

Reducing Adversity of Employee Turnover within Projects

Case Study at Volvo Car Corporation

Master of Science Thesis in the Master's Programme International Project Management

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Department of Civil and Environmental Engineering Division of Construction Management

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STRUCTURED ABSTRACT

<u>Background.</u> Employee turnover is seen as a challenging facet of organisational life, and is thus often discussed in both academic and corporate worlds. Some of the existing research concentrates on examining possible ways of reducing staff turnover rates, whilst other researchers make endeavours to find methods to reduce the negative consequences of the employee turnover.

<u>Aim</u> of the current dissertation is to combine the two directions of research of employee turnover, with an emphasis on the staff changes within matrix organisations, and create a holistic framework for tackling the issue.

<u>Research methods.</u> For the research aim to be achieved, a thorough review of literature is undertaken, and an empirical research is performed. The empirical research is complemented using qualitative research methods. A case study at the Programme Management unit of Volvo Car Corporation is conducted. Semistructured interviews are performed with ten company employees. Some of the interview results are verified via an online follow-up survey, internal documentation and informal conversations within the company.

<u>Findings.</u> The research shows that the major reason for employee turnover at Volvo Car Corporation is the company's matrix structure. Therefore, several recommendations, aiming to improve dialogue between project and line organisations, are made. The recommendations are supported by the reviewed literature, thus confirming reliability of the study results.

<u>Research Originality/Value.</u> The current research represents one of the initial endeavours to combine the existing research of major facets of the employee turnover area of knowledge, acknowledging tight relations and dependencies between the facets. It also provides a new perspective of looking onto employee turnover, namely, its specifics in project context.

Keywords. Employee Turnover; Matrix Organisation; Project Context; Project Management.

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Preface

This thesis is the final part of the International Project Management Master's programme at Chalmers University of Technology in Gothenburg, Sweden (dual award with Northumbria University in Newcastle, United Kindgdom).

The thesis research was supervised by Inger Bergman. The topic was chosen in accordance with the author's professional interest, Master's programme requirements and interest of the case company, Volvo Car Corporation. The research was predominantly undertaken in the company's premises in Gothenburg. The work occurred between February and June 2012.

The author would like to thank everyone who has contributed to this research and made it possible:

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1 Introduction

This chapter introduces the current research background and presents a rationale for the study. The chapter begins with background information about employee turnover and the research related to it. Later, diverse aspects of the turnover are briefly presented, and the relationship between such research areas as Employee Turnover and Project Management is drawn. Research aim and questions, as well as research methods, are then introduced, and the company context is explained. This is followed by the research scope and limitations demonstration. The chapter ends with a structure overview of the current report.

1.1 Rationale for the Study

With constantly increasing knowledge-intensity of the ways on how businesses are run, knowledge has increased in its significance in perception as a valuable resource by both researchers and practitioners (Zack, 1999; Massingham, 2008). Due to this, organisations are inclined to realise the importance of people who possess the essential company knowledge (Lindner and Wald, 2011). This understanding has let organisations to start paying more attention to managing both people and processes rather than managing processes only. A part of managing people, which is being studied among others, is employee turnover. Attention to this part has increased due to knowledge losses related to it.

Oxford Dictionaries Online define employee turnover as "the rate at which employees leave a workforce and are replaced" (Oxford University Press, 2012). The issue of employee turnover has been actively discussed in academia since 1950s (Bowden, 1952). During the last decades there were endeavours to understand reasons for the turnover and consequences of it (Laser, 1980; Parker and Skitmore, 2005; O'Connell and Kung, 2007; Tan *et.al.*, 2007; Massingham, 2008). Recently the research has gone further, and two diverse directions were developed.

The first direction is concentrated on exploring ways of reducing the turnover knowing the reasons for it (Laser, 1980; O'Connell and Kung, 2007). While finding the ways of satisfying employees' needs and increasing their job satisfaction is essential, employee turnover is often seen as an inevitable facet of the modern life of organisations. Thus, exploring opportunities of reducing the impact of personnel changes emerged as the second direction of the research. This may explain why a number of studies have been focused on developing knowledge management frameworks in order to confront the knowledge loss issue caused by employee changes (Boh, 2007; Tan *et.al.*, 2007).

Stephen Laser (1980) argued that staff turnover is expensive for organisations and has a negative impact on their operations. It is argued that not only financial aspect of turnover is a problem, but knowledge and time loss are also crucial (Laser, 1980; Tan et.al., 2007; Massingham, 2008).

With an increase of project-based ways of running businesses, the issue of staff turnover acquired a new meaning. As Lindner and Wald (2011) observe, projects gained importance not only within such project-based industries as construction or software engineering, but also for many other businesses "where projects are employed to generate innovative products and services and to bring about organizational change" (Lindner and Wald, 2011, p.877). In the intensive project environment, where time, budget and scope are predefined, consequences of personnel changes are even more noticeable than in permanent organisations.

Consequently, understanding the reasons for employee turnover, succeeding in turnover management and effective knowledge management are seen by project-based companies as essential factors for success.

Significant amount of research has been undertaken in both of the above mentioned directions of the research, namely understanding the reasons for the staff turnover and exploring its effects, be it effects on permanent organisations or projects. Some models have been developed which could help to reduce employee turnover or its impacts on a company. However, there is a lack of studies which seek to keep the two directions together. Therefore, this study aims to combine the results of the previous research in both areas and develop a holistic framework to address the issue of turnover within projects with a view on its whole context, not just or not restricted to selected aspects of it.

1.2 Research Aim

The aim of current research is

"To investigate possible means to facilitate reduction of adverse employee turnover and its negative impact on long-term projects".

To achieve the aim, existing research in the area of employee turnover was explored and analysed. In addition, an empirical study was undertaken in order to verify whether all the issues related to the turnover have been identified in previous research. Based on the conducted analysis of primary and secondary data, a framework was suggested targeting reduction of the turnover and its impact on projects.

1.3 Research Questions

For accomplishing the aim of reducing the turnover rates and its consequences, the study answered the following research questions:

- 1. Why do team members leave a project prior to its completion?
- 2. How does the employee turnover within a project affect the project and its remaining team?
- 3. How can staff turnover be most effectively mitigated?
- 4. How can the risks and impacts of employee turnover be mitigated when the turnover occurs?

For each of the research questions to be answered, a thorough literature review combined with an in-depth empirical study was undertaken.

1.4 Research Methods

A qualitative approach was chosen as the most appropriate to be applied for the current study. A psychologically rich and in-depth nature of the qualitative methods better fit the research aim and questions, in comparison to the quantitative approach which investigates a small predefined number of research variables (Rudesam and Newton, 2001).

The research strategy utilised during the research was a case study, where primary data collection was mainly undertaken via semi-structured interviews with employees who hold different positions at Volvo Car Corporation in Gothenburg, Sweden. The diversity of positions held was aimed to aid receiving an input of a range of internal stakeholders who are usually affected by employee turnover within projects. Apart from the interviews, observations of the company's working procedures were held and project documentation was studied to ensure triangulation of the results (Biggam,

2008). A detailed presentation of the research strategy and the data collection methods can be found in Chapter 3 of this dissertation.

1.5 Company Context

Volvo Car Corporation (VCC) is a global car manufacturing company which was founded in 1927 in Sweden. It employs approximately 20 000 people worldwide, has production in four countries – Sweden, Belgium, China and Malaysia, and is represented by more than 2 300 national and local dealers in around 100 countries across the globe (Volvo Car Corporation, 2012a).

In Sweden the company is represented by its largest factory Torslanda in Gothenburg, a factory in Uddevalla and production facilities in Skövde, Floby and Olofström. In total, around 13 000 employees of VCC are located in Sweden.

The primary data for this research was collected at the Torslanda office, within a Program Management unit which is a part of the Research and Development division of Volvo Car Corporation. The division consists of:

- four units that are responsible for the company products' drawings (Body and Trim Engineering, Electrical and Electronic Systems Engineering, Active Safety and Chassis and Powertrain Engineering);
- a unit which sets demands to the products and is accountable for the product testing (Vehicle Engineering);
- a unit which is in charge of managing program teams with representatives of the above mentioned units (Program Management);
- several other supporting functional units.

In total, the Research and Development division has approximately 5100 employees, 100 of whom work in the Program Management unit. Other functional units employ between 500 and 1000 people.

During this study the author was supported mainly by two employees of Volvo Car Corporation. Every-day supervision was received from a Program Director from the Program Management unit. The author also had an opportunity to obtain additional information and guidance from a Brand Ambassador Change Agent who works within the same department. The unit's Vice President acted as the principal sponsor for the study undertaken. There were occasional meetings with the sponsor to provide status updates of the research and receive feedback on the work done.

1.6 Research Scope

The study has been undertaken within the Research and Development division of Volvo Car Corporation. It investigated the issue of employee turnover within industrial car projects. Thus, the research has not reflected upon the turnover within the company in general. The turnover was explored from the project management perspective, but it was not feasible to completely isolate it from the line management view, as they are closely interconnected in a matrix organisation.

1.7 Research Contribution to the Study Area

This dissertation has studied employee turnover within projects, and areas of project management that are affected by the employee turnover. Areas such as communication, conflict management, and human resource management were shown to be influenced by staff rotation within projects. The current study explored the ways

to reduce the negative influence on the above mentioned Project Management (PM) areas, thus contributing to the PM field.

The area of employee turnover benefits from the current study as it represents one of the first attempts of bringing together two essential courses of the employee turnover research. The study demonstrates that possible ways of reducing employee turnover rates and reduction of the negative consequences of staff rotation are often codependent. Therefore, it can be beneficial to tackle both areas of employee turnover together. This dissertation proposes one of the ways to do so, based on the literature review and the case study undertaken within Volvo Car Corporation.

1.8 Research Limitations

The choice of VCC was made due to its matrix nature of organisation. Reasons for particular interest in matrix organisations will be explained further in the Theoretical Framework chapter of the report. It was decided to investigate the turnover within one organisation due to complexity of relations between stakeholders involved in a project within a large organisation, and the researcher's resource limitations and time constraints. The Torslanda factory of VCC was chosen as a scene for the current study due to the fact that it is the company's central management office. Considering the author's location in Gothenburg, limitation to the Torslanda office also facilitated the researcher's ability to interact with the company on a daily basis.

As mentioned before, Volvo Car Corporation is an international organisation, and the teams managed by the interviewees occasionally had a wide cultural diversity. Nevertheless, as the majority of employees in the Torslanda office are Swedes, the Swedish cultural background of management could still influence the way of running the projects. Therefore, the results cannot be generalised to international level without further verification.

The interviews as the main data collection method can also be seen as a limitation to the study as qualitative research is used when the issue examined is difficult to separate from the researcher's own opinions, which influences the objectivity (White, 2007). To eliminate bias, some quantitative methods, such as follow-up questionnaires, were used in the current research. For the triangulation of the results, different stakeholders were involved in the study to obtain diverse perspectives on the issue of turnover. The interviews outcomes were verified via observations and company documentation reading.

Case studies are occasionally questioned in regard of their generalisation (Yin, 1994; Naoum, 2007). It is claimed that generalisation cannot be based on a single case, which leads some researchers to be sceptical about this research method (Yin, 1994). Naoum (2007, p.45) agrees that scientific generalisation is not possible in such case, but argues that this does not diminish the advantages of the method. Instead, it emphasises the ability of case studies to supply a research with rich in-depth understanding of a study issue. Thus, the research method chosen for this dissertation can be seen as a limitation. However, Yin (1994, p.10) demonstrates that case studies are subjects to analytical generalisation instead of statistical one. In this way, a researcher aims to "expand and generalise theories", which was the case in the current research.

1.9 Dissertation Structure

This dissertation is structured as follows. Chapter 2 contains a literature review which the dissertation author referred to during the study. Based on the reviewed literature, a

theoretical framework was developed, and is presented in Section 2.4. Chapter 3 explains which research methods were used for the current research, portraying reasoning why a choice of these methods was made. Later, Chapter 4 describes the primary data gathered and its analysis. Both gathering and analysis of the data followed the structure of the theoretical framework, and are presented accordingly. Finally, conclusions to the study are given in Chapter 5. The report also contains Appendices and References after the main body of the dissertation.

2 Literature Review

The current chapter explores research that has been done regarding diverse aspects of employee turnover. The literature review provides grounding for answering Research Questions 1 and 2 and also verifies whether there have been any endeavours among researchers to bring light upon issues presented in Research Questions 3 and 4:

- 1. What are the reasons for team members leaving a project prior to its completion?
- 2. What are the implications related to the employee turnover within a project?
- 3. What are the most effective measures for mitigating staff turnover?
- 4. What measures can mitigate the risks and impacts of employee turnover when it occurs?

The first section familiarises the reader with major concepts of project management that are to be used in the current research. The following section discusses various notions related to the subject of staff turnover, specifically types of employee rotation, its reasons and consequences. Later, employee turnover is presented in a project context, highlighting traits that are distinguishing employee changes within projects from the topic of staff turnover in general due to project nature. Lastly, the chapter introduces the theoretical framework that is developed from the review of literature and is used in this research.

2.1 Project Management and Matrix Organisations

During the last several decades a significant change in the perception of the importance of projects can be noticed (Maylor, 2010; Lindner and Wald, 2011). While projects were typically associated with industries such as engineering and construction, nowadays project management has a value in a much wider variety of businesses. As Boh (2007) suggests, by managing projects a company facilitates its in-time adaptation to a changing market situation and a better flexibility required for meeting fluctuating organisational needs. Considering that project management research is extensive and is applied differently in diverse industries, it is useful to give definitions of projects and project management (PM) which are to be used in the current study. This is done in the following section. Later, typology of project organisations is presented to assist in understanding the theoretical framework which is presented later in the research.

2.1.1 Projects and project management

There are numerous definitions of project. The world's largest professional project management organisation, the Project Management Institute, defines a project as "a temporary endeavour undertaken to create a unique product, service or result" (PMI, 2004, cited in Maylor, 2010, p.5). It is rather difficult to clearly define which endeavour is a project and which is not. Maylor (2010, p.3) gives an example of a phrase "Life is one big project", which satisfies many definitions of a project. Considering this difficulty, he continues with summarising several existing definitions by identifying major characteristics of a project. Thus, Maylor (2010) sees projects as endeavours that are:

- 1) Unique (there are no two precisely similar projects undertaken)
- 2) Temporary (each project has a beginning and an end)
- 3) Focused (every project has a set goal to deliver)

Projects can have different level of uniqueness. There are three categories of projects based on that: "painting by numbers", "as... but..." and "first-timers" (Maylor, 2010). They are illustrated by Figure 2.1.



