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# Improving Operating Performance of a Service Desk Through Work Engagement

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## **Preface**

I started my Master Thesis one year ago, and I have to admit that completion of this study would not be possible without support of my family, academic community and colleagues.

In this regard, I would like to express my gratitude and respect to my brilliant supervisor, Dr. Marjatta Huhta, who has been extremely patient in guiding me through the debris of my research process. I admire her passion to work, her enthusiasm and readiness to help.

I am also very grateful to Dr. Thomas Rohweder for opening to me and my classmates the whole world of business management in the exiting, yet comprehensive manner. I especially value his talent to make complicated issues easy to understand.

I would also like to thank Dr. James Collins whose ideas and suggestions helped me on my path towards completion of this study. I also wish to express my deep appreciation to Ms Zinaida Grabovskaia for her encouragement, responsible attitude towards students' needs and her willingness to stand by a student and provide him/her with her assistance at any time.

As for my colleagues at work, I would like to say a big thank you to the Vice President of the case company for his invaluable support during the application process and his help with the final proposal of this study.

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<p>This Master's Thesis investigates how to improve operating performance of a case company's Service Desk through the discipline of work engagement. The case company is an international service provider of networking and data security solutions that requires improvements in the performance of its Service Desk. This is especially topical, because company's SD engineers often fail to complete their basic duties despite being given detailed guidelines on how to fulfill their daily responsibilities.</p> <p>Therefore, the aim of this Thesis is to determine strengths and weaknesses in a daily operation of a case company's Service Desk and to provide practical guidelines for Service Production management team on how to improve operating performance of SD engineers through enhanced work engagement.</p> <p>For this purpose, the Thesis starts with conducting a current state analysis of the case organization accompanied by the first round of data collection. Further, numerous literature sources about employee engagement is analyzed and discussed on macro level to identify tools or drivers of work engagement that can be utilized to tackle the challenges identified in the current state analysis on micro level, which consequently results in conceptual framework of this study. As soon as the conceptual framework is built, the second round of data collection is conducted in order to affirm the results of the previous data collection round and to generate provisional proposal of this study. When provisional proposal is ready, it is presented to the internal stakeholder of the case company for reviewing, which contributes to the third round of data collection and consequently to producing the final proposal of this study.</p> <p>In terms of the outcomes, this Thesis aims to generate a proposal of practical guidelines for Service Production management team for improving the performance of the case company Service Desk through increased work engagement. Equipped with the proposal, managerial team can increase the performance of its Service Desk members, which will positively influence customer satisfaction and secure competitive advantage of the case company.</p>	
Keywords	Service Desk, Work Engagement, Operating Performance

## Contents

Preface

Abstract

Table of Contents

List of Figures

List of Tables

Acronyms

1	Introduction	1
1.1	Case Company Background	1
1.2	Business Challenge	3
1.3	Research Objective	4
1.4	Scope and Structure of the Study	4
2	Methods and Materials	6
2.1	Research Approach	6
2.2	Research Design and Process	8
2.3	Data Collection and Analysis Methods	9
2.3.1	One-2-One Interviews	11
2.3.2	On-line Questionnaire	11
2.3.3	Efecte Statistics	12
2.3.4	Personal Observation	12
2.3.5	On-line Focus Group	12
2.3.6	Interview with External Expert	13
2.3.7	Interview with the Case Company Stakeholder	13
2.4	Validity and Reliability Plan	13
3	Current State Analysis	15
3.1	ITSM Practices of the Case Company	15
3.2	Service Desk of the Case Company	17
3.3	Objectives and Responsibilities of the Case Company SD	18
3.4	Current Status of the Service Desk Performance	20
3.4.1	Common 'Efecte' Statistics	21
3.4.2	Findings from Interviews and Online Questionnaire	25
3.4.3	Feedback from Other Departments of the Case Company	27
3.4.4	Benchmarks from External Expert	27
3.4.5	Results of the Interview with the Internal Stakeholder	28

