A Qualitative Approach to Motivation across the Lifespan of Knowledge Intensive Workers

A Case Study on IT Consultants

Bachelor’s thesis within Business Administration

Author: Frida Johansson
Tomas Kristiansson
Christoffer Wåhlin

Tutor: Joaquín Cestino

Jönköping May 2015
Abstract

The interest in effective human resource management has increased dramatically as mean age of the workforce has been growing in the developed western countries. A part of this workforce is constituted for by knowledge intensive workers, in which the motivation differs from other groups of workers. Moreover, existing literature on lifespan development research on motivation fails to differentiate sufficiently between types of worker groups; in a like manner literature on motivation of knowledge intensive workers has neglected to include age differences. This results in a shortage of research of how motivation of knowledge intensive workers differs in regards to their age.

The purpose of this thesis is to describe how the intrinsic motivational factors autonomy, variety in tasks, learning new things, receiving positive feedback, and the feeling of accomplishment and value creation influence knowledge intensive workers differently in regards to their age. The thesis’ research method was qualitative and the primary empirical data was collected through a case study in which interviews with IT consultants of two different age groups were conducted.

The findings revealed that differences between the age groups are present. The most apparent differences lie in preference for autonomy, learning new things and receiving positive feedback. Variety in tasks and the feeling of accomplishment and creating value also displayed age related discrepancies between the groups.
Acknowledgements

The authors have during the spring semester been given the opportunity to study a phenomenon within business administration. The authors chose to deepen their knowledge within the field of human resources and on the issue of motivation of knowledge intensive workers. The thesis has contributed to a greater understanding and insight in these subjects.

The authors would like to express their appreciation to the thesis’ tutor Joaquín Cestino for his continuous guiding and support throughout the process, the thesis’ examiner Anders Melander for his useful feedback, and the opponents for the constructive criticism.

The authors would also like to thank the individuals who took the time to answer the interview questions as well as the contacts who arranged for the interviews. The authors are grateful for their cooperation and helpfulness in the process of collecting empirical data.

Jönköping, 11th of May 2015

Frida Johansson	Tomas Kristiansson	Christoffer Wählin
# Table of Contents

## 1 Introduction

1.1 Background ......................................................... 1  
1.2 Problem ............................................................ 2  
1.3 Purpose .............................................................. 2  
1.4 Research Question ................................................ 2  
1.5 Definitions .......................................................... 2  
1.6 Limitations .......................................................... 3  

## 2 Theoretical Frame of References

2.1 Introduction to the Theoretical Framework .......................... 4  
2.2 Motivation and Knowledge Intensive Workers ...................... 4  
  2.2.1 Content Theory on Motivation .................................. 7  
2.3 Lifespan Development ............................................... 9  
2.4 Theoretical Gap .................................................... 10  

## 3 Method

3.1 Scientific Philosophy ............................................... 12  
  3.1.1 Interpretivism ................................................... 12  
3.2 Scientific Approach ................................................ 12  
  3.2.1 Inductive ........................................................ 12  
3.3 Research Method ................................................... 13  
  3.3.1 Qualitative Research .......................................... 13  
3.4 Research Strategy .................................................. 13  
  3.4.1 Case Study ..................................................... 14  
3.5 Sample Selection .................................................... 15  
  3.5.1 Convenience and Judgmental Sampling ......................... 15  
3.6 Data Collection ...................................................... 16  
  3.6.1 Primary Data ................................................... 16  
  3.6.2 Literature Search ............................................. 17  
3.7 Interviews ........................................................... 17  
  3.7.1 Semi-Structured Interviews .................................. 17  
3.8 Data Analysis ....................................................... 18  
  3.8.1 Pattern Matching ............................................. 18  
3.9 Quality Criteria ..................................................... 18  
3.10 Summary of the Methods .......................................... 19  

## 4 Empirical Data and Analysis

4.1 Description of Occupation: IT Consultants .......................... 20  
4.2 Autonomy ............................................................. 20  
  4.2.1 Empirical Data .................................................. 20  
  4.2.2 Analysis ......................................................... 22  
4.3 Variety in Tasks ..................................................... 24  
  4.3.1 Empirical Data .................................................. 24  
  4.3.2 Analysis ......................................................... 25  
4.4 Learning New Things ................................................ 28  
  4.4.1 Empirical Data .................................................. 28  
  4.4.2 Analysis ......................................................... 30  
4.5 Positive Feedback ................................................... 32
Figures
Figure 2.1 Theoretical framework overview. ................................................................. 4
Figure 4.1 Motivation and age in relation to autonomy............................................. 23
Figure 4.2 Motivation and age in relation to variety in tasks................................. 27
Figure 4.3 Motivation and age in relation to learning new things......................... 31
Figure 4.4 Motivation and age in relation to positive feedback.............................. 34
Figure 4.5 Motivation and age in relation to the feeling of accomplishment and creating value. ........................................................................................................... 38
Figure 4.6 Overview of analysis using Herzberg’s two-factor theory. ............. 38

Tables
Table 2.1 Linking Maslow’s, Alderfer’s and Herzberg’s Theories of Motivation (Dinibutum, 2012) .................................................................................................................. 8
Table 3.1 Interview List ................................................................................................. 16

Appendix
Appendix 1: Interview Guide......................................................................................... 49
1 Introduction

This chapter aims to provide the reader with a background and introduces problems within an aging workforce as well as motivation of knowledge intensive workers. The chapter also includes the purpose of the thesis.

1.1 Background

Currently, due to a multitude of factors and congruencies such as lower birth rates in the western world and advancements in technology and medicine, the average age of the workforce of an organization is increasing as well as average life expectancy. An example is the United States population, where it is predicted that the population of individuals aged over 65 in the workforce will increase by more than 70% by 2022, compared to the number of 2012 (Toossi, 2013).

For organizations, this creates a need for more knowledge on efficient workforce management for work populations where the mean age is higher compared to previously. Therefore a trend of modifications of attitudes towards the management and retaining older workers has been observed. As a result, the interest in practical implications that research on age related differences has increased greatly. (Kanfer & Ackerman, 2004)

Generally, there is an existing consensus regarding the issue of decreasing job performance with age. However, as will be discussed later in this study, several aspects influence this process and it is possible to negate some of the negative effects through effective management. Motivation is an influential factor and studies have confirmed that it influences job performance and that the agents determining the level of motivation changes over the lifespan (Warr, 2001; Boerlijst, Munnichs & van der Heijde, 1998). Thus, motivation is one of the cornerstones of human resource management and it is essential that motivation is investigated extensively in order for human resource practices to be effective (Kressler, 2003).

Moreover, it is desirable to distinguish between different groups of workers. Different occupations present different tasks and therefore characteristics vary greatly. As a result, it becomes difficult to make generalizations that cover entire workforces. Instead, one should distinguish between different groups of workers and categorize different jobs and occupations with similar characteristics into these groups. These groups can be defined by a large array of factors, for example the type of intelligence that the task requires, the psychical and cognitive demands, and the adaptation and flexibility requirements. By defining groups after the occupational characteristics, the authors argue that the makings of generalizations become facilitated and more usable for both researchers and practitioners since the samples included in the studies will be more homogeneous.

In this study, the authors have selected a specific group of workers to target; knowledge intensive workers (KIWs) situated in a rapidly changing environment. The author's interpretation of KIWs are in line with the definition proposed by Ware and Grathan (2007) who states that a KIW is an individual that uses their cognitive skills to solve complex problems. In addition, the authors adds to this definition by incorporating a rapidly challenging environment as a defining factor of a KIW as well as defining complex problems as problems requiring highly specialized knowledge. The rapidly changing environment requires the in-
individual to continuously renew their skills to avoid becoming outdated and obsolete in their profession.

One occupation that fits the specific worker group perfectly is information technology (IT) consultants, which is the reason why this occupation was selected for this thesis’ case study. IT consultants are dealing with highly advanced technological assignments. Due to the fact that much of their tasks require cutting edge knowledge of the technology, and the fact that technological advancements are occurring at a blistering pace, their environment changes frequently which puts demands on their ability to renew work skills. Further, IT consultants experience change of physical environment as they are employed on a for-hire basis. As a result, they work at new locations with new companies, new standards and new problems on a frequent basis. (Docherty & Huzzard, 2003)

1.2 Problem

Even though there has been studies investigating how motivation changes over the lifespan (see Warr, 2001; Boerlijst et al., 1998), most publications have not dealt with the specific worker group of KIWs. Due to a profoundly different working environment and work task characteristics of KIWs when compared to other occupancies, it is definitely worth a separate study (Tsai, Compeau & Haggerty, 2007). Furthermore, the existing literature on motivation of KIWs has neglected to include age differences. Thus, in light of the lack of literature on this subject and responding to the call of organizations for more research on effective workforce management (Kanfer & Ackerman, 2004), this gap deserves attention and this is the gap that this study attempts to investigate and fill.

1.3 Purpose

The purpose of this thesis is to describe how autonomy, variety in tasks, learning new things, receiving positive feedback, and the feeling of accomplishment and creating value influence the workers residing in the defined group, KIWs, differently in regards to their age.

By succeeding in delivering the purpose, the authors hope to make a theoretical contribution through adding to the academic body concerned with KIWs in a rapidly changing environment with constant demands on renewal of skills by contributing with conclusions on how lifespan development influence the significance of the examined motivational factors. Lastly, with their case study, the authors also strive to provide normative advice for IT consultancy firms in Sweden and other corporations engaged in the management of these specialist workers.

1.4 Research Question

How do the selected motivational factors motivate knowledge intensive workers differently in regards to their age?

1.5 Definitions

The core of this thesis is to investigate the effects of autonomy, variety in tasks, learning new things, receiving positive feedback, and the feeling of accomplishment and value creation on motivation of KIWs. Therefore, it is necessary to provide the definitions of these concepts employed by the authors, to make sure the reader grasps the message conveyed as well as reduce the possibilities for misunderstandings.
Knowledge intensive workers (KIWs): an individual that uses their cognitive skills to solve complex problems requiring highly specialized knowledge, in a rapidly changing environment.

Autonomy: the extent to which the individual has freedom over their job; with autonomy, higher responsibility often entails.

Variety in tasks: the degree to which the individual is presented with tasks of differing characteristics, such as complexity, timeframe and working procedure resulting in different demands being placed on the individual.

Learning new things: the possibility to acquire new knowledge when working with the tasks presented at work.

Positive feedback: the appreciation received for a job well performed.

The feeling of accomplishment and creating value: the feeling one receives when the individual has performed well and provided the customer with a product or service of worth.

1.6 Limitations

Lastly, the thesis is bound by some limitations. Most apparent is the narrow timeframe. Due to external factors the thesis was restricted to a timespan of roughly four months. As a result there was not enough time to reinforce the findings, thus the generalizability was limited. Also, the authors of the thesis were unable to give the thesis their undivided attention, as other university courses required attention. Cost was another limitation in that the authors were unable to travel far in order to conduct interviews with IT consultant at other locations. A couple of trips were made to Stockholm in order to conduct interviews however, despite the cost, as the authors felt it necessary.

Further, the lack of experience, especially within the field of conducting interviews was apparent, and because of this the empirical data collected resulted as slightly skewed due to the fact that the authors interviewing skills were enhanced along the process, making the last interviews the most accurate compared to the first. Moreover, due to inexperience in qualitative data analysis, some misinterpretations of the data could be present. Finally, the presented empirical data in summary and quotation format has been translated from its original language Swedish to this thesis’ language, English. This might have potentially reduced the accuracy of the data as some meaning could have been lost in translation.
2 Theoretical Frame of References

This chapter aims to present the literature on motivation, knowledge intensive workers, and lifespan development. The chapter concludes by defining the research gap and how the authors aim to fill this gap.

2.1 Introduction to the Theoretical Framework

Looking at the research question, links to theoretical bodies can be found. The research question concerns motivational factors, specifically autonomy, variety in tasks, learning new things, receiving positive feedback, and the feeling of accomplishment and value creation. As a result it was relevant to review and incorporate the academic body on motivation to fully grasp the context, which is done in the next section. Further, the specified group of workers can be described to a large extent by literature on KIW's, which is why some literature concerned with explaining motivation of KIW's has also been included. Lastly, the research question also brings attention to the aging factor, which relates to the academic body on lifespan development. The relevant part of this academic body has also reviewed in the section following motivation. Figure 2.1 provides an overview of the theoretical framework.

![Theoretical framework overview](image)

2.2 Motivation and Knowledge Intensive Workers

Motivation has several interpretations all originating from the Latin word “movement” (Steers, 2004). Katzell and Thompson (1990), furthers this concept by defining work motivation as “a broad construct pertaining to the conditions and processes that account for the arousal, direction magnitude and maintenance of effort in a person's job” (p. 144). This is not to be confused with job satisfaction, which is described as a person's positive emotional state towards their job (Locke, 1976).

Luthan (2005) suggests that there are three elements, needs, drives, incentives, which are crucial in order to gain a more basic understanding of motivation. The elements interact in
the way that a deficiency creates a need, which prompts behavior or drives targeting the goals or incentives that have the ability to alleviate the need (Luthans, 2005). People are always, consciously or unconsciously, striving to keep equilibrium and this is what stimulates people to pursue what will satisfy the arisen need in order to restore equilibrium. Furthermore, motivation is the internal force that makes up the intensity, direction, and persistence of a person's attempts in reaching one or several goals (Ivancevich & Matteson, 2002).

