformation: the contents of work and title changes. In the ICT sector the average number of posts was 4.6. In the paper sector that number was 5.5. The duration of the career was four years shorter in the ICT sector than in the paper sector, so changes seem to happen there more often. One ICT manager said that his longest period in one post, using the same business card, had been seven months.

Most of the ICT managers had started their professional career in the position of Software Engineer, developing software already during their education. Before this "first real job" they had worked in different summer jobs during vacations. Work and education are wrapped together in the ICT sector, it is usually possible to make thesis work for the employer and then get a permanent job. Career transition from other business sectors to the ICT sector had happened in three cases. These managers had been educated in a totally

different discipline. These three had started their careers in fields connected to their former education but changed their direction because of interest and better job opportunities in the ICT sector. The knowledge of ICT managers who do not initially have ICT education is updated to the information and communication tasks.

It seems that in the ICT sector the career development progresses alongside a person's growing competence in the position of Software Engineer which generally held for a couple of years. Person first learns about the basics of making software, about the company and the business in general. During this period the person finds out what kind of work he/she is interested in. The career path is then directed either toward general management, specialization or project careers. In regular developing discussions the supervisor and the subordinate decide the direction of the person's further career progress, noticing the prevailing demands of the company and the personal interests of the individual. When the manager's career develops inside a particular software company there are seldom based on response to formal job-openings. When demand exists in the company the person is promoted to a new position. Often the manager's career history directs his/her future career (see Rosenbaum 1984, 26 – 27).

Paper

The paper managers had four years longer working experience than the managers in the ICT companies but the average age of the paper managers was also higher than that of the ICT managers. However, transitions from one position to another seemed to happen less frequently in the paper sector than in the ICT sector. In the paper sector the duration of a manager's career varied from three years to 21 years and the average length of the career was 13.60 years. (Figure 20.) In the paper sector the average number of posts was 5.5.

The managers in the paper industry had been educated in pulp and paper technology-related disciplines: chemistry and wood processing, but in paper mills there also is need for other skills: mechanical, energy and electrical engineering. In the paper sector the same kind of concurrent connection with work and unfinished studies characteristic of the ICT sector did not exist. In the paper sector work and studies are separate: work is done only as summer jobs and not during academic terms. Formal studies are mainly finished when a person goes to work for a paper company. In the paper industry the managerial career usually starts from

thesis work or after graduation in a sort of technical specialist role. In the paper industry the managers from different disciplines can use their own educational background in their tasks because of the large variety of different positions in large paper companies.

In paper companies the manager's career seems to progress also with the help of development discussions, but the person can also take advantage of the company's formal job-openings in his/her career progress. One manager indicated that the superior of a manager is not always willing to promote the manager's career because of the difficulties that will occur in the transition phase. Manager's work contributions can be comprehended as a resource that will be lost if the manager leaves his/her present position. In paper companies, knowledge of positions generally first becomes known in internal nets, though to attract outsider applicants an advertisement in a newspaper is usually used. Paper companies are starting to announce their vacancies also on the Internet, but at the moment this is not as common as in the ICT sector, only summer jobs are announced in the Internet. Newspaper is still the main employment advertising media for the paper sector.

7.4.3. Career Development in Three Ladders

A division into three career paths (triple-ladder career model, see page 207) was identified in this research data. The managers' careers develop in areas of general management, specialization or project management, in both ICT and paper business sectors.

- *Now I'm near the highest position possible for me in this organization. There are not so many specialist positions in this organization. Even my superior is more in the role of a specialist than a leader. Time will show if I'll continue here and how long. Or should I change my direction toward leadership tasks and general management. Starting a business of my own, becoming a consultant, is also one possibility. (ICT manager) -*
- *I consider myself as a project worker. The work in projects is quite dynamic. There is a clear target and schedules and then you can decide yourself how the target is reached. (Paper manager) –*

Sveiby and Risling (1987) have presented junior-partner-senior-mentor-ambassador as phases in a professional career. In the ICT sector these phases come up clearly. A software

developer starts as a junior and co-operates in his/her team. When his/her competence grows he/she becomes a senior, achieves authority and starts teaching others as a mentor. The model of Thompson and Price (1977) follows four career stages in a specialist career. In the phase of apprenticeship the newcomer software developer works under the supervision of a more senior professional in a part of a project and gains independence and responsibility concurrently with growing expertise. Experts become mentors for junior specialists. The fourth stage is strategic, where specialists influence organizational decisions and directions and provide strategic insights. During this progression a person's power within the organization grows (see Arnold 1997, 198).

- *Because I have been here so long, people often queue on my door for advice (ICT manager) –*
- *There are many good workers here doing their first jobs, they don't have any experience of projects. They have never worked as managers or directors, so they have difficulties in negotiating with customers. I guess I am the only one who takes care of such negotiations. (ICT manager) -*

7.4.4. Positive and Negative Aspects in Work

The managers were asked about positive and negative aspects of their present position.

ICT

The ICT managers named 27 good and bad aspects. Negative features were: haste, responsibility, fragmentariness and childishness in business and too much HR related work. Positive issues were freedom and diversity in working tasks, learning possibilities, interesting job contents and responsibility in work.

Paper

In the paper sector 21 negative and 33 positive matters were mentioned. Haste, travelling, expanding duties and taking care of HR matters were considered negative. Travelling prolonged the paper managers' weekly working hours and they experienced it as exhausting. The engineering managers had not been educated in the area of HR, so they had difficulties

in solving personnel problems in the organization. Diversity, freedom, challenges and workmates were praised. Also salary was named as a positive factor in the paper industry.

In both business sectors the managers were responsible for HR duties but they were not educated into that area. They considered HR matters very irritating in their work. Also the need for haste was typical in both sectors. Freedom to arrange one's own work and diversity of work tasks were positive aspects in managers' work in both business segments. (Table 8.)

Table 8. Positive and Negative Aspects in the Managers' Present Position

	Positive aspects	Negative aspects
ICT	Freedom Diversity Learning possibilities Interesting job contents Responsibility	Haste Responsibility over results Fragmentariness in business Childishness in business HR-duties
Paper	Diversity Freedom Challenges Workmates Salary	Haste Travelling Expanding duties HR-duties

7.4.5. Overtime

ICT

It was surprising that in the main the ICT managers did not work overtime. The situation in the ICT sector has calmed down since the 1990s when it was customary and usual to work extra hours. In the ICT companies regular working time was 37.5 weekly hours. 33.3 % of the ICT managers did not work overtime at all, 53.4 % worked extra hours occasionally and 13.3 % admitted to working overtime. In the interviews the respondents were emphasized the importance of appropriate project management and resource allocation. If projects were managed well, need for overtime work did not exist.

- *Yes, I work overtime but consciously. I can say if I have some plans of my own, or don't feel like or haven't the energy to work overtime. In my employment contract it is stated that my weekly working hours are 37.5 hours. After that I am free to leave with no problems. I have the permission of my superior for overtime working. I generally compensate for the extra hours by having a longer vacation in spring or autumn. I usually go hiking. (ICT manager) –*
- *There hasn't been need for working extra hours. The projects have been quite small. (ICT manager) –*
- *Yes, I work overtime but I compensate for the extra hours by taking days off when it is more quiet at work. (ICT manager) –*

Paper

The paper managers took overtime working naturally. In the paper companies of this research the weekly working hours seemed to be longer than in the ICT companies. In the paper companies the regular weekly working time was 40 hours. Additionally the paper managers indicated that they worked overtime more often than the ICT managers. In the paper sector 33.3 % worked extra hours occasionally, and 66.7 % did overtime regularly. The paper managers noted frequently that travelling prolonged weekly working hours.

- *Yes, I have to do extra hours. It comes naturally. Sometimes more, sometimes less. If the extra hours aren't weekly, they are at least monthly. (Paper manager) -*
- *Yes, I do. If I can't finish my work in regular hours, so I must work longer days. It varies but I don't remember when I have worked 40 hours a week. (Paper manager) –*
- *Overtime working is included in this job. I don't even count hours. I must come here when it is needed. (Paper manager) –*

7.4.6. The Initial Selection of the Business Sector

Interest in mathematical subjects at school also directed the choice of the profession in both sectors.

ICT

The ICT managers were first attracted to information technology through free time activities and education. Work in the area of information technology was chosen also by accident.

- *I have been interested in computers since I was young. When you have played with a computer since you were a little boy and then get a possibility to come into this sector, of course you get interested. (ICT manager) –*
- *It was in elementary school when I first met my best friend who had a computer at home. There we were sitting in the evenings until I got a computer of my own. I got hooked. In the fifth form I said to my cousin that I will become a M.Sc. in computing when I grow up. (ICT manager) -*

Many ICT managers indicated that they had difficulty to defining the current phase and potential future of their own career. None of the interviewed ICT managers experienced their present position to be the top of their career progression. They estimated that the top of their career could be reached at the age of 40 to 50. Their future career development was seen as bright, but the progression was predicted to happen by growing from one position to a higher position little by little.

- *I don't want to become a CEO. Something between the positions of CEO and Project Manager suits best for me. (ICT manager) –*
- *Difficult to say. We don't have any hierarchy in our company. You can't achieve any fine titles. (ICT manager) –*
- *I think that I will reach the top in the age of 40 to 50, some development will continue in the age of 50 to 60. (ICT manager) -*

Paper

In the paper sector family had a great importance in the choice of the profession. Many paper managers had relatives working in paper companies. Because of these relatives working in paper companies it has been easier to find a summer job as well as eventual. Salary was also an attractive factor. Some managers became interested in the paper sector when working there as a summer trainee.

- *My grandfather and father worked in the paper sector. And when living next to the mill there was the opportunity to visit the mill with my father. (Paper manager) –*
- *Growing up in the smell, you can't get rid of it. My grandfather worked in Voikkaa paper mill, my father in Kuusankoski, my uncle in Äänekoski and I work here. (Paper manager) -*

In the paper sector six managers experienced themselves to be in the top position in their career development. Part of the reason for that might be the fact that the paper managers had longer working experiences than the ICT managers and their average age was older than that in the ICT sector. Paper managers imagined to continuing their career on a horizontal level by learning new business areas like environmental matters. Six paper managers stated difficulty predicting their future career. They trusted that some opportunities would come anyway.

7.4.7. Networks and Advertisements in Career Development

ICT

Networking seemed to have great importance for recruitment in the ICT sector. Friends often gave tips about the need for ICT personnel. Jobs were also found by following advertising about open positions. These advertisements were mainly found on the Internet in the home pages of companies. Transfers from the company to another had taken place in the early career of a number of managers in the ICT sector but then settling down had occurred, and the people had moved from one position to another inside the organization.

- *I have always happened to be in the right place at the right time. I have never read advertisements for open positions. (ICT manager) –*
- *It has gone through the grapevine. We were having a coffee and talking whether there happened to be any thesis work available. (ICT manager) –*
- *I asked my friend if there would be work for me where he was working. He discussed it with one of the owners of the company, after that I was asked to visit them. This owner gave me an employment contract and asked me to sign and start working immediately. There I was, we made user identifications and I started working. (ICT manager) –*

People who have come from outside the company have usually gotten interested after seeing an advertisement in a newspaper or the Internet. The Internet seems to be a popular media for ICT professionals who look for new job-opportunities. In ICT companies it is common to use the Internet in recruiting.

Paper

The competence from earlier summer trainee periods helped the managers in finding their first permanent position in a paper company. Open positions in the paper industry were usually found from an advertisement in a newspaper, most often in the Helsingin Sanomat. After that the person moved inside the company from one position to another. Thesis-work is also one important way of access to the paper business. The change from one employer to another happened through seeing an advertisement and applying for the new position. Networking seemed not to have had such an importance in the paper sector as in the ICT sector. New jobs in the paper sector were mainly found through formal job openings.

- *My first place was announced in the Helsingin Sanomat. (Paper manager) –*
- *There have been vacancies. I have applied for them and been chosen. (Paper manager)–*
- *The changes from company to another have happened when I have seen an advertisement. The changes inside the company have happened when I have been asked to accept another job. (Paper manager) –*

The main recruiting channels are demonstrated in Table 9.