3.4.6	Results of Personal Observation	28
3.5	Strengths	30
3.6	Weaknesses	30
3.7	Key Challenges	32
4	Best Practice of Work Engagement	35
4.1	Engagement in General	35
4.2	Employee Involvement and Engagement	38
4.3	Context and Employee Engagement	40
4.4	Employee Engagement and Individual Differences	42
4.5	Drivers of Employee Engagement	43
4.6	Commercial Models of Work Engagement	45
4.7	Conceptual Framework	47
5	Building the Proposal	50
5.1	Initial Proposal	50
5.2	Validation of the Proposal	53
5.3	Final Proposal	54
6	Discussion & Conclusions	56
6.1	Summary	56
6.2	Managerial Implications	58
6.3	Validity and Reliability Evaluation	59
6.4	Further Development	59
	References	61
	Appendices	
	Appendix 1. 'One-2-One' Interview	
	Appendix 2. On-line Questionnaire	
	Appendix 3. On-line Focus Group	
	Appendix 4. Interview with External Expert	
	Appendix 5. Following Manager's Instructions	
	Appendix 6. SD Daily Tasks	

## List of Figures

Figure 1. Values, Mission, Strategy and Vision of the Case Company.....	2
Figure 2. Action-Reflection Cycle .....	7
Figure 3. Research Design .....	9
Figure 4. The ITIL Service Lifecycle .....	16
Figure 5. Structure of the Case Company Service Production Department .....	18
Figure 6. Sequence of Tickets' Processing .....	20
Figure 7. Objectives of the Service Desk of the Case Company for Q1, 2014 .....	21
Figure 8. Customer Satisfaction Statistics .....	22
Figure 9. Average Response Time .....	22
Figure 10. Tickets Resolved by Team .....	23
Figure 11. First Pass Resolution .....	23
Figure 12. Tickets Accepted Over 5 Hours .....	24
Figure 13. Ringelmann Effect .....	28
Figure 14. Closed Tickets with E-mails .....	31
Figure 15. Work Engagement Vs Burnout .....	37
Figure 16. Culture, Climate and Work Performance.....	43
Figure 17. Employee Engagement Model.....	46
Figure 18. Conceptual Framework.....	48
Figure 19. Logical Structure of the Provisional Proposal.....	50
Figure 20. Scenarios of Further SD Development.....	59

## List of Tables

Table 1. Data Collection Techniques .....	10
Table 2. Key Challenges of the Case Company SD .....	34
Table 3. Twelve Statement of Gallup Inc .....	47
Table 4. Work Engagement Drivers and Corresponding Action Points .....	50
Table 5. Provisional Proposal .....	52
Table 6. Final Proposal .....	55
Table 7. Managerial Implications .....	57

## Acronyms

SD	Service Desk
SLA	Service Level Agreement
SLO	Service Level Objective
ITSM	Information Technology Service Management
ITIL	Information Technology Infrastructure Library
CDL	Customer Dominant Logic
POC	Point of Contact
AR	Action Research
CSA	Current State Analysis
SS	Service Strategy
ST	Service Transition
SO	Service Operations
EE	Employee Engagement
WE	Work Engagement
HRM	Human Resources Management



## 1 Introduction

In modern world where business competition has reached its pick, increased work engagement became one of the most important conceptual tools for a company to employ for maintaining performance of its employees at a high level, thus, keeping competitive advantage on the market.

As Baker (2008: 209) cites (Schaufeli et al. 2002) work engagement can be defined as 'a positive, fulfilling, work-related state of mind that is characterized by vigour, dedication, and absorption'. He further suggests that *vigorous state* is described by a high level of employee's energy; *dedication* refers to enthusiasm and sense of significance; and *absorption* is viewed as a complete immersion into a certain activity.

Many researchers suggest that employees' performance, which is defined as 'an action or achievement considered in relation on how successful it is' and 'the ability to operate efficiently, react quickly' (Oxford Advanced Learner's Dictionary 1997), can be enhanced by focusing on work engagement. They consider work engagement 'as a key determinant of performance' (Gruman and Saks 2008: 124).

Since work engagement is viewed as a driving force of employees' performance (Baker 2008: 214), current study aims to utilize the best tools and practices of *work engagement* in order to generate practical guidelines on how to improve the performance of a Service Desk of a case company which operates in the industry of Information Technology as a service provider.

### 1.1 Case Company Background

Case company specializes in providing network security and value-added services to corporate clients in Finland and 60 countries around the world. With its headquarters in Helsinki and branch officers in Moscow and St Petersburg, the case company covers Eastern and Western European markets.