There are different types of motives, primary, secondary, and general. Natural and physiological needs such as water and sleep are considered primary motives. Learned societal needs such as the need for power and achievement are secondary needs and have the most effect on human behavior. Lastly, needs that are neither learned nor physiologically based are considered general motives and make up the grey area between primary and secondary motives; examples include curiosity and manipulation. (Yukl, 1990; Luthans, 2005)

There are several approaches in explaining motivation such as the drive-reduction, instinct, arousal, cognitive, and incentive approach. The drive-reduction approach states that when there is inadequacy in basic biological requirements a drive is formed in order to secure that essential requirement. The instinct approach however, states that people are born with instincts that direct behavior to fill needs. The arousal approach states that people pursue to sustain a given level of activity and that people act accordingly in order to increase or decrease that level as needs arise. The incentive approach holds that motivation comes from people’s desire to gain valued external goals. The cognitive approach states that motivation is a function of people’s expectations, thought, and goals that are intrinsic and extrinsic. (Feldman, 2002)

The ideas of extrinsic and intrinsic motivation have been explored further. According to Deci and Ryan (2000) extrinsic motivation represents the desire to act as a result of the action leading to a specific outcome such as external rewards; promotions, salary increase and other externally influenced factors. Intrinsic motivation on the contrary depicts the inclination to act due to the appeal of the action itself such as internal rewards (Deci & Ryan, 2000). Additionally, a third type of motivation has been discussed, though less than the latter two types, and is referred to as interactive motivation, which has to do with the “social dimensions of individual motivation in relation to social groups and norms” (Alvesson, 2007, p 356), where the focus lies on values, morals, identity, ideals, and cultural norms (Alvesson, 2007).

However, the focus of this thesis lies on intrinsic motivation due to its greater complexity and the fact that it has been suggested that intrinsic factors influence the quality of one’s work, as well as creating lasting impacts, considerably more than extrinsic factors (Deci & Ryan, 2000). Exploring intrinsic motivation was also more relevant in regards to this thesis’ case study subject of IT consultants, whom are a complex group who work in a challenging, competitive and globalized work environment (D’Mello & Sahay, 2007). Also, extensive research already exists on the relationship between motivation and extrinsic factors (See Mahaney & Lederer, 2006; Eisenberger, Rhoades & Cameron, 1999; O’Driscoll & Randall, 1999 for example); a study done by Wallgren and Hanse (2011) even found that there is a lack of support for monetary incentives as a motivator for IT consultants.

The authors chose five specific factors of intrinsic motivation to explore deeper within this thesis’ research question, namely; autonomy, variety in tasks, learning new things, receiving positive feedback and the feeling of appreciation and creating value.
Firstly, autonomy is the amount of control a worker has over their work” (Besen, Matz-Costa, Brown, Smyer, & Pitt-Catsouphes, 2013,) and is an imperative factor in employee motivation (Hackman & Oldham, 1980; Herzberg, Mausner & Snyderman, 1959; McClelland, 1987). Studies have shown that in order for employees to maintain intrinsic motivation, some level of autonomy must be present (Gagne & Deci, 2005). Studies have also shown that autonomy needs increase with age (Schein, 1996). Autonomy is included as one of the ten fundamental groups relating to motivation as opportunity for personal control proposed by Warr (1999).

Secondly, the factor of variety in tasks falls under the category of non-repetitive work, task and skill variety (Warr, 1999). Variety in tasks is, along with autonomy, suggested to predict job satisfaction and motivation according to the task characteristics approach (Baker 2004). These factors are relevant to this thesis’ field of study considering that previous studies show that there is general support for autonomy and variety in tasks being important motivators for KIW's and thereby IT consultants (Wallgren & Hanse, 2011; Tampoe, 1993; Horwitz, Heng & Quazi, 2003). Furthermore, a study done by Besen, et al. (2013) shows that autonomy and variety in tasks have a positive relationship with job satisfaction as well as motivation; additionally the study shows that this positive relationship weakens with age; however this study does not differentiate between KIWs and other workers.

When looking at the different motivational factors and how they relate to KIWs, more factors can be incorporated as they also differ to the extent that these factors motivate workers in knowledge intensive firms as compared to workers in less knowledge intensive firms (Amar, 2004). However, in regards to IT consultants, empirical support suggests that autonomy and variety in tasks are generally the two most important factors (Wallgren & Hanse, 2011; Tampoe, 1993). Other factors with significant impact on motivation are the possibility to learn new things, receive positive feedback and be engaged in tasks that create the sensation of accomplishment and value creation (Horwitz et al., 2003; Tampoe, 1993; Wallgren & Hanse, 2011).

With tasks that permit the possibility to learn new things comes the opportunity for the KIW to grow both in the personal as well as the professional dimension (Horwitz, 2003; Tampoe, 1993). Connecting this to the academic body of lifespan development where claims are made stating that individuals would be less open to new information and experiences as they grow older (Jones & Meredith, 1996; Warr, Miles & Platts, 2001), it is possible that the strength of this motivator decreases with age.

In regards to positive feedback as a motivating agent for KIW's and specifically IT consultants, the validity of this factor has been confirmed by a multitude of studies (See Olomolaiya & Egbu, 2004; Horwitz; 2003; Wallgren & Hanse, 2011, for example). Although most employees appreciate positive feedback, one plausible reason for why it would be more motivating for KIWs is because of the fact that KIW's are significantly more intrinsically motivated (Amar, 2004).

Lastly, the motivational factor of working with tasks that allows the KIW to feel a sensation of accomplishment and that they are contributing to the value creation process within an organization is reviewed. Horwitz (2003) argue that KIWs are highly motivated by being presented with challenging work. By engaging in work of this nature it generates a great sense of accomplishment which in turn adds greatly to the individual’s motivation towards the job. Moreover, Tampoe (1993) suggest that the task itself must also be of relevance to the firm, in order for the KIW to be able to derive significant motivation from this factor.
In summary, this thesis incorporates five intrinsically motivating factors, namely; autonomy, variety in tasks, learning new things, receiving positive feedback and the feeling of accomplishment and creating value, and examines how they influence KIW's differently in regards to their age. The importance of the factors have already been established by a large body of literature, however there is a scarcity of research conducted on how they motivate KIW's of different age.

2.2.1 Content Theory on Motivation

To further understand the internal and cognitive process that underlies the concept and what drives motivation and to cover the research area some theories and concepts concerning basic human needs have been looked upon. These theories can be divided into two groups, content theories and process theories. Content theories of motivation are focusing more extensively on employees’ internal factors that invigorate and direct their working behavior. Major content theories of motivation are Maslow’s hierarchy of needs (Maslow, 1943), Alderfer’s ERG theory (Alderfer, 1972), Herzberg’s two-factor theory (Herzberg et al., 1959), and McClelland’s Theory of Needs (McClelland & Burnham, 1995). Next, the second group of theories on motivation are the process theories which includes Expectancy based models proposed by Vroom (1964) and Porter and Lawler (1975), Equity Theory proposed by Adams (1965), Goal Theory proposed by Locke (1968), and Attribution Theory proposed by Heider (1958) and Kelley (1973).

However, as the focus of this study is aimed at autonomy, variety in tasks, learning new things, receiving positive feedback, and the feeling of accomplishment and creating value as motivating agents on individuals of different age, process theories on motivation are of little relevance and would be redundant to include in this study. Process theories are concerned with what factors or elements initiate thoughts leading to motivation and how these factors direct the motivation as well as what efforts are undertaken to maintain the motivation. As a result, it is relatively arbitrary to attempt to connect these process theories to this thesis’ study and the authors therefore decided to not include them.

Since the aim of this study is to answer how the motivating agents autonomy, variety in tasks, learning new things, receiving positive feedback, and the feeling of accomplishment and value creation influence KIW's, content theories can be used to shed light on the issue of what internal factors energize and guide working effort for this group of workers.

A theory that is based on the work of Maslow (1943) is the ERG theory proposed by Alderfer (1972). The ERG theory labels the levels differently compared to Maslow (1943), namely existence, relatedness and growth (Alderfer, 1972). Existence needs concerns physiological and safety needs, and relatedness needs deals with relationships to the social environment while growth needs concerns the development of self-actualization and esteem, as well as the desire to create meaningful tasks and have productive effect on himself or the environment (Alderfer, 1972). Both Alderfer and Maslow’s work cover roughly the same needs but are viewed upon from different perspectives.

The ERG theory (Alderfer, 1972) sees the needs as a continuum where progression is possible even though a certain category of needs are blocked, in comparison to the perspective of Maslow (1943), which sees the needs as a hierarchical structure and progression is not possible if the previous level is not attained. In this thesis, the authors have consciously decided to use the ERG theory as Alderfer (1972) showed that progression in the needs did not necessarily follow a hierarchical path, which would entail that one could not progress in growth needs unless the progression throughout the previous needs had been done. The
ERG theory was used to analyze whether there are differences in how much the two age groups have progressed in the three categories of needs, which could explain possible differences in effectiveness of the motivational factors incorporated in this study.

Next, the two-factor theory proposed by Herzberg et al. (1959) was also used to analyze the results of this study; it also incorporates the same needs but categorizes them differently and expands on the concept brought forward by Maslow (1943). Furthermore, this theory is more focused around work and job characteristics which made it more interesting for this study. The categories used are hygiene factors and motivators. The critical point that distinguishes this content theory from others is that the hygiene factors are equally important as motivators, however, they do not motivate in themselves but rather serve to prevent dissatisfaction and when these are tended to, no dissatisfaction is created. Motivators on the other hand increases motivation and do not necessarily have anything to do with hygiene factors. To further elaborate on how the theory handles hygiene factors and motivators, it should be mentioned that according to the theory that the opposite of dissatisfaction is no dissatisfaction, and vice versa for motivators; namely that the opposite of motivation in this regard is simply having no motivation. For example, if all the motivators are removed, it leads to the individual having no motivation, rather than being demotivated. (Herzberg et al., 1959)

Therefore, both hygiene factors and motivators must be given attention, firstly to prevent dissatisfaction and secondly to motivate and encourage employees (Herzberg et al., 1959). If the hygiene factors are not tended to, employees become dissatisfied. If the motivators are not tended to, the employees lose their motivation. However, later studies made by Hinrichs & Mischkind, (1967), Friedlander, (1964) and Ewen, Smith & Hulin, (1966) prove that a factor can serve both as a motivator and a hygiene factor at the same time within the same study. As these criticisms are considered just, the authors saw it fit to incorporate this in the analysis of the data and considered each motivating factor to have the possibility of belonging in either both, one, or none of the two categories. Table 2.1 provides a clear visualization of how Maslow’s, Alderfer’s and Herzberg’s theories of motivation relate to one another.

Table 2.1 Linking Maslow’s, Alderfer’s and Herzberg’s Theories of Motivation (Dinibutum, 2012)

<table>
<thead>
<tr>
<th>Maslow’s hierarchy of needs</th>
<th>Alderfer’s ERG theory</th>
<th>Herzberg’s two-factor theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSIOLOGICAL</td>
<td>EXISTENCE</td>
<td>HYGIENE FACTORS</td>
</tr>
<tr>
<td>SAFETY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOVE</td>
<td>RELATEDNESS</td>
<td></td>
</tr>
<tr>
<td>ESTEEM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SELF-ACTUALIZATION</td>
<td>GROWTH</td>
<td>MOTIVATORS</td>
</tr>
</tbody>
</table>

In conclusion, these concepts all suggest that intrinsic needs motivate employees. As this thesis’ study is centered on the factors of autonomy, variety in tasks, learning new things, receiving positive feedback, and the feeling of accomplishment and creating value, which are all intrinsic variables, these levels of the content theories were of the most relevance
and therefore of use when collecting and analyzing the data. Thereafter the analysis of each factor, connections were made to the examined literature, the ERG theory (Alderfer, 1972) and the two-factor theory (Herzberg et al., 1959). The concepts developed by these theories were used to further illuminate differences between the age groups which in turn provided more clarity and rigor to the conclusions found. In the event of that the factor analyzed displayed no relevance to a specific theory, the authors decided it would be redundant to include it in that specific section.

2.3 Lifespan Development

The next element brought up in the research question is the factor of aging and age differences of workers employed to do highly complex tasks in a rapidly changing environment. Theorists of lifespan development study what effect aging has on both the biological and the cultural level, and the authors aim to answer whether some of the most intrinsically motivating factors, namely autonomy, variety in tasks, learning new things, receiving positive feedback, and the feeling of accomplishment and value creation, motivate the workers in this specific group differently depending on what age group they belong to. The theoretical body of lifespan development is substantial and not all of it is relevant to this thesis’ study.

In general, one can witness four paths that humans follow as they age. These four trajectories are loss, growth, reorganization and exchange (Kanfer & Ackerman, 2004). The loss trajectory that humans experience as they age can be attributed to the gradual decrease of ‘Gf’ which refers to fluid intellectual abilities (Cattell, 1943, 1987). These fluid abilities refer to abilities such as working memory, processing of new information and attention. Over time, these cognitive abilities gradually deteriorate (Wechsler, 1944).

The second trajectory, growth, refers to the increase of certain crystallized intellectual abilities (abbreviated ‘Gc’) with age. These abilities are associated with educational or experiential knowledge, such as knowledge, emotional regulation, general wisdom and vocabulary (Cattell, 1987; Baltes & Staudinger, 2000; Kunzmann, 2004), and are supported by empirical evidence from Ackerman (1996, 2000), Ackerman & Rolfhus (1999) and Beier & Ackerman (2001, 2003).