Table 9. Recruiting Channels

ICT	Networking Open positions Internal job opportunities Recruiting events
Paper	Open positions Thesis work Networking Summer jobs

7.4.8. *The Masculine World of Production*

Both the ICT and the paper sector are mainly masculine worlds; women are rare in both the software and paper business. There were only five female managers among the 30 interviewees. Within both of these sectors, production can be defined as a purely masculine area. Both ICT and paper sector professions require mathematical skills and girls usually choose something other than mathematics at school. There are ever fewer female students in technical universities. This is the main reason for the scarcity of females among the technical professions, but during the interviews I met also with attitudes that favoured males and showed suspicions about the competences of women.

ICT

In the interviews of the ICT managers it was stated that gender does not seem to have great importance in developing software, more important is how capable the person is. Women are welcomed into the ICT sector, representation of both sexes in the working place was said to have a good effect on the working climate. Concurrently the managers said there was a lack of female workers and managers in the ICT business.

- *Women work in documentation. Only one of them works in production. I see no difficulties. They are very nice girls. (ICT manager, male) –*
- *I feel comfortable working with men, I have worked a lot with them. They have taken me positively. I think there exists some kind of glass ceiling for women however. It doesn't*

bother me. I have a nice job. But there exist many men's affairs when men do things together. Other Department Managers are taken along more easily because they are male. I don't know if they think that it would be difficult if a woman goes along. Boys can't talk boy's business then. Actually I notice it only when I start thinking, it doesn't bother me every day. (ICT manager, female) –

- *This is a masculine environment. There could be more girls here. It forces boys to shape up when a girl sits at the same table. I haven't met any good female software developers but I know they exist. It is possible for girls to develop software, though it is a technical area. (ICT manager, male) –*

Paper

Women in the paper business have accepted the masculine world and made themselves “good guys”. The female managers in the paper sector seemed to work in supportive assignments like customer services and laboratories or in research and development. They also worked in projects or in environmental functions.

The interviewed paper managers stated that they saw no difficulties for women to enter the paper business. At the same time, these managers usually stated that the paper sector still maintains the old-fashioned tradition: old engineers recruit mostly young males. Where do these old engineers come from? Does the long history in the paper sector force hiring men only? Anyway, the managers welcomed women to the paper business. However, the managers thought that the attractiveness of the paper industry among female students should be increased by improvement of information and marketing.

- *It is certainly more difficult for women to work here. There are old engineers recruiting mostly male friends. Women have never been included in that group and never will. Unfortunately. As such there exist no barriers (for women to enter paper technology). There are rare examples of women who have managed here. (Paper manager, male) –*
- *This has been very old-fashioned area of business and we still don't have any female engineers working in the mill. There aren't so many women studying pulp technology. If they exist, they direct rather towards research and development. (Paper manager, male)-*

- *I have adjusted myself for being a "good guy". Even to the degree that they (men) don't always notice me as a woman. I have taken part in making an equality plan in this mill. We aimed to help the development among workers so that the mental boundaries between women's and men's work would be overthrown. With the help of summer trainees we have tried to make the attitudes more open so that there would not be need to divide work into women's and men's work. (Paper manager, female) -*

What are the reasons for the scarcity of female managers in the paper sector? The lack of women in the paper business is explained by the lack of a competent female work force. However, there are many female university graduates who are competent to work for in the paper sector. Men seem to suspect that women are mentally too weak in difficult situations, that decisions may need hardness and there is not always place for emotions. The women themselves can keep a low profile about their own competence and therefore are not noticed in the paper companies. One reason can be upbringing; women have been taught to be kind and not to bring themselves forward. Being a female manager in the paper sector requires adequate competence, hard work and strong self-assurance. She must bear the masculine atmosphere and the language of work. Instead of being accepted as a woman in the working environment she should become a "good guy".

7.5. Values Orienting Manager's Career on the Basis of Career Anchors

People, challenges, diversity and freedom were the said to be the most important factors in the ICT managers' work. The paper managers emphasized diversity, people, challenges and co-ordination work.

Managers were asked about the direction of their career by using an application of Schein's (1990) career anchor concept. The eight anchors were: Technical/Functional Competence, General Managerial Competence, Autonomy /Independence, Security/ Stability, Entrepreneurial Creativity, Sense of Service /Dedication to a Cause, Pure Challenge, and Life Style. Every manager valued each anchor using the scale: 1 - 5 where 1 was not important and 5 was very important. The results are demonstrated in the Figure 21. The contents of an anchor were first described by key words based on Schein's theory. In

addition to this valuation the managers gave reasons for their choice verbally and explained what in their current position assumes the knowledge and skills of each anchor.

This research is qualitative by nature, but in connection with Schein's career anchor-model quantitative statistical analysis was also used. In this case the Mann-Whitney test, also called the rank sum test, was considered to be appropriate, because it compares the medians of the group values. The research data was not normally distributed. A T-test for unpaired groups was used to strengthen the validity of the Mann-Whitney test. There was no statistical difference found between the results of the T-test (comparing means) and the Mann-Whitney test (comparing medians).

If the total sample size is seven or less, the Mann-Whitney test does not necessarily work. It has to be noticed that here group 1 represents the ICT managers (N=15) and group 2 the paper managers (N=15). The Mann-Whitney test does not assume that the population follow Gaussian distributions. In the Mann-Whitney test sums in each group are ranked and reported. (<http://www.graphpad.com/instatman/instat3hh.htm>)

Hypotheses were as follows:

H0 = ICT and paper managers, no difference

H1 = ICT and paper managers, difference exists

The results of the Mann-Whitney Test are presented in Appendix 5.

The Security/Stability anchor was the only one where a difference existed (0,002).

When Sig 0,002 < 0,05 -> H1.

The career orientation of managers is demonstrated in Figure 21. with the help of career anchors.

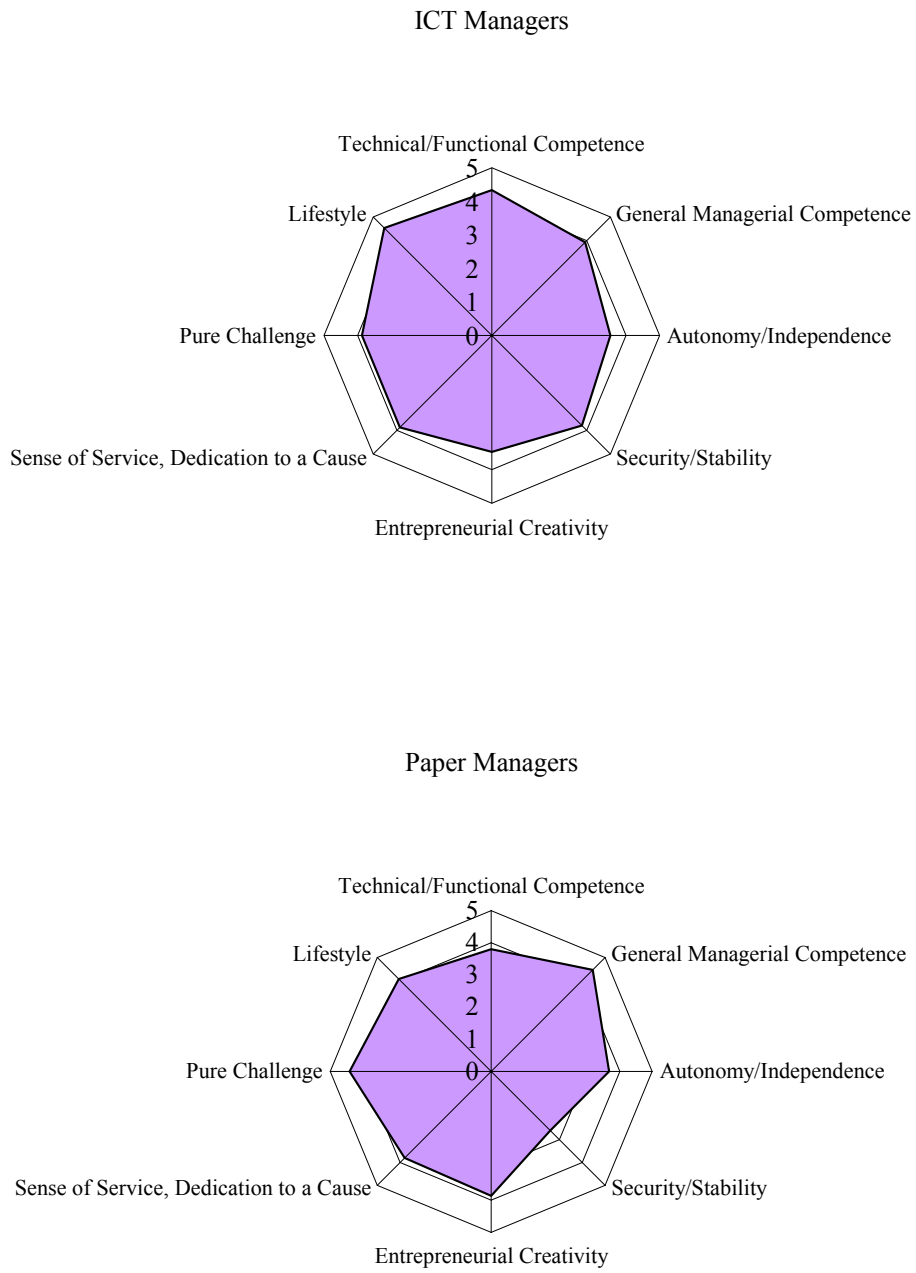


Figure 21. Career Orientation of ICT and Paper Managers

Technical/Functional Competence

The average of the Technical/Functional Competence anchor among the ICT managers was 4.33 and among the paper managers 3.80. In the ICT sector technical competence was emphasized more than in the paper sector. Solving problems and development as a specialist seemed to be important. It seems that the paper managers do not need as much exact technical knowledge as the ICT managers. Their career develops more towards general management. Expertise in strict technological knowledge decreases when a manager moves to general management tasks.

- *At every stage there occur situations that demand problem solving. (ICT manager) –*
- *Our customers demand that we have expertise and special competence, otherwise they do not buy our services. (ICT manager) –*
- *It is a challenge to make a team solve problems together. (ICT manager) –*
- *I want to develop myself as a specialist in my area. (Paper manager) –*
- *I am not any kind of specialist at the moment, more like a 'jack-of-all-trades'. (Paper manager) –*
- *Technical/functional competence is not so extremely important. (Paper manager) -*

General Managerial Competence

The average of General Managerial Competence anchor was 3.93 in the ICT sector and 4.47 among the paper managers. A managerial position in the ICT sector provides leadership skills when working in teams. Management is not emphasized in an ICT manager's work. In the paper sector it is also important to have leadership skills. However, management has a greater role in a paper manager's work than in ICT managers' tasks.

- *Leading people belongs to my daily work. (ICT manager) –*
- *In my opinion the most important thing is to get along with the project team. (ICT manager) -*
- *Financial responsibility at the end is quite low. (ICT manager) –*
- *It is a question of leading the whole group of people. Controlling production, costs and everything that comes along. (Paper manager) –*
- *Pure management is needed. Leadership is now emphasized too much. (Paper manager)-*

- *This work is more like controlling the cost efficiency with the help of people. (Paper manager) –*

Autonomy/Independence

In the ICT sector the Autonomy/Independence anchor had an average of 3.53 and in the paper sector 3.67. In the ICT world a person cannot be independent of others, but there exists willingness to affect one's own tasks. It is important take care of one's duties. In both sectors it was stated that the supervisor should give enough freedom to the subordinate and should not "breathe down the subordinate's neck". In the paper industry the work is often connected with the work of others. The need for autonomy involves to arranging one's own work.