Figure 2.1. Project categories (Maylor, 2010)

The "first-timers" and "as... but..." are the projects which require special treatment to achieve their goals. This is done by project management. PM can be described as "the process by which projects are defined, planned, monitored, controlled and delivered such that the agreed benefits are realised" (APM, 2006, p.3).

As projects require special treatment, their management differs from general organisation management. Thus, Lundin and Söderholm (1995) acknowledge that perception of time is not the same in a project environment and a permanent organisation. Also, task-orientation and team formation around the task differentiate a temporary institution from a permanent one (Lundin and Söderholm, 1995). Among other dissimilarities, Maylor (2010) mentions that PM is accountable for control of the change undertaken in the company and for cross-functional operations, whereas general management is responsible for "managing the status quo" (*ibid*, p.11) and does not go out of their functional boundaries.

The differences mentioned by Maylor (2010) can be observed in matrix organisations which have both line and project structure in their operations. Co-existence of temporary and permanent institutions may create tensions within organisation (Arvidsson, 2009), and thus it is of a particular interest for a discussion of matrix organisation, which is to be presented further.

2.1.2 Matrix organisations

A matrix organisation can be defined as one that is "co-dependent on line organisations and projects" (Arvidsson, 2009, p.97). Such organisations have two major characteristics that distinguish them from others (Hendry, 1975). First, there is a dual-management situation when project team members have two bosses to report to, that is line and project manager. Second, employees from diverse functions are brought together to form a project team.

Matrix organisations can be classified in three categories (Arvidsson, 2009):

- 1) a traditional organisational form, where expenses and profits are related to company's routine operations;
- 2) a project-based organisation (PBO), where expenses and profits are predominantly related to its temporary structures;
- 3) an intermediate category, a project-oriented organisation (POO), where expenses mostly relate to projects whilst its profits come mainly from the repetitive processes.

Every category of organisations has its advantages and drawbacks. Hendry (1975) suggests that a traditional line structure benefits from having a team configuration identical to the configuration of a department. Thus, its hierarchy is defined and a way of arranging functional knowledge base is believed to be convenient (Hendry, 1975). However, he claims, employees' attachment to a particular functional department can create their isolation from an organisation as a whole and prevent an important cooperation with other functions. It leads to a more complex debate regarding company resources when several departments are involved in a non-trivial task (Hendry, 1975). This idea is supported by the argument that functional organisations are rather time-consuming with their processes (Maylor, 2010).

A matrix organisation, on the other hand, helps to utilise advantages of a functional structure and simultaneously guarantees required management emphasis on successfully running cross-functional and cross-organisational projects (Hendry, 1975). However, such an organisation is supposed to have the problem of conflicting priorities for people working on projects while being attached to a particular line structure (Maylor, 2010). This conflict can be strengthened by a so-called "two bosses problem" (Maylor, 2010). Additionally, the problem of resource scarcity exists and can cause conflicts between project and line managers (Hendry, 1975). The latter drawback leads to a disagreement on which part of the matrix structure is responsible for which issues (Hendry, 1975). This is echoed by Jehn (1997, cited in Arvidsson, 2009) who claims that lack of clarity about responsibilities distribution results in satisfaction and performance decrease.

Line and project institutions of a matrix organisation cannot operate independently. As Maylor (2010) explains, a project manager is accountable for directing people who are representing diverse functions in a project team. Thus, despite the differences between line management and project management, companies need to find ways to successfully manage their co-operation which is a foremost challenge for PBO's and POO's (Arvidsson, 2009).

2.2 Employee Turnover

Since the employee turnover has been discussed, its nature, reasons, advantages and drawbacks were the major issues to be considered (Morrell, Loan-Clarke and Wilkinson, 2004; Hong, Wei and Chen, 2007; Massingham, 2008). Bowden (1952) suggested that in some situations personnel turnover can be a positive change within an organisation. He claimed that the employee turnover is needed due to reasons such as a company growth or a market demand, which requires an internal organisational change. Nevertheless, personnel changes are more often seen to have negative impacts on a company rather than positive effects (Parker and Skitmore, 2005; Massingham, 2008). Such changes are known to be inevitable. Therefore there is a necessity to better understand the staff turnover reasons in order to become capable to tackle their damaging consequences.

2.2.1 Types of staff turnover

Many literature sources refer to staff turnover as to employee's "movements *across* organisational boundaries" (Hong, Wei and Chen, 2007, p.808). However, this term can also be used in case of movements *within* an organisation. The current section presents types of employee turnover in both these contexts referred to as to external and internal employee turnover, accordingly.

Employee turnover is frequently considered to be involuntary, or anticipated, and voluntary, or unanticipated, in its nature (Morrell, Loan-Clarke and Wilkinson, 2004;

Hong, Wei and Chen, 2007). Involuntary turnover is mainly initiated by an organisation. In this case employees do not have much influence on the decision about their movement. Voluntary staff rotation, on the other hand, takes place when an employee himself decides to change a job within a company or to leave the organisation.



Figure 2.2. Types of employee turnover

External involuntary employee turnover can take place because of a company's strategy or policy, or a need to downsize its personnel (Hong, Wei and Chen, 2007). It was claimed to be of a lesser interest for organisation as it is known in advance and its extent and consequences are easily defined (Hong, Wei and Chen, 2007). However, consequences of extensive downsizing related to the financial crisis in 2008 proved to be problematic to companies (Datta *et.al.*, 2010; Schmitt, Borzillo and Probst, 2011). Thus, an interest in the causes of external involuntary staff rotation has lately increased significantly and the issue is now being explored more thoroughly (Datta *et.al.*, 2010).

External voluntary staff turnover takes places when, e.g., one prefers to be employed by another company (Morrell, Loan-Clarke and Wilkinson, 2004). Unlike involuntary employee changes, it is considered to be challenging and is thus explored more extensively. Hong, Wei and Chen (2007) clarify that challenges are explained by difficulties in predicting when and under which circumstances voluntary turnover will occur, what the scale of the change will be and which outcomes an organisation will face due to it.

Internal involuntary employee turnover occurs when a company requires a person to occupy another position within its structure. As Schmitt, Borzillo and Probst (2011) explain, this can be caused by downsizing and thus lack of employees needed to execute some particular operations. However, it may be also required that an employee does not change his position but is requested to perform the same

responsibilities within another functional department or different project, due to resource scarcity (Hendry, 1975). Arvidsson (2009) identified that internal involuntary staff turnover is especially urgent in all types of matrix organisations. It is thus seen by him as one of the major sources of tensions in such structures.

Internal voluntary staff rotation can be observed when a person is willing to change a position or a project to work on, but is not intending to leave the company. This again can be observed more in matrix organisations, where a switch can be from their line to project side, or between projects or functional departments (Parker and Skitmore, 2005). Currently, to the author's knowledge, there are few literature sources referring to internal voluntary employee turnover, thus it can be assumed it does not occur as often as the other three types, or it is not considered to be problematic for organisations.

Some of the reasons for diverse types of employee turnover were briefly mentioned above, but to better understand the issues related to staff changes, the reasons are to be discussed more detailed in the following section.

2.2.2 Reasons for employee turnover

There is extensive research of the causes that lead to people changing jobs within organisations or across organisational boundaries. Generally, the causes can be divided into two categories – inevitable and avoidable reasons (Bowden, 1952; Hong, Wei and Chen, 2007).

External involuntary staff turnover with its reasons such as company downsizing, employee's parental leave, permanent illness, retirement, or death, can be seen as inevitable staff rotation. Inevitable reasons are perceived as an element of organisation's normal life (Bowden, 1952), and therefore their existence emphasise that it is impractical to consider organisation's personnel as an unchangeable environment while planning resource allocation and managing the company in general.

However, many reasons for staff turnover are claimed to be manageable and thus avoidable. Several employee turnover prediction models were developed to assist identifying controllable reasons and successfully manage them. Mobley (1977, cited in Hong, Wei and Chen, 2007) developed first model explaining employee turnover. The model claimed that decision to quit a company starts with job dissatisfaction, which then triggers thoughts of changing a job and causes making endeavours to find a new placement.

It can be argued that job dissatisfaction is not an original cause of turnover, but an intermediary phase of a process that results in staff rotation. This is due to various reasons why an employee can be dissatisfied with his current work. Laser (1980) argues the most widely spread misconception about an employee's motive to leave is salary discontent. This opinion is widespread due to employees' stating salary dissatisfaction as a reason to leave a company. This reason is often used because of its neutrality, comparing to other causes such as conflicts with management or colleagues (Laser, 1980).

Among reasons that cause employees to be dissatisfied with their work, Laser (1980) mentions an inappropriate employment process, improper employee expectations set during the employment, lack of formal training, and tensions between the employee and his direct management.

It is essential for an organisation to "find the right men for the right jobs" (Bowden, 1952, p.73). If it fails to do so, both company and a new employee are facing the pitfalls of the improper employment process – the company does not receive required help from the newcomer, whilst the newcomer has a lack of motivation due to his

mismatching to the position held (Bowden, 1952). Situation like this leads to staff turnover that can be voluntary or involuntary, external or internal. To avoid employees leaving due to this reason, an organisation should appreciate their selection process more and invest sufficient time and resources in investigating who is a suitable person to be employed (Laser, 1980).

Another reason for employee dissatisfaction mentioned by Laser (1980) is setting inappropriate expectations upon the job. It is a mistake made by management during the employment process to highlight only advantages of a person's future job and thus let him see position in "brighter light" and get uninspired soon after taking over his new responsibilities.

One more setback that causes job dissatisfaction is providing insufficient training for a new employee (Laser, 1980). Training is important for an employee's successful work inception as it introduces him or her to the organisation's structure and operations, provides knowledge about the ways of communication, and helps to start developing a useful working network. Failing to supply a new employee with knowledge and network encourages upcoming challenges and problems which can again give rise to job dissatisfaction.

Lastly, Laser (1980) mentions tensions between employees and management as a reason for staff turnover. It can be especially crucial to manage employees accurately during an organisational change (Morrell, Loan-Clarke and Wilkinson, 2004). In case the reasons for change are not suitably explained to the staff, or employees do not receive sufficient help from management during the change implementation, it can lead to people's decision to leave organisation.

The above mentioned reasons of turnover and other causes identified by diverse researchers (see Morrell, Loan-Clarke and Wilkinson, 2004, for a summary) can be a ground for both types of voluntary staff turnover. Thus, an employee can be willing to change a job within an organisation, i.e. internal voluntary staff rotation, or he or she can decide to make a cross-organisational movement, i.e. external voluntary employee turnover.

Voluntary staff turnover can also be caused by an employees' eagerness to selfdevelop and have career growth opportunities (Bowden, 1952; Morrell, Loan-Clarke and Wilkinson, 2004). Since the beginning of industrial growth, which provided larger amount of job opportunities in a wider variety of industries and geographical locations (O'Connell and Kung, 2007), employees' willingness of changes became more urgent. This caused an amendment of people's work attitudes and therefore a more dynamic organisational environment. Nowadays, being aware of prospects, employees tend to be more ambitious and consequently more motivated to perform better to receive additional development and promotion. In case the current position does not encourage career growth, an employee's job satisfaction can deteriorate, which can prompt the intention to search for new work or affect performance at the present one (Hong, Wei and Chen, 2007).

However, there is no general agreement upon the relationship between an employee's performance and staff turnover (Hong, Wei and Chen, 2007). There are four general opinions regarding the issue. The opinions claim that the staff's performance and employee turnover are found in (Hong, Wei and Chen, 2007):

- 1) a positive relationship;
- 2) a negative relationship;
- 3) no relationship;
- 4) a non-linear relationship.

In their summary, Hong, Wei and Chen (2007) claim that high performers tend to leave an organisation more often than others. Other sources suggest that employees with poor performance switch jobs more often. However, Birnbaum and Somers (1993, cited in Hong, Wei and Chen, 2007) asserted that there is no relationship between an employee's performance and his or her intention to leave a company or change a position. Lastly, some studies have shown that both poor and high performers are in risk of changing jobs often, whilst employees with medium performance tend to stay within an organisation.

According to Hong, Wei and Chen (2007), the negative correlation was proved to be accurate in more studies than others, meaning that employees with poor performance are more probable to leave organisation. This raised the discussion on whether companies should strive to reduce turnover of such employees (Bowden, 1952). It is argued that keeping non-performers is economically and morally unhealthy for an organisation. Therefore, reducing avoidable staff turnover is not always the best solution for a company.

This section discussed possible causes for employees to leave an organisation or change a position within its structure. It is also important to understand what consequences staff turnover leads to, which is a matter of debate in the following section.

2.2.3 Consequences of employee turnover

Due to its importance to organisations, employee turnover is being studied thoroughly, its consequences being one of the main study directions. Staff rotation is widely seen as a harmful phenomenon and thus its disadvantages are usually considered (Laser, 1980; Morrell, Loan-Clarke and Wilkinson, 2004; O'Connell and Kung, 2007; Massingham, 2008). It is argued that employee turnover incurs financial expenses to an organisation and therefore the disadvantages are often presented as direct and indirect costs (Morrell, Loan-Clarke and Wilkinson, 2004).

Each employee who leaves his position in particular or organisation in general causes the organisation inevitable additional expenses (Laser, 1980). Those are costs of recruiting a new employee (O'Connell and Kung, 2007), higher unemployment taxes (Laser, 1980), temporary replacement staff (Morrell, Loan-Clarke and Wilkinson, 2004), which all result in decreased company profitability (Schmitt, Borzillo and Probst, 2011).

Voluntary staff turnover rates have been recently increasing, showing approximately 24 per cent of employees who initiated a change of their occupation during 2004 (O'Connell and Kung, 2007). Considering that direct costs related to a change of one employee are estimated to be between \$13 000 and \$14 000, such turnover rates result in significant annual expenses for a company (O'Connell and Kung, 2007). However, many researchers agree that indirect costs associated with staff turnover are much higher and thus more problematic for organisation (Laser, 1980; Morrell, Loan-Clarke and Wilkinson, 2004).