This leads to a conclusion that the first and second trajectory has different impact on performance, which supports the idea that depending on job tasks, older employees might outperform young employees, or vice versa. In the context of IT consultants, the answer to which age group outperform the other is ambiguous, as the job nature is centered around both Gf and Gc abilities (Cattel, 1943, 1987).

Thirdly, reorganization refers to the notion that individuals restructure their goals throughout life (Kanfer & Ackerman, 2004) and therefore the motive to reach these goals can be subject to change as well (Carstensen, 1988). Goal theory, as proposed by Locke (1968), argues that the individuals become motivated by the goal they set. Looking at this in relation to Carstensen (1988), one possible conclusion to draw is that the motivating factors change with different goals and goals change over time. Support for this conclusion exist, for example some literature states that adolescents set goals that aims at developing themselves as individuals, meanwhile older adults sets goals to prevent losses (Baltes & Baltes, 1990; Ebner, Freund & Baltes, 2006; Freund, 2006; Freund & Baltes, 2002; Heckhausen, 1997; Ogilvie, Rose & Heppen, 2001). This points toward that there could very well be differences in the motivating agents of KIW’s as they age.
Lastly, individuals undergo an exchange process where the primacies of some motives are changed to others during the lifespan. These changes take place in several dimensions of an individual, namely their personality traits, vocational interest and self-concept (Kanfer & Ackerman, 2004). In regards to personality traits, conscientiousness is expected to increase with age meanwhile extroversion and neuroticism are expected to decrease (Kanfer & Ackerman, 2004). Additionally, individuals are also expected to be less open to new information and experiences (Jones & Meredith, 1996; Warr et al., 2001).

Furthermore, according to Erikson’s theory of psychosocial theory of development (1964) the human lifespan can be divided into eight stages and each of these phases have a specific developmental task. Moreover, the adult life can be divided into three stages; young adults, middle aged adults and old adults and it is these stages that are relevant to this thesis. A study by McAdams and de St. Aubin (1998) demonstrate proof that middle aged adults show increased amount of generativity compared to both the other adult groups. Generativity is defined as showing concern or care for others than self and according to the study of McAdams and de St. Aubin (1998) this means that middle adults show an increased level of caring for others when compared to the two other adult age groups, who displayed lower levels of generativity (McAdams, de St. Aubin and Logan, 1993; Keyes and Ryff, 1998). When connected to motivation the literature on generativity suggest that there is a difference in the effectiveness of achievement motives and generativity motives depending on the age of the worker (Kanfer & Ackerman, 2004).

Next, vocational interest has been subject to research and some controversy exists around whether it changes across lifespan or not. Initial studies, for example one conducted by Strong (1955), examined vocational interest preferences over a period of 20 years. The results suggested that the interests did not change much. However, since the study by Strong (1955) did not incorporate the level of Gc and Gf (Cattel, 1943) that each task required, there are other studies who challenge this claim. Warr (1997, 2001) and Besen et al. (2013) contends that preferences for variety in tasks and feedback, among other vocational interests, decrease with age. This is also aligned with the study of Baltes (1996) and Baltes & Silverberg (1994) who supports the notion that during the first half of life, independence maximization is desired and later this changes to creative use of dependence which supports the claim by Warr (1997, 2001) that younger adults appreciate feedback more compared to old, as it helps them become more independent in the future.

Further, there is also literature on how individuals perceive themselves across life. Ackerman, Beier and Bowen (2002) propose that individuals are aware of that their Gf abilities are higher during adolescence and gradually decrease as they progress into mid- and late life. This leads to individuals who are in the process of decreasing Gf abilities disengage themselves from situations where they would be at a disadvantage compared to a younger worker (Ackerman et al., 2002).

### 2.4 Theoretical Gap

The academic body on motivation is extensive. If the scope is narrowed down to workers engaged in highly complex tasks (e.g. KIW’s) in a rapidly changing environment with constant demands on renewal of skills (e.g. IT consultants, IT professionals), the available literature is scarcer. Current literature suggest that workers in this group are motivated by different factors and to different extents compared to other groups involved in work tasks with perhaps lower complexity. Although there is an apparent lack of quantitative data in this area there are still some qualitative studies that examine this phenomenon. Wallgren and Hanse (2011) found that autonomy and variety in tasks are the most motivating factors
for IT consultants, although without quantitative proof. The theoretical body on motivation examined previously would support this notion to the extent that a majority of the workers in this group are motivated by intrinsic incentives.

Moreover, this thesis’ study also incorporated aging, which is related to lifespan development theory. This academic body is also substantial and includes several scientific disciplines, most predominantly psychology and biology. However, relevant to this study was personality development and motivation across the lifespan. As mentioned previously, many aspects of an individual is changed and transformed over the lifespan. There are both increases and decreases in a multitude of factors, characteristics and traits.

By combining these two bodies of research the authors were able to illuminate a gap in the existing research and this study aimed to fill this gap. From the literature on KIW's in general, there is strong support for the dominant importance of intrinsic variables as motivators, compared to extrinsic variables. However, there has been no distinguishing between age groups and studies have treated this group of workers as an entity where age is not a variable of importance. At the same time, the academic body on lifespan development makes claim that because of generativity (Kanfer & Ackerman, 2004); changes in goal priorities (Carstensen, 1988) and decreases in certain intellectual capabilities (Cattel 1943, 1987), the importance of certain intrinsic motivators can reduce or increase across the lifespan. However, research on how motivation changes across the lifespan has not differentiated sufficiently between different routine workers and KIWs. As a result, the impact on a KIWs motivation from the selected factors across the lifespan is not explored to a satisfactory level.

Lastly, the examined literature and theories provide the authors with the lens to interpret and analyze the data collected. In more detail, the literature included on motivation and lifespan development was used to identify differences and similarities between the findings and the literature. Furthermore, the content theories on motivation included were also used to shed light on and bring clarity to the differences and similarities between the age groups included in this thesis.
3 Method

In this chapter the authors describe and defend the methods used within this thesis. A section discussing the data collection as well as a list of the empirical study subjects is also presented. A summary concludes the chapter.

3.1 Scientific Philosophy

There are several scientific philosophies within research such as positivism, interpretivism, pragmatism, and realism (Saunders, Thornhill & Lewis, 2009); however, this thesis’ study was conducted using the interpretivist philosophy.

3.1.1 Interpretivism

Interpretivism is a philosophy which states that social science, which concerns people, cannot be tested using only data in the same way as natural science can. When basing a study on the interpretive philosophy the qualitative method is often used and empirical data is gathered in a natural setting; however, this does not always exclude the use of quantitative techniques. The main characteristic of using the interpretivist view is that context is constantly changing and people are always interpreting it. Interpretivism is about becoming a part of the research subject or subjects and understanding the reality from their point of view. The basic approach combined with this philosophy is the inductive approach which is explained later. Interpretivism is a recommended approach within the fields of organization, marketing and human resource management due to their complexity and uniqueness in every situation. (Saunders et al., 2009)

The study is interested in KIW’s, whom are people, making this study concerned with the social science. The field of study of this thesis is human resource management for which the interpretivist philosophy is recommended. The authors used the qualitative method to gather data in a natural setting through interviews using an inductive approach; not generating any hypothesis. This called for the interpretivist viewpoint to be utilized due to the need to interpret the data gathered from the interviews. What the respondents said during the interviews was interpreted, rather than simply accepted, making positivism inappropriate for this thesis. Through the interpretivist viewpoint the authors were able to gain insight of motivation from the KIW’s point of views resulting in retaining a strong understanding about the motivation of KIW’s.

3.2 Scientific Approach

There are two major research approaches in regards to how a research project relates to theory, deductive and inductive. In simple terms, the approaches differ in whether the theory or the empirical data comes first in the research process (Saunders et al., 2009). The author’s choice of approach for this thesis was inductive.

3.2.1 Inductive

The Inductive approach is the opposite of the deductive approach in that theory comes after the data collection has been done. The inductive approach, unlike deductive, allows for alternative explanations other than the content of existing theory to back up the findings. Also, the inductive approach gives greater focus to the context rather than the variables of
the research. In inductive research the data collection is carried out first, and the theory comes afterwards and is based on generalized conclusions of the research findings. (Saunders et al., 2009)

The way that the research question is composed called for an inductive approach since the authors collected and analyzed the empirical data before making generalizations that concluded the research and added to theory. The authors did not aim to produce a theory and hypothesis prior to collecting empirical data and concluding the research. Since the inductive approach allows for empirical data to generate conclusions not backed up by existing theory, it is appropriate for this thesis’ research.

3.3  Research Method

Furthermore, there are two different research methods, qualitative and quantitative. The methods differ respectively in that one deals with data in word format while the other deals with data in a numerical format (Bryman & Bell, 2005). The method chosen for this thesis’ study was qualitative.

3.3.1  Qualitative Research

Qualitative research can be related to the previously discussed scientific philosophy, interpretivism, with a subjective focus on understanding factors such as incentives, values, actions, thoughts, and what governs these things, as well as society as a whole. Qualitative research explores the how, what, when, who, and/or why in practical study; it is therefore more common for qualitative research samples to be of a smaller size than quantitative. Due to the smaller samples of qualitative studies the findings are usually generalized as propositions (Denzin & Lincoln, 2005). Qualitative research connects with social sciences seeing as the researcher attempts to visualize the perspective of the studies subject(s) (Bryman & Bell, 2005).

The research question of this thesis is in the ‘how’ format which the qualitative approach is best suited to answer. Instead of conducting a study featuring a large sample with vague and undescriptive responses, the authors decided that a complex matter such as motivation is difficult to quantify since there are many variables involved, and results will be more insightful if the sample is small but supplying extensive information gained from each subject’s perspective. The authors used the qualitative research method in order to conduct interviews in which the data was presented in word format unlike the quantitative methods numerical format. Interviews was the most effective approach for the research because interviews would provide the most useful and in depth data on the topic of motivation in that it allowed for respondents to express themselves more freely unlike in quantitative research. Furthermore, the authors wanted to envision the study subjects’ perspectives in order to gain a deeper understanding of the results.

3.4  Research Strategy

The outcome of the underlying methodological approach naturally comes down to a choice of strategy. Common research strategies include survey and case study (Saunders et al., 2009); however, the authors decided that working with a case study would yield the most interesting and useful results.
3.4.1 Case Study

The case study strategy can use multiple sources of evidence in order to investigate and understand a social phenomenon. This can be obtained both by various qualitative and quantitative styles. However qualitative data is the most commonly used in order to get a deeper understanding of the research area; however, it can also be combined with quantitative methods to get a broader perspective and to get a full view. Common techniques are interviews, questionnaires and observations. The case study strategy is best used when there is little knowledge about how a certain phenomenon occurs, and is less useful when a phenomenon is well known. It has been used in both scientific viewpoints: positivism and interpretivism. An important part of conducting a case study is to choose a relevant area for the industry the research takes place in (Williamson, 2002). Case study is a suitable method for gaining a deep understanding of the context (Morris and Wood 1991). Research questions answered with a case study are usually of the “why” character but also “what” and “how” questions that in some cases are more connected with the survey strategy. In some cases it is advantageous to use the multiple case study strategy in order to assess the same results in more than one context. (Yin, 2003)

To answer the research question which is of a “how” character the authors decided to use a case study in order to answer the question on a deep level and gain descriptive answers. A case study on IT consultants, as the source of KIWs, was decided upon.

It is possible to distinguish between different groups of workers. In these groups, workers have work roles with sometimes similar features. Depending on the work role, different requirements and demands will be presented. The aim of this study is to investigate how the motivating agent’s autonomy, variety in tasks, learning new things, receiving positive feedback, and the feeling of accomplishment and value creation influence the workers in a specific group differently, in regards to their age. The authors identified this group of workers as individuals with work roles characterized by working conditions much different from most other groups and therefore constitute for a special sub-occupancy group; this claim is supported by Tsai, Compeau and Haggerty (2007). This group works in a rapidly changing environment that place high demands on the ability to adapt and learn. Thus, individuals located in this group experience a substantial threat of professional obsolescence (Ivancevich, Napier & Wetherbe, 1983). Furthermore, the nature of the tasks of the workers are highly complex and often require cooperation with multiple parties, including individuals external to the organization as well as other companies (D’Mello & Sahay, 2007). The authors define this group as ‘individuals that uses their cognitive skills to solve complex problems requiring highly specialized knowledge, in a rapidly changing environment.’

The work role of an IT consultant fits perfectly with the characteristics within the definition, and therefore this is the occupancy the authors choose to incorporate into this thesis’ study. The conclusion that IT consultants are in fact characterized by above mentioned factors is also supported by other studies (see e.g Wallgren & Hanse, 2011; D’Mello & Sahay, 2007). IT consultants are often employed temporarily and are often only desired to stay until the specific task or problem is solved (Ivancevich et al., 1983). Their tasks are highly complex and as they are employed at a for-hire basis the customer usually places higher demands in comparison to other IT professionals and other employees working at the customer firm (Ivancevich et al., 1983). Due to the complicated nature of the problems cooperation is often warranted (Docherty & Huzzard, 2003). Lastly, development in the IT industry occurs at an incredible pace which requires IT consultants to renew their knowledge frequently (Ivancevich et al., 1983).
3.5 Sample Selection

There are several sample selection types that can be utilized in research and they fall under the categories of probability and nonprobability selection. The authors selected the sample for this study using the non-probability sampling methods convenience and judgmental sampling.