- *I want to affect my own work. (ICT manager) -*
- *It is good that I can move quite freely, as long as people can reach me and the tasks are done. (ICT manager) -*
- *Some sort of independence and freedom and maybe autonomy are quite important. I do not even expect my supervisor to stand and watch what I am doing. (Paper manager) -*
- *Nothing is done alone. This is dancing with a pair. (Paper manager) -*

Security/Stability

In this anchor the greatest difference between the sectors is seen. It was surprising to find out that the ICT managers scored higher on the Security/Stability anchor than paper managers. In the ICT sector the average of the Security/Stability anchor was 3.80 and in the paper industry 2.60. The question of relevance is worth evaluating in this context, however: How relevant is the question of security and stability in work to an ICT manager or a paper manager? Security/Stability seems to be more self-evident for the paper manager than it is for the ICT manager. In the paper sector employment is more taken for granted. For that reason it is difficult to compare the importance of the Security/Stability anchor, despite the difference between the values of the two groups. Anxiety over security in employment is more typical in the ICT sector than in the paper industry. Maybe the changing business cycles and the recent downsizing operations in the ICT sector have caused it. ICT managers esteem permanent employment but an exact definition of tasks is not so important. The contents of work may and is expected to vary. The paper managers seem to be more

confident of the ability of the company and sector to employ people; there does not exist a threat of becoming unemployed. In general, it can be assumed that large paper companies can better guarantee employment inside one company, but ICT companies form a kind of network where managerial competencies can be grown inside the ICT sector, inside many small companies. It seems that the feeling of security is based on the manager's own competences in the ICT industry whereas the security of the paper managers seems to rest on the company.

- *Permanent employment is important. It is not so important if tasks change. (ICT manager) -*
- *Most important is a stable, permanent employment. (ICT manager)-*
- *Of course such basic security is needed. But I do not hunger for certainty of what I am doing and where I am doing it in two years from now. (Paper manager) -*
- *It is good to be in this kind of work, I'm not afraid of being unemployed tomorrow. It is not important to know what I'm doing tomorrow but it is important to know that I am doing something tomorrow. (Paper manager) -*
- *I see that if this work comes to an end, something else will come up. (Paper manager)-*
- *It is safe to be here, I can see continuation here. I have noticed that this sector of industry will remain in Finland and will not disappear. (Paper manager) -*

Entrepreneurial Creativity

This anchor measured both entrepreneurship and creativity. Both aspects were discussed in the interviews. Many managers in both sectors noticed that entrepreneurial creativity is needed in everyday work, even though they were not working as entrepreneurs. It was surprising that the ICT managers score lower than paper managers on entrepreneurial creativity. Only one ICT manager reported that he was interested in starting his own company in the future. In the ICT sector the average value of the Entrepreneurial Creativity anchor was 3.47 and among the paper managers 3.87.

- *Programming is creative work. In a given framework you should invent an intelligent solution to the problems. (ICT manager) -*
- *I am a kind of entrepreneur in my work. Basically a sort of boss or salesman in some small company. (ICT manager) -*

- *I often use the example that we need more entrepreneurs to our mill, boys from farmhouses. They are used to repairing a tractor when it is broken. (Paper manager) -*
- *Every one of us should have a spirit of entrepreneurship. I have taught here that if a person has a right to do things he/she also has a responsibility to promote things. (Paper manager) -*
- *This is a kind of inner entrepreneurship. Nobody comes to tell you how you should do things. You should develop, discover, discuss and try to find right operation models. (Paper manager) –*

Sense of Service/Dedication to a Cause

The attitudes towards service were quite equal in both sectors. In the ICT sector the average was 3.87 and in the paper sector 3.80. Both sectors were experienced as being a service industry; there is a need to keep the customer satisfied. Also the need to help workmates was obvious, nobody can do things perfectly alone. There is a need for a supervisor to create positive circumstances for subordinates, so that things are taken care of.

- *I like to help others, it is quite important. And you feel good when noticing the own capability to help. (ICT manager) -*
- *Because I've been here so long, people often queue on my door for my advice. (ICT manager) -*
- *I cannot assume that something can work here if I don't help others. (Paper manager) -*
- *Service is one way of leading an organization. You are serving other departments, mills, customers or subordinates. (Paper manager) -*

Pure Challenge

The Pure Challenge anchor was a bit more important to the paper managers than to the ICT managers. The average in the ICT sector was 3.87 and in the paper sector 4.40. The need for solving more difficult problems and showing one's own strengths came up in the interviews, said to be more important for oneself than for others.

- *Solving problems and doing things well is important. (ICT manager) -*
- *I don't consider myself as a competitive person. But the real challenges are most important. (ICT manager) -*

- *I think it is like a cornerstone for me. (ICT manager) -*
- *It is the driving force. (Paper manager) -*
- *There is need for showing my strengths just to myself. That I can do and take care of something. It directs me more than just showing things to others. (Paper manager) -*

Life Style

The Life Style anchor was important to both sectors, and a bit more important for the ICT managers. The average among the ICT managers was 4.53 and among the paper managers 4.07. Coping in life and a balance between the different sectors of life were essential. It appears that in the beginning of a career there is a strive to show one's own strengths and the willingness to work overtime doing interesting tasks. A manager's life seems to calm down when he/she gets a family. The managers in both sectors also appreciated life outside work.

- *If I had to name the three most important things in my life, they would be: family, life and then work. (ICT manager) -*
- *I'll put it this way: in the morning a man goes to work with good feelings and in the afternoon he leaves it with good feelings. This is quite in balance, and does not get on one's nerves. Everything is nice both at work and at home. (ICT manager) -*
- *If a person is totally committed to his/her career and does not take care of the family, the career will not lead far. (Paper manager) -*
- *This is the most important matter. There must exist four foundation pillars in life: family, work, hobbies and friends. One should keep a balance between these four. Temporarily one may falter, by turns. Balance should be achieved quickly. You'll manage even if one pillar is missing but it becomes more difficult when yet another pillar begins to falter. (Paper manager) -*
- *When you leave your work, anyone of us, you or me, no one remembers that you worked here after two weeks. In your family album the photos will remain. (Paper manager) -*

7.6. Socialization and Commitment

7.6.1. Socialization Tactics

Individuals select organizations when applying for jobs. This selection is usually based on education, competence and former working experience. Also organizations go through a selection process when hiring new employees and socializing them. In the ICT sector formal, prepared familiarizing plans and induction processes, were used with all newcomers. HR, the supervisor and the workmates were responsible for familiarizing a newcomer step-by-step into the organization and giving him/her a prepared information package and suitable tasks to do. During the induction process the newcomer served in the role of an apprentice, not that of a fulltime worker yet. The commitment of the newcomer was ensured on the organization level by familiarizing him/her to the organization and his/her tasks, with apprenticeship contracts, given education and interesting tasks to do. In the ICT organizations, continuous commitment of the personnel was emphasized. The organizations took care of the commitment of the employees by informing them about company strategy and policy. The organizations also committed the personnel by giving them interesting tasks to do and by giving them freedom to resolve problems in their own way. Organizational and personal interests were checked regularly in development discussions between a subordinate and a superior. The possibility to use and develop one's own competences played a great role in the commitment. The organizational resources that were put into the education of personnel were appreciated. Community spirit in the organization was promoted and maintained through the company's collective events.

7.6.2. Togetherness

Work communities are unique and permanent social combinations created by individuals. Communities are socially unique combinations of persons. It is possible for communities to create original cultures with their own values, norms, attitudes, habits etc. Cultural characteristics arise collectively from joint experiences. Culture arises on the basis of the socialization process (Aaltio-Marjosola 1992, 39 and 46 - 47). According to Kanter (1972), commitment leans on the feeling of uniqueness typical of one's own work community and not common in other work communities. When a person is socialized into the organization, he/she will not change the work place on impulse. In this research, eye-catching is the sense

of *togetherness* inside the ICT companies. The ICT personnel create a tight community, almost like a family, inside the company. There were many factors common to all the ICT managers interviewed. A majority of them worked in the software development process; content of their work was quite similar. They were quite homogenous in terms of their educational background, age and sex. In addition to the kind of strong culture (see Aaltio-Marjosola 1992, 42) inside the company, the managers' life course was in the same phase: the ICT managers shared the same situations in their private lives. Each of them had finished their studies, bought homes, gotten married and created families. They knew each other well, shared collective leisure time activities associated with each other in their free time. At work these people shared the same values, corporate vision and mission. They all knew in what direction the company was going and why. Commitment rose from doing work together, people were interested in what they did and how they wanted to develop. The company had made a commitment to group by giving them freedom to develop and by informing them about the strategy of the company. In addition to that the camaraderie with their colleagues and the communal feeling inside the company had also a great impact on the commitment of the individual. While there might be questions about the one-sidedness of the group's social intercourses: that is, is it good for you if you associate with the same persons both at work and in leisure time? Answers to this question were not found within this research data.

The feeling of togetherness identified among the ICT managers did not surface among the paper managers in the same way. Paper managers accomplished their tasks at work but spent their leisure time outside the work community.

7.6.3. Commitment Factors in the ICT Industry

ICT

The most important thing that contributed to the commitment of the ICT managers to the sector and to the company was the competence that they had developed through education and experience. After that came interesting tasks, good workmates and loyalty towards the organization. Here the connection to the Law of Linus can easily be observed (Torvalds 2001, Lampikoski 2003), i.e. important factors at work are social contacts with colleagues and interesting tasks where development of intellectual abilities is a great joy. The managers

interviewed expected their employers to maintain their side of the psychological contract; the managers wanted to trust that if they did their tasks carefully, the employer would keep them employed. In committing to the ICT sector good relationships with one's colleagues and a collegial view seemed to be essential.

- *I can't do anything else! Such a basic competence has developed, some understanding and know-how about this kind of software. It would be frightful to change to another business area. (ICT manager) -*
- *The most important thing is that all my friends work here. Maybe I have been living life through work or almost all of my friends have chosen the same place of work. The fact that commits me to the sector is that I am not able to do anything else. (ICT manager) -*
- *Employment contract. Loyalty. Particularly that it is two-sided. I do not want to be the only giving side of the contract. (ICT manager) -*
- *Interesting work. Everybody does not have a possibility to do this kind of work in the ICT sector. (ICT manager) -*
- *The work itself, it is meaningful and interesting. We have a very nice crew here. (ICT manager) -*

A question concerning stock options was not directly asked in the interview, but in the ICT sector options are used and mentioned when commitment was discussed. However, options seemed to be more like extra income to employees than stimulus for commitment. In the paper sector stock options were not brought up in the interviews. In the ICT sector also visions, missions, values and strategies were mentioned as important to building commitment among personnel. These things were marketed and widely communicated to the entire work force. Commitment in the ICT sector seemed to be both reactive, based on factors on employee-side such as collegiality and shared leisure time, and proactive the part of the company including the offering of challenging work, development opportunities, and encouraging a shared culture.

In the ICT organizations the importance of continuous commitment seemed to be taken more seriously than in the paper sector. This may arise from the insufficiency of a competent labour force in the ICT sector. In all the ICT companies studied a prepared induction system was used at the beginning of employment. In the ICT sector continuous

commitment was taken care of by informing and involving the managers in business actions and company development, by giving them challenges and education. Stock options seemed to have exogenous importance for commitment. The ICT companies were much smaller than the paper companies and maybe the sense of solidarity and togetherness was easier to construct and maintain in smaller companies.

7.6.4. Commitment Factors in the Paper Industry

An emphasis on commitment appeared to happen in the paper sector mainly in the beginning of the employment contract. Employees were initiated to their new tasks and the organization, but less importance seemed to be placed on the continuous commitment of a person than in the ICT companies. Commitment was seen to happen once, in the occasion of entry and socialization and occurred in a form of education.

The most important commitment factor among the paper managers was locality. The work of the spouse, schools, summer cottages and houses kept the managers in the present place. After this came competence, development possibilities and workmates. Earning potential as a commitment factor seemed to be important when choosing the area of studies. Income was more often a hygiene factor (see Brooks 1999, 57) in career. The managers thought that compensation should be reasonable but it was not the reason for committing to the organization. Laurila (1997) has mentioned the tradition of locality among paper managers, the managers begin their career on the mill-level of the organization and make their career inside the company. Younger managers are more directed to cosmopolitanism, however.

In the paper sector companies the togetherness feeling was not visible like in the ICT companies. The paper companies were larger than the ICT companies and the structure of the personnel was more diverse. Employees interviewed in the paper sector structured their existence as being a part of a large and safe company with a long history. Their commitment was not based on similar work tasks, congruent education, same life phase, sex, age or common leisure time activities as it was in the ICT sector.