Indirect costs of staff turnover proved to be less tangible and therefore difficult to quantify (O'Connell and Kung, 2007). These indirect expenses are associated with:

- 1) costs of training of new staff (Laser, 1980; Morrell, Loan-Clarke and Wilkinson, 2004);
- 2) decreased morale within organisation (Bowden, 1952; Laser, 1980; Morrell, Loan-Clarke and Wilkinson, 2004; O'Connell and Kung, 2007);
- 3) emotional pressure on remaining staff (Morrell, Loan-Clarke and Wilkinson, 2004);

- 4) additional workload for remaining staff during employment and training of new personnel (O'Connell and Kung, 2007; Massingham, 2008);
- 5) decreased productivity during a new employee adaptation period (O'Connell and Kung, 2007; Massingham, 2008);
- deteriorated product or service quality (Laser, 1980; Morrell, Loan-Clarke and Wilkinson, 2004; O'Connell and Kung, 2007; Massingham, 2008; Schmitt, Borzillo and Probst, 2011);
- 7) lost social capital (Morrell, Loan-Clarke and Wilkinson, 2004; Massingham, 2008);
- 8) lost human capital (Massingham, 2008);
- 9) lost structural capital (Morrell, Loan-Clarke and Wilkinson, 2004; Massingham, 2008).

Authors	Bowden	Laser	Massingham	Morrell, Loan-Clarke	O'Connell, Kung	Schmitt, Borzillo
Indirect expenses				Wilkinson		Probst
Costs of training of new staff		+		+		
Decreased morale within organisation	+	+		+	+	
Emotional pressure on remaining staff				+		
Additional workload for remaining staff during employment and training of new personnel			+		+	
Decreased productivity during a new employee adaptation period			+		+	
Deteriorated product or service quality		+	+	+	+	+
Lost social capital			+	+		
Lost human capital			+			
Lost structural capital			+	+		

Figure 2.3. Summary of indirect expenses related to employee turnover

Although they are considered to be complicated to calculate, indirect costs are seen to be of high significance to companies. As can be seen from the listing above, employee turnover affects many stakeholders – remaining staff, employees involved in recruitment process, people who temporarily occupy vacant position and newcomers employed for holding it permanently.

When staff turnover occurs, be it voluntary or involuntary, colleagues of a person leaving are affected. Losing a team member is seen to have a negative impact on the team spirit and its development (Tuckman and Jensen, 1977). Moreover, work, for

which a leaving person is responsible, still has to be done and this is often the responsibility of the remaining staff during the process of recruiting and training a new employee (Massingham, 2008). Thus, the workload of other team members may increase in short term, which causes more emotional tensions and decreased quality of work done (O'Connell and Kung, 2007) as well as increasing job dissatisfaction of the remaining staff.

Massingham (2008) asserts that another essential outcome of employee turnover is loss of a company's social and structural capital, or loss of organisational memory and deteriorated learning ability, accordingly. When an employee leaves company, he or she takes organisational knowledge with him or her. Nowadays, as it has been discussed earlier, organisational knowledge is seen as crucial success factor for businesses (Massingham, 2008). Therefore, they strive to prevent knowledge loss by making it less dependent on people who carry it and by striving to keep key knowledge holders within the company.

Bowden (1952, p.73) claims that in case external involuntary staff turnover is caused by downsizing, it negatively affects remaining employees as they "contemplate what is happening to their fellow workers". Schmitt, Borzillo and Probst (2011) support this opinion stating that downsizing reduces staff productivity. However, it can be suggested that remaining employees can be observed to work harder in case they perceive good performance as the only way not to become a downsizing statistics as well.

Up to the author's knowledge, there exists no research that research considers employee turnover as a positive phenomenon. No academic research, which attempted to prove this point of view, was found during the literature review. Only occasional mentioning of cases when staff turnover can be advantageous were found in studied literature. Hence, Schmitt, Borzillo and Probst (2011, p.56) mention that downsizing is sometimes perceived to provide "sustainable performance improvement". Bowden (1952) states, that a degree of employee turnover is needed for the healthy being of organisations. Therefore, it can be claimed that unavoidable staff rotation is better for a company than endeavours to keep personnel static and thus fail to meet new market requirements and adapt to dynamic contexts in which a company operates.

Similar conclusions were drawn by Arvidsson (2009) who said it was noteworthy that there is not much research on positive outcomes of tensions within matrix organisations. He thus suggested further research to concentrate on possibilities provided by tensions, which were identified during his study.

Unlike academic publications, industry-focused business publications include some endeavours to perceive employee turnover from its positive side. Lau and Albright (2011) propose that companies should analyse whether each case of staff rotation affects them in an advantageous or disadvantageous manner. They also claim that occasionally employee turnover can serve an organisation in a positive way granting growth opportunities for current talented staff, allowing a company to employ new people with greater potential, and diversifying abilities and background of staff (Lau and Albright, 2011). Employee rotation can encourage a company to improve their staff development program and other undertakings that motivate remaining employees to develop themselves and their working capabilities (Lau and Albright, 2011).

It could be suggested that employee turnover can increase a company's productivity and morale in case a poor performer is being replaced by a more efficient person. However, it is definite that firing every employee who underperforms cannot be seen as a fruitful solution. In such a case it could be useful to identify the employees with poor performance with a view to improve their work results given that some training and coaching is provided by employer.

Lau and Albright (2011) agree that turnover of employees with high performance and important knowledge is more harmful to a company than helpful. However, they claim, possibilities provided by staff turnover should not be neglected.

2.3 Employee Turnover in Project Context

Due to their nature, goals and management, projects create a special environment which has an impact on the issue of employee turnover. Project specifics supply organisations with new causes of staff rotation, and additional consequences of employees leaving a project can be observed in context of temporary organisations. These are discussed in the current section.

Projects are temporary endeavours (PMI, 2004, cited in Maylor, 2010), which means they have time constraints imposed on their delivery. A limited time frame is proven to create additional pressure and consequently stress for employees involved in project execution (Maylor, 2010). Stress is widely considered as one of the job dissatisfaction reasons (Chapman, 1998), thus can lead to increased employee turnover.

Another important characteristic of projects is that project teams consist of people who have diverse backgrounds, both professional and cultural, differ in personalities and are often brought together for the first time and do not know each other (Lundin and Söderholm, 1995). Due to differences in backgrounds and personalities, conflicts between team members can arise. Time and resource restraints inherent for projects create additional pressure and thus can worsen the conflict. This provides another reason for employee turnover within projects (Arvidsson, 2009).

The project life cycle can also be seen as a reason for staff rotation within projects. As Parker and Skitmore (2005) observed, large number of project managers have not been involved in projects from their inception until finalisation phase. Instead, more than half of Parker and Skitmore's research respondents did not participate in the project's last stages, and a third of them joined the project after the concept phase (Parker and Skitmore, 2005). Several reasons were identified to explain this phenomenon. First, diverse project stages can require different ways of management due to their specifics (Parker and Skitmore, 2005). Then managers can be changed to meet the project requirements in the best way. Second, it was observed that project managers lose their motivation when the project reaches its last stages and thus they tend to search for new projects (Briner, Geddes and Hastings, 1994, cited in Parker and Skitmore, 2005). Both reasons result in rotation of project managers.

However, it can be claimed not only project managers tend to work during several project stages instead of the whole project. This trend can be observed among other project team members as well. Diversities of project stages affect differences in requirements for many roles in project team, not only the role of project manager. Furthermore, exhaustion which is observed among project managers during the final project stages can also be seen among other team members, which can cause them search for new projects to get involved before the current project is finalised. Therefore, it is suggested that the project life cycle should be seen as a reason for employee turnover within projects.

Matrix forms of organisations create new reasons for staff turnover due to their combination of line and temporary structures. The issue of identification and prioritisation between line and project organisation that employees face was previously discussed. It may create tensions in a project team or between the team and

functional department (Arvidsson, 2009). Such tensions can result in additional stress of team members and consequently in voluntary or involuntary staff rotation. Extra pressure can be caused by the two bosses problem described by Maylor (2010) and also account for additional employee turnover.

The major matrix organisation's attribute that leads to employee turnover appears to be scarcity of resources (Arvidsson, 2009). Hendry (1975) explains that staff turnover can be caused by line managers re-allocating employees from one project to another due to their need of filling an empty position there. In this way internal involuntary turnover occurs, affects projects, and organisation's performance in general.

It was discussed that nowadays employees tend to be more ambitious and are more willing to utilise extensive opportunities that the industrial era provided (Bowden, 1952). People who are now more aware of possible career growth paths often prioritise self-development and expect their employer to assist in it (Morrell, Loan-Clarke and Wilkinson, 2004). Matrix organisations provide various possibilities how employees can develop their career. One can be promoted from having a role in the functional structure to representing the function in a project. An employee can also be allocated to a bigger and more important project once succeeding in a smaller one. Such possibilities can be included in an employee's career plan increasing his feeling of identity and decreasing possible sources of tensions (Arvidsson, 2009). However, the possibilities mentioned above of employee's development can also increase company's staff turnover and its negative outcomes provided the growth is not planned thoroughly enough by management. It is therefore crucial to find a balance between satisfying employees' needs and running a healthy and profitable organisation.

Having examined the reasons for employee turnover, its consequences and specifics in project context, it is now time to develop a theoretical framework of the current study which will bring all these aspects together and be a helpful ground for achieving the research aim.

2.4 Theoretical Framework

Based on the information received from reviewing existing literature, a theoretical framework for the current research has been developed and is briefly presented in this section. The framework is aimed at assisting the researcher in structuring, collection and analysis of primary data, in particular in configuring interview questions and categorising interviewees' responses. The framework considers the research areas discussed in sections 2.1, 2.2 and 2.3, and presents and explains relations between them.

The left part of Figure 2.4 shows four types of employee turnover which can all be either voluntary or involuntary. First of all (number 1 on the Figure 2.4), an employee can leave an organisation (external staff turnover). Secondly (number 2), a person can change positions going from a permanent organisation to a project or vice versa. Thirdly (number 3), a change can occur within the temporary organisation, either within a particular project or between projects. Lastly (number 4), staff rotation can happen within the permanent organisation, similarly to the third case.



Figure 2.4. Theoretical framework

The right part of Figure 2.4 presents three courses of handling employee turnover. As previously discussed, staff rotation can be avoidable and unavoidable, advantageous and disadvantageous. The first course tackles issues of avoidable disadvantageous employee turnover. This was done by investigating possible ways of reducing staff changes. The investigation was based on the reviewed literature. It identified actions, which would potentially help to decrease the employee turnover rates, and then verified them throughout the primary data collection.

The second course is directed to mitigate negative consequences of unavoidable disadvantageous employee turnover. This was done by utilizing knowledge gained from the literature review and data collected about negative impacts of staff rotation. This knowledge was applied to develop best practices which would assist reduction of the harmful impacts.

The third course manages enhancement of positive consequences that advantageous staff turnover can provide. Due to the lack of information regarding the positive side of employee turnover, this course was paid less attention to during the data collection process. However, there was mentioning of it by the research participants, which led the author to the understanding that this area should be studied more thoroughly.

All three courses were discussed during the interviews and studied thoroughly using additional input from the company. Their relationship with the different types of employee turnover was explored in the context of the chosen company. This provided the researcher with rich qualitative data which helped in achieving the research aim. The data collected and their analysis are presented in Chapter 4 of this dissertation.

3 Research Methods

The current chapter provides an overview of the choices of research methods used for this study and describes the research process in detail. It begins with clarifying how the research approach and research strategy, that best fit the current dissertation, were chosen. It goes on to present the process of selection of the case company in general and interviewees in particular. Later, data collection and analysis techniques are discussed and their utilisation for this study is reported. Lastly, the chapter renders the ethical issues and matters of validity and reliability considered while undertaking this research.

3.1 Research Approach

A research can be undertaken by adopting one of three research approaches – quantitative, qualitative or mixed. Naoum (2007) generally explains that the main characteristic of quantitative study is its objectivity, whilst qualitative study is attitudinal, thus involving researcher's opinions and interpretations. Rudestam and Newton (2001, p.36) explain the difference between methodologies in the following way: "Whereas a quantitative researcher is apt to record a small set of previously identified variables, the qualitative researcher seeks a psychologically rich, in-depth understanding of the individual, and would argue that experimental and quasi-experimental methods cannot do justice to describing phenomena".

Quantitative research provides "hard and reliable" data (Naoum, 2007, p.38) which represent concrete measurements and facts about the research topic, and quantities related to it (Biggam, 2008). Such data is helpful when a study is aimed at answering research questions starting with "What?" or "How many?" and that are designed to collect some accurate evidence for testing research theory. In quantitative research, theory is developed at the beginning of the study, and is then checked deductively, thus being verified or unproven by data collection and analysis (Naoum, 2007).

Qualitative study is believed to be subjective and is used when the issue examined is difficult to separate from the researcher's own opinions (White, 2007). It involves not only facts provided by collected data, but their interpretations, exploring relations, causes and effects (Biggam, 2008). Qualitative exploration is aimed at finding responses to "Why?" and "How?" research questions, and thus the theory emerges gradually during the course of the study. Such inductive approach allows a researcher to develop the theory by comparing results of empirical investigation with existing theories (Naoum, 2007).

Use of mixed methods derives from a study of Campbell and Fisk in 1959, when they combined utilisation of both qualitative and quantitative methods (Creswell, 2009, p.14). In this way, the researchers claimed, bias of results of a field study can be eliminated, and their interpretations can be triangulated. Moreover, researcher has a possibility to benefit from advantages of each of the methods, eliminating the influence of methods' disadvantages on the study results.

The current study's aim is "to investigate possible means to facilitate reduction of adverse employee turnover and its negative impact on long-term projects". The aim combines the two existing directions of the staff turnover exploration, namely turnover rate reduction and turnover damages reduction. As the literature review indicated, despite tight relation between the two, there is no holistic framework which would keep the areas of research together. Thus, exploration of real-life experiences was required to understand how a theory, which would fill in this gap, could be developed. Considering the above mentioned dissimilarities between the research approaches, a *qualitative* approach was chosen for this goal. This choice was due to the fact that the issue of the study could not be examined fully based on gathering any kind of numerical data. Instead, reasons of employee turnover, its types and consequences needed to be investigated in an in-depth way. Understanding relations between these would assist achieving the research goal, therefore qualitative methods were seen as best serving the purposes of the current study.

3.2 Research Strategy

Research can be undertaken using one of several research methods. Yin (1994, p.4) suggests that the choice of a research strategy to be used for a research should be grounded on answers to the following three questions:

- What is the type of the research question of the study?
- How much control does a researcher have over actual behavioural events?
- Are the events to be explored of contemporary or historical nature?