3.5.1 Convenience and Judgmental Sampling

In convenience sampling the most accessible subjects are selected; this method is commonly used despite possible bias. Judgmental sampling is the process of choosing the subjects most suitable for the particular research; this method is commonly used in small samples such as case studies. (Saunders et al., 2009)

The authors decided to utilize the judgmental sampling method for this research as they wanted to select IT consultants of different ages to fit the criteria of the study. An equal amount of IT consultants were selected for each age group, four subjects for the young group aged under 41, and four for the old group aged over 41. One IT consultant project leader was also selected in order to gain a different point of view and perspective on KIWs motivation. The sampling selection can furthermore be qualified as a convenience sample in that the authors already had the possibility of getting in contact with IT consultants from different companies due to previous contact and networking. It is also a convenience sample due to the fact that three out of the nine IT consultants selected were situated in Jönköping, the same location as the authors. The other six out of nine interviewees were located in Stockholm where the authors had to travel to conduct the interviews.

The authors anchor their decision behind the specific age group segmentation of the data into two arguments. First, the different generations, known as Generation X and Y (Coupland, 2002) have psychological and sociological differences. Generation X is currently aged 39-54 and Generation Y is currently aged 22-38 (Schroer, 2004). Therefore, a case can be made that segmenting the data around the age of 39 is desirable. Furthermore, these age generations have differences in them that impact their psychological and sociological attitudes, such as the ability for technology adoption which has a direct impact on work behavior and performance (Schroer, 2004).

The second argument is related to the technological advancements that have occurred during the last four decades. The individuals who grew up during this time will be the first generation that possesses the skills required to manage technology since they grew up with it. Especially in knowledge intensive industries and businesses, this leads to a monopolization of these skills by individuals from this generation. As a result, they will have more leverage and require special treatment, as opposed to how the procedure has occurred previously, where the employee enters work and abide by the rules imposed by the manager. (Amar, 2004)

Consequently, the authors judged it desirable to segment the data around the age of 39. However, due to difficulties in constructing an adequate and balanced sample the authors had to adjust the segmentation of the data to the age of under 41, as well as over 41 respectively. Additionally, the authors handled the data supplied from subjects located closely to the segmentation point with carefulness and analyzed this data as slightly less representative for the age group.
3.6 Data Collection

Primary data is the data that is of empirical nature collected by the authors through strategies such as interviews which was used for this study (Bryman & Bell, 2005). A literature search follows and explains how the authors gathered information for the literature review within the theory section which was used in analyzing the empirical data.

3.6.1 Primary Data

The primary data of this thesis was collected through interviews conducted with eight IT consultants, as well as one IT consultant project leader. Four IT consultants were interviewed for each age group; four aging under 41 years old and under and four aging over 41 years old. In order to collect the most reliable and the most representative empirical data while still under the limitations of time and cost, interviews were conducted with IT consultants from different companies in order to remove as much bias, such as company culture, as possible. Also due to the limitation of time, a cross sectional study was produced rather than a longitudinal study, which means that the subjects were observed and compared at a single point in time unlike the latter approach. Nine interviews were held in total; at this point a sufficient amount of empirical data had been collected in order to conduct a thorough analysis.

Most of the interviews were conducted at the workplace or office of the IT consultants while some where conducted over a phone call. The interviews were each timed at approximately 30 - 40 minutes long. All interviews were recorded and transcribed in order to be analyzed most effectively. Due to the authors' fluency in both the Swedish and English language, the interviews were conducted in Swedish while the data presented within the thesis is in English; all direct quotes from the subject used to strengthen claims within the analysis have been translated directly.

Interview List

All of the interviews were conducted in April, 2015. In order to provide anonymity for the respondent their names are not used within this thesis. The nine respondents are listed below:

Table 3.1 Interview List

<table>
<thead>
<tr>
<th>Consultant</th>
<th>Abbreviation</th>
<th>Age</th>
<th>Gender</th>
<th>Company/ Customer</th>
<th>Employment type</th>
<th>Type of consultant</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young consultant 1</td>
<td>YC#1</td>
<td>24</td>
<td>Female</td>
<td>Evry</td>
<td>In-house</td>
<td>Developer / Support</td>
<td>2015-04-20</td>
</tr>
<tr>
<td>Young consultant 2</td>
<td>YC#2</td>
<td>27</td>
<td>Female</td>
<td>Test4Quality</td>
<td>Working Off-site</td>
<td>Tester</td>
<td>2015-04-19</td>
</tr>
<tr>
<td>Young consultant 3</td>
<td>YC#3</td>
<td>28</td>
<td>Male</td>
<td>Springworks</td>
<td>In-house</td>
<td>Developer</td>
<td>2015-04-07</td>
</tr>
<tr>
<td>Young consultant 4</td>
<td>YC#4</td>
<td>40</td>
<td>Female</td>
<td>PDB</td>
<td>In-house</td>
<td>Developer</td>
<td>2015-04-14</td>
</tr>
</tbody>
</table>
3.6.2 Literature Search

The main literature sources used in developing theory and in discovering the research gap were Besen et al. (2013), Kanfer and Ackerman (2004) and Wallgren and Hanse (2011). The articles were found by using search phrases such as “motivation”, “lifespan development”, “knowledge intensive workers” and “IT consultants”. Most of the major articles were found by using various electronic search engines such as Google Scholar and the Jönköping University libraries own search service, Primo, were used extensively. Another source widely used for discovering articles were the reference lists of the main articles. The authors analyzed the selected articles to identify the most prominent and usable references.

Wiley was used as a source for general information and to gain a proper overview of the topics; however, much emphasis was put into using published journal articles as main sources of reliable information. The theory chapter was built on three pillars that related to the research question: motivation, as a part of human resource management, KIWs and lifespan development.

Search phrase examples: IT consultants, motivation, lifespan development theory, knowledge intensive workers, knowledge workers, information technology, human resource management, motivation of IT consultants, aging, motivation knowledge worker, lifespan motivation

3.7 Interviews

The three main types of interviews are structured, semi-structured, and unstructured (Bryman & Bell, 2005). The type of interviews conducted for this study was semi-structured interviews.

3.7.1 Semi-Structured Interviews

In semi-structured interviews the respondents have the freedom to answer as they would like as the questions or answers are not strictly set beforehand, rather, some questions are prepared, following no specific order, and there is room for extended impromptu questioning. (Bryman & Bell, 2005)
For this research the authors decided to utilize semi-structured interviews in order to have a similar line of questioning for each subject so that the data can more easily be compared and analyzed while it still allows for discussion. The semi-structured interviews also allowed for the respondents to express their answers more freely which gave the authors more material and data to work with in the analysis. At the same time, while discussion of the topic was encouraged, the authors did not conduct completely unstructured interviews because the authors wanted to keep the focus centered on the topic.

3.8 Data Analysis

There are several methods to use in analyzing data, some of these include pattern matching, explanation building, time-series analyzing, logic models, and cross-case synthesis (Yin, 2009). Pattern matching was used in analyzing this thesis’ empirical data.

3.8.1 Pattern Matching

Pattern matching is the process of comparing two patterns, the empirical based and the predicted pattern. The higher the similarity the higher the validity of the case is. Pattern matching is the most preferred type of analysis for case studies. (Yin, 2009)

The authors chose to utilize the pattern matching data analysis method for their research and data. The authors found this method the most suitable since the aim was to compare the patterns found within the data to the related and existing theoretical content. Patterns within the existing theory was found initially within the theoretical framework, secondly patterns of the empirical data were discovered. The additional data analysis methods mentioned above were dismissed due to their inappropriateness for the author’s research seeing as they would not attempt to build a case explanation, nor would the data be collected over a long period of time.

3.9 Quality Criteria

According to Yin (2009) there are four quality measurements tests appropriate for case studies: construct validity, internal and external validity, as well as reliability. Validity is mainly concerned with the integrity of the study’s conclusions (Bryman & Bell, 2005).

Construct validity deals with the question if what is being studied is the same as what is being claimed to be studied and can be achieved by collecting data using several sources of evidence, as well as have the report reviewed by main subjects of the study. If a conclusion dealing with a causal relationship of more than one variable makes sense or not concerns internal validity and can be enhanced by applying logic models in order to explain the relationship. External validity on the other hand, is concerned with whether the conclusion can be applied and holds true to other research that lies outside of the specific context; this can be achieved by analytical generalization where the results may go beyond the context. Finally, reliability deals with whether the results can be repeated or not. Reliability can be strengthened by documenting the process so that others may replicate the case. (Yin, 2009)

The authors of this thesis created construct validity by utilizing many and varied sources such as scientific articles and literature. The authors also had key informants of the study review their findings. Internal validity is shown through the models of the relationship in the project and external validity is confirmed by the projects analytical generalization. Finally, reliability is created by the authors documenting the whole process, from beginning to end.
3.10 Summary of the Methods

The authors of this thesis utilized the interpretivist scientific philosophy as well as the inductive scientific approach. Moreover, the authors used the qualitative research method and the research strategy case study. In selecting the sample for the empirical data judgmental and convenience sampling was applied. The thesis consists of primary data which was collected through nine semi-structured interviews. Thereafter, the data was analyzed using the pattern matching method. Finally, the thesis bases its quality criteria on four tests: constructive, internal, and external validity, as well as reliability.
4 Empirical Data and Analysis

Interviews with the sampled IT consultants are presented in this chapter alongside the analysis using the author’s own ideas and the theoretical data. The empirical data is divided into different topics and the analysis of each topic follows. The section is commenced with an overview on the IT consultancy occupation using information gained from the conducted interviews.

4.1 Description of Occupation: IT Consultants

In order to enhance the understanding of the empirical data, a brief description of the occupation is included and the description is based on the information supplied by the interviewees. An IT consultant is an expert in information technology and they can be seen as value-creating resources mainly used for filling knowledge and competence gaps (YC#3, personal communication, 2015-04-07). IT consultants are most commonly hired on a project basis, and can perform a large array of tasks as well as fill several different roles.

There are several ways to categorize IT consultants such as employment type: self-employment or employed by a larger consulting firm (PL, personal communication, 2015-04-20). The IT consultants can also be categorized by what type of tasks they are usually involved in since those tasks can vary in both complexity and nature. Common tasks performed by IT consultants are producing requirement specifications, system development, programming, integrating systems and testing. The role can also differ in that more experienced IT consultants can take on the role of advising how to plan the entire IT environment in a firm. The role can also include programming and developing applications, or implementing new functions in already existing software. Lastly, IT consultants can work either in-house or off-site, which means that they either work at the location of the consultancy firm or at the physical location of the customer. From an overview, IT consultants can be perceived as a small but irreplaceable cogwheel in the large IT machinery of a firm, a cogwheel that the customers does not have within their own organization.

4.2 Autonomy

4.2.1 Empirical Data

Young IT Consultant Group

YC#1 said that autonomy is important for parents with children dependent on them. The company she works for is fairly flexible: the employees are allowed to set their own working hours as long as they are able to complete the tasks as expected. She values being able to decide for herself how she completes her work, and she states that having a boss telling you exactly how to do the tasks would be inefficient for the company seeing as it is the IT consultants who know best how to complete certain tasks as they as specialized in the field, not the bosses. She is motivated by the ability to do her own work in that she is rewarded with the feeling of being smart and competent in her work. While YC#1 values her freedom and being able to plan her days as she prefers, she also finds that a negative aspect of autonomy is that sometimes she has to work during the weekends in order to finish her work in time. (Personal communication, 2015-04-20)

YC#2 did not value autonomy and the ability to be flexible very much as other motivation-al factors were prioritized by her. (Personal communication, 2015-04-19)
YC#3 stated that autonomy was important for parents who needed to set their working hours according to when their kids needed to get picked up. YC#3 also values autonomy in the sense that he can sleep long in the mornings and work longer hours in the afternoon instead, as long as he completes his work as expected. (Personal communication, 2015-04-07)

YC#4 stated that autonomy probably motivates many, and while she sees it as an important factor she does not value it as the highest motivator for her. She would not appreciate having a boss watching her every move, but having set hours would not be highly demotivating for her. She has not experienced having set hours however, so is therefore unable to dictate how important she might find autonomy had she had this experience. (Personal communication, 2015-04-14)

**Old IT Consultant Group**

When asked about the seven different motivational factor examples OC#1 stated that autonomy was the absolute most important motivator for her. This because she values being able to complete tasks herself and having the freedom to decide herself how and when she will do her work. She would not appreciate a superior telling her how to specifically do her job; she finds that the ability to think for herself is motivating. (Personal communication, 2015-04-11)

OC#2 did not rank autonomy as very important. While he states that autonomy is important, it is not the most important. OC#2, a prior entrepreneur, even returned to work as a consultant at a larger and established company due to the fact that he preferred that setting rather than that of the freedom an entrepreneur might experience. Even though OC#2 has some autonomy today, he finds that he is still controlled by his customers despite his ability to influence his working hours. He agrees however that having a boss that checks up on him frequently would not be optimal, but he has not experienced a situation in which he has no autonomy, and therefore finds it difficult to really say how important the factor is. Despite not emphasizing the importance of autonomy as a motivational factor, OC#2 values being able to set his own working hours when his work allows for it since he puts a lot of value on his free time. (Personal communication, 2015-04-07)