Service model of the case company follows industry best practices and is incorporated into customers' processes. Service Desk of the case company is the first point of con-

tact for IT teams and Help Desks of various companies if they need to report about incidents or place a service request concerning their networking security issues.

The case company consists of two major departments: Service Production and Sales. In its turn Service Production Department incorporates Service Desk team, Service Operations team, Service Development team and Project Management team.

Portfolio of the case company includes a wide range of cost-effective and operator-independent services that help to enhance business efficiency of corporate clients in such areas of networking security as Security Gateways, Operations and Event Management, Access Control and Strong Authentication, Log Management & Reporting, etc.

Recently, the case company has been acquired by DNA Group, and became responsible for the service production and development of value-added network services of DNA Group's corporate business.

In order to sustain its competitive advantage, the case company constantly develops and enhances its values, mission, strategy and vision that are illustrated in Figure 1.

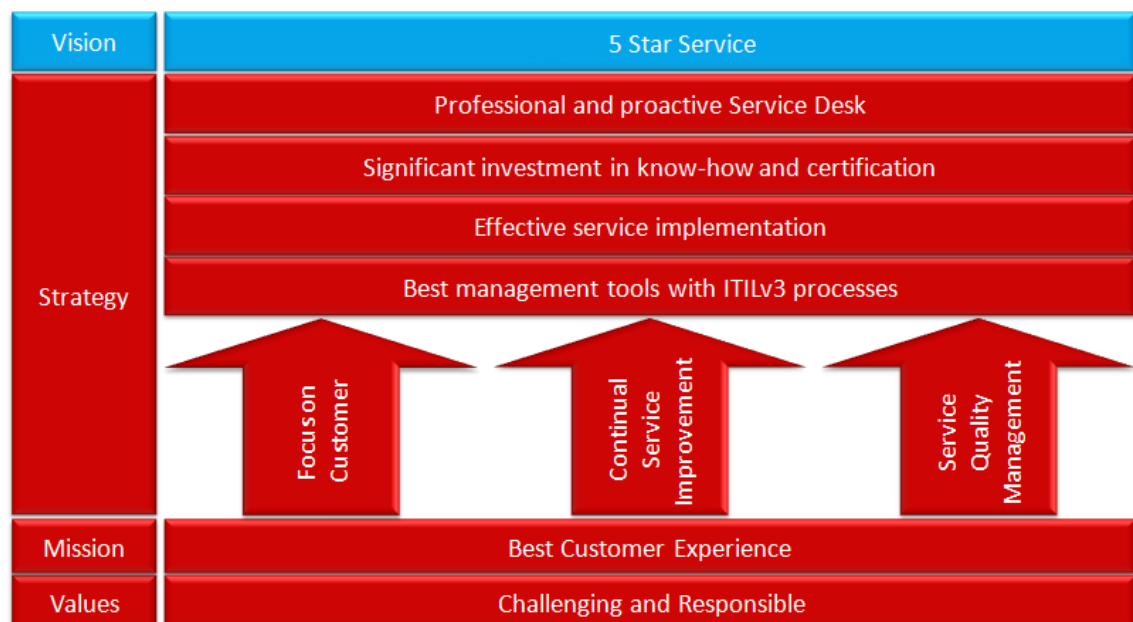


Figure 1. Values, Mission, Strategy and Vision of the Case Company.

As seen from Figure 1, the case company is being valued by its customers for providing innovative solutions to meet their various requirements and for being trustworthy service provider whom customers can really rely on.

As for its mission, the case company sees it in providing the best customer experience to ensure renewing the contracts with the existing customers and acquiring new ones.

In terms of the case company strategy, customer centricity is in the corner stone of all its operations and communications with the customers that are conducted with the strong emphasis on continuous service improvement and service quality management.

Processes of the case company are aligned according to the latest ITILv3 recommendations to safeguard an effective service delivery and professional project management.

The case company makes significant investments into internationally recognised certification programmes to make sure that all of its system engineers are equipped with the latest knowledge and tools concerning technologies and related services that the case company provides to its customers.

At the front line of the case company stands its SD team, which serves as the first point of contact for its customers and aims to make company's vision to come true by obtaining the title of a '5 Star' service provider.

## 1.2 Business Challenge

Even though all the processes of an IT company are aligned with the latest ITIL recommendations and customer centricity is the corner stone of the company's operations, there is always a need for enhancing the performance of employees that are responsible for the front line interaction with the customers and delivery of services.