Yin (1994, p.6) then gives examples of several research methods in relation of answering the three questions (Table 3.1). It is worth noting that the table does not present all possible research strategies, but rather a limited selection of them.

Strategy	Form of Research Question	Requires Control over Behavioural Events?	Focuses on Contemporary Events?
Experiment	How? Why?	Yes	Yes
Survey	Who? What? Where? How many? How much?	No	Yes
Archival Analysis	Who? What? Where? How many? How much?	No	Yes/no
History	How? Why?	No	No
Case Study	How? Why?	No	Yes

Table 3.1. Relevant situations for different research strategies (Yin, 1994, p. 6)

Considering that research questions for the current study all start with "How?" or "Why?", experiment, history and case study were considered while designing the research. However, experiment requires control over behavioural events which was not feasible in the context of this research. History was not applicable either as the research was aimed at focusing on the current situation of employee turnover management in the case company. Therefore, the choice was made to *case study* as the most appropriate research method for the current dissertation. This choice was discussed with the dissertation supervisor and confirmed by her.

A method not presented in Table 3.1 which was also taken into consideration was grounded theory. It would fit the research aim and questions as it would assist in creating a theory grounded on a tight plexus of existing research regarding staff turnover and the author's empirical research findings. However, as Biggam (2008)

explains, this method has theory that is challenging to apply in practice, and is thus not widely used for dissertations at Masters level. Considering the time and resource limitations determined for the current dissertation, case study was felt to be the research method best fitting this study.

According to Naoum (2007), a case study can be of descriptive, analytical or exploratory nature. Descriptive case studies aim at gathering numbers of respondents who have some particular opinion, and then analyse the numbers. Analytical research has the goal of finding relations between particular topics of the research issue (Naoum, 2007). Lastly, exploratory case studies identify cause-and-effect connections between the research objects and strive to explain them.

The research goal of the current study was to identify the connections between different aspects of employee turnover, both those that are already explored and those yet to be studied more thoroughly. To reach the goal, a holistic framework which combines the aspects was created. Thus, based on definitions provided by Naoum, an exploratory case study was designed for the current research. This choice was made due to Naoum (2007, p.46) who clarifies that exploratory case study "studies the relationship of one set of facts to another, with the hope of finding some causal relationship between them". This is a sound description of what the current research has done.

3.3 Case Selection

Case selection was the next step after identifying which research approach and strategy best fit the current study. According to Naoum (2007, p.45), a case to be studied can be "a person, a group of persons, an organisation or a particular project". It was decided that an organisation would be a suitable unit of analysis for this research. A particular project could be claimed to be a more suitable option, but the author wanted to analyse whether the issue of employee turnover tends to be seen in different ways by team members depending on the scale of projects. Thus, a particular organisation which had projects as a part of the way they operated had to be chosen. Moreover, as the literature review showed, employee turnover within projects was seen as more problematic in matrix organisations due to co-existence of line and project structures in them. Therefore, a matrix organisation was seen as a beneficial unit of analysis for the case study.

After the type of the case company was defined, the author used her personal network, as Bryman and Bell (2011) proposed, to find an appropriate unit of analysis. A contact with Volvo Car Corporation was made and a meeting with the Vice President of a Program Management unit, which is a part of the Research and Development division, took place. During the meeting the research aim, questions, background and expected outcomes were presented. The unit and division structure were also discussed. The author concluded that the above mentioned unit suited the research due to several reasons:

- projects are of "as... but..." nature (Maylor, 2010),
- projects played an important role in the company's operations,
- the organisation had a matrix structure, namely, it was a project-oriented organisation (POO), and
- the company management was aware of the issues related to employee turnover within projects and were thus interested in the current research.

The last reason played an important role in the author's decision regarding the case company. VCC's interest in the research showed that the issues identified during the literature review were urgent in the organisation, thus there was a possibility to gather relevant data for the research. Moreover, the Program Management Unit was placed high in the company hierarchy, granting the author access to a large amount of data.

The Vice President of the unit, who later became the research principal sponsor, chose the company supervisors for the current research based on the needs discussed during the initial meeting.

Selected sampling was used for choosing participants for the interviews (Naoum, 2007). Interviewees were selected collectively by the author and one of the company supervisors. After the division structure was studied by the author, occupations which would be essential for the data collection were presented. Based on the list of occupations and the supervisor's knowledge of the employees and projects, people to be interviewed were selected. The selection of people was aimed to be representative on diverse matters, including the scale of the projects they worked on, positions they occupied and their personalities.

Once the list of interviewees was decided, a brief presentation of the researcher and her study was sent out to the employees by the supervisor. Considering the supervisor's senior position and many years of working at Volvo Car Corporation, the introduction was advantageous for the researcher, as Yin (1994) proves that a research is seen as a more valuable if it is presented by a senior colleague to the future participants.

3.4 Data Collection Techniques

Data collection is a process that should be carefully planned by a researcher as it is the way to avoid bias and minimise the influence of selected research method's shortcomings (Biggam, 2008). There are various data collection techniques, and it is suggested that any of them should not be used alone (Yin, 1994). Instead, Biggam (2008) believes that a combination of different sources of data is beneficial for a research as it allows triangulation of the gathered data. Every technique used for data collection has its advantages and disadvantages and thus none of them can be claimed to be generally beneficial in comparison to others (Yin, 1994). This is another reason to apply several techniques while undertaking a research. Advantages and disadvantages of the most widely used data collection techniques are presented in Table 3.2, which was used by the author while designing the current research.

Interviews are believed to be "[o]ne of the most important sources of case study information" (Yin, 1994, p.84). It is believed that they can serve the goals of a case study well. Thus, interviews were chosen as the main data collection technique for the current study.

Source of Evidence	Strengths	Weaknesses
Documentation	 stable – can be reviewed repeatedly unobstructive – not created as a result of the case study exact – contains exact names, references, and details of an event broad coverage – long span of time, many events, and many settings 	 retrievability – can be low biased selectivity, if collection is incomplete reporting bias – reflects (unknown) bias of authors access – may be deliberately blocked
Archival Records	 [same as above for documentation] precise and quantitative 	 [same as above for documentation] accessibility due to privacy reasons
Interviews	 targeted – focuses directly on case study topic insightful – provides perceived causal inferences 	 bias due to poorly constructed questions response bias inaccuracies due to poor recall reflexivity – interviewee gives what interviewer wants to hear
Direct Observations	 reality – covers events in real time contextual – covers context of event 	 time-consuming selectivity – unless broad coverage reflexivity – event may proceed differently because it is being observed cost-hours needed by observers
Participant-Observation	 [same as above for documentation] insightful into interpersonal behaviour and motives 	 [same as above for documentation] bias due to investigator's manipulation of events
Physical Artifacts	 insightful into cultural features insightful into technical operations 	selectivityavailability

Table 3.2. Six sources	of evidence: strengths and	weaknesses (Yin,	1994, p.80)
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The advantages of interviews, described in Table 3.2, are essential for answering the research questions. The research topic of this study is exploring the reasons of employee turnover, its influences on a project and possible ways of making it less harmful to organisations. Conducting interviews would enable a deep understanding of this topic in a company context, and would assist in protruding the relations between the staff turnover aspects taking into consideration opinions of diverse stakeholder groups affected by the turnover.

The weaknesses of interviews were also taken into consideration and addressed by some ways suggested by Biggam (2008, p.101). As he recommended, importance of triangulation of the data collected was emphasised, and was achieved by utilising other data collection techniques. These techniques are studying documentation, and elements of direct observations and participant-observation. Observations could not be fully used for the current research due to the time and resource limitations allowed to the author. More information about triangulation of the results can be found in Section 3.5 of this dissertation.

Two most commonly used types of interviews during a case study are open-ended (unstructured) and focused (semi-structured) interviews. A third type, structured interviews, is not a widespread data collection technique for case studies, but it is used occasionally when the study specifics allow (Yin, 1994). *Focused interview* was chosen as the most appropriate for the current study. Semi-structured interviews usually contain open-ended questions, which encourage an interviewee to explain his or her opinion, and thus provide collection of an extensive data for the research (Bryman and Bell, 2011). In addition, a pre-set structure helps a researcher to keep an interview within the research topic (Yin, 1994). The structure does not have to be followed strictly, which provides an interviewer with flexibility.

As the current research questions include several aspects of employee turnover, such as its reasons, consequences and possible mitigation strategies, it was essential for the researcher to discuss all of them during the interviews. However, it was not desirable to restrain the interviewees by a stringent interview structure, in order to receive information which would enable a deep understanding of the research issue. Therefore, focused interviews were seen as the most advantageous data gathering technique for the current study.

The interviews were audio recorded with the formal consent of the interviewees. This method was chosen according to Barbour's (2007) suggestion. In this way, the author was able to concentrate on keeping the conversation instead of on taking notes. It also allowed the researcher to pay attention to the body language of the interviewees, which helped to notice when responses were restrained. In such cases the interviewer made an effort to ask additional questions to understand the reasons for particular behaviours and opinions of the interviewees.

3.5 People interviewed

Nine employees of Volvo Car Corporation, working in the Research and Development division, were chosen for the formal interviews. The employees had experience of working in a line organisation or in projects, several interviewees worked in both. The line structure was represented by line managers for the Electrical and Electronic Systems Engineering (EESE), and Vehicle Engineering (VE) units, as well as by a functional project manager from the Vehicle Engineering unit. From the temporary organisation, seven project managers, who have been involved in projects of different complexity, were interviewed. Such a selection allowed the researcher to receive opinions of people with diverse educational, professional, personal and cultural backgrounds. Table 3.3 presents the positions currently occupied by the interviewees, number of years of working within Volvo Car Corporation, and the date when the interview was held. Due to confidentiality reasons, names of interviewees are not used.

Current Position	Years of Work	Interview Date
	within VCC	
Vehicle Line Director	31	22.05.2012
Functional Program Manager (VE)	10	14.03.2012
Chief Program Engineer	28	09.03.2012
Senior Manager (EESE)	11	14.03.2012
Technical Project Leader 1	19	12.03.2012
Technical Project Leader 2	25	13.03.2012
Senior Manager (VE)	17	07.03.2012
Technical Project Leader 3	35	06.03.2012
Change Agent R&D	29	05.03.2012
Senior Project Manager	18	12.03.2012

Table 3.3 Employees interviewed at Volvo Car Corporation

Apart from the formal interviews, the study also had some additional informal conversations with the interviewees and other Volvo Car Corporation employees. Observations during management and technical meetings were also employed as well to monitor how the employee changes are discussed.

3.6 Data Analysis

Analysis of data gathered during case studies is proven to be an underdeveloped and thus a difficult part of performing case study research (Yin, 1994; Bryman and Bell, 2011). However, there are several approaches to the analysis conduct. One of them was proposed by Miles and Huberman (1984, cited in Yin, 1994, p.103), where they encourage a researcher to utilise diverse analytical techniques, including:

- Putting information into different arrays,
- Making a matrix of categories and placing the evidence within such categories,
- Creating data displays flowcharts and other devices for examining the data, and
- Tabulating the frequency of different events.

All these techniques were used while analysing the data received during the current research. The data analysis was undertaken in several stages, following the data gathering stages. First, interview protocol was created based on the reviewed literature and developed theoretical framework. The conducted interviews were recorded and later transcribed. A qualitative data analysis computer software *NVivo* (QSR International, 2012) was used for transcribing and analysing the interviews. At this stage of data analysis, following Miles and Huberman's advice, the information was categorised in three categories – reasons for employee turnover, influences of employee turnover and ways of managing employee turnover. Each of the categories contained subcategories which helped to structure the information more precisely. The

categories and gathered opinions were then summarised in a mind map for a further reference.

Once all the interview responses were categorised and the patterns analysed using the mind map, the results of the first data gathering and analysis were presented to the two company supervisors in separate meetings. The decision to present the results to each of the supervisors individually was made to encourage them to openly share their opinions regarding the results. During this stage of data analysis, brainstorming techniques were used to create a preliminary structure of recommendations which would be a practical outcome of the dissertation. The outcomes of the brainstorming sessions were documented in mind maps and word documents.

Based on the summaries created during the second stage, an online-based survey was designed and sent out to the interviewees. This was aimed at reducing the bias of author's misinterpretations of the interviewees' interview answers. It also assisted the research in gathering opinions of *every* interviewee about *each* idea generated during the interviews. This was needed to ensure that final recommendations would be based on ideas supported by several people occupying diverse positions, not only by a single employee. The survey contained questions which had to be graded by respondents using a 1–5 point (strongly disagree to strongly agree) Likert-type scale. Responses were saved in a spread sheet table, and the recommendations were prioritised based on their average score.

After the analysis of the survey responses, the recommendations on how employee turnover could be managed were developed. The recommendations were based on the survey results as well as the literature review.

3.7 Ethical Considerations

Several ethical considerations were taken into account while the current research was being undertaken. The study was undertaken within an organisation, therefore a confidentiality contract was signed by the researcher and the case company. Each interviewee was informed about the research purpose during interview invitations and in the beginning of the interviews. Interviewees were also notified about the confidentiality agreement in order to secure anonymity of information provided. A consent form was filled in by each research participant to ascertain that all ethical issues were discussed. This ensured participants' confidence and thus the feeling of freedom to provide responses without a fear of influencing their position in the case company.

Each reference to information about Volvo Car Corporation, which was received during the interviews, survey, documentation reading or observation, was orally agreed on with the supervisor provided by the company.

3.8 Validity and Reliability

Each study is questioned to be valid and reliable. Research is proven to be valid if it is adequate for other researchers and practitioners interested in the same area (Biggam, 2008). For this, the study has to (*ibid*, p.99):

- 1) have well established research methods as its ground,
- 2) use verified data collection techniques, and
- 3) analyse collected data utilising techniques that are appropriate to the current research.

Research methods, and data collection and analysis techniques used in the current study were chosen based on state of the art in the research methods literature with the help of a thorough analysis of the study aim and context, as well as the author's resource accessibility. The choice was also reviewed by the university tutors. Thus, it can be acknowledged that the current study is a valid empirical research.

Reliability of a research is defined by its trustworthiness and minimisation of any kind of bias (Biggam, 2008). For a research to be trustworthy and data collected to be unquestionable, Biggam (2008) suggests to provide as much detailed information about data collection and analysis as possible. It is also proposed to include interview questions, transcripts and notes in research appendices to reduce any possibilities of the reliability to be questioned.