OC#3 emphasized the importance of autonomy as the main motivator for him. He is currently working 80% and has the ability to choose which days he works. He appreciates the ability to take vacations as he pleases as well as longer lunches on occasion as long as he gets his job done as expected. OC#3 also started his own company in the middle of his career and he noticed that he enjoyed being his own boss with the freedom to come and go as he pleases as long as the customers get what they want. (Personal communication, 2015-04-10)

OC#4, the oldest IT consultant interviewed, agreed with OC#1 and OC#3 in that autonomy is the absolute most important motivational factor. She values being able to make her own decisions and working in an environment where she has freedom as well as the ability to evolve. OC#4 abruptly ends the topic discussion by saying that she would quit immediately if she was forced to work at a company where strict working hours and time cards were utilized. (Personal communication, 2015-04-10)

**Managerial Perspective**

The PL finds autonomy very important as a motivator for IT consultants. He states that IT consultant's value being able to manage the time spent on their personal and work related
affairs how they see fit. He states that the ability to take time off is very motivating for his employees. He always allows for time off no matter how much it hurts the project, because he knows that the reason is usually important and the employee is aware that the project will suffer so they work extra hard before and after they take the time off, so the PI gets a lot in return for allowing his employees autonomy. On the other hand people can be very differently motivated by autonomy: he has employees who prefer to discuss things with him every hour while others become irritated if disturbed more than once a week. (Personal communication, 2015-04-20)

4.2.2 Analysis

In general, autonomy adds to motivation since it gives the individual freedom and trust from the customer, which in turn creates a stronger desire and serves as an incentive to create value for the customer. The authors found that the idea of autonomy as a motivational factor can be separated into different types of autonomy. Firstly, autonomy in terms of time, in regards to personal life and work life, can be discussed. Because older individuals usually have more commitments and more people depending on them, the time aspect of autonomy becomes more important to them than for young, which makes it a strong hygiene factor for the older IT consultants since without autonomy, significant dissatisfaction is created (Herzberg et al., 1959). Meanwhile, younger IT consultants simply enjoy autonomy since their working hours become more flexible, which does not make it a motivator in regards to working hours, nor a hygiene factor as they would not mind working set hours, according to our sample. (Herzberg et al., 1959) Conclusively, autonomy in terms of time management such as work hours and personal life, does not act as a motivator for either of the age groups according to our data.

“I think autonomy motivates both age groups but for different reasons. The older might have children to pick up from daycare while as young like to sleep in in the morning and get to work a bit later” (YC#1, personal communication, 2015-04-20).

“We were supposed to be at work between nine and four, and then you could work more hours at home if you wanted to. But there was those who came in at six and left at five, and then there was those who came in at nine because they couldn’t get out of bed” (YC#3, personal communication, 2015-04-07).

“I wouldn’t mind working nine to five hours so much; there are other factors I prioritize more than autonomy, such as learning new things” (YC#4, personal communication, 2015-04-14).

An example of the reorganization trajectory (Kanfer & Ackerman, 2004), mentioned in the literature review, is that younger people’s goals focus on developing and bettering themselves while older people’s goals focus on preventing loss and maintaining social connections (Baltes & Baltes, 1990; Ebner, Freund & Baltes, 2006; Freund, 2006; Freund & Baltes, 2002; Heckhausen, 1997; Ogilvie, Rose & Heppen, 2001). This can be applied to the findings that younger consultant are more independent in their personal lives, and therefore desire less autonomy, while older people on the other hand are more dependent on others and often have others who are dependent on them, which makes them desire a greater amount of autonomy in order to prevent losses and keep up with their commitments.

“I value my spare time a lot; my personal time. And being able to decide a lot for myself” (OC#2, personal communication, 2015-04-07).

“Something that’s usually very motivating for my employees is me giving them time off when needed. It’s an important motivational factor because if they ask for time off they usually have a good reason for it” (PL, personal communication, 2015-04-20).
Secondly, autonomy in the sense of working style can be discussed. Both age groups appreciate having the possibility to come up with their own solutions. However, autonomy as a motivational factor influences the age groups slightly differently. Young IT consultants get motivated by having this possibility, and the same is true for the old IT consultants; however, the old are more motivated than the young. The point at which the groups differ is when the possibility is taken away. Young IT consultants are much less affected by this when compared to the old IT consultants, who become drastically less motivated. As a result autonomy within one's working style is considered a strong hygiene factor for older IT consultants but only a weak hygiene factor for young IT consultants; autonomy is also a strong motivator for old IT consultants while a moderate motivator for young IT consultants (Herzberg et al., 1959).

“I like the freedom and to decide a lot for myself; that I’m able to come up with solutions by myself”
(OC#1, personal communication, 2015-04-11).

“I started my own company, and as a result I felt more in control, which I preferred” (OC#3, personal communication, 2015-04-10).

“I don’t mind doing a task exactly the way the customer wants it, as long as they’re satisfied. I don’t have a problem with people telling me what to do, but it’s of course better when I get to think for myself.” (YC#1, personal communication, 2015-04-20)

In general, the authors found that the differences in the level of motivation between the old and the young consultant groups, in regards to autonomy, can be attributed to differences in knowledge, experience, confidence and trust. Old employees possess more experience and knowledge. As a result, older IT consultants often believe that they know “best-practice” and in combination with their vast experience, they are much more prone to argue for the sake of working in a more autonomous way. As a result they receive a greater amount of trust from their employer which in turn increases the amount of autonomy the customers are prepared to supply. The trust stems from the fact that the employers are aware of the older IT consultants’ greater amount of experience and knowledge. The young IT consultants however, have less experience and knowledge and therefore often less confidence; resulting in requiring as well as receiving less autonomy from the employer and customer.

“The IT consultants, especially the experienced ones, are more aware of what best-practice is, not the team leaders or the boss. The IT consultants usually know best how to do a specific task; it’s their specialty, so they should be able to decide how it should be done” (YC#1, personal communication, 2015-04-20).

The finding that autonomy is positively related to motivation is confirmed by Besen et al. (2013). However, the authors of this thesis found that autonomy is more motivating for older than younger people goes against the findings of Besen’s et al. (2013) study which states that the positive relationship between autonomy and motivation weak-
ens with age (Besen et al., 2013). Besen’s et al. study was however conducted with routine workers, not KIW’s which explains the differing results. Another study conducted by Schein (1996) state that autonomy needs increase with age which agrees with this study’s results. This study shows that autonomy is valued more highly as a motivational factor for older IT consultants than young; therefore the authors propose that autonomy increases in its ability to motivate KIWs over time as they age (see Figure 4.1).

Finally, the results can be related to the ERG theory (Alderfer, 1972) in which the authors suggest that the younger IT consultants have a greater amount of growth needs in that their confidence is lower than the old; resulting in accepting a lower amount of autonomy. The older consultants have less growth needs due to knowledge and experience, and therefore desire more autonomy.

4.3 Variety in Tasks

4.3.1 Empirical Data

Young IT Consultant Group

YC#2 prioritized variety in tasks as the most important factor. She prioritizes the ability to work with non-monotone work while receiving less pay rather than the other way around. People get bored with doing the same thing in the long run, and will lose focus on the task at hand. She feels that the level of concentration will be greater even if the task varies just slightly. Having no variety is not good for anyone, unless you are a robot she jokes. (Personal communication, 2015-04-19)

YC#1 felt variety in tasks was a major motivational factor, but not just variety in tasks, but also variety in environment such as customers and social settings of the job. When faced with the hypothetical scenario that she would only be working with one task, she says that she would be able to manage for a little while, but the motivation would definitely not hold in the long run. She also emphasizes that there is so much within the field of IT, that even if you are only working with one product or task, there is so much within that product or task that can vary, such as updates and new versions. (Personal communication, 2015-04-20)

While discussing variety in tasks as a motivator YC#3 realized that this factor is a core value for the company that he works for. The company used a strategy in which all the IT consultants would have the opportunity to work with every part of the process so that everyone would be similarly knowledgeable and understand the entire process well. Each employee would never do one task for too long, and YC#3 feels this is very effective. He would not want to work with only one task all the time. (Personal communication, 2015-04-07)

YC#4 prioritizes variation in tasks a lot and would not be able to stand working with only one task day in and day out. However, despite valuing having variation in tasks she believes there are negative aspects as well. When one has too much variety in tasks and has to focus on all tasks at once the work can become very stressful. She also mentions that sometimes it is nice to work with tasks that you are familiar with; it creates a safe zone. (Personal communication, 2015-04-14)
Old IT Consultant Group

OC #1 values variety in tasks in that she prefers work that is not monotone, routine based or boring in the long run. She has variety in tasks in her current job because there are new problems and challenges occurring every day, as well as due to the fact that technology is constantly being updated and renewed. OC#1 has experience in all fields, and she feels that there is so much to do within each field of IT consultancy, so there is always variety in tasks. However, she feels that there is an end line between how much you can do, too much variety can also be negative. In the end however, she feels that it is not the money that motivates her, it is the fact that she is able to go to work every day for eight hours without tiring of her job. (personal communication, 2015-04-11)

OC#2 was unable to distinguish properly between the motivational factor variety in tasks and the opportunity to learn new things. While both are important, he simply felt these two factors fed off of each other and that if you have one you also have the other. (Personal communication, 2015-04-07)

OC#3 finds that variety is important in order to enjoy his job, but it is not a major motivational factor for him. He currently has a lot of variety in his job. He is able to perform every task within IT consultancy and therefore works with a product from start to finish. He once worked with a British IT firm in which the employees were divided into different groups in which each group performed one task. OC#3 says he would never be able to work like this as he would tire of the work quick and really values his ability to work within the entire field of IT. (Personal communication, 2015-04-10)

OC#4 finds that variation in tasks is necessary to avoid the work becoming completely dull. The amount of variation in tasks for a consultant depends on the kind of consultant one is, the kind of consultancy work OC#4 does entails a lot of variation. IT consultants work with many different customers and changing customers constantly, and this creates a lot of variety as well. Since OC#4 has worked as an IT consultant for a great amount of time she has knowledge within all fields of IT, she is therefore able to consult with everything, and is a part of the entire process which creates variety. (Personal communication, 2015-04-10)

Managerial Perspective

The PL states that IT consultants relatively often stay within one assignment for a long period of time especially the older and more experienced ones, so it is advantageous if there is variety in tasks within their job in order to avoid becoming bored. He also states that from a managerial point of view, the PL attempts to let IT consultants work with a variety of tasks as the quality of their work is usually higher. (Personal communication, 2015-04-20)

4.3.2 Analysis

The authors found that the job characteristic of variety in tasks in the two age groups both have similarities and disparities. However, it should be noted that individual characteristics play an important role in determining the temporal extent to which an individual can work with an identical and repetitive task. In the sample, all of the IT consultants mentioned that there is a time limit that the sampled IT consultants can work with an identical task before it becomes dull, which is of no surprise.

“Doing the same thing for a long time would be boring in the long run” (OC#1, personal communication, 2015-04-11).
“Monotone work gets boring in the long run; I think I would lose focus” (YC#2, personal communication, 2015-04-19).

“I think I would stay motivated for a little while if I had to do the same thing over and over again, but in the long run I would lose my motivation. I think I would search for a new employer.” (YC#1, personal communication, 2015-04-20)

Furthermore, the similarity between the two age groups is the basic need of having variety, but not necessarily in tasks. Until this point the age groups display similarity, which is to be expected. However, the source of which the IT consultants in the sample extract this variety from differs. It is important to keep the definition used for variety in tasks in mind whilst reading this analysis. Variety in tasks is defined as the degree to which the individual is presented with tasks of differing characteristics, such as complexity, timeframe and working procedure resulting in different demands being placed on the individual in this study. The younger IT consultants often spoke about variety but not in the same regard as the authors.

The authors findings suggest that younger IT consultants satisfies their need of variety in tasks by a mix of learning new things in the specific task that they are specialized in and experiencing new social environments. As a result, their need for variety in tasks becomes satisfied even though they have not engaged in a completely new task. This is one of the conclusions that the authors found.

“In my job you can work with the same task for a long time but find variety within the task itself. For example, if I am working with the Citrix system I can learn about the new Citrix version, or I can find different ways of implementing this system with new customers. Through this I get variety.” (YC#1, personal communication, 2015-04-20)

“There doesn’t have to be huge differences in tasks, as long as you’re able to take a break from the current task for a little and then come back, instead of be stuck working on the exact same task for an entire week, day in and day out” (YC#2, personal communication, 2015-04-19).

Another aspect that can be illuminated is the timespan of the assignments, which can be one of the reasons to why younger IT consultants have a smaller need for a larger variety of tasks. According to the sample, younger IT consultants often have a smaller knowledge base due to limited experience and therefore are often hired for projects lasting a shorter time, which entails a smaller array of tasks that the IT consultant is expected to execute. Due to the shorter time span, the frequency of change in their environments is higher. This relates to the previous section and explains why younger IT consultants have a more frequent change of environments. The authors draw the conclusion that the younger age group satisfies their need for variety in tasks by obtaining deeper knowledge in the specific task and by experiencing new social environments, which is the result of working with new customers.

“I feel like I have variation when I get to work with a new customer, program, or something else” (YC#1, personal communication, 2015-04-20).

However, for older IT consultants, the source from where they receive variety in tasks diverges from the one of young IT consultants, and as a result they obtain motivation in a different way. Naturally with old age comes, in most cases, more experience and knowledge of the profession. From the sample the authors could see that the older IT consultants were more often self-employed and ran their own firm, through which they offered their services to companies. Moreover, the authors witnessed that the assignments for the older
IT consultants often stretched over a much longer timespan. These assignments generally started with an idea that the consultant was asked to develop and finalize into a finished product.