During the recent years, the level of employees' work engagement has become a mandatory task for the case company, because its system engineers often fail to fulfil their basic duties despite thorough instructions and guidelines. This situation negatively influences SLAs between the case company and its customers, and consequently requires urgent treatment. Therefore, the aim of the current study is to determine

strengths and weaknesses in a daily operation of the case company Service Desk and to provide practical guidelines for Service Production management team on how to improve operative performance of its Service Desk engineers through increased work engagement.

### 1.3 Research Objective

The study aims to generate a proposal for Service Production management team for improving the performance of the case company SD system engineers through increased work engagement.

Thus, the main research question is formulated as follows:

*How to improve the performance of the case company Service Desk?*

In order to find the answer to the central research question, I address the following sub-questions:

- 1) What factors influence the performance of the case company Service Desk?
- 2) What benchmarks are used in the company for running Service Desk?

In addition, a phenomenon of Work Engagement is analyzed to get clear understanding of its concepts which can be adapted and applied to eliminate weaknesses in SD performance.

### 1.4 Scope and Structure of the Study

The scope of the study is determined by the necessity to identify positive and negative factors that influence the performance of the case company SD; and by the Work Engagement discipline which concepts can be adapted and effectively applied in order to improve the performance of the case company Service Desk.

Thus, the current study is composed of seven sections, where Section 1 familiarizes the reader with the business challenges and research objectives of this study.

Section 2 is dedicated to *methods and materials* that are being used in this study. It also provides detailed overview of the research design and process; data collection techniques and associated methods of data analysis and validation.

Section 3, in its turn, contains *current state analysis* which familiarizes the reader with the case company Service Desk, its objectives, strengths and weaknesses in its performance, and existing best practices of ITIL framework that are currently used in the company. This section also presents a comprehensive set of challenges that stand on the way of high performance of the case company SD.

Further, Section 4 analyses Work Engagement phenomenon by identifying its key concepts on a macro level and distinguishing on a micro level what drivers of Work Engagement can be utilized to tackle the problem of the current research. Thus, this section presents Conceptual Framework of the whole research.

Then, Section 5 presents provisional proposal generated in accordance with the previously developed conceptual framework. Furthermore, In Section 6, reader can be familiarized with the final proposal. And eventually, Section 7 is dedicated to conclusions, managerial implications, analysis of research reliability and validity, and possible scenarios of further development of working life of the case company Service Desk.

## 2 Methods and Materials

This section provides an overview of the research approach; research design and implementation; and corresponding data processing methods and techniques.

### 2.1 Research Approach

Keeping in focus the objective of the current study, it is conducted utilising Action Research approach, which McNiff and Whitehead (2011) defines as:

... a form of enquiry that enables practitioners in every job and walk of life to investigate and evaluate their work. They ask, 'What am I doing? Do I need to improve anything? If so, what? How do I improve it? Why should I improve it?' They produce their accounts of practice to show: (1) how they are trying to improve what they are doing, which involves first thinking about and learning how to do it better; and (2) how they try to influence others to do the same thing. These accounts stand as their own practical theories of practice, from which others can learn if they wish. (McNiff and Whitehead 2011:5)

In other words, the choice of the research approach is conditioned by both my working environment and my position as a team leader which allowed me to observe the practitioners – SD system engineers from the outside and where working as a practitioner – SD system engineer I could analyse the performance of the Service Desk from the inside.

Such peculiar combination of my duties and responsibilities permits me to fully utilise two main approaches of AR, where followers of one approach believe that AR can be properly conducted only by an external researcher who will 'watch and report on what other practitioners are doing'; and followers of another approach believe that practitioners can explain themselves what they are doing (McNiff and Whitehead 2011: 6). Correspondingly, the first type of AR is referred as interpretive action research and the latter one, as either self-study action research or first-person action research, or just living action research.

Regardless how AR is being referred to, it empowers me with the ability to identify a research problem; to try various ways of accomplishing any particular task on the way of solving a research problem; to understand and confirm with my colleagues how effective my proposals and actions are; and based on the analysis of gathered data to

implement a different way of tackling a research problem, which might be more successful than the previously implemented solutions.

This process of observing, reflecting, acting, evaluating, modifying and moving in a new direction is widely known as an 'action-reflection' cycle, which is presented in Figure 2 below.