Details on the data collection and analysis process for the current study were presented in Sections 3.4 and 3.5 respectively. Moreover, interview questions for employees from project and line organisations can be found in Appendices A and B, respectively, and the online survey structure is provided in Appendix C.

The issue of bias was also addressed during the data collection process. Case studies are often accused of being biased. However, Yin (1994) argues that other research methods cannot fully exclude bias and misinterpretation, therefore this issue is a common one. Nevertheless, he agrees that case studies are at a bigger risk of misinterpreting the data received, therefore he suggests researchers to keep the concern in mind throughout the whole study and try to eliminate it in any way possible (Yin, 1994).

Biggam (2008) claims that interviews can be seen as a delicate research method, as interviews provide respondents' opinions. Moreover, interviewees may sometimes give responses that are not truthful, but are expected to satisfy the researcher. Being aware of such risks, the author of this study emphasised to the interviewees the fact that it is their personal opinions that are valuable for the research and that there were no expected "model" answers to the questions being asked.

To ensure triangulation of the results and thus eliminate the risk of bias, interviewees were asked to complete an online survey (Appendix C), which summarised the interview discussions. The results of both steps of data gathering were compared, and brief explanations were requested from the interviewees in case any inconsistencies were observed. Furthermore, the researcher followed advice of Yin (1994) who suggested receiving help from colleagues in interpreting data collected. People who are not directly involved in the research, Yin explained, could see the flaws of the analysis as they do not have personal connection to the research unit. Therefore, personal observations were held by the author of the current study, and then presented to the company supervisor and author's colleagues. In this way, possibilities of misinterpreting of the data collected were reduced to minimum. Internal documentation of Volvo Car Corporation was also used to verify some of the results.

The following chapter presents the results of the primary data collection as well as the outcomes of the data analysis.

4 Data Analysis and Results

The current chapter starts with summarising the types of employee turnover identified during the research interviews. It goes on to explain the problems that the company employees saw due to the staff rotation within projects. Next, a discussion of advantages of employee turnover is presented. The discussion is followed by a description of suggestions on how to improve the situation of employee turnover within Volvo Car Corporation. Lastly, a recommendation designed by the author is introduced. The recommendation is based on the suggestions provided by the reviewed literature and by the research interviewees, and is aimed at tackling the most urgent issues related to the employee turnover.

4.1 Current Situation of Employee Turnover Management

In this section, each type of the employee turnover, that was identified and discussed during the interviews, is presented.

4.1.1 External employee turnover

The situation where a person leaves an organisation and thus causes an employee turnover was mentioned by most of the interviewees when asked about what kinds of staff rotation they could think of. Reasons for a person leaving, that were stated by interviewees, included retirement, parental leave, serious sickness, and death. However, it was noted that only once a new job in another company was named as a reason for a person to leave. The interviewees agreed that predominantly employees switch within the Volvo Car Corporation. As one of the interviewees said, the changes happen both within the company and outside, "but mostly within the company. They [the company employees] get another assignment, that is more profitable or fun, or whatever".

Predominance of internal employee turnover over external staff changes could be explained by the considerable size of Volvo Car Corporation and its structure complexity, which allow employees to try themselves in new occupations within the company. Moreover, it is encouraged by the organisation that employees change positions after some time (five to ten years). This, as a participant explained, is done to help people develop and not be caught by a routine and thus get demotivated at work. Such internal staff turnover also supports cross-functional knowledge sharing.

To conclude, it can be said that external employee turnover was acknowledged by the interviewees, but, as one research participant said, "it seems that at Volvo people stay, they don't leave the company". This is due to the opportunities the company size and structure provides, as well as the internal culture which encourage the employees to work at Volvo Car Corporation for many years.

4.1.2 Internal employee turnover within the same department

As mentioned in the previous section, internal employee turnover was discussed more lively than external staff rotation by the interviewees. Movements within the same department were considered to be quite a usual practice. The interviewees mentioned that it could be both voluntary and involuntary.

One of the reasons for a person to voluntarily change a position or assignment within the current department could be work overload. As an interviewee said, there could be "too much work, too much pressure, too much stress". This idea was supported by other interviewees as well. In this case an employee can wish to get involved in a less complicated program where he or she would have less pressure. Occurrence of such a situation can be explained by improper expectations that employees have on their work in the project (Laser, 1980). This matter was mentioned in Section 2.2.2 of this study, where it was claimed that such misunderstandings can be caused by an inappropriate description of the work provided by the management prior an employee joining the project.

Voluntary employee turnover within the same department can have a reason opposite to the one described above, that is when an assignment is "not fun" and "not inspiring enough". From the researcher's observation, this happened with experienced employees who have participated in projects of high complexity and thus familiarised themselves with challenges of intricate assignments. When such employees were involved in the same type of complex projects, they got demotivated because of being acquainted with the issues. Although such de-motivation could lead to voluntary staff turnover *within* the same department, a movement *across* the functions is a more common solution in these situations. As one of interviewees put it, "no one [in my experience] swapped programs, it was swapping jobs".

One more reason for the voluntary staff rotation within the department could be personal conflicts and tensions between colleagues (Laser, 1980). This reason was discussed in Section 2.2.2 of this dissertation and was cited by several of the interviewees to occasionally occur at Volvo Car Corporation. However, not many interviewees confirmed that such situations took place often, or, as a participant said, ever: "you could swap programs if you don't like people you work with, but that I haven't heard about". This phenomenon can be explained by the characteristics of the Swedish culture, namely, their conflict-avoidance (Gesteland, 2002, p.299-303). This reason was confirmed both during formal interviews - "Scandinavia is avoid-conflict" - and during informal conversations with the Volvo employees. On the other hand, a research participant said that there was a noticeable staff turnover within one of the first projects he was involved in at the company, "because some people didn't like to work with me". It is worth to notice that this employee was not a Swede, but came from a country where attitude to conflicts is more open (Gesteland, 2002). Therefore, it can be assumed that moving the interviewee's colleagues to other projects was aimed at avoiding future conflicts within the project team.

Last, but not the least, an issue of motivation was discussed while talking about voluntary employee turnover within a department (Parker and Skitmore, 2005). It was discussed in Section 2.3 of this study that team members can lose their motivation to work on the project while approaching its final stages. This was confirmed to be the case by one of the interviewees who explained: "you also know that soon it will be finished. And then you get in this 'what shall I do after this?' [mood], so you start to look, and you grab the opportunity if it comes". This issue, in line with others, mentioned above, should be addressed by the management to decrease avoidable voluntary staff turnover.

Reasons for involuntary employee turnover within a department were also discussed during the interviews. The first and foremost reason that was mentioned by the interviewees was hierarchy, and thus prioritisation, of projects. A research participant explained: "to some extent, when we have a project dealing with the complete new vehicle, people have a tendency to believe that it's more fun or it's more beneficial for their career to join the new vehicle team rather than staying with the model year changes". It was observed that the management have the same attitude towards hierarchy of the projects: "of course there's a hierarchy in different types of programs". Therefore, when employees are being allocated to projects, priorities are given to the new vehicle projects. In case a position happens to be open in a new vehicle project, people from model year change programs¹ can be appointed fill the position in: "And if you suddenly have a hole in a very important position, and you need to fill that hole, you could have like a domino effect". As an interviewee explained, the involuntary employee turnover within a department "is mostly to fill up other open positions".

The issue of allocating employees to another project while their current one is still running is caused by the specifics of matrix organisations, described in Section 2.3 of the Literature Review Chapter of this dissertation. The main reason, mentioned there, was resource scarcity (Arvidsson, 2009), which proved to be the issue at the case company. As one of research participants confirmed, when asked whether the resource scarcity is the biggest issue causing staff turnover, "[t]hat's the main root cause. That is clearly the main root cause".

Another reason for involuntary staff rotation within the department was related to the project phases (Parker and Skitmore, 2005). An interviewee explained that functional managers tend to feel it is easier to re-allocate an employee to another project when the current one is in its late stages: "sometimes you don't [even] put this less experienced guy [to substitute a more experienced previous team member] in the program cause it's almost finished, it will sort out itself". This issue was also found in the literature reviewed (see Section 2.3 of this dissertation), where it was explained that this course of events is difficult to avoid in matrix organisations (Briner, Geddes and Hastings, 1994, cited in Parker and Skitmore, 2005).

To summarise, several reasons were mentioned for an employee change to occur within a department. Voluntary staff turnover was attributed to the work being too stressful, or vice-versa, not challenging enough, due to lack of motivation in the end of the project life cycle, or due to personal tensions within the project team. Involuntary staff turnover can be caused by re-allocation of employees to other projects, which can occur because of lack or resources and diverse project prioritisation. Several of these reasons, among others, could be applied to employee turnover across department borders, which is to be discussed in the following section.

4.1.3 Internal employee turnover across department borders

Unlike employee turnover within a department, which had a balance between voluntary and involuntary reasons, staff rotation across functional boundaries was observed to be predominantly voluntary. That is, when employees decide to change an occupation within an organisation: "you applied for something else and you suddenly got that". The reason why personnel change can occur during the course of a project was attributed to the position opening for upcoming projects. And then, as a participant described, "if the occasion occur, of course you jump on it, so-to-say".

An employee may be willing to change due to his or her "personal career thoughts" based on a long-term perspective. Career growth was confirmed by most interviewees to be the major trigger of the cross-functional voluntary staff turnover. Thus, one of interviewees said that the several latest turnover cases she had in her department were due to the employees applying for and getting new jobs in other functions within the same company.

Hong, Wei and Chen (2007) suggested that it is essential for companies avoiding voluntary external staff turnover to provide personal growth opportunities for their employees (See Section 2.2.2 of this dissertation). However, it is impossible for

¹ Programs that handle periodic changes in existing car models

everyone to progress with their career while staying within the same department. As a research participant noted, a company cannot help everyone to grow and become a CEO. Therefore, personal development can occur with the help of cross-functional changes. The research showed that it is supported by the company if employees want to change a position after several years. As another interviewee commented on the recent changes in her division, "they've been in the department for 10 years, so it was time to do something else."

It was also mentioned by the interviewees that employee turnover within departments and cross-functionally can interfere with each other. In particular, an example was given by a participant when a person receives a new job from another function and leaves, thus creating an open position within the previous department. In such a case a domino effect can occur and involve several changes within the department.

In conclusion it can be said that cross-functional employee rotation takes place mainly when an employee takes the initiative to start working within another department. This initiative is supported by Volvo Car Corporation, but it is acknowledged that it should be managed more thoroughly to lessen negative impacts of it.

4.1.4 Internal employee turnover due to project handover

There was one more type of internal employee turnover identified during the literature review – turnover due to different project phases during project life cycle (See Section 2.3 of this study). It was confirmed that this type of turnover exists at Volvo Car Corporation: "we do actually plan for the turnover. Most of the people are exchanged between the [concept and industrialisation] phases". That is, the core project team is changed between these two project stages.

Parker and Skitmore (2005) explained that different teams running diverse project phases can be explained by different requirements of the project stages. This idea was verified by several interviewees. An interviewee suggested that the early project phases should be run in a less structured way, as "there are a lot of lose ends". On the contrary, as another interviewee explained, the later phases are more ordered: "you know exactly what to do, just solve remaining issues and follow up to make sure you do what has been decided". Consequently, one needs different personalities for different project phases – "thinkers" for the early phases and "doers" for the later ones.

Although there were several interviewees who supported the idea of changing the teams between the project phases, most of the participants were critical about this procedure. Several reasons for this that were named are presented in Table 4.2.

Reason	Quote
Complexity of the handover	"If we talk about the complexity of it, the handover of the program from the concept to the industrial team is probably the most complex one"
Inappropriate timing for the handover	"We put these handovers at the very late stage of the program"
Loss of project history knowledge	"Personally I think it's not the best thing we are doing to switch a complete team. Because you lose a lot of knowledge when you do that"
Loss of project history knowledge	"It's more important to stick to commitments and to have very well documented program when we hand this thing over. And we are not famous to sticking to the commitments and have good, clear documentations"
Different concepts of time	"Concept people don't have the same concept of time as those working with pure industrialization"

Table 4.1. Criticism of the project handover process

The company is aware of the flaws of the process and is thus making efforts to improve it. One of interviewees notified that the project handover to another team was introduced comparatively recently. Another research participant explained that Volvo Car Corporation is still in the process of standardising this procedure: "you have long times of overlap. So the person who will be responsible for the industrialisation comes on board together with the concept team six months or even more prior to that he or she takes over the main responsibility. And someone else from the concept team might have a task to stay in the industrial process". Therefore, it can be concluded that the company is aware of the issues related to the employee turnover that occur between the project stages, and the issues are being addressed.

4.2 Problems Related to Employee Turnover within Projects

This section introduces the findings related to the issues caused by employee turnover, which are present at Volvo Car Corporation. It can be noticed that the issues are interrelated, they cannot stand alone. Instead, occurrence of one of the problems can lead to another. This dependence illustrates the complexity of the staff turnover matter, strengthening the findings of the literature review for the current research.

4.2.1 Loss of knowledge of project background

The issue, related to the employee turnover, that was named as the most critical one by most of the interviewees was loss of knowledge of the project background. It was noted by the interviewees that when a new person steps into a project, he or she receives access to the project documentation. The documentation provides information about all the decisions made before within the project so far. However, an interviewee explained that the context of a decision is essential for understanding it: "you get the decision but you don't get the real facts or feelings behind it. You want to know how it worked and how it played. The context. You need that to make a good decision next time". The context, nevertheless, is not reported in the documentation, which makes it more challenging for a newcomer to continue the project work uninterruptedly.

The importance of the project history was explained, among others, by one of participants, as follows: "All the problems in a launch have a history and the route cause lies two years back". And he continued that when an issue with such a long history arises, it is not certain that the current team members were involved in the early project stages. Thus, it can be difficult to understand the nature of the issue without knowing its context.

In the case of changing the core team due to project handover, the lack of project history can result in the "not invented here" problem in which "the guys taking on don't agree on everything that is done. And then you start to change things". That, an interviewee claims, can affect the project duration, team culture, as well as the quality assurance.