“When you’ve worked somewhere for a long time you’re a part of the entire process. You’re involved in discussing solutions, coming up with ideas, and so on… You work with everything!” (OC#4, personal communication, 2015-04-10)

“I’m able to do everything. I think you should work from start to finish.” (OC#3, personal communication, 2015-04-10)

The findings from the interviews reveal that the older IT consultants experience that variety in tasks as a motivational agent is satisfied when they are included in several stages and phases of the project. This entails that they work with several, fundamentally different, tasks such as planning, programming, developing, and system integration throughout the project. When the interviewees were asked about variety in tasks, the older IT consultants referred to it as being able to work with these different tasks, which clearly differs from the answer of young IT consultants regarding variety in tasks.

In regards to the actual difference between the age groups, the authors draw the conclusion that younger IT consultants accept a lower degree of variation, albeit they still value it highly. A great part of their interpretation of variety in tasks stems from variation in environments and social interactions, meanwhile older IT consultants focus more on the actual tasks themselves. Seeing as the authors define variety in tasks as being engaged in fundamentally different tasks the young IT consultants are not profoundly motivated by this factor. Across a lifespan of an IT consultant, the authors expect that IT consultants initially aim to obtain more knowledge within IT by attempting to strive for variety in tasks. By doing so they will have the capability to perform several different tasks as they grow older, which should shift their main source from where they find variety; from specialization in a task and social environments to actually working with fundamentally different tasks. As a result, and as seen in the empirical data, older IT consultants values actual variety in tasks more than younger IT consultants. Figure 4.2 visualizes the generalization that variation in tasks increases as a motivator as age increases.

In relation to the academic literature, this finding conflicts with Besen et al. (2013) and Warr (1999, 2001) who makes the claim that the preference for variety in tasks decrease over time, as the finding suggests that the preference increases over time. This difference could be explained by the fact that the sample included in this study consists of KIW's meanwhile the studies of Besen et al. (2013) and Warr (1999, 2001) is not focused around this group of workers. Another plausible explanation could be that this phenomenon would be restricted to the profession of IT consultants. The authors reasoning behind this explanation is that because of the nature of IT consultants, social and physical environ-
ments change rather frequently. In the case of a profession where this change is nonexistent, the source from which younger KIWs find their variation is unaccounted for. Therefore the conclusion reached by the authors might be restricted to the IT consultancy profession.

Relating the results to the ERG theory (Alderfer, 1972), the authors propose that, similarly as to autonomy, the younger IT consultants have more growth needs in that their confidence is lower than the old; resulting in them accepting a lower amount of variety in tasks. The older consultants have less growth needs due to knowledge and experience, and therefore want more variety in tasks.

Lastly, connecting this finding to theory, the authors argue that relating variety in tasks to the two-factor theory proposed by (Herzberg et al., 1959), variety in tasks seem to work both as a motivator and a hygiene factor for both age groups. However, the difference lies in the strength that the factor has in each respective age group. The authors find that variety in tasks is a weak motivator for younger IT consultants, primarily because of their limited experience in IT; their need for variety is satisfied by other factors than actual variety in tasks. For older IT consultants it is a strong motivator, as they enjoy being engaged in several stages of the project and find that this brings variety in tasks. Moreover, older IT consultants enjoy having this variety as it contributes to their job satisfaction primarily. In the sense of a hygiene factor, it creates dissatisfaction more easily with the older age group compared to the younger age group. The reason behind this could be that the younger IT consultants are more insecure and inexperienced and thus accepts working in a less challenging and varied environment, as opposed to an older IT consultant. Conclusively, it is defendable that variety in tasks is a strong hygiene factor for older IT consultants and moderate for younger IT consultants.

4.4 Learning New Things

4.4.1 Empirical Data

**Young IT Consultant Group**

YC#1 claims that learning new things is a natural part of the job and that the positive feeling it brings comes naturally when the IT environment changes. Young workers are usually hungrier to learn and older IT consultants can sometimes serve more as a mentor, by teaching younger IT consultants and collaborating within projects. She states that she is learning new things every day at work. Older IT consultants learn less due to the larger knowledge base; however she speculates that they will derive the same amount of motivation from learning some new knowledge, when compared to a younger consultant. (Personal communication, 2015-04-20)

YC#2 gets motivated by learning new things, which is required in order to keep up with the rapidly changing environment of IT. She values learning since IT consultants quickly fall behind without continuous learning. YC#2 also claims that learning new things can be done at home and does not necessarily have to be implemented in the actual job. She prefers feeling confident about her ability to deliver good quality in her job rather than engaging in a new task in which she does not feel very confident. (Personal communication, 2015-04-19)
YC#3 values learning new things very high, even more than autonomy in terms of flexible hours and variety in tasks. It leads to personal growth and that is why it is the most important factor according to him. (Personal communication, 2015-04-07)

YC#4 mentions the fact that she gets to learn new things and personal development are the reasons for why she is motivated at work. She also explains that the high demand of skill renewal on IT consultants leads to new obtained knowledge and it can be both motivating and stressful. YC#4 does not have a personal drive to develop her capabilities further due to not having a general interest in IT. However, she still appreciates learning new things but perhaps not as frequent as the colleagues with a strong IT interest. (Personal communication, 2015-04-14)

Old IT Consultant Group

OC#1 enjoys her job since she is able to learn new things all the time due to the ever changing IT environment. She believes it will continue like that during her career since everything is changing so fast within the industry. However, she speculates that it might be tougher with competence development for older IT consultants as the curiosity fades and it becomes more difficult to take in novel information. (Personal communication, 2015-04-11)

OC#2 gets motivated by working on the limit between what he knows and what he does not master completely. This creates an unrivaled level of excitement in his work and contributes to his motivation considerably. However, now that he is of older age he admits to not being as courageous as previously. Nowadays he still enjoys learning new things but he refers to his personality traits as the reason behind this. (Personal communication, 2015-04-07).

OC#3 does not feel much excitement about learning new things that is not directly related to his job. Nevertheless, he claims that this is due to the weakened spark towards IT which makes him less prone to seek new information, as well as less receptive when this information is presented. (Personal communication, 2015-04-10).

Due to her age OC#4 has decided to limit the amount of new things she picks up and is now focusing on becoming better in what she does. She also feels that she is of better use within her areas of expertise. One of the reasons she is still working is because she feels that she can contribute within her areas. She would not accept an assignment where she does not feel she can do a good job. However if she gets the chance to work in a project involving new things she appreciates learning about them as long as she does not have to work with it directly herself. She attributes this notion to her personality, which she describes as a personality that enjoys learning about new things, regardless of what it is (Personal communication, 2015-04-10)

Managerial Perspective

The PL has employed IT consultants as young as 22, and states that older IT consultants are very hesitant to learn new things while the younger IT consultants are very curious. He also states that the process of IT consultants learning new things is primarily to benefit the project and growing as a professional and individual is an externality. The PL also states that learning new things is very motivating for those seeking professional growth within a specific field. Young IT consultants often try to figure things out and study, if they lack the skill in something, in order to do better the next day; older IT consultants rarely do this. Young IT consultants are curious and not afraid of unknown territory; they tend to have
greater faith in themselves. Older IT consultants already have the experience of throwing
themselves out into unknown territory and know that this is not always very comfortable
so they are more reserved and find this less desirable. He also states that the older one be-
come the more they value their personal time, which discourages learning of new
knowledge on their free time. (Personal communication, 2015-04-20)

4.4.2 Analysis

Whether an IT consultant is genuinely interested in the technology plays a large part in be-
ing motivated by learning new things or not. A common trend in the interviewees’ re-
sponses was that older IT consultants have lost the “spark” for the job that they might
have had as newly hired IT consultants. The authors therefore argue that the less of a spark
left for the job and the specific field, the less intrigued and motivated one is to learn new
things within that field. However, this inner source of motivation is not the sole variable
that determines whether or not IT consultants are motivated by learning new knowledge.
Other personality traits and age are, according to the findings, also of importance.

The findings from the older age group are slightly inconsistent. The data collected does
not show an entirely clear connection between age and importance of this particular moti-
vational factor. This could be the result of having a too large age group, as there are dis-
parities within the age group. The two oldest IT consultants included in the sample dis-
played a clearly negative attitude towards learning about new work processes or similar.

“I am not that kind of guy that wants to learn about new things in my job except for what I need for my
task.” (OC#3, personal communication, 2015-04-10).

“When you have come of age and is just about to retire, you are supposed to do what you are good at and
you don’t become good instantly, it takes a while. So it is very limited in regards to what new things I want
to learn. Not a damn person would hire me to do something I just learned” (OC#4, personal commu-
nication, 2015-04-10).

The reason for this could be given by having the large age-span. The sample includes sub-
jects that are approaching retirement and these subjects might experience an apparent de-
crease, or lack, of Gf abilities (Cattel, 1943), which could explain why the older IT consul-
tants behavior of disengaging from activities including novel practices. This finding would
be in line with the finding made by Wechsler (1944) and Ackerman et al. (2002).

Consequently, this reduces the possibility for the authors to generalize and provide propo-
sitions about this particular finding. In regards to the other subjects included in the older
age group of the sample, they expressed a more positive attitude towards learning new
things, although they argued that the importance of other factors, such as autonomy, was
of greater importance. These subjects instead emphasized the importance of the challenge
to learn new knowledge and how it motivated them as it made work more interesting and
enjoyable.

“I really like my job because I enjoy constantly learning new things. There are always new things within
software development and it happens at full speed constantly. When you become older, about 55, then per-
haps it starts to not appeal as much” (OC#1, personal communication, 2015-04-11).

“I love working on the border between what I master and what I don’t master. It creates a very rewarding
challenge for me.” (OC#2, personal communication, 2015-04-07)
Continuing, the findings from the younger age group displayed clarity and coherence. All subjects in this age group heavily emphasized that the received motivation from learning new knowledge was from a mix of a genuine IT interest and the increased personal and professional growth.

“Learning new things is absolutely most important since you develop and grow as a person” (YC#3, personal communication, 2015-04-07).

“When I get to learn new things it is very enjoyable, when you feel that you get the chance to develop, that is very rewarding” (YC#4, personal communication, 2015-04-14).

“Within IT you have huge potential to develop as a person and professionally, and if you don’t you will fall behind in the flow and in knowledge” (YC#2, personal communication, 2015-04-19).

The authors found that the motivation stemming from personal and professional growth is the strongest reason why this motivational factor is of such significance to the younger age group, as all subjects in this age group mention it. This finding is aligned with the finding of Tampoe (1993) and Horwitz (2003) who state that KIWs are motivated by having a job that allows for personal and professional growth, among other factors.

In sum, the authors found that the motivational factor of learning new knowledge is stronger within younger IT consultants and weaker with older IT consultants. This finding is generalized into stating that the importance of learning new things decreases as a motivator as age increases (Figure 4.3). This finding agrees with the results of the studies conducted by Jones and Meredith (1996) and Warr (2001), which is that individuals are less open to new information as they grow older. The decision of IT consultants to withdraw from tasks requiring the learning of new knowledge could be explained by the loss trajectory proposed by Kanfer and Ackerman (2004) and more specifically due to the loss of Gf abilities (Cattel, 1943).

In regards to content theory on motivation, Herzberg’s two-factor theory (Herzberg et al., 1959) can be used to categorize the factors after their importance to each respective age group. It is clear that the factor of learning new things is clearly a strong motivator and a strong hygiene factor for the younger age group as without the factor the subjects would become greatly dissatisfied and lack motivation. Meanwhile, for the older age group the impact of the factor is more ambiguous. In regards to the subjects over 60, learning new things cannot be applied neither as a motivator nor a hygiene factor. Firstly because it does not motivate the older IT consultants, and secondly because having to learn new things would actually make the older IT consultants dissatisfied.

This makes learning new things the opposite of a hygiene factor for old IT consultants, compared to how it influences the group of younger IT consultants. Since by having the factor fulfilled at the workplace for young IT consultants prevents dissatisfaction, and for

![Figure 4.3 Motivation and age in relation to learning new things.](image)
old IT consultants it creates dissatisfaction. Lastly, in relation to the individuals aged under 60 in the older age group, the factor serves in a similar way as for the younger age group, only slightly weaker in both regards.

Lastly, relating the finding to Alderfer’s ERG theory (1972), the authors find that while both young and old IT consultants are considered to reside within the growth needs stage of the ERG theory, it is also clear that the two age groups have different levels of growth needs in regards to learning new things. Young IT consultants have a lot of growth needs that need to be satisfied in order to be motivated while old have only a slight amount of growth needs in comparison. Young IT consultant’s desire professional and personal growth, which they find can be in part fulfilled by learning new things, thus making learning new things a strong motivational factor. Older IT consultants however, due to enhanced knowledge and experience they do not desire professional growth to the same extent as young, thus are not motivated by the ability to learn new things.

4.5 Positive Feedback

4.5.1 Empirical Data

Young IT Consultant Group

YC#1 emphasized the feeling of positive feedback as the most important motivational factor. She states that she walks on clouds when she is told she has done a good job. She feels positive feedback gives her an extra confidence boost needed to improve her work; she gets the feeling that she is good enough to do the work which in turn motivates her to learn more things and keep going. (Personal communication, 2015-04-20)

YC#2 values positive feedback highly. She likes to know when she has performed a good job and if she never receives any feedback she would lose the spark in her work. She finds that by receiving positive feedback for her work she gets a confidence boost and can keep improving her work. (Personal communication, 2015-04-19)

YC#3 did not discuss positive feedback.