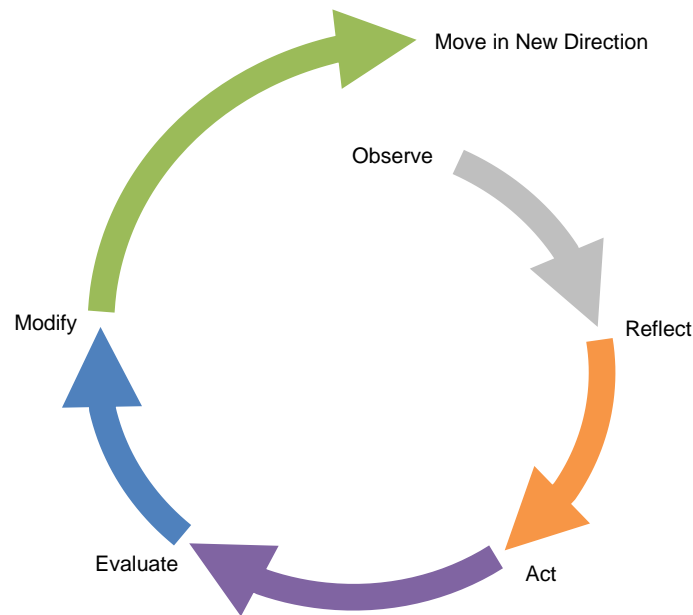


Figure 2. Action-Reflection Cycle (McNiff 1988: 9).

As Figure 2 illustrates, 'action-reflection' process is ongoing, because as soon as a provisional solution is found at a certain point of the research, that point could pose a new challenge which might require the researcher to repeat the whole cycle again until the final solution is found (McNiff and Whitehead 2011: 10).

Since AR 'can include all types of data gathering methods' (Coughlan and Coughlan 2002: 225), current study is going to utilise for data collection such tools as interviews, on-line questionnaire, on-line focus group, personal observation and statistics from the generic system: 'Efecte'.

## 2.2 Research Design and Process

To successfully accomplish a task, it is necessary to understand what steps or actions are supposed to be taken. This is especially the case with any type of the research, because only clear understanding of the research building blocks and associated actions may ensure its successful completion. Hence, the research design and associated processes are presented in Figure 3 below.