It was acknowledged by the interviewees that it is difficult to manage transfer of a project role from one company employee to another successfully, as there are always "small items" regarding the project history, which have to be discussed during the transfer. However, the research participants agreed that a single transfer does not harm a project significantly: "yes, that can be tricky, but the team members to a certain extent cover up for each other". The employee turnover becomes problematic in case the staff turnover increases, and there are several changes occurring simultaneously.

Losing competence and project history leads to loss of time which is needed for a newcomer to adapt and learn the project background. This issue is discussed in the following section. All the issues identified by the research participants were considered during the last part of interviews, when interviewees were asked to suggest possible measures to mitigate the problems. The suggestions are presented later, in Section 4.4.

4.2.2 Loss of time

Loss of time was claimed to be a direct cause of the employee turnover and the lack of project context: "you lose time per definition, when you change over people". As several interviewees noted, a change of one person is not affecting the project dramatically, but "it always takes time to learn how to communicate with people, to build a team, to work together", as an interviewee said. Learning the project history is also time-consuming, because one has "to transfer a lot of information". As a consequence, the project team can lose their pace, but as long as the team helps the newcomer, they get back to the normal pace with no harm to the project.

It was agreed by the interviewees that the effects of the staff rotation become more noticeable if it occurs during the later project stages due to the faster pace that can be observed then. During the later phases, the team members do not have much time to explain their reasoning for decisions. One of research participants explained this saying "here (*pointing at the last program phase*) you just want to execute."

It is noteworthy that time loss was not discussed in the literature reviewed, among other consequences of the employee turnover (see Section 2.2.3 of this dissertation). However, it was indirectly addressed in several other outcomes such as costs of training of new staff, additional workload for remaining staff during employment and training of new personnel, and others (Schmitt, Borzillo and Probst, 2011). Unlike the academic researchers, the Volvo Car Corporation employees saw this issue urgent enough to mention it as a separate outcome rather than an indirect consequence of staff rotation.

4.2.3 Loss of team culture

It was discussed in Section 2.2.3 of this study that team culture is largely affected by a team member changing during a project (Tuckman and Jensen, 1977; O'Connell and Kung, 2007; Massingham, 2008). This issue was noted to be significant at Volvo Car Corporation as well. All the interviewees mentioned some impacts the employee rotation has on the team. An extensive explanation was given by one of research participants:

"after a while together and working quite closely, you get a culture, you learn each other, you have ways to discuss things and you pass the 'honeymoon' period, you might not become a true team, but at least you learn all the team members and you learn about their capability to deliver, and their attitudes and everything. And if you suddenly have a [staff] turnover when you during a month replace not one, but two, three or four [team members], then the team has to re-learn, reestablish itself".

Every interviewee confirmed that a change of a team member results in some negative impacts on the team. However, similar to the issue of time loss, it was suggested that a change of one employee can be managed with no significant losses to the team, provided it is managed well. On the other hand, if a turnover of several team members takes place within a short period of time, the consequences can be much more dramatic. Therefore it can be concluded that the company learned how to succeed in a single employee turnover cases, but still finds it challenging when multiple staff rotations happen.

The employee turnover within projects is without doubt a very complicated and challenging issue. However, the participants of this research have also paid attention to the situation when changing a team member can have positive impacts on the team and the project. These are presented in the following section.

4.3 Advantages of Employee Turnover within Projects

The literature review for this dissertation showed that there is little research on the advantages of the employee turnover, as opposed to the problems related to it (see Section 2.2.3 of this study). The same pattern was observed during the data collection. The current research proved that the issue of employee turnover is seen as problematic by the employees of Volvo Car Corporation. Nevertheless, the study participants mentioned, on several occasions, the positive influences of the staff changes on a project and its team.

One of research participants suggested that change of employees can be required on several occasions. The first occasion was related to diverse project phases. As previously discussed, both literature reviewed and the interviewees acknowledged that different project stages can require various personality characteristics of the project team members. Consequently, some team members can find it problematic to participate in a concept development if they prefer to work in a structured way, or vice versa. In this case, it is beneficial to plan for the staff turnover considering the team members' personalities and the project phases requirements. However, an interviewee confirmed, the employee turnover should be planned thoroughly to avoid multiple staff changes occurring simultaneously.

Another occasion, when an employee change can have positive impacts on the projects, was described by one of interviewees:

"it can also be good. I've seen in a couple of cases when you've had a very experienced guy, but he didn't want to do that job. Then you got a new, younger

person. May be he didn't have that experience, but the person by running quicker compensated that with a lot of effort. So that could also be a good thing".

As it can be seen, motivation has a significant impact on a person's performance. It was discussed in the literature review (see Section 2.3) that employees' motivation can decrease during the long term projects, which can result in poor performance. The quote above strengthens the suggestion that high motivation can compensate the lack of knowledge a newcomer has. In this case, the employee turnover is an advantageous phenomenon.

Lack of motivation was also discussed by a participant, who mentioned a situation when an employee initiated a switch to another department while the project he worked on was still running: "And I believe that when a person starts to feel that he should do another thing, then we shouldn't stop him. When a brain get root in another kind of job, you don't have any need of that person". On such occasion it is harmful to the project to force the person stay, therefore allowing a well-thought through staff rotation can be beneficial.

Another situation when the employee turnover can be advantageous is when an employee does not "cope with the other guys". It was claimed in Section 2.2.3 of this dissertation that employee turnover decreases morale and team spirit of a team of remaining colleagues (Massingham, 2008). However, several interviewees emphasised that changing a team member can be a healthy event in case the employee has conflicts with the rest of the team.

To conclude, several occasions when staff turnover can be advantageous were named by the interviewees:

- 2 when an employee's personality does not correspond to the requirements of the current project stage,
- 3 when an employee has no motivation to work on the current project, and
- 4 when there is a conflicting situation between the employee and the project team.

4.4 Employee Turnover Management Improvement

After the types of employee turnover, its disadvantages and benefits were discussed, the interviewees were asked to propose possible ways of managing the issue. Following the theoretical framework, which was developed after the literature review (see Section 2.4 of this study), two courses of actions were addressed – reducing rates of avoidable staff turnover, and mitigating negative consequences of unavoidable staff turnover. The third course of action, enhancing opportunities provided by staff turnover, was decided not to be emphasised during the data collection process. This decision was made as a result of the conversations with the author's company supervisors. It was discussed that this course should be a topic for a separate research as it has not been studied as extensively as the first two courses.

All the ideas proposed by the interviewees were gathered in a mind map, which served as a ground for creating a follow up questionnaire that can be found in Appendix C. The Appendix C presents the following data:

- proposed solutions, grouped by general topics,
- grades each solution received from the interviewees through the online follow up questionnaire, and
- average grade each solution received.

Based on the results of the follow up, the solutions were sorted by the average grade (see Appendix D). Later, six solutions were identified – three solutions with the highest grades for each of the two courses of actions from the theoretical framework.

The solutions are highlighted in table presented in Appendix D. These solutions were chosen to be the core of the final research recommendation, and thus will be discussed in more details in this section.

4.4.1 Possible Ways of Reducing the Employee Turnover Rates

The research showed that internal staff rotation is a more common phenomenon at Volvo Car Corporation than an external employee turnover. The interviewees mentioned the employee rotation occurs during project life cycle due to new opportunities arising with a start of a new project. This issue was seen as a problematic side of the staff turnover due to the difficulties discussed in Section 4.2 of this dissertation. Therefore, it was suggested by several research participants that *people in major roles in a project should stay in the project until its finalisation*. It should be a normal practice to plan for employees to be involved in a project for its whole duration. However, as one of interviewees noticed, the company employees "are not famous to sticking to the commitments". As Arvidsson (2009) suggests, this battle for the company resources is typical within matrix organisations (see Section 2.1.2 of this dissertation). Therefore, it was decided to address this issue in the final recommendation, based on the literature review and the author's discussion with the research participants.

The solution with the second highest average grade, suggested that *project* management and line organisation should have an agreement on duration of a person's involvement in a project. This solution is related to the previous suggestion, and is also aimed at finding a consensus between the line and project organisation within the company. The solution was proposed by the interviewees for the cases when the first solution was not feasible due to some reasons. By having an agreement, permanent and temporary organisations would set the same expectations upon an employee's involvement in the project. This is an essential improvement in contrast to the current situation when line organisation does not communicate the employees' plans to the project structure, and thus create conflicts by the sudden employee turnover. As an interviewee said, sometimes the transfer is not communicated at all, "somebody just walks into the room and says 'hey, I am the new[...]' ". Most of the participants agreed that such situations should be avoided by a constructive dialogue between the two management sides.

The third solution advised *project management and line organisation to synchronise their long-term resource allocation plans*. It was acknowledged that both project and line management have resource allocation plans within their area of influence. However, the interviewees confirmed that the plans are not synchronised, which causes conflicting resource arrangements. Thus, the interviewees emphasised that synchronisation of plans would decrease the amount of the conflicts in plans, consequently reducing the employee turnover rates.

It is noticeable that all three solutions, that were proposed to reduce the avoidable employee turnover, are related to planning of allocation of employees to projects, as well as discussing the plans cross-functionally. This underlines the importance of a constructive dialogue existing between line and project organisation within a company. Constructive dialogue is also highlighted by Arvidsson (2009) as one of the important success factors for existence of a matrix organisation.

4.4.2 Possible Ways of Reducing the Consequences of Employee Turnover

According to the research participants, the most important solution for making the employee turnover within projects more successful is a *sufficient time overlap for two*

people who are making the transfer. It was admitted by most of the interviewees that if an employee change is inevitable, it is essential to have enough time for a person who is leaving the project to transfer the project knowledge to a newcomer. By having time to observe the work of a project team and his precedent in particular, a newcomer receives important understanding of the project context. However, Senior Project Manager recommended that the overlap should not be too long to avoid confusion within the team regarding who is actually performing the duties – the person who is leaving or the newcomer.

The solution suggested may seem to be simple to implement and quite obvious as a necessity within a company. It can be thus questioned why this practice does not currently exist within VCC. It could be explained by several reasons. Firstly, it is typical for matrix organisations to have resource scarcity (Arvidsson, 2009). Therefore, a staff rotation may be an urgent matter in case a project of higher priority requires an employee with a particular expertise. In this case, there is lack of possibility for both the person who is leaving the project and the newcomer to stay on the project together for a detailed knowledge transfer. Secondly, complex organisational structure, significant size of such an organisation as Volvo Car Corporation, and large number of projects that are run simultaneously, make synchronisation of resource plans difficult. This issue was addressed during the study, and the results are presented further in this Chapter.

Another solution seen by the research participants as an important success factor, is *building relations between a project manager and line organisation that are encouraging open communication*. As a research participants noted, "just the simple fact that we talk to each other might be rather simple and good idea". A project manager can be seen as a major stakeholder affected by an employee change in his team, due to additional work that has to be done by him to "get a new person up and running". Thus, creating a dialogue between a project manager and a functional manager, communicating reasons for the upcoming change and discussing how the transfer can be made successfully are valuable steps for the employee rotation to be managed properly.

One more solution that the interviewees found necessary was *having team building activities after a new person joined the team*. Many interviewees emphasised the importance of a healthy relations within a project team. They also admitted the need to work required to help the team develop. As a change of a team member "throws the team two steps back", additional actions should occur to get the renewed team working together again. However, it was presented in Section 4.2.3 that the research participants believe it is not feasible to have additional team building activities after each employee change. This could be explained by the large scale of projects Volvo Car Corporation has, where a change of one person in a team of several hundred employees does not affect the project process dramatically. Nevertheless, it was suggested that team activities should take place on a regular basis ("each semester") to encourage co-operation of the team, as well as project knowledge sharing.

The solutions, as well as all other issues that have been discussed during the interviews, are summarised in a mind map and are presented in Appendix E. Based on the discussed solutions, a recommendation was developed by the author of this research, and is to be presented in the following section.

4.5 Recommendation

Taking into consideration the reviewed literature (Chapter 2 of this study) and the empirical research undertaken by the author, recommendations were developed and are to be presented in this section. Summarising the suggestions identified during the

literature review, recommendations from Morrell, Loan-Clarke and Wilkinson (2004), Parker and Skitmore (2005), and Arvidsson (2009) are as follows:

- 1. Access to critical resources in matrix organisations has strategic importance for companies, thus standards of resource allocation should be in focus of the company management.
- 2. Different organisational logic and principles, which create tensions within matrix organisation, should be considered when a company's business model, organisational structure and its principles are being developed and re-visited.
- 3. Identity issues should be addressed by organisations to help employees recognize which team they belong to.
- 4. Organisational principles should shed light onto possibilities of personal development for employees to know the prospects they have within a particular department and in the whole organisation in general.
- 5. Organisational management should address the issue of team members' low motivation during projects' later phases.

The suggestions from the literature review were considered during designing the final recommendation within this research. First and foremost, it is recommended that Volvo Car Corporation creates a procedure for synchronising resource allocation plans of functional departments and project management. There is a practice within the line organisation of the company (further referred to as ABC) which is "a managerial forum which facilitates employee career planning in the line with the needs of the business" (Volvo Car Corporation internal documentation). The forum is aimed to align personal development plans of the department employees with the long-term plans of resource allocation. However, it was confirmed by some of the research participants that this practice is not utilised cross-functionally. However, introduction of cross-functional ABC, or *Programme ABC*, would tackle the issues related to the nature of matrix organisations.

Programme ABC should be a forum where functional managers will gather with programme management to synchronise their long-term resource allocation plans, as well as discuss the other issues related to the composition of the project team. It is recommended that Program ABC has to be chaired by an employee who has power and authority within the company staff, e.g. head of Program Management unit. In such way, the forum will be seen as an important part of the company routine. It is an undertaking that is planned to tackle the major issues related to the employee turnover. Thus, perception of importance is essential for the forum's success. The main point in the Programme ABC agenda is a discussion of resource allocation plans. The expected outcome of such a discussion is general agreement on decisions made by line ABCs. It is emphasised that decisions regarding resource allocation must be left as a responsibility of line ABCs, to avoid further complication of the organisational structure (Arvidsson, 2009). According to the suggestion by Arvidsson (2009), in case a disagreement arises during a Programme ABC, the issue has to be brought to a higher management level. In case of Programme ABC, decision making is to be done by the forum's chairman.