The concept of a psychological contract in transition also came up among the paper managers. It was possible to identify growing thoughts of a new career among managers

(see Arthur and Rousseau 1996, 370 – 380). Some paper managers followed the job markets outside the company. These thoughts may arise from a mistrust of organizational loyalty in the aftermath of the recent waves of organizational downsizing (Mir et al. 2002). There seemed to be mistrust and uncertainty towards the employer. The psychological contract between the employer and the employee was not necessarily certain anymore. This came up when some managers described how they were following what was happening in the world outside the company and taking care to make sure their competences were up to date. One manager found it dangerous to be completely committed to one company because in such a case the company has the possibility to do almost anything it likes to the employee. Many managers also indicated that they had not made an employment contract for life with their present employer, that “everything was on sale”. The paper managers appeared to trust their own competences and also were concentrating on maintaining their employability (see Gratton and Hope Hailey 1999, 81) by continuous learning. They did not feel uncertain about the future: something will come up and their competencies will be needed also in the future.

- *The company has a good profile. My spouse works here and it commits me to this place. And schools for children, cottages, houses. (Paper manager) –*
- *Living here makes it hard to change place and firm. (Paper manager) -*
- *In fact, it represents dangerous thinking if you should say that you are completely committed to some company. In that case the company could do anything it wants to the employee. Good working possibilities, this is a large company and it gives possibilities to follow one’s own aspirations and desires. (Paper manager) –*
- *Everything is on sale, I haven’t made a life-time contract with the company. Maybe it is typical for younger generation not to have such strong values, the person working for a certain company from childhood. Feeling some kind of penchant for the company, finding it impossible to leave the firm. (Paper manager) –*

Only in one company in the paper sector did a manager mention a controlled familiarizing system of new employees. In that particular company commitment was something that was emphasized mostly at the beginning of employment. While employees were given suitable education in most cases, the importance of continuous commitment did not rise in the discussions in the paper organizations.

7.7. Managers' Future Expectations

Challenges and interesting tasks were the most essential future expectations at the personal level in both sectors. After that came the well-being of the family. Family matters connected to balancing work and family were emphasized in the paper sector more than among the ICT managers, and also health was named more often in the paper sector. Continuation of employment in the future was desired in the ICT sector; in the paper sector there seemed not to be any threats for the managers' safe living.

7.7.1. Expectations on Personal Level

On a personal level, future expectations were connected to health, balance in life and challenges at work. The paper managers mentioned balance between work and family more often than the ICT managers.

- *Getting along. That there will not occur big changes in the future, at least to a negative direction. (ICT manager) –*
- *Balance and satisfaction in life. Convenient amount of challenges, not too much. There is no need for stress. (ICT manager) –*
- *Comprehensively speaking, not getting sick, that something happens that inhibits doing something. Anyhow, there should be action in life. (Paper manager) –*
- *New challenges. If you think that you still have 25 years of working life ahead, it is a long time. Also that you can be appreciated as a female employee in this organization. I hope that I can maintain my desire to keep on that development. (Paper manager) –*
- *I want to participate in developing this mill. On the family-side, of course you worry about the children, no matter how old they are. (Paper manager) –*
- *Health and a long life. Balance in family and child's advancements in life. Diversity in work challenges. (Paper manager) -*

7.7.2. Expectations at the Business Development Level

ICT

In terms of work, trust in the future dominated in the ICT sector. Economic situations continue to change but product development goes on. During the latest depression that

wheat was separated from the chaff, and only the capable companies survived. Work in the ICT sector has calmed down since the bursting of the ICT bubble.

- *It is for certain that software will be developed more and more. When electronics and consumer electronics increase, and now it seems that different things will have computer-controlled systems, it means that before computers learn to program themselves we are needed. And anyhow, it will take a long time. (ICT manager) –*
- *When we have started playing, so that everything begins to be automated, then it is difficult to stop. It needs somebody to take care of the old systems and make new ones when the systems get old. (ICT manager) –*

Paper

The future of the paper sector was seen as positive and strong by those interviewed. The production of paper will not end, products will develop and companies will get even bigger in the future. Potential new markets are seen in Asia, China, Africa and South-America. Paper managers did not see any serious threats for the paper sector.

- *I don't see that the paper industry will disappear or be threatened e.g. by electrical industry. Glass, aluminium or plastic will not gain ground in the markets. There may happen geographical changes but I see the future of the sector positively. (Paper manager) -*
- *Brazil, South America, China and Asia are seen as potential areas. Europe and North America are quite saturated areas when comparing the use of paper and the gross national product (GNP). (Paper manager) -*
- *Who knows? I don't know if paper is needed in the future elsewhere than in toilets, if even there. Such paper that is read, as advertisements, is thrown away. But maybe something new will be developed, like coffee cups or something. Anyway, pulp is such a versatile material. If it isn't paper that is produced then it's something else. It will continue for decades. Something will be invented, more challenging tasks. (Paper manager) –*

7.8. Career Profiles

The managers of this research were educated in technical sciences. Their careers developed in areas of general management, a specialty or project management, in either information and communication technology or the paper industry. The career profiles of all the interviewed managers are presented in Appendix 4.

7.8.1. Career Profile of the ICT Manager

The ICT managers were mainly engaged in developing software. The work was connected projects where suitable applications were developed for customers' needs. Applications were designed in interaction with customer representatives and software developers.

An essential characteristic in the ICT sector was *interaction*. The work in the ICT companies was done in groups, and socializing with colleagues continued also in leisure time. The same kind of educational background, proficiency, being of the same age and sex, sharing the same situation in their private lives, along with shared organizational events and teamwork contributed to a particular togetherness-feeling among the ICT personnel. The strong organizational culture insured the commitment of the personnel and controlled the transition to other organizations. Transitions were common in the beginning of the ICT career but calmed down later. The feeling of being a part of the organization and having challenging work and friends there attached the person to the organization. This kind of togetherness was not seen among the paper managers.

The career of an ICT manager was developed inside the ICT sector. According to old and new meanings of career (Arthur and Rousseau 1996b) the career concept in the ICT sector is mainly new; working experience is gained in different companies and positions (see also Mirvis and Hall 1994, Arthur and Rousseau 1996, Gunz et al. 2000). However, signs of hierarchical structure, representing the traditional career concept, can be seen also in the ICT careers. Through career progression the responsibilities and power grow and better titles are signs of hierarchical upward movement. ICT organizations are newcomers to the labour market. Networks with customers, colleagues and other organizations have a great importance in the ICT organization. All ICT managers had permanent jobs, but they

followed the development of their own sector and deliberated about possibilities outside the present company. Groups are formed through interaction inside the organization according to business needs. Colleagues and teamwork are important. Learning in the ICT sector is based on organizational and personal needs, work is done collectively, and the team solves problems together. All team members must have appropriate competence in order to manage problem solving. The ICT sector represents the new meaning of civility (see Arnold and Rousseau 1996b), based on personal competences and interaction with colleagues. Interaction happens at work but also in leisure time. Transitions are a continuous process in the ICT sector, not seen as exceptional. The career progresses through transitions, it is formed in interaction between the manager and the organization. Open positions are not necessarily visible or advertised. In the ICT sector the development process (movement) of a career as such is important.

The average career duration of the ICT managers was 9.53 years. It seems that a typical feature of the ICT managers' career was that the career had begun when education was not finished. The attitude toward time and duration of posts differed between the ICT and the paper sector. A five-year period in one ICT position was considered to be a long time.

In the ICT managers' careers the phases junior-partner-senior-mentor-ambassador (see Sveiby and Risling 1987) could be clearly delineated. The career progressed from the phase of junior to more advanced positions. The role of a mentor, advisor or consultant emerged during the career progress of an ICT manager. In the paper sector this kind of progression could not be seen. The managerial career in the paper sector continued to more responsible tasks but the manager's role as a mentor, advisor or consultant to others was not emphasized as much as in the ICT sector.

Networking inside and outside the company was important in the ICT sector, but business secrets were protected from outsiders also.

7.8.2. Career Profile of the Paper Manager

Companies in the paper sector produce paper, pulp or paperboard. The tasks of the managers in this research were connected to production, maintenance, projects or customer relations.

An essential characteristic in the paper sector was *introspectiveness*. Membership in a large and recognized paper organization raised the self-respect of the managers and committed them toward the organization. According to research data the history still burdens paper companies: things are usually done like they have always been done. Old traditions had power in the career development process affecting the decisions of who would be hired or promoted.

According to the old and new meanings of career (Arthur and Rousseau 1996b) the career concept in the paper sector is mainly traditional (see also Mirvis and Hall 1994, Arthur and Rousseau 1996, Gunz et al. 2000). The careers of the paper managers developed inside one organization. Open positions were visible in organizational networks. At senior levels the paper managers were often asked whether they would accept another post. The career concept was traditional, professional advancement leading upwards in the hierarchy. The long history and the big size of the paper companies made changes slow. The career of a paper manager usually started in positions like Line Engineer, after which the first managerial position, like that of a Line Manager, was achieved. There could be several managerial positions in a person's career path. Results of this research indicate that the closer a manager is to the core business of the firm (i.e. production) the more recognised and notable place he/she has in the organization. Production Managers and Mill or Unit Managers in the paper sector represented the highest managerial position in this research.

The paper managers were working in permanent positions, but many of them expressed thoughts about the possibility of working elsewhere. In the paper sector groups were appointed by the organization. Dynamics came from interaction with customers, subcontractors and distributors. Learning in the paper sector seemed to be individual-centered (see Arnold and Rousseau 1996b). A person attended courses based on his/her own initiative. The paper managers constructed their citizenship through organizational membership: they found themselves as members of a particular company. This can be considered as the

old meaning of civility. Transition in the paper sector can be understood through the old meaning when transition is movement between stages and happens only exceptionally. Career transitions happened when the manager got a new job after having applied for it. Career development in the paper sector seemed to be more fixed than in the ICT sector. Being in a position (existence) was more important than moving within organizational hierarchy.

In the paper sector the average duration of a manager's career was 13.60 years. Paper managers had four years' longer working experience than the ICT managers. A five-year period in one position in the paper sector was experienced to be a good time.

7.9. Reliability, Validity and Limitations of the Study

Reliability and validity as terms have arisen in the quantitative research domain and they are not easily applied to qualitative research. According to Janesick (2000, 393) the core matters in qualitative research are the descriptions of persons, places and occasions. A "soft" method like focused interview allows describing the multiplicity of the reality. It aims to reach the nuances of phenomena and compress them in order to transmit real thoughts and experiences (Hirsjärvi and Hurme 1991, 128).

Reliability means the repeatability of the measurement results. The reliability of research insures for the ability to give non-random results. The result is reliable when the same case is examined by two researchers and they come to the same conclusion, or if the same results can be given in two interviews when 1) different interviewers are used or 2) when the interview is re-arranged by the same interviewer in the same circumstances. Re-arrangements are more easily done in quantitative research, based on figures and inquiries, than in qualitative research, based on interaction between two people. In qualitative research and conducted through focused interviews, as it was in this case, the interview situation is always unique and it is impossible to interview the same person about his/her career in exactly the same way twice, whether by the same or different interviewers (Hirsjärvi and Hurme 1991, 129, Silverman 2001, 225).

Validity means the capability of the indicator or research method to measure just what is intended to measure. Validity is also connected to the researcher, how he/she can use his/her method to study what is intended to study. The basic idea of validity is based on quantitative research. The validity of qualitative research can be increased by designing a proper interview framework through accurate reporting of the manner in which the research has been carried out and by choosing the right interviewees. Validity can also be increased by the researcher's familiarity with the topic (Hirsjärvi et al. 2001, 214. Hirsjärvi and Hurme 1991, 129. Hirsjärvi and Hurme 2001, 184, Silverman 2001, 232).

According to Pirttilä (1979) the most central technical problems in interviews are communication problems between the interviewer and the interviewee (see also Eskola and Suoranta 2000, 213). In this study the researcher posed the questions, based on the interview frame, correctly and alike in every interview. By concentrating on the answers given in the interview it was easy to learn if the question was understood wrongly. In an interview the progress of communication can be better controlled than in a questionnaire (Hirsjärvi et al. 2001, 193 – 194). In one case the interviewee answered another question than asked, but there was an opportunity for the researcher to clarify the question immediately and receive a proper answer.

The researcher listened to each interview three times before beginning analysis, once in the interview situation, second in the transcribing process and third when checking the typed text. This threefold handling of the data brought the researcher closer to the content.