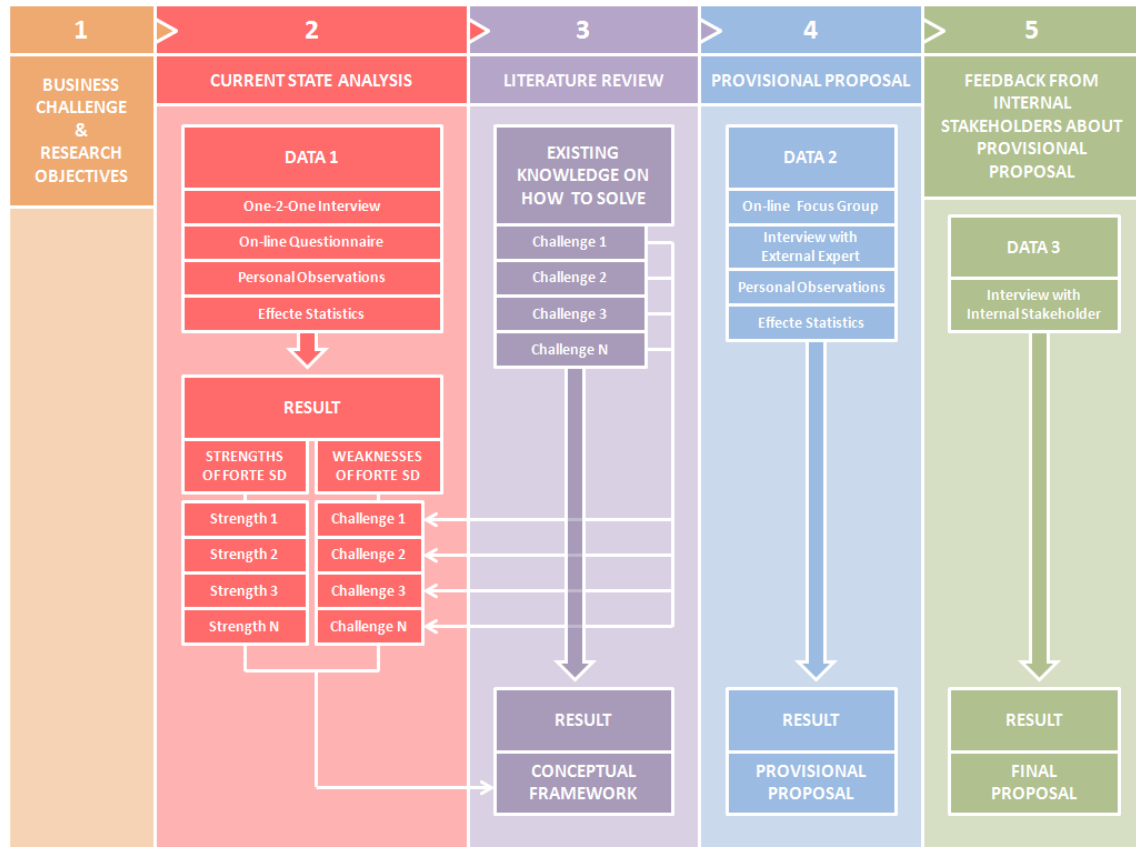


Figure 3. Research Design.

As Figure 3 illustrates, the study starts by identifying business challenges and the research objectives. Then, the first round of data collection is performed in order to define strengths and weaknesses in daily operation of the case company Service Desk. It consequently contributed to producing the Current State Analysis (CSA). When CSA is ready, Conceptual Framework is built by analysing the most respected literature sources related to work performance on a macro level. The goal is to identify already existing solutions and best practices applicable to the challenges identified during CSA on a micro level.



After that, the second round of data collection was performed in order to validate previously collected data and as a result to generate provisional proposal on how to improve the performance of the case company Service Desk.

As soon as provisional proposal was presented to the attention of the company's stakeholder and his feedback was received, which contributed to the third round of data collection, the final proposal was generated in order to meet the objectives of the current research.

### 2.3 Data Collection and Analysis Methods

In this study, the data was acquired using qualitative and quantitative research methods. The choice of the research methods was determined by the nature of the research question and involved a collection of statistical data from the in-house monitoring system and the interviews with the stakeholders. These data evaluate performance of the Service Desk on a daily basis and demonstrate personal opinions and attitudes of the Service Desk members, Service Production managers, representatives of other departments towards the performance of the SD system engineers of the case company. Thus, the data comprised the quantitative and qualitative techniques of data collection.

First of all, *Qualitative data* were collected with the help of 'one-2-one' interviews conducted to define the factors that may encourage SD members to perform their tasks better. Secondly, an *on-line questionnaire* was utilized. It was developed to identify the factors that have a negative impact on the SD performance. Thirdly, representatives of other departments of the case company were invited to participate in *focus group* so they could express their thoughts about performance of the Service Desk. To clarify best practices of increased performance in other companies, an 'external expert' – SD Manager of company: 'ABC' was invited for the interview. Another very important interview was conducted with the internal stakeholder. It was organized to obtain a feedback about initial proposal. In addition, I used my personal observation of the daily activity of SD members to contribute to the qualitative data collection.

*Quantitative data* was obtained from the in-house generic system 'Efecte' which is configured to analyse the activity of the whole SD team and every Service Desk member in particular. Consequently, it produces electronic reports about the ability of SD system

engineers to reach their personal and company's objectives on a daily, weekly and quarterly basis. The summary of data collection methods is illustrated in Table 1 below.

Informants	Method	Date & Duration	Topic / Qs & As
<b>1<sup>st</sup> Round</b>			
7 SD Engineers	One-2-One Interviews	20.02.2014 (30 min)	See Appendix 1
7 SD Engineers	On-line Questionnaire	28.02.2014 (15 min)	See Appendix 2
Researcher	Personal Observation	01.09.2013 – 01.04.2014	
Researcher	'Efecte'	01.09.2013 – 01.04.2014	
<b>2<sup>nd</sup> Round</b>			
Service Development Manager, Head of the Project Managers, Network & Security Architect	On-line Focus Group	02.04.2014 (30 min)	See Appendix 3
External Expert	One-2-One Interview	28.03.2014 (30 min)	See Appendix 4
Researcher	Personal Observation	01.09.2013 – 08.03.2014	
Researcher	'Efecte'	01.09.2013 – 01.04.2014	
<b>3<sup>rd</sup> Round</b>			
Stakeholder: Vice President, Service Production	Interview	07.04.2014 (30 min)	

Qualitative Data
  Quantitative Data

Table 1. Data Collection Techniques.