YC#4 mentions that others might need positive feedback since they seek prestige in life, but does not categorize herself as one of those people; she is not a prestigious person. YC#4 rarely receives any appreciation or positive feedback for her work but the rare occasions when she does she enjoys it greatly. When she receives appreciation and is in contact with a satisfied customer she finds it a lot easier and more enjoyable to go to work and she feels more motivated to perform well (Personal communication, 2015-04-14).

Old IT Consultant Group

OC#1 always does a good job regardless if it is appreciated or not. It is up to the customer to use the results as they wish. However, she enjoys when they value her work and if they are satisfied. However, she finds it important to get good references and to be able to keep working with the customer (Personal communication, 2015-04-11).

OC#2 says that it would be tough if he never got any positive feedback, and that it is probably more important than one might think. One of the reasons why he stopped being an entrepreneur was because of the lack of positive feedback (Personal communication, 2015-04-07).
OC#3 mentions that positive feedback is always enjoyable to receive sometimes, although it is not motivating him. OC#3 sees the positive feedback he receives as an assurance that he is doing a good job so that he in turn will receive autonomy which he values highly (Personal communication, 2015-04-10).

OC#4 thinks that appreciation is usually seen when the end user likes the product and that she does not need it from her contractor since she knows when the product is successful or not and is very confident in her abilities (Personal communication, 2015-04-10).

Managerial Perspective

The PL emphasizes the importance of receiving feedback continuously, both positive and negative. He states that all the work one does should be given attention in some way. Negative feedback is important in that it is not certain that one is aware if the work was not sufficient, it allows for improvement. He emphasizes that feedback is especially important for young IT consultants who are new at the job. He refers to himself in that when he was younger he found feedback very important and motivating in order to develop, now that he is older however he does not find it important. (Personal communication, 2015-04-20)

4.5.2 Analysis

The conducted research agrees with the multitude of studies that claim that receiving positive feedback is a motivating agent for KIW's (See Olomolaiya & Egbu, 2004; Horwitz; 2003; Wallgren & Hanse, 2011, for examples). Both young and old IT consultants appreciate positive feedback and it creates job satisfaction, however it is not a motivator for the older group. The older IT consultants appreciate positive feedback in that it makes working with that customer more enjoyable. The older IT consultants also value the positive feedback from customers as it reflects upon their relationships with the customers. But while it is not considered a motivator for the older group it is simply just something that they generally appreciates, but it does not necessarily motivate. The old IT consultants are less sensitive and less affected by feedback due to experience and knowledge. The older workers have less of a need for praise since they are already confident their work is good. This is supported by Kanfer and Ackerman’s (2004) claim that older workers are less anxious.

“I always do a good job, even if I don't receive a pat on the back.” (OC#1, personal communication, 2015-04-11).

“Appreciation is nice, everyone wants it, but it's not crucial for my work” (OC#3, personal communication, 2015-04-10).

Younger IT consultants however, value positive feedback more highly and as more crucial than the older IT consultants. As argued previously, younger IT consultants have less confidence than the older IT consultants which makes younger IT consultants more affected by feedback in the sense that they desire the confidence and assurance. Olomolaiya and Egbu (2004) claim that feedback is needed in order for workers to be assured that their work is of proper quality, which is aligned with the author’s findings that younger IT consultant’s desire assurance. From this information, the authors are able to draw conclusions about the young consultant group: they are situated in the beginning of the “growth” stage of Alderfer's ERG theory (1972). The growth stage deals with personal growth and development, and the beginning is mainly concerned with self-esteem (Alderfer, 1972) which can be related to the young IT consultants need for assurance and confidence in their work as motivation.
“Positive feedback, especially, gives you the confidence to improve; you feel like you’ve mastered the specific task and you’re motivated to move on and learn more” (YC#1, personal communication, 2015-04-20).

“Appreciation is more important the younger and newer you are” (PL, personal communication, 2015-04-20).

Young IT consultants desire the positive feedback due to receiving assurance that they are doing a good job as well as enhanced confidence. While positive feedback increases job satisfaction for the younger IT consultants it also contributes to the inner spark that the consultant feels for the job. Positive feedback can be considered a motivator as well as hygiene factor in regards to Herzberg’s two-factor theory (Herzberg et al., 1959), in that if positive feedback is not received, young IT consultants become significantly less motivated because it impairs their ability to grow professionally, hence it is an influential hygiene factor for IT young consultants. For old IT consultants however, positive feedback is a very weak hygiene factor. Young IT consultants are significantly more motivated by positive feedback than older IT consultants according to this thesis’ study.

“Positive feedback is very important. If you don’t receive any appreciation you have no idea if you’ve done the task right or not, and this makes you lose the spark for the job” (YC#2, personal communication, 2015-04-19).

“When I was young and eager to learn I appreciated feedback, positive and negative, because I wanted to continuously develop further. Now, at 55 years old however, I feel more secure, experienced and tired, so if I receive the same feedback now I don’t care nearly as much” (PL, personal communication, 2015-04-20)

The quotes support the idea that young IT consultants are more motivated by positive feedback in regards to assurance and professional growth while older IT consultants are not as affected. This finding is directly aligned with the proposition of Warr (1997, 2001) who claims that younger adults appreciate feedback more as it helps them become more independent in the future. Figure 4.4 visualizes the generalization that the importance of positive feedback as a motivator falls as age increases.

4.6 The Feeling of Accomplishment and Creating Value

4.6.1 Empirical Data

Young IT Consultant Group

YC#1 values helping the customer very highly; since she has the knowledge and the customers probably do not, she values the opportunity to be able to provide assistance. She thinks that the reason why she thinks like this is because of her personality. (Personal communication, 2015-04-20).
YC#2 does not have much direct contact with the customer but would feel discouraged if the information reached her that the customer threw away her work. (Personal communication, 2015-04-19).

YC#3 emphasizes creating something that is useful and contributes to society according to his subjective opinion. He takes marketing as an example as something that according to him does not contribute to society. He would rather help people with real problems. He would not want to work with old systems that are not utilized any more. It can be clearly observed that he enjoy the feeling of contributing to entities other than himself, such as society. (Personal communication, 2015-04-07).

YC#4 mentions creating value for the customer as her first answer when asked what she thinks generally motivates IT consultants. She says that creating value is the goal of their work and the feeling of making the customer save time and money by using their system is a motivating factor. It is fine if the customer does not end up using the product since that is up to them and she had fun creating it, but it can still feel a bit irritating. She does not have a genuine IT interest but instead it is the interaction with humans and helping them that is the best part of her job. She mentions that she previously worked with healthcare IT and that she found this especially satisfying knowing that her work helps people. (Personal communication, 2015-04-14)

Old IT Consultant Group

OC#1 states that creating value for the customer has been low priority in her motivation since her focus has been more on developing her own skill set and creating variety in her work. She does not see it as demotivating if the customer decides to not use her product, since it is up to them, and she still had fun creating it. It is important to satisfy the customer but it is no problem if the customer throws away the product. Later in the interview she changes her mind and realizes that creating value for the customer is actually the most important mission for a consultant and the purpose of their work, meaning that without the value creation brought by an IT consultant the work they put in would be obsolete. (Personal communication, 2015-04-11)

OC#2 talks about the indulging feeling of helping someone else. He emphasizes this by bringing up an example of research he read on the satisfaction gained from helping others compared to only serving yourself. He claims that helping others was proven to have a more long term effect compared to helping yourself. OC#2 states that producing value for the customer is the feedback he receives which can be both positive and negative depending on how useful his service for the customer was. Depending on the outcome, it can serve as both a motivator but also as demotivating. This means that if he has spent a lot of time developing something that is of no value to the customer, it would create a discouraging feeling towards further work, resulting in reduced motivation. (Personal communication, 2015-04-07)

OC#3 pinpoints the customer as a central part of being a consultant. He values the feeling of doing a good job highly as it results in more autonomy for him. Also mentions the importance of creating value, however not as much because of the motivation it gives him directly, but rather as it serves as security that he can keep his job/assignment (Personal communication, 2015-04-10)

OC#4 does not want to put in work effort into something that no one will use. She experiences a frustration when there is no purpose to what she creates and become less prone to perform well. She enjoys assisting customers to perform better, but it is not the actual sen-
sation of helping someone else that infuses her inner motivation (Personal communication, 2015-04-10)

**Managerial Perspective**

The PL states from experience, that self-employed IT consultants value the ability to create value for the customer higher than a consultant employed by a larger company would. The self-employed consultant needs satisfied customers in order to lengthen contracts and maintain the influx of revenue. The PL emphasized the importance for him, as a manager, to communicate to his employees that they are a part of a team, a whole, and that they are all contributing in the process of creating value for the customer. In regards to age he says that older IT consultants need less assurance that they contributing, because they already know due to experience, while younger IT consultants with less experience need more assurance that their work is valuable and appreciated. (Personal communication, 2015-04-20)

### 4.6.2 Analysis

Both age categories agree that the customer is central to their work and creating value for them is the whole purpose of their job. Without the customer there would be no job. However, as a motivating agent, the factor differs in regards to the age groups.

"That is what is the important factor, as a consultant it is the customer who is central" (OC#3, personal communication, 2015-04-10).

A common theme among the interviewee’s thoughts on creating value for the customer was that it is at the core of an IT consultant's mission. Creating value is a major part in why they are doing the work in general. Performing a service or creating a product that the customer does not value is demotivating for most IT consultants in our sample. Both age groups value having a clear purpose; although older IT consultants value it more highly according to the sample.

Moving on to the data examined from the sample of this thesis, the authors identify a discrepancy in regards to how this factor motivates the age groups. In the sample the authors noticed that the younger IT consultants generally argued for the social aspect of creating value for the customer. In other words young IT consultants argued that the sensation of contributing and helping others was highly motivating.

"It is more the contact with people and contributing with a service. I used to work with IT within healthcare before and thought it was an extra incentive as motivation since you did something for other people.” (YC#4, personal communication, 2015-04-14)

"On my behalf I like to help, when you work within IT yourself you are technically skilled; a customer is not always as technically skilled. So it doesn’t have to do with IT, it has to do with the service you do, the feeling you get when it is appreciated by the customer.” (YC#1, personal communication, 2015-04-20)

There can be several explanations for this finding. One plausible reason could be generativity. The subjects in the sample that derived motivation from the sensation of contributing and helping others had a mean age of 35, which is close to the midlife age spectrum in which generativity is expected to be high (Erikson, 1964; McAdams & de St. Aubin, 1998). Moreover, generational differences could also play a role in determining the degree of generativity of the different age groups since the attitude towards work in general has changed with the generations (Amar, 2004) from ‘living to work’ to ‘working to live’ (Loughlin and Barling, 2001).
The second reason for this finding could simply be because of personality traits (for example if the subject is strongly individualistic or collectivistic) of the specific subjects included in our sample. Due to the limited size of the sample, deviating personality traits might have found its way into the sample that might skew the data and thus reduce to possibility to generalize.

Next, the data revealed that older IT consultants were more prone to emphasize the professional aspect as their reason for valuing this motivational factor. These IT consultants argued that they were there to do a specific job and the point is to create value, but here the focus is shifted from the social aspect to more of a financial and economic aspect, in comparison to the younger IT consultants who are not as concerned with this specific aspect.

Older IT consultants argued that by assisting the customer with creating this extra value they became more motivated as it created a clear purpose as well as it often stimulated their need for accomplishment. The subjects all belonged to the older age group and they pointed out that the purpose of IT consultants is to create value for the customer and therefore the factor is of utter importance. This agrees with the finding of Tampoe (1993) and Horwitz (2003). However, the motivation did not come from helping the customer but rather to make sure they were desired to keep working for the customer, as without the customer they would be without an assignment if they were employed at a consultancy agency and without revenue if they were self-employed.

“Yes it is very desirable if it creates value and they make money on it and it eases their work. So that is very good since it increases my value there.” (OC#1, personal communication, 2015-04-11)

The underlying reasons for this could again be because of generativity and generational differences (Laughlin and Barling, 2001) as mentioned previously. McAdams et al. (1993) and Keyes and Ryff (1998) claim that generativity is substantially higher in midlife, compared to both young and old adults. This could explain why the old adults express less need for helping others and places more emphasis on their obligations towards their customer. Although the sampled age groups do not align perfectly with the definition of the age of the individuals characterized with high generativity, the authors are confident that the findings indicate the relationship between generativity and motivation derived from creating value for others.

Relating the findings to the two-factor theory (Herzberg et al., 1959), the authors observe that this motivational factor impacts the age groups differently. The younger IT consultants seem to view this motivational agent as a moderately strong motivator and as a weak hygiene factor, meaning that if they do not have this component in their job, they become less motivated but only slightly more dissatisfied. Meanwhile for the older IT consultants, the feeling of accomplishment and creating value obtained from working for the customer, the factor seem to act as a quite weak motivator and as a moderately strong hygiene factor. This means that if the factor was not present at the workplace, the older IT consultants would only become slightly less motivated, but quite dissatisfied as they take pride in their service and if the service did not produce any value they would experience that it lacked purpose and would become frustrated.