Validity of information should be analysed by considering the validity of every question (Alasuutari 1999, 103). Validity represents the compatibility between description and explanations and interpretations. Interpretation of the data occurs as a result of four factors: the interviewee, interviewer, researcher and reader. The same data can be approached through different frameworks. Successful interpretation happens when the reader holds the same framework as the researcher and ends up with an accurate picture of the facts as found by the researcher (Hirsjärvi and Hurme 2001, 151). When the interviewer and the researcher are the same person as they were in this research there is one less stage of interpretation. Validity can also be increased by offering direct citations to augment presentation of the

research data. With the assistance of citations the reader has the possibility to come to the same conclusions as the researcher did.

One of the limitations of this study might be the research method and the way in which the interviewees were chosen. The qualitative interview method does not allow for statistical processing and generalization. The results inevitably contain a lot of interpretation. The selection of the interviewees was done with the help of a director in every company. He decided potential persons for interviews on the basis of the description of the research made by the researcher. Such a scheme of selection carries the chance of bias.

Every manager was asked the same questions but the answers varied in extent and content. The quality of the interviews varied. Some managers wanted to explain their careers in details, others did not have time for a long interview and they described their career stories more generally. For example one manager in the early stages of career explained more fully his short career than did a manager with 17 years of working experience.

Only two business sectors out of the nine in the Finnish economy were studied here. These are the most important two in Finnish economy. The interviews were done in the Finnish society and companies were acting under Finnish labour legislation. The ICT and paper sectors differ a lot, and the results of this study might be quite different if two different sectors were compared, for example the paper business sector and metal processing sectors.

8. DISCUSSION OF THE STUDY

In this final chapter I will first recount the goal of the research and present the key findings crystallized in the light of the related theories presented above.

8.1. Goal of the Research

The argument of this study was:

The business sector has an importance on how managerial careers are constructed in the ICT and paper sectors.

The basic research question was:

- What kind of influence does the business sector have on managerial careers?

There was also a desire to learn answers to the following questions:

- What factors commit managers to ICT and paper sectors?

- How does paper and ICT organizations socialize the person into the organization?

- What career anchors direct managers' careers?

8.2. Summary of the Most Important Findings

In this sub-chapter I concentrate on the key findings of this research. I identified several differences but also found some similarities in managers' careers in the ICT and paper business sectors. I also discovered factors that commit managers to ICT and paper sectors.

Career research has earlier been connected to the life course and the focus has been on the whole lifetime of a person (see e.g. Schein 1978). In this case the study concentrated on the early career of managers.

Schein's Career Anchors were used in order to identify potential differences between careers made in paper and ICT business sectors. The Security/Stability anchor was determined to be the only one where a difference exists.

The target group of this study is in Schein's Model of Life/Career/Family Cycle Interaction (see p. 126) are living in the periods A2, B1, B2 and C1. The managers have been working for some years after or while completing their studies and they have established their place in the company. Their average age is 37, so the crisis said to happen in the 30s is going on or has just been passed. The majority of managers in this research, (87 %), have a wife or a husband or live with a regular partner; 63 % of them have 1 to 3 children.

The technical managers in the both the paper industry and ICT industry are often responsible for production, research and development. Part of their job is to look after budget and personnel, take care of customer relations and develop the organization to better serve the core business. Many of the managers in this study have multiple roles in both work and private life. They are in a particular position in their organization, in the role of a supervisor, a subordinate and a colleague, a team member and a representative of the organization. In their private lives these managers are spouses, fathers and mothers, brothers and sisters, children of their own parents. Different roles may cause conflict situations in managers' lives.

Career progression seems to lead engineering managers towards administrative work. Over time responsibility over personnel and budgets increases and the proportion of work done in the area where the person was educated decreases. In this research the managers seemed to yearn for the days when they were doing concrete work, for example coding software or purchasing pumps for the mill. If the manager has chosen the role of specialist, it is easier for him/her to keep close of doing the core business and use know-how acquired through education. By advancement he/she often becomes a consultant for others.

Sipilä (1996) puts the project manager in the specialist ladders. According to the research data of the present study it is possible to argue that triple-ladders exist where the project manager's career path can be detached from the specialist ladders (Figure 22.).

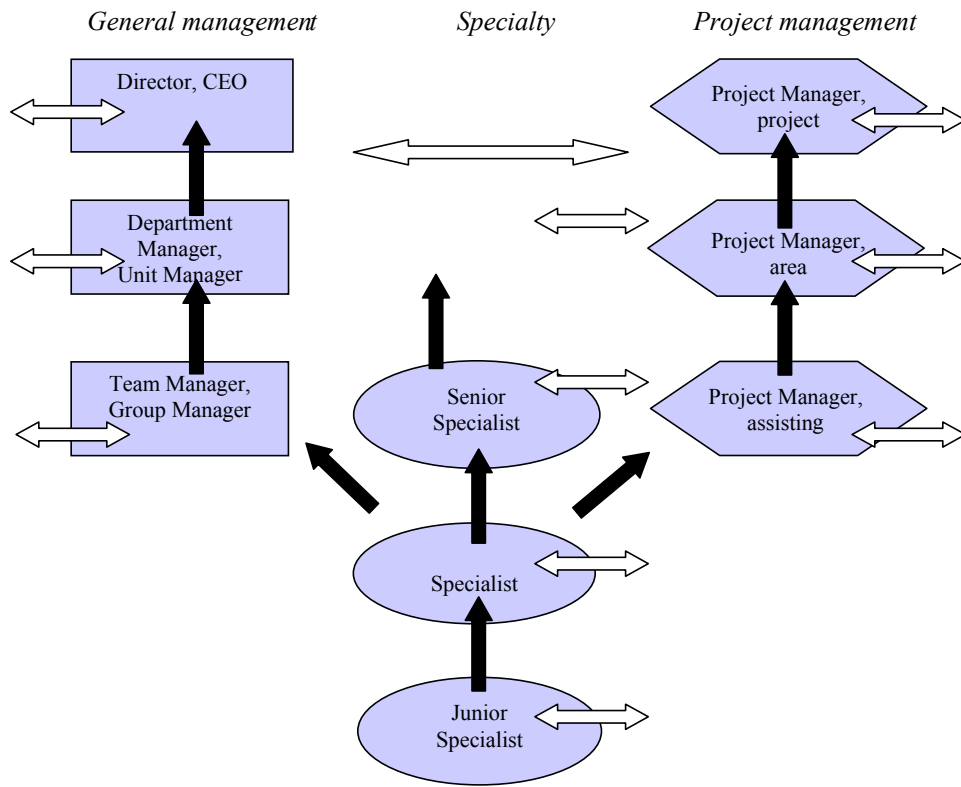


Figure 22. Triple-Ladder Career Model

In the ICT sector the project can be a customer project where, for example, software applications are developed for customer needs. In the paper companies division into three different career paths can also be delineated. A general manager attends to the wide lines in the company. A project manager concentrates on a particular temporary and fixed project in the organization. A specialist takes care of a certain process, or research and development. In the paper industry a project can be connected to constructing and/or starting a new mill, machine or control system. The project manager is interested in working on fixed term projects. He/she enjoys the diverse tasks, interaction and even rush of work, he/she enjoys the hectic atmosphere a project brings. Typical to projects is that they are temporary by nature, projects come and they go. The project manager coordinates, arranges, negotiates, orders and takes care of costs in the project. He/she keeps the wheels turning but there is no

need for any deep competence in any particular area. He/she is eager to start working on another project when the present project ends. The career of a project manager proceeds, when his/her experience grows, from assisting with project tasks through wider task assignments to main responsibility for a project. Project management can be seen as general management in miniature scale, the same factors as those important on the company level must taken into consideration. It is possible for individuals to change position to the general management side of career ladders before the next project becomes available. Because of the lack of special expertise it is difficult to change from project management ladders to the specialist side.

The Sipilä's (1996) concept of career ladders directing only upwards is inaccurate. A career path is not necessarily directed continually upwards (black arrows in Figure 22.) but horizontal (white arrows in Figure 22.) or downwards motion is also possible. All kinds of motion were perceived in this research. For that reason it is wiser to talk about career in the *areas* of general management, speciality or project management.

In this study the Rosenbaum's (1984) career tournament model is evidenced in the development process of managerial careers. Career history and the present position define the opportunities for and individual's future career. Competency connects, for example, connects to software development or environmental matters in paper industry. Transitions from the area of speciality to another are exceptional. Careers develop inside the ICT or paper sector because the know-how of the career holders is connected to the business sector.

The career development process through junior-partner-senior-mentor-ambassador phases (see Sveiby and Risling 1987) was supported by this research especially in the ICT sector. Career in this industry begins in the position of Software Engineer when his/her work is basic, coding software. When he/she achieves experience, he/she will gain more responsibility and voice in the organization. Then he/she becomes a consultant to others in the organization.

In this study the development of the new career model working environment is also obvious. Progress is more easily noticeable in the ICT sector but the paper sector will follow. Career is seen in the context of the global economy characterized by global economic competition,

technical innovation, smart technology, advanced telecommunications and changing demographics. The rise of individuality and continuous learning direct one's career development.

In every company of this study some sort of career development activities have been implemented. For example, employees plan their career and take part in supervisor-subordinate-discussions focused on development. In these organizations the career management is based on the need for personnel with particular skills. In the case of organizational change the present personnel is evaluated in order to assess their potentials for the new positions.

The majority of the managers interviewed deny consciously planning their careers. Despite that they indicate that they look for new challenges after five years in one position, or even earlier. Careerism seems to be understood negatively, at least most managers hesitate to express their career plans directly.

8.2.1 Paper Sector

In the paper sector it has been common to recruit to the children of personnel as summer trainees. It has been possible for individuals to be acquainted with the paper business then for first time. On the basis of this experience, many of the paper managers become then interested in the paper sector and aim toward technological degrees. Studies and work alternate but does not overlap. During school terms paper students concentrate on their studies; they work only during summer holidays. Generally paper students first finish studies before they start a regular work. Careers in the paper sector generally begin with thesis work or from the first permanent position. The first permanent post is generally located in a newspaper, usually from the Helsingin Sanomat. The first position is usually of a specialist working in a particular strictly defined area. Paper managers construct their career inside one paper company. Often job-openings are formally made available at least in the company's intranet. Paper managers expect their tasks to change after every five years. The careers of paper managers progress to demanding managerial tasks with larger responsibility and are directed from the role of a specialist to the area of general management. The closer managers work to the company's production function the more recognized there positions are.

Traditional career thinking is strongly in evidence in the paper sector, but there can also be seen signs of new career thinking. Paper managers, for example, take care of their own competences and follow what happens in the labour market outside one's own company.

Paper managers seem to commit more to the company than to their professional group or work community. Important committing factors among paper managers are connected to environment and location. Work of the spouse, schools of the children, house and summer cottage are important in committing paper managers. Commitment in the paper sector seems to happen once, in the beginning of the employment. The psychological contract in the paper sector is in change, it is not necessarily certain anymore. There exist some kind of mistrust and uncertainty towards the employer. Some paper managers are on the alert for the actions of the organization. In the paper sector the managers experience stability in their working conditions. The psychological contract in the paper sector used to be more relational (see p. 155) before than it is now in the light of the present research data. The progress is toward more balanced contract. Paper technology develops and the environment in paper sector is becoming more dynamic but the speed of change is slower than it is in the ICT sector. When compared to the study of Viljanen and Lähteenmäki (2002b) the paper managers still commit more to particular company than occupational group. Everybody in the paper sector are not committed to a particular company, but the growing working experience in the paper sector commits the managers to the paper business sector, however.

8.2.2 ICT Sector

In this research the ICT companies mainly work in software customer projects where software applications are designed, tested and documented. It is a world with deadlines and contracts to be finished. The work done in ICT companies has to be integrated with customer schedules and working time. There may be several unfinished projects continually underway where the same person may work as a member of various projects in various capacities. The organizations mainly use matrix organizational structure offering flexibility and effective allocation of resources. The pressure for change is continuous: changes in technology and tools assumed constant training and re-training. Weekly working hours are 37.5 hours and the work is done in the daytime. There may be a need for temporary extra hours during tight periods, but if overtime work is continuous it is a sign that something is

wrong in the project design and resource planning. Certain diversity is seen for the future of the sector. According to one ICT director, certain re-organizing is going on in the ICT business, some companies will die, some will consolidate, some will change their business philosophy. Otherwise the future is seen quite positively.