As seen from Table 1, the first round of data collection comprised the sources of data mostly limited to the case company. The second round of data collection was conducted to obtain additional information from a representative of 'ABC' company, who works in a similar working environment and has similar duties and responsibilities as the author of the current study. This data was used later in the study as a benchmark to clarify the factors that influence the performance of the SD team of another company.

During the second round of data collection, Service Production managers and managers from the other departments of the case company were asked to participate in an

on-line focus group in order to share their opinion concerning the performance of the SD system engineers. It was an important event to organise because it provided the data on SD performance from the managerial point of view.

In the third round of data collection, an internal stakeholder was invited to reflect his opinion on the provisional proposal which was presented to his attention. Therefore, different types of data are described in more detail below.

### 2.3.1 One-2-One Interviews

'One-2-One' interviews with the SD system engineers of the case company were conducted during the first round of data collection. Every system engineer of the Service Desk was invited to a meeting room where he was asked to reflect on the factors that would make him to be interested in working at the case company for the next 5 years and perform his daily tasks and duties at the utmost level. Even though some of the respondents were hesitant at the beginning of the interview, they all provided answers to the posed question, which can be found in Appendix 1.

As soon as the responses were recorded, they have been analysed and generalized into the categories according to the different aspects of working life of the case company SD: salary and benefits; working conditions; professional growth and career development; interrelationships in the company. After generalization, final results of 'One-2-One' interview have been extracted and formulated.

### 2.3.2 On-line Questionnaire

On-line questionnaire was also conducted during the first round of data collection. The main purpose of the questionnaire was to get precise explanations from SD system engineers about the factors that had negative influence on SD performance. To accomplish this task, Google Drive applications: 'Form' and 'Spreadsheet' empowered by Google Analytics engine were employed. As for the content of the on-line questionnaire it was designed according to the main objectives of the case company Service Desk. As soon as SD members received an URL link to the on-line questionnaire, they were asked to follow instructions and choose 5 most important factors that negatively influenced their performance. They were also given a possibility to extend their answer by

entering any other reason which was not mentioned in the predefined list of 10 answers.

Upon the completion, results of the questionnaire, specified in the Appendix 2, were automatically analysed and presented by Google Analytics in graphical format on-line.

### 2.3.3 Efecte Statistics

Statistics from Efecte concerning performance of SD system engineers have been collected for the duration of the whole study. On a daily basis, dedicated Efecte reports that are configured in accordance with SD objectives have been accessed and their corresponding data have been stored in the form of screenshot images presented in Appendix 3. As soon as the data concerning daily performance of SD system engineers were collected, it was compared against defined objectives.

### 2.3.4 Personal Observation

Personal observation was conducted by the researcher of the current study through daily interaction with all the SD members. These observations were documented by making notes about the SD working results and experience. The researcher's position of a Team Leader provided an excellent opportunity to evaluate the performance of the SD team members and identify the needs of every system engineer, since the researcher has considerable experience in working as a system engineer himself. The personal observation, backed by the data retrieved from the generic system 'Efecte' relate to the data described in the first and the second rounds of data collection, shown in Table 1 above.

### 2.3.5 On-line Focus Group

The main purpose of the on-line focus group, which was organized during the second round of data collection, was to obtain data from the representatives of other departments that work in close co-operation with the Service Desk. In order to accomplish this task Service Development Manager, Head of the Project Managers, Network and Security Architect were invited to share their opinion about the strengths and weak-

nesses of the Service Desk. Results of the on-line discussion are presented in the Appendix 3.

### 2.3.6 Interview with External Expert

During the second round of data collection, an external expert, who works as a Service Desk Manager for another company, was asked to share her thoughts and expertise on how she maintains work engagement in her team. This interview was mainly organized in order to minimize the subjectivity of the current study. According to the results of the analysis, shown in Appendix 4, the feedback covers all areas of working life of the external SD team and gives a concise overview of actions which were performed in another company to maintain work engagement of the employees.