Furthermore, the ERG theory (Alderfer, 1972) can be used to explain the difference in the way the two age groups view creating value. The young IT people are motivated by creating value because they focus on the societal aspect, such as helping and contributing positively.
This can be explained by the fact that they have more growth needs than the old; they have more desire to be productive and creative as well as complete meaningful tasks (Alderfer, 1972). The old IT consultants however focus on the professional aspect of creating value in that they value their work having a purpose and the idea of retaining their customers and contracts. This can be explained by older IT consultants have less growth needs than young; hence do not feel as strongly about having a positive effect on the environment (Alderfer, 1972).

In sum, the two age groups are motivated by the factor but in different ways and to different extents. The young IT consultants experience increased motivation when they help others as their source of motivation, meanwhile the older IT consultants experience a smaller increase in motivation which comes from the fact that they value having a purpose more as well as securing their continued employment. The authors conclude that from the findings, it is possible to generalize that younger IT consultants are slightly more motivated by the feeling of accomplishment and creating value than older IT consultants, hence the motivation decreases marginally as age increases (Figure 4.5).

### 4.7 Summary of Relationship between Findings and Content Theories

![Figure 4.5](image)

**Motivation and age in relation to the feeling of accomplishment and creating value.**

![Figure 4.6](image)

**Motivation and age in relation to the feeling of accomplishment and creating value.**

**4.7 Summary of Relationship between Findings and Content Theories**

Figure 4.6 Overview of analysis using Herzberg's two-factor theory.
4.7.1 The Two-Factor Theory

Figure 4.6 provides an overview of the analysis usage of the two-factor theory (Herzberg et al., 1959). The figure visualizes the importance of each of the factors as motivators as well as hygiene factors for both young and old IT consultants side by side in order to facilitate comparing and differentiating the factors (Herzberg et al., 1959). The authors found that autonomy was less significant for younger IT consultants than what the literature insinuated. The results regarding variety in tasks slightly contradicted some of the literature as it seemed that the relationship between the factor and motivation increased with age, in the case of IT consultants, which contradicts the findings of Besen et al. (2013). The findings related to the factor of learning new things revealed that as individuals comes closer to retirement the factor drastically decreased in its power to motivate. Here it would be beneficial to divide the age groups further due to the disparities in the data.

Moreover, according to the chart, one can clearly see that when a motivational factor is valued strongly, it is almost always simultaneously a strong hygiene factor, and the same is true for when it is valued less it is often a weak hygiene factor (Herzberg et al., 1959). The reason why the included factors were considered both hygiene factors and motivators could be the result of the authors failing to properly explain the difference between motivation and satisfaction to the subjects in the collected sample (Herzberg et al., 1959). It could also be because of the combination of the exclusion of extrinsic variables and the insignificance of extrinsic variables for KIW's. This explains why intrinsic variables not only regulate motivation but also dissatisfaction in the case of the sampled IT consultants.

4.7.2 The ERG Theory

Furthermore, the ERG theory (Alderfer, 1972) was used in analyzing the data with focus on the growth needs seeing as existence and relatedness needs were not as applicable or relevant. It is clear that according to the findings young IT consultants have numerously more growth needs compared to older IT consultants. Growth needs are needed in order for a person to progress towards one's ideal self; this includes the need for esteem as well as personal and professional growth (Alderfer, 1972).

The authors claim that the reason for young IT consultant’s greater amount of growth needs stem from their lower amount of confidence in their work due to lesser experience and knowledge compared to the old IT consultants. This is highly relevant in that it provides a reason for why some of the factors, such as positive feedback and learning new things are considered to be important motivators for young IT consultants. The authors argue that old IT consultants on the other hand have much less growth needs mainly due to greater amount of confidence, experience and knowledge within their work. This in turn explains why older consultants do not feel the need to learn new things, nor get similarly motivated by positive feedback as the younger IT consultants. Growth needs also entail the need to complete meaningful tasks and have a positive effect on oneself and the environment (Alderfer, 1972). This explains why young IT consultants, whom have more growth needs, feel motivated by primarily contributing while old, whom have less growth needs, feel motivated by the professional aspect.
5 Conclusions and Discussion

In this chapter the authors present conclusions for the research questions based on the analysis in the previous chapter. Furthermore, the authors end with a discussion as well as suggestions for further research.

5.1 Conclusion

This study was aimed to describe how the motivational factors autonomy, variety in tasks, learning new things, receiving positive feedback, and the feeling of accomplishment and creating value motivates KIWks differently in regards to their age. A case study of eight IT consultants was conducted; four IT consultants aged under 41, four aged over 41, as well as one project leader to gain an external perspective. The study yielded interesting results in which the IT consultants of different ages were motivated differently by the various factors; the relationship between age and motivation was more clear in regards to some factors than others. The authors have been able to generalize the case study results into general propositions concerning KIWks.

5.1.1 Contributions

The authors found that the motivational factor autonomy could be categorized into two types of autonomy: time related and work procedure related. Autonomy in regards to time the authors found that younger KIWks enjoys the flexibility but are not motivated by it. Older KIWks value the factor strongly and will be drastically more dissatisfied if the factor was not tended to, mostly due to having more people dependent on them. In regards to the autonomous working style, both the young and old KIWks feel motivated by having the possibility to determine their preferred way of working independently. However, when the possibility is withdrawn the older KIWks become vastly more dissatisfied, when compared to the young KIWks.

Similar results were derived when studying the motivational factor variety in tasks. Young KIWks value variety in tasks but accept a lower degree of variation. Young KIWks often find that the need for variety in tasks is fulfilled, without having experienced a complete change in task, by changes within the task itself as well as by new social and physical environments. Older KIWks however, are considerably motivated by variety in tasks as their knowledge and experience allow for them to participate in the entire process, start to finish, which often is their preference. In a situation in which the possibility for variety in tasks is eliminated, older KIWks feel more demotivated while younger KIWks are more capable to accept the loss.

On the contrary, the factor learning new things resulted in findings of the opposite nature. The authors found that young KIWks emphasize the importance of learning new things as a motivator since it allows for professional growth. If the ability to learn at work is removed, young KIWks feel drastically demotivated. Older KIWks however, are much less motivated by learning new things and can even feel demotivated by having to learn new knowledge.

Furthermore, the results found when studying positive feedback as a motivational factor were to some extent similar to that of learning new things. It is clear that younger KIWks are motivated by receiving positive feedback due to their need of assurance and self confidence in their work and as it helps them become more independent in the future. Receiving
no feedback is demotivating for young KIWs as they are hindered in their professional growth. Older KIWs appreciate positive feedback but are not motivated by it as possessing extensive knowledge and experience generally does not create the need for assurance.

Finally, the findings on the feeling of accomplishment and creating value as a motivational factor generated interesting results. Here the authors found that both young and old KIWs are motivated, but due to different reasons. Young KIWs are motivated by this factor in the sense of contributing to external parties, such as society, and helping in general. Older KIWs are more motivated by the professional aspect in that creating value for the customer is the purpose of the job, and not fulfilling this purpose could potentially lead to suffering the loss of a customer or job, which is why older KIWs argue that this factor is a significant motivator.

The authors were able to generalize this study’s cross sectional findings and propositions on KIWs into a longitudinal setting of KIWs. The authors conclude that the importance of autonomy and variety in tasks as motivational factors rise as age increases. On the contrary, the importance of learning new things and receiving positive feedback as motivational factors declines as age increases. Finally, the importance of the feeling of accomplishment and creating value as a motivational factor only decreases slightly as age increases.

5.2 Discussion

The process of conducting this study did not only answer to the purpose and research question, but also brought forward other notions and implications of interest to both the authors and to practitioners. In this discussion section attention will be given to findings not entirely related to answering the purpose, albeit of high interest. Also, the authors will discuss and evaluate strengths and weaknesses of their study as well as provide suggestions for future research.

5.2.1 Practical Implications

In the start of the study the authors set out to make a contribution to the academic body as well as provide normative advice for practitioners. Therefore the authors find it suitable to shed light on what the differences between the age groups imply for the treatment of KIWs of different age, which the authors argue would be of value to practitioners. The findings suggest that autonomy lacks some of the significance for motivation of younger KIWs, which is one of the most interesting findings since it slightly contradicts the claims of the examined literature. The reason for this could be because of bias within the sample, the cultural and geographical differences within the sample, or methodological insufficiencies. However in this study, the authors still see a clear positive relationship between autonomy and age. For practitioners, this information can be used, for example by instructing project leaders to make explicit claims regarding how they want the task to be executed to avoid misunderstandings or to make sure that the work fits the desire of the firm. On the other hand, practitioners should ensure that autonomy is present for older IT consultants.

Next, the finding that young KIWs require less variety in tasks has more of an economic impact for practitioners. This study suggests that supplying KIWs with a multitude of tasks might be motivating, but it can also be achieved by simply letting them explore the same task in depth. Thus, practitioners could be less focused on constantly supplying the IT consultants with new tasks in order to keep them motivated, which in turn might yield more profit due to the learning process occurring when learning a new task.
5.2.2 Further Findings

The two previously mentioned findings are this study’s greatest managerial implications. However, other findings, not discussed in the previous empirical data and analysis chapter, brings forward more points that does not exactly align with the purpose of this thesis, yet interesting. First, the authors witnessed that age did not always equal experience. In such situations, for example where the employee has recently changed profession, the impact on the intrinsic motivators might be different than what is argued in this study.

In regards to the profession in general, validity of the study could be increased if the sample selection was created using more strict criteria. Due to the fact that the tasks that IT consultants are concerned with differ widely in complexity, it can be desirable to distinguish between the different types to identify differences between occupations. Thus, the authors suggest that it might not be enough to separate IT professionals and IT consultants from knowledge workers, but also find sub-groups within these occupations.

Another interesting remark that the authors found was that the youngest subjects included in the sample mentioned that the extrinsic variable of pay could be motivating at times. The pay was received in a bonus system where if the IT consultant achieved certain set goals, they would receive a monetary bonus. This goes against general consensus which states that extrinsic variables are not effective in motivating KIWs. One possible explanation could be that these subjects had recently graduated from undergraduate programs and still in a fragile economic position.

Furthermore, the authors observed that the interviewees often brought up the genuine interest they had in IT. Out of the subjects interviewed by the authors, seven out of nine claimed to have a genuine IT interest. It could be of interest to conduct a study on subjects that does not have this personal source of motivation to see what motivates them instead. Moreover, during the interviews some subjects also mentioned gender and personality traits differences which had an impact on what motivated them. These are variables that are difficult to draw generalizations about without incorporating them as the primary foci in the study.

5.2.3 Future Research

Continuing, the authors would like to point out some shortcomings and weaknesses of this study. Initially the authors struggled with differentiating between job satisfaction and motivation, yet after reading academic articles on the relevant topics thoroughly the distinction was clearer. However, despite the author’s having a thorough understanding of the concepts, the interviewees did not always share this understanding, causing slight confusion within the interviews. Furthermore, in regards to the interviews, the authors continually increased their interviewing skills, creating slight bias in that the interview results grew in accuracy as more interviews were held.

Additionally, while the sample was sufficient in size and subject were selected from different companies, a more defined sample, using stricter criteria, could potentially have resulted in a more accurate and valid outcome. Instead of using only two age groups, the study could have been conducted using three age groups as there can exist quite a lot of variety within the age groups. The authors also learned that the importance of a motivational factor can depend a great deal on more than just the age variable, such as gender, personality, interest and former experience. However, these variables are difficult to measure, and would create a substantially more complex study.
Lastly, some areas for future research have been identified. First, this study was of a qualitative nature and due to the limitations mentioned previously, it is difficult to generalize the findings. It would be interesting to quantify the results, which means that a quantitative study is desired. As a result, a more clear relationship between the variables could be proven resulting in easier prioritization for practitioners regarding what factors should be focus on, depending on the KIW. Furthermore, future studies could divide the sample further, thus incorporating three or more age groups. This would not only increase the knowledge on motivation of KIW’s, but also increase the validity of what impact generativity has on motivation.

Also, subsequent studies should be interested in incorporating a larger array of motivational factors, one example could be to include the effect of negative feedback, and not be restricted to the five included in this study. Also, the validity of these studies is further strengthened if the future studies were to use a longitudinal approach.
List of references


Appendix

Appendix 1: Interview Guide

Interview Questions for IT Consultants

❖ How old are you?
❖ How was the age distribution at your work?
❖ How long have you worked as an IT consultant?
❖ Why did you choose this career?
❖ What do you think other IT professionals are motivated by in the workplace?
❖ Do you think IT professionals of different ages are motivated differently? Do you know other younger/older IT professionals? Any examples?
❖ Do you consider yourself motivated while at work?
❖ What motivational factors are the most important for you to go the extra mile at work?
  ➢ Examples include salary, promotion possibilities, variation in task, autonomy, possibility to learn new skills, the feeling of providing a service of worth for the customer, and the praise received for doing a good job.

Interview Questions for IT Consultant Project Leader

❖ Tell us about your job?
❖ In which way are you dependent on IT consultants in your job?
❖ Do you feel comfortable giving the responsibility to others to do a good job on a project?
❖ What factors do you think motivates the IT consultants working for you?
❖ Do you have a method that you apply in your work to motivate IT consultants?
❖ Do you think there is any difference in what motivates older and younger IT consultants?
❖ See example motivation factors, would you like to comment on any of these in regards to what you think motivates IT consultants?
  ➢ Examples include salary, promotion possibilities, variation in task, autonomy, possibility to learn new skills, the feeling of providing a service of worth for the customer, and the praise received for doing a good job.