Hobbies are an important factor among ICT managers when they decide on this area for education and work. An individual's first position is usually found through networks or from company homepages. The open position that is announced in company's home pages is usually that of Software Engineer. It is the starting point of an ICT career. Other open positions are seldom announced.

ICT sector careers begin with either part-time or fixed time-contracts in the positions of Software Engineers. Usually people assuming the software developer position are undergraduates in technical universities working part time during their studies. They can be placed in the transactional-box (see p. 155) in the beginning of their career. During rooting to the company the psychological contract becomes more balanced.

In the ICT sector work and studies overlap in the beginning of the career and the thesis work is generally done based on a subject defined by the employer. Both employee and employer appreciate ready-made degrees and therefore both sides are flexible in arranging tasks and working hours in order to enable the individual to finish his/her studies. Concurrently with his/her studies the ICT student is connected to and socialized within the organization. At the beginning of their ICT careers software professionals work in service to several employers doing different software applications. Later on in their careers the transitions between employers calm down. The majority of work done in the ICT sector connects in some way to software development; there is little work in the ICT companies that does not directly connect to implementation of software by planning, coding, testing and documenting. Persons hired with different educational background are retrained in doing software development.

In the ICT sector there appear to be more new career conceptions and more boundaryless work is done, but there is also a sort of hierarchy in career progression that can be seen as an expression of traditional career thinking. Aspects of boundaryless careers can also be seen in

the ICT sector (Mirvis and Hall 1994). Careers are often developed without limits and formal hierarchical progression. Persons working in the ICT sector are eager to develop their competences and care about their continuing employability. The career of an ICT manager progresses through growth in competence; as he/she is ready the manager is given new challenging positions. However, the traditional hierarchically developed career model has not been completely rejected in the ICT sector because frequently growing competences pushes the career holder upwards in the hierarchy. The concept of career, however, is more relational than hierarchical, the new position is related to the former position, training and work experience achieved. In the ICT sector career paths and particular posts are seldom ready-made. Open positions are usually for entry level software developers. After an individual is a part of the organization it takes care of career development in interaction with the employee. The course of any career is composed on the basis of the manager's competence. There is not necessarily a box in the organization chart where a manager can direct his/her next step. Career development is done in interaction between the organization and the manager: by giving him/her new opportunities and challenges, power, salary and elevated title.

Career progress in the ICT sector is made in service to one or several ICT companies doing different software applications. Applications are designed to match customers' needs and companies are specialized in different applications. Some companies may design web pages, some develop mobile applications or different data systems. When a person commits to an ICT organization his/her career continues inside that organization based on growing competence achieved through education and working experience. His/her tasks become more demanding and he/she becomes responsible for ever larger entities. Concurrently his/her titles change and he/she is better compensated. Work as a Software Engineer is connected to basic ICT work, programming. After serving in the Software Engineer role he/she can choose the career ladders that suits him/her best. Career track possibilities include that of general management, serving as a specialist or project management. The subordinate and the supervisor agree on the orientation of the subordinate toward one of these directions in regular development discussions.

Studies and work overlap the ICT sector. ICT managers are often employed while their studies are unfinished. Despite the unfinished studies the managers often reach very

authoritative positions in the workplace. The work of managers requires an updating of knowledge, hence continuous learning is expected.

Commitment in the ICT sector is more often to a manager's own competences, to an occupational group or to projects than to his/her employer. Important commitment factors are connected to work and the most important commitment element in the ICT sector is competence achieved in that sector. Interesting tasks, good workmates and loyalty towards the organization are also important in commitment.

8.2.3 Differences in the ICT and Paper Managers' Careers

Family paves the way in the paper sector. Relatives working in the paper sector contribute at the beginning of a paper manager's career through finding him/her initial employment. The ICT manager, on the other hand, chooses the business sector on the basis of interest in computing. In the ICT sector the most important recruiting channel is one's network while paper professionals search for open positions in newspaper advertisements. In the ICT sector work and studies overlap at the beginning of the career. On the other hand, careers in the paper sector begin at the time of thesis work or after graduation. The career of an ICT manager is constructed inside the business sector, in service of several employers. In the paper sector the managerial career is developed inside one company.

Neither of the business sectors can be considered as purely representative of the boundaryless or traditional career conceptions. In fact, the paper and ICT sectors are converging towards a shared reality of career but from the opposite ends. In the ICT sector new career concepts are evident and work is done in a more boundaryless fashion, but there is also a sort of hierarchy behind ICT career progression that is more in line with traditional career thinking. Also new career thinking has had an influence on careers in paper sector though they seem more traditionally hierarchical in most ways.

In testing Schein's eight career anchors with the two groups the most important difference was found in the Security/Stability anchor. However, there is some question as to how relevant the question of security and stability in the Schein's instrument might have been to the ICT manager or to the paper manager.

Different attitudes toward time and the appropriate duration in positions existed in the sectors. Five years in one position in the ICT sector is a sign of stagnation in career. In the paper sector five years is seen as an adequate period in one position. The paper managers in this study have four years longer working experience than the managers in ICT companies. The average number of positions in the ICT sector is 4.6 and 5.5 in the paper sector, but because of shorter working experience transitions seem to happen more often in the ICT sector.

ICT managers count on the business sector whereas the paper managers seem to take place their trust in the organization. ICT managers seem to commit more to their own competences and of their occupational group while paper managers seem to commit to the company. The main commitment factors in the ICT sector are connected to work and know-how, whereas in the paper sector these are connected to the environment. Commitment is done in the ICT companies continuously during the employment. In the paper sector commitment seems to consist mainly of organizational familiarization at the beginning of employment. In the ICT sector a togetherness-feeling among the company's personnel can be noticed, which contributes to commitment. The same kind of cohesion is not found in the paper sector.

Extra working hours mainly characteristic of the paper sector. 73.3 % of the paper managers work overtime regularly or occasionally. In the ICT sector 53.4 % work overtime occasionally.

In the ICT sector safe support and the possibility of position in the future is a considered, but in the paper sector there does not seem to be any potential threats to the manager's safe living.

8.2.4 Similarities in the ICT and Paper Managers' Careers

Careers in both the ICT and paper sectors proceed along three career ladders, general management, specialty or project management. Growing competence achieved through education and working experience promotes the career of managers in both sectors.

Challenges and interesting tasks are the most important future expectations on the personal level in both sectors. The well-being of the family comes next. Freedom to decide on one's own working tasks and diversity in work contents are seen as some of the positive aspects of the present position held by the managers in both sectors. Haste and too many HR responsibilities are common negatives shared by both groups.

In both sectors trust in the future was a dominant theme. Economic situations keep changing but product development goes on in the ICT sector. The future of the paper sector is also seen as positive and strong. Making paper products will not end, products will develop and companies will enlarge even in the future.

8.3. Theoretical Implications

With this research I produced a clear reply to former career theories based on personal (see e.g. Super 1957, Holland 1966) and organizational (see e.g. Hall 1976, Van Maanen 1977) approaches. In this research career is explored in a holistic way where both personal and organizational factors affect to managerial careers (see Schein 1971, 1990). I offered a new viewpoint to present career theorizing research by comparing the boundaryless and traditional career concepts (see Mirvis and Hall 1994, Arthur and Rousseau 1996, 1996b, Gratton and Hope Hailey 1999) in the context of the ICT and paper business sectors. As a conclusion I found that business sector has an effect on managerial careers. The career of ICT manager differs from that of paper managers. However, neither of these business sectors can be perceived as adopting pure traditional or pure new career thinking. According to Hatch's jazz metaphor (see p. 112) the paper managers seem to play more in a symphony orchestra when the ICT managers seem to be more like jazz musicians but there is also departure from this metaphor in both situations.

In the results noted the importance of social and cultural context around careers (see e.g. Morrison 2002, Allen and Mayer 1990, Schein 1987). Careers are never made independently from the environment. The organizational culture has a strong effect on careers and commitment. The business environment is different in ICT and paper companies. Both business sectors are based on technical know-how but traditions, products and personnel are different. Commitment seems to happen differentially in the ICT and paper business sectors.

ICT managers commit more to occupational group and managers' own competences while paper managers commit to the organization. ICT managers trust that their strong competence will guarantee them work inside the ICT sector, while paper managers see that the large paper company will continue to employ them in the future.

I developed a constricted analysis of life based on life-span thinking (see e.g. Levinson et al. 1978, Dunderfelt 1996) as applied toward career thinking. I concentrated on the early career of managers. Certain general regularities affect a person's career, but career can have an effect on the scheduling of these regularities. Individuals can divide their lives into periods of work and education instead of "first education then work"-thinking considered to be typical. Work and education can also overlap as is seen in the ICT sector. The notion that individuals, rather than the organization, are expected to take primary responsibility for their career development (Gratton and Hope Hailey 1999, 81 – 84) promotes the idea of life-long-learning and continuous development of one's skills.

8.4 Managerial Implications

Managerial implications of this study connect to the HRM practices that are carried out in organizations in the areas of recruitment, career development and commitment. Career is constructed in interaction with a person and an organization. Because of the current or forthcoming lack of educated personnel in the ICT and paper business sectors, more emphasis in organizations should be put on the placed on ways to encourage commitment of personnel. Interaction between the person and organization, discussions between manager and supervisor, are important tools when used to build commitment. In development discussions it is possible to determine a manager's motivation factors and career aspirations and then convey them to the organization. Information about the company's situation can also be given to the manager. By allowing a manager to follow his/her motives organizations can insure committed personnel and avoid turnover. Managers gain commitment when they are allowed to find their best place to perform, offered challenges and allowed to affect the content of their work. The collective feeling of togetherness, inside the small ICT companies is also an important commitment factor and offers something for the paper companies to learn.

8.5 Suggestions for Further Research

In this research I have concentrated on careers in two main business sectors in Finland. While gender matters were not an interest in this study, it would be interesting to clarify the careers of women more exactly in these two masculine working environments.

The discussion on traditional, hierarchical vs. boundaryless careers continues. Even when traditional careers are decreasing in number and development is towards more boundaryless career structures, one wonders if a totally boundaryless career is possible?

This research did not cover the topic of work vs. family thinking. During my research project I often encountered expressions connecting work as a part of the whole life. It would be interesting to go deeper into that discussion in the future.

The togetherness of the ICT companies, in the long run, would be interesting to study more closely. At the present time personnel in the ICT sector are quite young and not many have families of their own. Colleagues can create a tight community in an ICT organization, it can be a sort of substitute for a family. What will happen to the togetherness feeling when the people create families? Will private life outside the workplace become more important when the personnel become older? What effects will families have on the togetherness feeling inside the ICT companies?

In this research I met only one manager who had made a radical change in his career and moved to the ICT sector after working elsewhere for years. This kind of career transition would be interesting to study more closely. What makes a person change his/her working conditions and professional expertise so entirely and move toward another working environment?

Finally, competency development was very important to managers. The development of learning and competency in the context of career deserves research of its own.

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APPENDIX 1

STRUCTURE OF THE THEMATIC INTERVIEWS (Managers)

Introduction

Background information

Age
 Family
 Leisure time activities
 Present title
 Number of subordinates

Education

Educational background
 Development of competences

Career

Former career
 Present position
 Good and bad sides in the present position
 Working overtime
 Origin of the interest toward work in this sector
 Phase of your career development. When will you reach the “top” of your own career?
 Recruiting, how has it happened?
 Gender structure in your working place. How do you experience it?

Values behind the career

What kind of work do you enjoy?

Questionnaire

What matters do you find important in your work? (1 = not important, 5 = very important)
 What factors in your permanent position require these skills?

- Technical/Functional Competence
- General Managerial Competence
- Autonomy/Independence
- Security/Stability
- Entrepreneurial Creativity
- Sense of Service, Dedication to a Cause
- Pure Challenge
- Lifestyle

Future

What do you expect from the future, in life and in work?

How do you want your career to proceed?

What commits you to the present work place/business sector?

How do you see the future of the business sector?

Do you consider changing the business area/working place? Why?