Apart from synchronising the resource allocation plans, the company will benefit from Programme ABC in several other ways as well. First, the composition of a project team will be discussed prior to the project start. Therefore, personalities of the future team members can be discussed and compared in advance. By holding such a discussion, the forum will eliminate risks of composing a team which would not be able to work together. Another benefit is related to personal development planning. One of the Line ABC agenda points is a discussion of an employee's performance and his or her future growth possibilities. By including this point in the agenda of a Programme ABC, line managers can receive a broader, cross-functional view on employees' achievements. This will assist a better identification of future opportunities for the employees.

Last, but not least important, a Programme ABC would be beneficial by providing a permanent platform for discussing resource allocation issues when they arise. As the literature review showed, it is common for matrix organisations to face challenges regarding resource allocation. Therefore, it is important to have a pre-defined structure which would assist in resolving the issues. Programme ABC could serve as such a structure for Volvo Car Corporation.

Sections 4.4.1 and 4.4.2 of this dissertation named six solutions proposed by the interviewees, which would help tackle the issues related to employee turnover within projects. The suggested Program ABC includes five of those six proposals, as follows:

- people in major roles in a project should stay in the project until its finalisation,
- project management and line organisation should have an agreement on the duration of a person's involvement in a project,
- project management and line organisation should synchronise their long-term resource allocation plans,
- there should be sufficient time overlap for two people who are making the transfer, and
- relations that encourage open communication between a project manager and line organisation, should be built.

As it can be seen, Programme ABC with suggested configuration would tackle most of the major issues identified during the research. Thus, it can be concluded that introducing a Programme ABC would be a significant improvement to the issue of the employee rotation within projects at Volvo Car Corporation.

The only solution which was not included in the suggested innovation, was "having team building activities after a new person joined the team". Additional team building events should be initiated by the company management, for project teams to perceive them as important endeavours. As mentioned before, the research participants acknowledged that having additional activities after each single change in a project team is redundant. However, they affirmed that such activities should occur under two circumstances:

- when two or more team members were changed within a short period of time, and
- on a regular basis in long-term projects.

By making Programme ABC and regular team building activities part of company routine, Volvo Car Corporation would be able to reduce undesirable employee turnover and some of the negative impacts of unavoidable staff rotation. This recommendation provides answers to Research Questions 3 and 4 of this dissertation, namely:

- 3. How can staff turnover be most effectively mitigated?
- 4. How can the risks and impacts of employee turnover be mitigated when the turnover occurs?

4.6 Relation to the Theoretical Framework

The results of primary data collection and analysis can be summarised using the theoretical Framework that was presented in Chapter 2 of this dissertation. The framework is presented in Figure 4.1 as a reminder.



Figure 4.1. Theoretical framework reminder

All types of staff turnover that have been identified during the literature review were confirmed to be present at Volvo Car Corporation. Employee turnover type 1 (external staff rotation) was found to be not as urgent as diverse types of internal staff rotation. Employee turnover between permanent and temporary organisations, or within any of them (types 2, 3 and 4), was verified to be vital and challenging for the case company.

The three ways of handling staff turnover that are presented in the right part of the Figure 4.1 were investigated during the primary data collection. It has been decided to concentrate on exploring the negative consequences of staff turnover, following the trend of the literature reviewed. Therefore, a thorough study of the third course, presented in the framework, is suggested as a further research topic (see Section 5.5 of this dissertation). The first two courses were extensively discussed with the interviewees, and various suggestions on how to tackle the issue of employee turnover have been made.

The assumption that tackling staff rotation has a valuable impact on an organisation (represented by the arrow between the two parts of Figure 4.1) was confirmed by the research participants to be veracious within the case company. Thereby, all the parts of the theoretical framework were verified to be truthful in the case of VCC.

Having analysed the primary data and presented the results of research, and related the results to the literature review and theoretical framework, the author's recommendations have been introduced. The chapter is followed by the conclusions of the research which are drawn in the following chapter of this dissertation.

5 Conclusions

The current chapter finalises the dissertation. For this, the research aim is first revisited. Research findings are then presented, following the structure of the research questions, showing that the research aim was reached. Later, the major conclusions to the findings are summarised. Next, the contribution of this study to the areas of Project Management research and research of employee turnover is highlighted. Limitations of the study are named in the following section. The chapter is finalised with suggestions for further research of the employee turnover issues covered in this dissertation.

5.1 Summary of Findings

This dissertation was purposed to add value to the research of employee turnover, by achieving the following research aim:

"to investigate possible means to facilitate the reduction of adverse employee turnover and its negative impact on long-term projects".

This section presents a summary of the key research findings of this dissertation, on each of the research questions that were pursued.

Research Question 1: Why do team members leave a project prior to its completion?

Internal staff rotation was identified as a predominant type of employee turnover within the case study organisation. Employee turnover amongst project team members in the company was primarily due to the organisation's size and specifics of its matrix structure. The company size was confirmed to provide multiple opportunities for employees to develop by changing positions within the company, causing internal voluntary employee turnover. Matrix structure specifics, such as resource scarcity, "two bosses problem", and prioritisation issue, were seen as reasons for most of the cases of internal involuntary staff rotation.

Research Question 2: How does the employee turnover within a project affect the project and its remaining team?

The research showed that loss of project history and knowledge was considered as the major consequence of employee turnover within projects in the case organisation. Another issue related to the staff rotation was loss of time due to the new employee's need to learn the project and its context. The third negative impact of employee turnover that was identified during the research was loss of team culture. It was confirmed by the research participants that both time loss and team culture loss do not have very significant impact on a project when a change of one team member occurs. However, employee turnover becomes very challenging when several changes take place in a team within a short period of time.

Although negative impacts of employee turnover were predominantly recognised by the interviewees, several situations were described when a change of a team member can be positive for the project. The change can be advantageous when a poorly performing employee is substituted by a colleague who can contribute to the project more. It can also be positive in case there is a conflict within the project team, and an employee rotation is the only solution to the problem. The employee turnover was confirmed to be occasionally dictated by the project requirements regarding how diverse phases of it should be managed. Under such circumstances a thoroughly planned staff rotation between the project stages can also be beneficial.

Research Question 3: How can staff turnover be most effectively mitigated?

As a result of the research interviews, several suggestions were made on how employee turnover rates could be reduced within the case organisation. The vast majority of the proposals were underlining significance of a constructive dialogue between temporary and permanent parts of the organisation, which would handle all the issues related to staff rotation on a constant basis. It was confirmed that resource planning takes place within each department of the case organisation. However, important cross-functional planning was being omitted. Therefore, it was discussed that project management and line organisation should synchronise their long-term resource allocation plans. A list of all suggestions on possible ways to mitigate the turnover rates can be found in Appendix C.

Research Question 4: How can the risks and impacts of employee turnover be mitigated when the turnover occurs?

As it is not possible to completely avoid employee turnover, it was also explored how the negative consequences of it can be mitigated. For this, it was suggested by the research participants, a sufficient time overlap for two team members who are making the transfer should occur. Following an experienced and knowledgeable team member would allow a newcomer to learn the project history faster and thus get effectively involved in the project within a shorter period of time. It was also mentioned that team building activities should not be neglected as they help a renewed team to establish their common culture. However, the research participants agreed that organising such activities is not feasible after every change of a team member. This is due to existence of planned team building activities which are occasionally held within project teams and are believed to be satisfactory. A complete list of proposals made by the research participants can be found in Appendix C after this dissertation.

5.2 Conclusions

This section briefly presents four key conclusions, based on the research done for this dissertation.

- 1. The case study showed that the matrix structure of the case organisation results in high rates of internal staff rotation that affect company's projects.
- 2. Employee turnover within projects was verified to affect both the project and its team in various ways. Losses of project history, pace and team culture were named to be the major challenges faced due to a personnel change.
- 3. It was noted during both the literature review and the data collection and analysis that there is lack of investigation of advantages of employee turnover. However, occasional mentionings of possible positive effects, found in literature sources and interviews, suggest that the issue should be explored further.
- 4. Based on the research findings, it was suggested that VCC should introduce a cross-functional meeting, that would be held on a regular basis and discuss resource allocation plans, created within each department. By having this discussion as a part of organisation's routine, VCC would solve the issues

related to the tensions and lack of constructive dialogue between line and project organisations.

5.3 The Study's Contribution to the Research Area

The study contributes to the area of Project Management as it researched handling employee turnover within projects, which is a part of human resource management. The dissertation discussed issues related to communication, teamwork, leadership, conflict management, negotiation and human resource management, which are defined as important facets of project management by the Association for Project Management (2006).

The literature reviewed within the current study indicated that there is no holistic view on two major research areas in the field of employee turnover, namely reduction of staff turnover rate and reduction of damage of staff turnover. This dissertation contributed to the research by emphasising tight relations between the two directions, as well as the need to explore them together instead of separating the directions in two different areas of research. By an example of a case study within Volvo Car Corporation, it was suggested that some actions can tackle the problems related to both reducing the employee turnover rates and the turnover damage. It was illustrated that seeing two directions of employee turnover management as tightly interrelated is essential and helpful. This is a new point of view, which has not been extensively explored prior this study.

5.4 Limitations of the Study

The major limitation of the current study is impossibility to generalise the research findings and conclusions without further verification. This is due to the single case study that was undertaken during the research. The findings cannot also be claimed to be applicable for other industries apart from automotive, unless the applicability is proved by further research. These limitations were caused by the time limit allocated for the dissertation research. However, the solution, provided in Chapter 4 of this study (see Section 4.5), can be considered as generally applicable in other organisations with minor adjustments to the internal structure.

Due to time restrictions, the final solution could not be verified in action within Volvo Car Corporation. However, the implementation of the solution was included in the short-term planning of the Research and Development division, with a set timeframe. The author of this dissertation will follow up the process of implementation and is planning to take the research further based on the results of the solution execution.

5.5 Suggestions for Further Research

The author recommends to take the research, presented in this dissertation, further. To do so, several suggestions can be made. Firstly, a verification of the author's solution within VCC is needed. Implementation of the proposal in real life would provide a clear understanding how the employee turnover can be influenced and successfully managed.

Secondly, it can be investigated how the two directions of employee turnover management are interrelated and combined within organisations in other industries, countries and cultures, of diverse sizes and ways of operations. Such research would allow generalisation of the results of the current research. It would also provide the data for analysing patterns of effects of diverse organisation characteristics on the issue of staff rotation within projects.

Based on the literature review (Arvidsson, 2009) and the analysis of primary data gathered for this research, the author assumes that there is a correlation between the type of organisation (whether it is a traditional organisation, a PBO or a POO) and the types of issues that are related to the employee turnover. Therefore it can be suggested that this assumption could be verified in a further research as well.

It is also suggested that positive effects of employee turnover should be investigated. By exploring the advantageous impacts of staff rotation on projects, researchers could progress with turning unavoidable employee turnover to an organisation's benefit. Changing the mind set in general, from perceiving only the drawbacks of personnel changes to also realising their potentials, would help to tackle the issue more effectively.

6 Appendices

Appendix A. Interview Questions for Employees from Project Organisation of Volvo Car Corporation

Introduction

- 1) Myself
- 2) The research
 - a. General idea
 - b. Current emphasis
 - c. Interview outcome
- 3) Introduction of the interviewee

Terms used

0. To be clear about the terms we are using, what do you mean by a program and what by a project?

- 0. Are these terms interchangeable?
- 0. Are you comfortable with the term "employee turnover"?

General project information

- 1. What is the number of employees involved in the programs you manage?
- 2. How long do the programs usually take?
- 3. What is a usual budget for the program?

Types of turnover

- 4. What reasons can you think of for people leaving the program?
- 5. Which type do you consider as the most difficult to manage?

Problems due to turnover

- 6. What are the problems a program team faces due the employee turnover?
- 7. If you think of types of turnover, what are the problems related to each of them?
- 8. What do you think about reducing the turnover?
- 9. If positive,
- how could it be reduced?
- who should be responsible?
- who should be actively involved in the problem solving?

If negative, why?

Appendix B. Interview Questions for Employees from Line Organisation of Volvo Car Corporation

Introduction

- 1) Myself
- 2) The research
- 3) Introduction of the interviewee

Terms used

0. To be clear about the terms we are using, what do you mean by a program and what by a project? Are these terms interchangeable?

0. Are you comfortable with the term "employee turnover"?

General management information

1. How many employees do you have in your department?

2. How many of them are $DPLs^2$?

3. Is it a sufficient number, or do you have a feeling that fewer/more DPLs would be better to have?

Types of turnover

4. What reasons can you think of for people leaving the program?

5. Which type do you think is the most difficult to manage?

Problems due to turnover

6. Which problems do you as a line manager face due to the turnover?

7. Which problems do you think DPLs face due to their change of a program?

8. What are the problems which, in your opinion, PEMs³ face? (PEM=program execution manager)

9. What are the problems a program team faces due the employee turnover?

10. If you think of types of turnover, what are the problems related to each of them?

11. What do you think about reducing the turnover?

12. If positive,

- how could it be reduced?

- who should be responsible?

- who should be actively involved in the problem solving?

If negative, why?