Foreign countries

APPENDIX 2**VALUES BEHIND THE CAREER
(Questionnaire connected to managers' interviews)**

1. Please circle: 1 = not important, 5 = very important
2. What factors in your current position require these skills?

1. Technical/Functional Competence 1 2 3 4 5

Expertise, talent, solving problems, challenges, salary is based on experience and skills, becoming a specialist is important.

2. General Managerial Competence 1 2 3 4 5

Becoming a general manager is important, diversity in tasks and talents, rising up in hierarchy, challenges, success of the organization, high salary is based on results.

3. Autonomy/Independence 1 2 3 4 5

Independency of others, self-assurance, strictly defined tasks based on own skills, salary based on evidence, noticeable recognition.

4. Security/Stability 1 2 3 4 5

Security, predictability, permanent employment, strictly defined tasks, safe working environment, advantages, loyalty.

Please turn over

5. Entrepreneurial Creativity

1 2 3 4 5

Building the organization, production planning, surviving on one's own, economic success, beginning of new business, challenges, ownership more important than salary, making money

6. Sense of Service, Dedication to a Cause

1 2 3 4 5

Helping others, social responsibility, humanity, fair play, money is not important *per se*, position with influence and freedom.

7. Pure Challenge

1 2 3 4 5

Solving unsolvable problems, competing and winning, proving one's superiority to self and others.

8. Lifestyle

1 2 3 4 5

Total lifestyle, career is less important, integrating individual needs, flexibility, respect for personal and family concerns, unwillingness to move geographically.

APPENDIX 3

STRUCTURE OF THE THEMATIC INTERVIEWS (Directors)

Introduction

Confidentiality

Permission for the research

Selection of suitable interviewees (technical managers with versatile careers)

Place for interviews

Company presentation

Number of employees in group/unit

What kind of work is done in the company?

Regular weekly working hours

Recruitment policy

Commitment of the personnel

Human resource development

Career possibilities in the company

The future of the company/business sector

APPENDIX 4

CAREER PROFILES OF THE INTERVIEWED MANAGERS

ICT Managers

Manager A, 27 years, an undergraduate at Lappeenranta University of Technology lived with his girlfriend. In 1998 he started working in an ICT company as a Software Engineer developing and coding Web-applications. His career developed through acquisitions of the company and growing competence, titles changed first to Team Manager and then to Technology Manager. This progression took four years. The responsibilities widened, a transition happened from the role of specialist toward more general management tasks. He was the superior of the Team Managers and also responsible for the general management of the company site. At the moment of the interview he was quite satisfied with his position and was not thinking of the changing his workplace. He had not thought about his future career.

Manager B, 41 years, had a wife and two children. He was a M.Sc. (Tech.,) but his major subject had been Energy Technology. He became interested in Information Technology and started working as a Software Developer after graduation. It was easy to find interesting work in the Helsinki area, so he decided to move there temporarily. However, it took 15 years until he came back to Lappeenranta. For 15 years he worked as a specialist in internal and external software projects in the duty of an employer. The wish to return back to Lappeenranta made him to apply for a suitable job in South-Karelia and in 2001 he started working in company A. At the moment of the interview he was not considering a change of company.

Manager C, 30 years, had a wife but no children. He had graduated from the University of Technology, Industrial Engineering and Management as his major subject. He had made his thesis work for metal industry but had been interested in information technology since he was young. His first position in company A was a Software Engineer. After that he was responsible for the function and personnel of a team as a Team Manager. He was willing to take the next step in his career shortly. He wanted more challenges and more demanding tasks but was not willing to make career at the expense of the family. He appraised achieving the top of his career at the age of 40 to 50 years.

Manager D, 31 years, was married and had two children. His education was M.Sc. (Tech.) in Telecommunications. The ICT business sector appeared challenging to him. During the studies he started doing software applications as an entrepreneur. After the acquisition of the company his career proceeded as a Project Manager, Team Manager, Site Manager and Program Manager in company A. He had been working in the ICT sector for nine years, the first three years as an undergraduate. After being in a role of a specialist he continued his career in customer projects. The content of his career was many-sided: he had done everything except financial management tasks. He was dreaming about some sort of change in his work during the next year. He expected that the diverse working experience in the ICT sector would help him forward in his career.

Manager E, 27 years, had a girlfriend. He had just graduated from the University of Technology, Department of Information Technology. His selection of area of studies was based on hobbies. He worked also during his studies as a Programmer, Project Manager and Project Coordinator. Then he made his Master's Thesis and started working as a Project Manager in company B. He dreamed of the career of a Project Manager or a specialist. He wished that he could continue in permanent work and have interesting tasks with a reasonable salary.

Manager F, 31 years, lived with his girlfriend. He was a M.Sc. (Tech.) in Energy Technology but changed the direction of his career on the basis of interest to information technology. The first job experiences were in the area of energy technology, but after graduation in 1998 he started as a Testing Engineer and was then promoted to the position of a Testing Manager in company B. He considered his career to be in the phase of beginning. He wanted to develop himself in work and was quite satisfied at the moment.

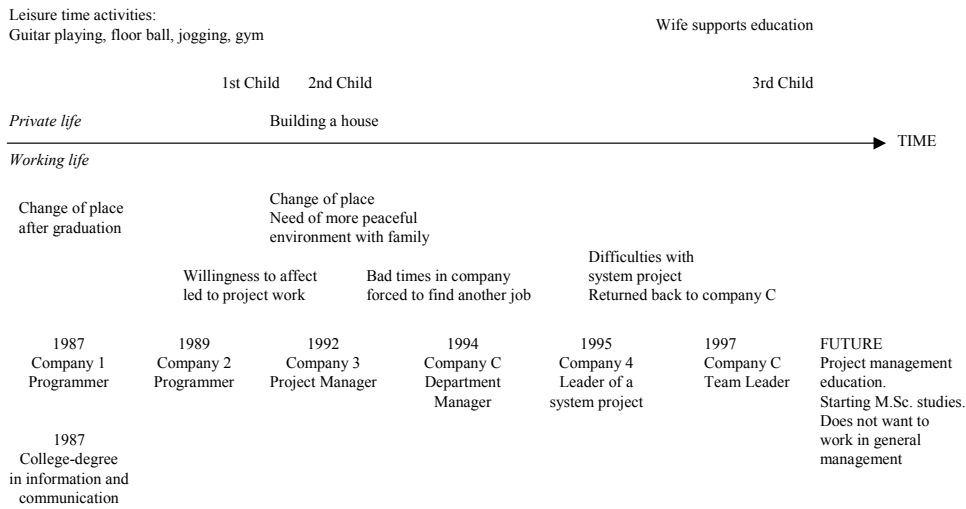
Manager G, 31 years, lived with his girlfriend. He had graduated from the University of Technology, from the Department of Industrial Engineering and Management in 1999. He first worked in another ICT company as a Programmer and then changed to company B. He worked there as a Testing Engineer and Project Manager. He seemed to be satisfied with his work and planned his future in projects. He liked the environment and dreamed about a house of his own and a family. There existed no need to change the employer.

Manager H, 27 years, lived with her boyfriend. She was an undergraduate at the University of Technology studying in the Department of Industrial Engineering and Management in International Operations and Marketing. She had chosen her work by accident and had been working in company B for one year, first as a Training Engineer, then continuing there as a Documentation Manager. She would like her work to develop more toward the customer interface or to marketing. She aimed at graduation and thought about moving nearer her family.

Manager I was 34 years old and single. He was an undergraduate at the University of Technology in the Department of Chemical Technology. He had been working in several companies in food and mechanical industries but made a transition to the ICT sector in 2000. He was interested in telecommunications and saw good possibilities there in the future. He did not like the atmosphere in his previous working place. After discussions with the chief executive officer of the company B he started there as a Software Engineer. Then he advanced to Project Manager tasks in the customer interface. In the future he wanted new challenges and hoped that the salary would not decline. He was quite satisfied and was not planning to change the working place in the near future.

The career of manager J is demonstrated in the figure below.

Career Profile of an ICT Manager. Age 37. Wife and three children.



In the career profile of Manager J can be seen the high stress in 1992 simultaneously both in his work/career cycle and family of procreation cycle (see p. 126). The family had just moved to Lappeenranta and they were building a house. They had a two-year-old child and another was about to be born. He had just started working in a small ICT company and enjoyed his work. In the interview he described the hectic atmosphere in the workplace and the strong strive for work.

Manager K, 40 years, had a wife and three children. He was a M.Sc. (Tech.) from the Department of Industrial Engineering. He became interested in information technology during his summer jobs. After the graduation in 1986 he started working as a Programmer in company C. He had been also a Project Manager, Department Manager and Project Leader. At the moment of the interview he was working as a Department Manager. He had noticed the growth of general management tasks in his work during his career. His career path had not directed only upwards, the current situation represented more a recession in his career development. In the future he wanted bigger challenges. However, he wanted to keep a balance between work and family in his life.

Manager L, 37 years, was married and had two children. He had graduated from the University of Technology the Department of Industrial Engineering. His first touch

information technology was during his studies and in a summer job in the computing department of Lappeenranta University of Technology. He was then asked by his friends to start working in one ICT company as a Software Developer. His career developed there to the task of a Project Manager but then he applied for a job elsewhere. He did not find his work meaningful in the earlier work place. Then he was hired by company C. He had been doing tasks of a Developer, a Project Manager and a Team Leader. His responsibilities were to develop applications and take care of the maintenance of the data system. He was wondering about the future of his career. He noticed that his tasks would be connected more with general management if he moved upwards in organizational hierarchy. He liked work where ICT know-how was needed and was not willing to move into general management tasks. However, he wanted suitable challenges inside the company also in the future, but maintaining the balance in life between work and family was important.

Manager M, 43 years, with husband and two children. She had studied in two periods: first for a lower university degree and after a while the higher degree. She started her studies in mathematics but wanted to do concrete tasks, which led her to the area of information technology. She moved from the capital city to Lappeenranta and started working there as an ADP-manager. She was studying for the higher degree while working. The desire to learn C++-language made her to apply for another job. She was accepted to company C where she had been a Project Manager and a Team Leader. Her career was directed by the need to learn, she wanted to do challenging tasks, not to make a career. She wanted to do data systems to customers also in the future. Generally she wanted health and action. Work in a foreign county would also be one possibility in the future.

Manager N, 49 years, single. M.Sc. (Econ.). The career decision was based on coincidence. One of her friends recommended her to the employer. She started working in information technology in 1971. After the outsourcing of the ADP functions and an acquisition of the earlier company she came to company C. Her career progression has taken place through offers of new jobs. She had been responsible of projects, and at the moment of the interview was a Department Manager. She had never planned or directed her career. All she wanted was challenging work also in the future and interaction with people. She was not applying for other jobs. In her private life she wanted just living and enjoying the moment.

Manager O, 27 years, single. He was a M.Sc. (Tech.) in Information Processing. The origin of the interest toward information technology was in the leisure time activities of his early life. Quite early, in the age of ten or eleven, he had decided the direction of his future: studies and career in the area of ADP. During his studies he asked a friend for a job in the company where that friend was working. Then his career had progressed through two acquisitions and growing competence from the position of a Web-Designer to a Software Engineer, a Team Manager and a Software Architect. At the moment of the interview he worked as a Technology Manager. He had also applied for a job elsewhere but decided to stay in the present organization when he was promised challenging work. His career development had been very fast. He stated in the interview that the longest time he had used the same business card was seven months. The total duration of his career was five years, the first four years he had worked as an undergraduate. From the future he wanted intellectual challenges but defined no accurate ambitions. Work in foreign countries was one possibility for him.

Paper managers

Manager P, 39 years, was married and had two children. She had studied for her M.Sc. at the University of Helsinki in the area of Chemistry. She moved to South-Karelia in 1987 because her husband started working there. Her first job was as a teacher. Then her career continued as a researcher in a research centre of paper technology. The open position was announced in a newspaper. After the access to company D there had not been any formal job openings. The career development had based on interaction in the company, she had often been asked to a new position. After being a researcher she became a Manager of the Quality Department. She did not like working there and sought for other possibilities. She started as a Technology Marketing Manager in the area of customer service. At the moment of the interview she was working as a Manager in Environmental Affairs and Product Safety. Her career had continued for 15 years. She wanted health and challenging work also in the future.