² Internal term: Delprojektledare (Swedish for Unit Program Manager)

³ Internal term: Program Execution Manager

Appendix C. Results of Online Follow-up Survey

Dialogue between program management and line organisation							
It would help to reduce the turnover if project management and line organisation would:	1 ⁴	2	3	4	5	Total	
have an agreement on duration of a person's involvement in a project (whether one will stay in the project until its end or step out at certain point)	0	0	2	4	3	4,11	
synchronise their long-term resource allocation plans (plans within each department about who will take certain role for each of the upcoming projects)	0	0	2	4	3	4,11	

More people available within line organisation						
The following actions and practices would help to reduce the turnover:	1	2	3	4	5	Total
Having more DPLs available	0	1	4	4	0	3,33
Having additional people to help DPLs with administrative work	0	0	4	3	2	3,78
Reducing administrative work that has to be done by DPLs	0	1	5	3	0	3,22

⁴ 1 – Strongly disagree

²⁻Disagree

^{3 –} Neither agree nor disagree

^{4 –} Agree

^{5 –} Strongly agree

Personal career plan						
The turnover rate would get lower if:	1	2	3	4	5	Total
personal career plan would not permit an employee to start a new program before finalising the previous one	1	1	2	4	1	3,33
personal career plans were synchronised with line organisation's resource allocation plans	0	1	2	4	2	3,78
employees had stronger commitment "If I am signing for this project, I am doing it until the end"	0	1	1	4	3	4,00
employees saw their current project as a necessary step in their long-term career development plan	0	0	1	2	5	4,00

Dialogue between PEM and line organisation						
Turnover would become less troublesome if:	1	2	3	4	5	Total
reasons for each change were discussed by line manager and PEM in advance	0	2	0	4	3	3,89
PEM would provide a feedback to line organisation describing how the current transfer was made (what was transferred well, what was omitted)	0	0	1	6	2	4,11
relations between PEM and line organisation were encouraging open communication	0	0	2	3	4	4,22

Involvement of a new person in a project team						
Turnover would become less troublesome if:	1	2	3	4	5	Total
there was a sufficient time overlap for two people who are making the transfer	0	0	0	5	4	4,44
there were additional team meetings to help a newcomer to get involved in the project	0	0	2	6	1	3,89
there were some team building activities after a new person joined the team	0	0	0	7	2	4,22

Continually keeping the "critical mass" of a project team (people who hold the major roles in the project)							
Turnover would become less troublesome if:	1	2	3	4	5	Total	
the major roles in a project would stay in the project until its finalisation	0	0	0	4	5	4,56	
there was a possibility of an immediate cover up (two or more people who get status updates about each other's work to be able to temporarily substitute each other)	0	2	3	3	1	3,33	
there was a long-term successor planning within line organisation (who could substitute someone in case one leaves a project)	0	0	2	5	2	4,00	

Appendix D. Sorted Results of Online Follow-up Survey

Rate ⁵	Category	Solution	Average Score
1	Continually keeping the "critical mass" of a project team (people who hold the major roles in the project)	keeping the major roles in a project until its finalisation	4,56
2	Involvement of a new person in a project team	sufficient time overlap for two people who are making the transfer	4,44
3	Dialogue between PEM and line rganisation	relations between PEM and line organisation that are encouraging open communication	4,22
3	Involvement of a new person in a project team	team building activities after a new person joined the team	4,22
4	Dialogue between program management and line organisation	project management and line organisation having an agreement on duration of a person's involvement in a project	4,11
4	Dialogue between program management and line organisation	project management and line organisation synchronising their long-term resource allocation plans	4,11
4	Dialogue between PEM and line organisation	feedback provided by PEM to line organisation describing how the current transfer was made (what was transferred well, what was omitted)	4,11
5	Personal career plan	employees' stronger commitment "If I am signing for this project, I am doing it until the end"	4,00
5	Personal career plan	employees' seeing their current project as a necessary step in their long-term career development plan	4,00
5	Continually keeping the "critical mass" of a project team (people who hold the major roles in the project)	long-term successor planning within line organisation (who could substitute someone in case one leaves a project)	4,00
6	Dialogue between PEM and line organisation	reasons for each change being discussed by line manager and PEM in advance	3,89
6	Involvement of a new person in a project team	additional team meetings to help a newcomer to get involved in the project	3,89

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Double frame in the table shows the solutions included in the final dissertation proposal

7	More people available within line organisation	having additional people to help DPLs with administrative work	3,78
7	Personal career plan	personal career plans being synchronised with line organisation's resource allocation plans	3,78
8	More people available within line organisation	having more DPLs available	3,33
8	Personal career plan	personal career plan not permitting an employee to start a new program before finalising the previous one	3,33
8	Continually keeping the "critical mass" of a project team (people who hold the major roles in the project)	possibility of an immediate cover up (two or more people who get status updates about each other's work to be able to temporarily substitute each other)	3,33
9	More people available within line organisation	Reducing administrative work that has to be done by DPLs	3,22

Appendix E. Mind Map, Summary of Interviews Part 1. Types of Employee Turnover



Part 2. Problems Related to Employee Turnover



Part 3.1. Solutions How to Reduce Employee Turnover Rate



Part 3.2. Solutions How to Reduce Damage of Employee Turnover



7 References

Arvidsson, N. (2009) 'Exploring tensions in projectified matrix organisations' *Scandinavian Journal of Management*, 25, pp.97-107.

Association for Project Management (2006) APM Body of Knowledge Definitions. 5th edn.

Buckinghamshire: APM Publishing.

Barbour, R. (2007) Doing Focus Groups. London: SAGE Publications.

Biggam, J. (2008) Succeeding with Your Master's Dissertation. A step-by-step handbook. Maidenhead: McGraw Hill.

Boh, W.F. (2007) 'Mechanisms for sharing knowledge in project-based organizations' *Information and Organization*, 17, pp.27-58.

Bowden, G.T. (1952) 'The Problem of Employee Turnover' Harvard Business Review, 30 (5), pp.72-82.

Bryman, A. and Bell, E. (2011) *Business research methods*. 3rd edn. Oxford: Oxford University Press.

Chapman, R.J. (1998) 'The role of system dynamics in understanding the impact of changes to key project personnel on design production within construction projects' *International Journal of Project Management*, 16(4), pp.235 247.

Datta, D.K., Guthrie, J.P., Basuil, D., Pandey, A. (2010) 'Causes and Effects of Employee Downsizing: A Reviview and Synthesis' *Journal of Management*, 36(1), pp.281-348.

Gesteland, R.R. (2002) Cross-cultural business behavior: marketing, negotiating, sourcing and managing across cultures. 4th edn. Copenhagen: Copenhagen Business School Press.

Hendry, W.D. (1975) 'A General Guide to Matrix Management' *Personnel Review*, 4 (2), pp.33-39.

Hong, W.-C., Wei, S.-Y., Chen, Y.-F. (2007) 'A Comparative Test of Two Employee Turnover Prediction Models' *International Journal of Management*, 24(4), pp.808-821.

Laser, S.A. (1980) 'Dealing with the Problem of Employee Turnover' Human Resource Management, Winter, pp.17-21.

Lau, S., Albright, L. (2011) 'Positive Turnover, Disability Awareness, Employee Selection Guidelines' *HR Magazine*, January 2011, p.20-21.

Lindner, F., Wald, A. (2011) 'Success factors of knowledge management in temporary organizations' *International Journal of Project Management*, 29, pp.877-888.

Lundin, R.A. and Söderholm, A. (1995) 'A theory of the temporary organisation' *Scandinavian Journal of Management*, 11, pp.437-455.

Massingham, P. (2008) 'Measuring the Impact of Knowledge Loss: More Than Ripples on a Pond?' *Management Learning*, 39(5), pp.541-560.

Maylor, H. (2010) Project Management. 4th edn. Harlow: Pearson Education Limited.

Morrell, K.M., Loan-Clarke, J., Wilkinson, A.J. (2004) 'Organisational change and employee turnover' *Personnel Review*, 33(2), pp.161-173.

Naoum. S.G. (2007) *Dissertation Research and Writing for Construction Students*. 2nd edn. Oxford: Elsevier Ltd.

O'Connell, M., Kung, M.-C. (2007) 'The Cost of Employee Turnover' *Industrial Management*, January/February, pp.14-19.

Oxford University Press (2012) Oxford Dictionaries Online. Available at: <u>http://oxforddictionaries.com/definition/turnover?q=turnover</u> (Accessed: 2 April 2012).

Parker, S.K., Skitmore, M. (2005) 'Project management turnover: causes and effects on project performance' *International Journal of Project Management*, 23, pp.205-214.

PMI (2004) A Guide to the Project Management Body of Knowledge. Upper Darby: PMI.

QSR International (2012) *NVivo* (Version 9.0) [Computer program]. Available at: <u>http://www.qsrinternational.com/products_nvivo.aspx</u> (Accessed: 13 April 2012).

Rudestam, K.E., Newton, R.R. (2001) *Surviving Your Dissertation. A Comprehensive Guide to Content and Process.* 2nd edn. Thousand Oaks: Sage Publications.

Schmitt, A., Borzillo, S., Probst, G. (2011) 'Don't let knowledge walk away: Knowledge retention during employee downsizing' *Management Learning*, 43(1), pp.53-74.

Tan, H.C., Carrillo, P.M., Anumba, C.J., Bouchlaghem, N., Kamara, J.M., and Udeaja, C.E. (2007) 'Development of a Methodology for Live Capture and Reuse of Project Knowledge in Construction' *Journal of Management in Engineering*, 1(18), pp.18-26.

Tuckman, B.W, Jensen, M.A.C. (1977) 'Stages of Small-Group Development Revisited' *Group & Organization Studies*, 2(4), pp. 419-427.

Volvo Car Corporation (2012a) *Working at Volvo Cars*. Available at: <u>http://www.volvocars.com/intl/top/about/corporate/career/Pages/working-at-volvo.aspx</u> (Accessed: 29 March 2012).

White, B. (2007) *Dissertation Skills for Business and Management Students*. London: Thomson Learning.

Yin, R.K. (1994) *Case Study Research: Design and Methods*. 2nd edn. Thousand Oaks: SAGE Publications.

Zack, M. H. (1999) 'Managing Codified Knowledge' *Sloan Management Review*, 40, pp.45–58.

8 Bibliography

Abdel-Hamid, T.K. (1992) 'Investigating the Impacts of Managerial Turnover/Succession on Software Project Performance' *Journal of Managemeni Information Systems*, 9(2), pp. 127-144.

Allen, J.P. (2010) 'Knowledge-Sharing Successes in Web 2.0 Communities' *IEEE Technology and Society Magazine*, Spring, pp. 58-64.

Anantatmula, V.S. (2010) 'Impact of cultural differences on knowledge management in global projects' *The journal of information and knowledge management systems*, 40(3/4), pp. 239-253.

Bader, G.E., Rossi, C.A. (2002) Focus Groups: A Step-By-Step Guide. 3rd edn. San Diego: The Bader Group.

Birdir, K., (2002) 'General manager turnover and root causes' *International Journal of Contemporary Hospitality Management*, 14(1). pp. 43-47.

Boer, N.-I., Berends, H., Baalen, P. (2011) 'Relational models for knowledge sharing behavior' *European Management Journal*, 29, pp. 85-97.

Bresnen, M., Edelman, L., Newell, S., Scarbrough, H., Swan, J. (2003) 'Social practices and the management of knowledge in project environments' *International Journal of Project Management*, 21, pp. 157–166.

Chapman, R.J. (1998) 'The role of system dynamics in understanding the impact of changes to key project personnel on design production within construction projects' *International Journal of Project Management*, 16(4), pp. 235-247.

Fernie, S., Green, S.D., Weller, S.J., Newcombe, R. (2003) 'Knowledge sharing: context, confusion and controversy' *International Journal of Project Management*, 21, pp. 177–187.

Gagne, M. (2009) 'A Model of Knowledge-Sharing Motivation' *Human Resource Management*, 48(4), pp. 571–589.

Haas, M.R. (2010) 'The Double-Edged Swords of Autonomy and External Knowledge: Analyzing Team Effectivenes in a Multinational Organization' *Academy* of Management Journal, 53(5), pp. 989–1008.

Hanisch, B., Lindner, F., Mueller, A., and Wald, A. (2009) 'Knowledge management in project environments' *Journal of Knowledge Management*, 13(4), pp. 148-160.

Holste, J.S., Fields, D. (2010) 'Trust and tacit knowledge sharing and use' *Journal of Knowledge Management*, 14(1), pp. 128-140.

Hooff, B., Huysman, M. (2009) 'Managing knowledge sharing: Emergent and engineering approaches' *Information & Management*, 46, pp. 1–8.

Inkman, A.C. (2008) 'Managing Knowledge Transfer in International Alliances' *Thunderbird International Business Review*, 50(2), pp. 77-90.

Jackson, P. (2010) 'Capturing, structuring and maintaining knowledge: a social software approach' *Industrial Management & Data Systems*, 110(6), pp. 908-929.

Kasvi, J.J.J, Vartiainen, M., Hailikari, M. (2003) 'Managing knowledge and knowledge competences in projects and project organisations' *International Journal of Project Management*, 21, pp. 571–582.

Kitzinger, J. (1994) 'The methodology of Focus Groups: the importance of interaction between research participants' *Sociology of Health & Illness*, 16(1), pp. 103-121.

Liebowitz, J., Megbolugbe, I. (2003) 'A set of frameworks to aid the project manager in conceptualizing and implementing knowledge management initiatives' *International Journal of Project Management*, 21, pp. 189–198.

Longenecker, C.O., Scazzero, J.A. (2003) 'The Turnover and Retention of it Managers in Rapidly Changing Organizations' *Information Systems Management*, 20(1), pp. 59-65.

Messmer, M. (2000) 'Preventing Employee Turnover' *Strategic Finance*, September, pp. 9-10.

Miller, K.D., Zhao, M., Calantone, R.L. (2006) 'Adding Interpersonal Learning and Tacit Knowledge to March's Exploration-Exploitation Model' *Academy of Management Journal*, 49(4), pp. 709-722.

Moehler, R.C. (2011) 'Information Management'. *BE1170 Project, Programme and Portfolio Management* [Online]. Available at: <u>http://elp.northumbria.ac.uk</u> (Accessed: 23 January 2012).

Pears, R., Shields, G. (2008) *Cite them right: the essential referencing guide*. 3rd edn. Newcastle upon Tyne: Pear Tree Books.

Perry, T., Shivdasani, A. (2005) 'Do Boards Affect Performance? Evidence from Corporate Restructuring' *The Journal of Business*, 78(4), pp. 1403-1432.

Puchta, C., Jonathan Potter, J. (2004) *Focus Group Practice*. Thousand Oaks: SAGE Publications.

Saunders, M., Lewis, P., Thornhill, A. (2009) *Research Methods for Business Students*. 5th edn. Harlow:Prentice Hall.

Sheaffer, Z., Carmeli, A., Steiner-Revivo, M., Zionit, S. (2009) 'Downsizing strategies and organizational performance: a longitudinal study' *Management Decision*, 47(6), pp. 950-974.

Tan, H.C., Carrillo, P.M., Anumba, C.J., Bouchlaghem, N., Kamara, J.M., and Udeaja C.E. (2007) 'Development of a Methodology for Live Capture and Reuse of Project Knowledge in Construction' *Journal of Management in Engineering, January*, pp. 18-26.

Tohidinia, Z., Mosakhani, M. (2010) ' Knowledge sharing behaviour and its predictors' *Industrial Management & Data Systems*, 110(4),pp. 611-631.

Williams, C.R. (2000) 'Reward Contingency, Unemployment, and Functional Turnover' *Human Resource Management Review*, 9(4), p. 549-576.

Zhen, L., Jiang, Z., and Song, H. (2011) 'Distributed knowledge sharing for collaborative product development' *International Journal of Production Research*, 49(10), pp. 2959-2976.