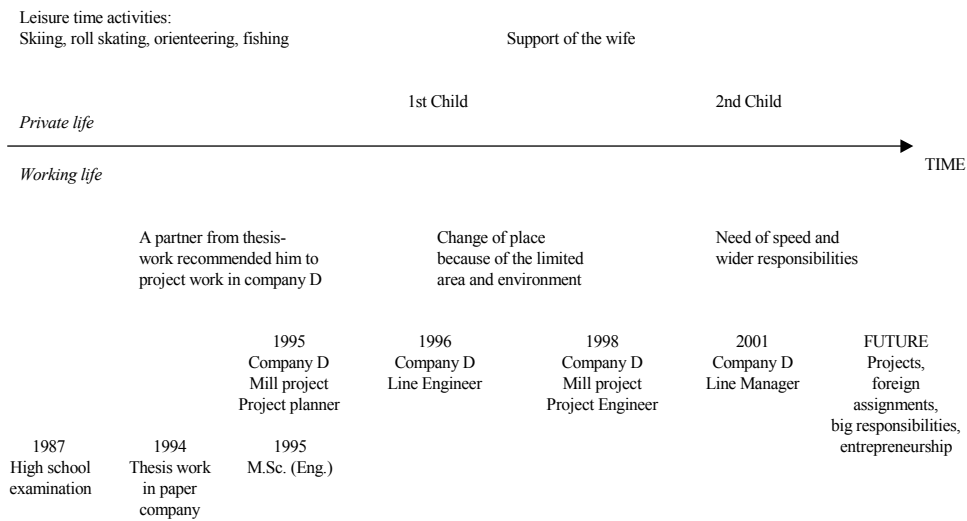
Manager Q, 42 years, was divorced and single. She was a M.Sc. (Tech.) in wood processing technology. Finland as a land of forests encouraged her to the area of wood processing. She had also checked the level of wages in the paper sector before starting her studies. Her first position in company D was the thesis work and her first permanent post was in the research centre. Then her career continued as an Engineer in a pulp mill. After that she was

responsible for starting a new production line, then for fine paper logistics and the sheeting department. Then her career developed to the tasks of a Production Manager. At the moment of the interview she worked as a Project Manager. The duration of her career was 17 years. Recruiting had happened inside the company, she had known somebody or somebody had known her and asked her for new job. She had been active in job seeking and wanted interesting and challenging work also in the future. She was considering returning back to the production line again or continuing her career in the area of general management. She did not consider a change of the employer.

Manager R, 46 years, was married and had two children and a M.Sc. (Tech.) He started his career working as a controller of pressure vessels after his graduation in 1981, first in civil services then in a company. The transition to paper business happened in 1986 when he changed the employer. He had noticed an advertisement in newspaper of a Line Engineer in the power plant of company D. After that he had stayed in that business sector. Career progression had occurred in interaction with the organization, vacancies inside the company had not been officially open. He had been asked to other assignments. He was expecting changes in his work to happen during the next five years.

The career of manager S is demonstrated in the figure below.

Career Profile of a Paper Manager. Age 34. Wife and two children.



Manager T, 32 years, was married and had two children. He had the degree of a M.Sc. (Tech.) from the Department of Industrial Engineering. Many members of his family had worked in paper industry and that had directed also his career choice. He first started working in a paper mill as a summer trainee, then continued there with his thesis work. He got his first assignment in 1995. He had been responsible for logistics in different units also abroad. At the moment of the interview he worked as a Sales Manager. Transitions between different posts had happened in interaction with the organization. Sometimes he had been the active part, sometimes the organization. He was willing to see what he can reach in the future. He considered himself too young for managerial positions in that organization. Meanwhile he was willing to progress horizontally in the hierarchy and gain more experience e.g. in the area of financial management.

Manager U, 30 years, married. He was a M.Sc. (Tech.) from the Department of Wood Processing. Several summer jobs were followed with thesis work in a pulp mill. After that his career had progressed as a Line Manager. He thought that was only the starting point in his career, he wanted to learn more and develop. He saw that five years in one position was a suitable period. From the future he wanted classically two children, a house and a car. He was

following with interest the changes that were going on in company E during the research interviews and expecting some changes to happen also in his career.

Manager V, 41 years, had a wife and two children. He had worked in 3-shift work in wood handling but did not like it. That encouraged him to start studies in technical college in the line of paper technology, where he graduated as an engineer in 1987. His first assignment was abroad, he took part in a pulp mill start-up project. His friend gave him a hint. After that he actively searched for a job in Finland. After a 4-month period abroad he started as a Process Developer in the capital city area. He did not like his work as a planner nor living in the Helsinki area. This encouraged him to apply for a job in South-Eastern Finland. He started as a Line Engineer and Line Manager in a pulp mill. Then his career had developed from a Project Manager to a Production Manager, where he was at the moment of the interview. He found the project tasks related to the construction of a new pulp mill interesting. He considered himself to be in the top of his career at the moment. Then next step would be broadening his competence to new areas, e.g. to environmental tasks. Foreign assignments would also be possible.

Manager X, 45 years, was married and had two children. His career had started as a summer trainee in a paper company in 1979 and continued with thesis work for a M.Sc. (Tech.). From the first permanent position his career had continued for 18 years. He started as a Line Engineer in another mill but moved to company E in 1985. The vacation was announced in a newspaper. After that he has been working in the service of the same employer in different vacancies. He had received information about the new positions through the organization, not necessarily from his supervisor. The career had progressed to the tasks of a Line Manager and at the moment of the interview he had just been promoted to a Production Manager.

Manager Y, 42 years, had a wife and three children. He had a degree of an engineer. He started his career as a Planner in an engineering works and graduated then from technical college. He worked in paper mill maintenance as a Developer and then moved to the capital city. He continued there as a Planner and Project Leader for nine years in a consulting company. His work took him also abroad for one year. Because of a furlough he moved to Norway and worked in oil refining business for 1.5 years. Then he wanted to move back to South-Eastern Finland where he comes from. He was asked to start as a Developer in a pulp

mill. After that his career continued in the positions of a Development Manager and a Maintenance Manager. He saw himself at the top of his career at the moment of the interview. From the future he expected challenges.

Manager Z, 34 years, had a wife and a child. His education was a M.Sc. (Tech.) in the Department of Chemical Engineering. First he worked as a summer trainee in a paper company and continued there with the thesis work. The career progressed to the position of a Line Manager, which was officially announced in a newspaper. After that his career had been made inside the organization. First he worked in a project, then as a Line Manager and from 2001 on as a Production Manager. In the interview he told that he had achieved his target, becoming a Line Engineer in a paper mill, too early, there were no goals to be reached there any more. He enjoyed his work in the present position but considered also foreign assignments. Many-sided working experience was highly appreciated in the company.

Manager Å, 41 years, was married and had a child. He had the education of an engineer. He had first studied in vocational school then in technical school and graduated from technical college. His first assignments were connected to maintenance work in a paper company. He continued his studies in technical school and college, having a leave of absence from his work during the studies. After graduation he applied for an open position in company F. His career had been very diverse, he had worked as a Shift-Foreman, Shift Manager, Repairing Manager, Industrial Safety Officer, Research Engineer and Project Manager in the same company. At the moment of the interview he had just begun a new work in the customer interface and did not think about his future career. He posed his current career phase near the top possible for him to reach. Anyhow, he welcomed challenges in the future.

Manager Ä, 42 years, had a wife and three children. He had the degrees of M.Sc. and Lic.Sc. (Tech.) from the Department of Mechanical Engineering. He had always been interested in technology. In his career there existed two different phases: the career of a researcher and the career of a manager in paper industry. He had worked in the paper sector as a summer trainee, but his thesis work was done in mechanical industry. After graduation in 1989 he started as a university researcher with post-graduate studies. This took 5 years. At the same time company F was making the organization younger, hiring new personnel, and was one of the interviewed candidates. In 1995 he started there as a Project Manager. He had been

responsible for implementation of data systems but lately his work contents as a Department Manager and Development Manager had developed towards general management tasks. Despite the career in the paper sector he was dreaming of taking an MBA-degree and making a doctoral thesis. From the future he hoped health, and balance between work and family.

Manager Ö, 45 years, was married and had two children. He was a technician. This manager had a very rich working experience inside the paper sector. He had been working in different positions after graduating from technical school in 1981. He started as a Planner, then entered company F in another site and became a Line Manager. Then he moved to South-Eastern Finland and participated in a pulp mill project. After the start of the new mill he was promoted to a Line Manager. He had always been eager to enter new projects and he was welcoming challenges also in the future but without stress. He had considered also the end of his career: he would like to return back to a specialist role in his last working years and calm down. There would not be any responsibility for keeping the wheels rolling.

Manager Ü, 39 years, had a wife and two children. He had taken the degree of M.Sc. (Tech.). After the degree of an engineer from a technical college he had started working in car manufacturing industry. That position was advertised in a newspaper. Then he entered his first assignment in the paper industry as a Line Engineer. Also that position was officially open. Concurrently with the work he studied at Lappeenranta University of Technology and became a Planning Manager. After that he moved to another mill inside the company, first to a post of a Maintenance Manager and then a Mill Service Manager. This manager was the only one in this research data who admitted having planned his career. He wanted to advance in his career path step by step. In the future he wanted also to keep a balance between work and private life.

Manager @, 44 years, was married and had three children. He had a degree of M.Sc. (Tech.) from the Department of Electrical Engineering. His first summer jobs had been in paper industry. The master's thesis was made in an electrical engineering company. After the graduation he applied for an open position of a Developing Engineer in a paper company. His career continued in the positions of a Department & Development Manager and Mill Service Manager. After that he changed his location because of an interest in a new pulp mill project. In this new position he also used the title of a Mill Service Manager. After the start of the new

mill he was offered a post a Unit Manager. In the interview he stated that the direction of his career had not necessarily been always upwards, but he had progressed also horizontally in organizational hierarchy. He had not seriously thought about the future: there existed enough challenges in the current position. He cared of the future of the children: how they will manage in their life.

APPENDIX 5

Mann-Whitney Test

Ranks

	ICT and Paper Managers	N	Mean Rank	Sum of Ranks
ICT and Paper Technical/Functional Competence	ICT	15	17,43	261,50
	Paper	15	13,57	203,50
	Total	30		
ICT and Paper General Managerial Competence	ICT	15	12,63	189,50
	Paper	15	18,37	275,50
	Total	30		
ICT and Paper Autonomy/Independence	ICT	15	14,27	214,00
	Paper	15	16,73	251,00
	Total	30		
ICT and Paper Security/Stability	ICT	15	20,40	306,00
	Paper	15	10,60	159,00
	Total	30		
ICT and Paper Entrepreneurial Creativity	ICT	15	13,53	203,00
	Paper	15	17,47	262,00
	Total	30		
ICT and Paper Sense of Service, Dedication to a Cause	ICT	15	16,13	242,00
	Paper	15	14,87	223,00
	Total	30		
ICT and Paper Pure Challenge	ICT	15	13,10	196,50
	Paper	15	17,90	268,50
	Total	30		
ICT and Paper Lifestyle	ICT	15	17,20	258,00
	Paper	15	13,80	207,00
	Total	30		

Test Statistics(b)

	ICT and Paper Technical/Functional	ICT and Paper General Managerial	ICT and Paper Autonomy/Independence	ICT and Paper Security/Stability	ICT and Paper Entrepreneurial Creativity	ICT and Paper Sense of Service, Dedication to a Cause	ICT and Paper Pure Challenge	ICT and Paper Lifestyle
Mann-Whitney U	83,500	69,500	94,000	39,000	83,000	103,000	76,500	87,000
Wilcoxon W	203,500	189,500	214,000	159,000	203,000	223,000	196,500	207,000
Z	-1,314	-1,931	-817	-3,211	-1,347	-447	-1,594	-1,170
Asymp. Sig. (2-tailed)	,189	,053	,414	,001	,178	,655	,111	,242
Exact Sig. [2*(1-tailed Sig.)]	,233(a)	,074(a)	,461(a)	,002(a)	,233(a)	,713(a)	,137(a)	,305(a)

a. Not corrected for ties.

b. Grouping Variable: ICT and Paper managers

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