### 2.3.7 Interview with the Case Company Stakeholder

Interview with the case company stakeholder was conducted during the third round of data collection. The stakeholder, at the same time, occupies the position of the Vice President of the Service Production department. Thus, it was one of the most important interviews, because during the interview, the stakeholder was familiarized with the results of the previous data collection sessions and presented provisional proposal on how to increase work engagement of the SD engineers. During the interview, he pointed out that some proposals cannot be implemented simply due to the nature of the Service Desk operations. Nevertheless, it was agreed that final proposal would be generated based on his comments and remarks.

## 2.4 Validity and Reliability Plan

The most common risk of any action research lies in its subjectivity and certain degree of unreliability because its solutions 'cannot be universally tested and are therefore invalid' (McNiff 1988: 131). In this regard, to ensure trustworthiness of any research, it is necessary to satisfy two most important criteria related to data collection and analysis, validity and reliability.

In general, *validity* is related to the level of accuracy and precision of the data presented in the study. When researchers validate their data, they have to confirm that they

measured or observed what they were supposed or planning to observe or measure (Swetnam 2004: 23). Moreover, validity can be internal which demonstrates whether outcome of the research can be supported by the collected data (Cohen et al. 2000: 107) and external which is related to the level 'to which the results can be generalized to the wider population, cases or situations' (Cohen et al. 2000: 109). Another factor that any researcher has to address is data triangulation, which serves as a bridge between data validity and reliability; and comprises employment of two or more research methods and associated data collection techniques (Cohen et al. 200: 112).

In order to ensure validity of the current research, a fusion of the qualitative and quantitative research methods are utilised. Moreover, to secure data triangulation, research data are gathered by adapting various data collection techniques: interviews, questionnaires, personal observation, etc. and from multiple sources: internal and direct, e.g. SD system engineers and Service Production Managers of the case company; internal and indirect, e.g. managers of other case company departments; external and direct, e.g. customers of the case company; and external indirect, i.e. representative of another company.

In terms of the research *reliability*, it refers to minimising the amount of possible errors and bias (Yin 2003: 37). In other words, research is considered to be valid if the degree of subjectivity is reduced to minimum. According to Swetnam (2004), the concept of research reliability seeks to confirm whether 'the same procedures, experiments or actions carried out again produce the same result' (p.23).

Concerning research reliability, it is ensured by three rounds of data collection in order to provide the possibility for all the respondents to reflect their opinion on the previously collected and summarized data, and consequently confirm its reliability. As for possibility to replicate current research, it is secured by detailed description of data collection and analysis methods and techniques.

If summarised, all the necessary criteria of the valid and reliable research point to the following measures. The study needs first to utilize various research methods. Its data ought to provide the means of defining the scope of the study and meeting the research objectives. Finally, the research design and implementation should allow other scholars to replicate it. These are the criteria that the study means to implement to ensure reliable and valid research results.

### 3 Current State Analysis

This section analyses the current practices, results and related tools used in IT Service Management by the case company to maintain operational effectiveness of its Service Desk. It also identifies the strengths, weaknesses and challenges of the case company SD and presents provisional proposals on how to improve the performance of the Service Desk through increased work engagement. Finally, it briefly overviews the existing benchmark.

#### 3.1 ITSM Practices of the Case Company

IT infrastructure of the case company is mainly based on the Information Technology Infrastructure Library (ITIL, v3) framework which comprises ready-to-implement solutions and tools that help 'to plan, transition, operate and improve IT services' (ITIL 2011: 6). There are no doubts that any organization which operates in such dynamically changing environment as IT industry is continuously improving its performance in order to maintain its competitive advantage. This is where ITIL comes to the stage as it comprises 'non-prescriptive', 'vendor neutral' best practices adopted from the 'public frameworks and standards', and from the 'proprietary knowledge of organizations and individuals' (ITIL 2012: 2).

From the time of its first official publication in 1992, ITIL has become 'the world's leading Service Management reference source' of benchmarking as it describes the complete Service Lifecycle. The case company is utilizing ITIL to ensure its success and sustainability of its business on the market. In other words, ITIL enables any company to improve relationships with the customers by delivering required services in an effective manner and to manage IT resources across the enterprise in a standardized fashion (ITIL 2011: 8). On a global scale, ITIL comprises five publications that address Service Lifecycle presented in Figure 4 below.

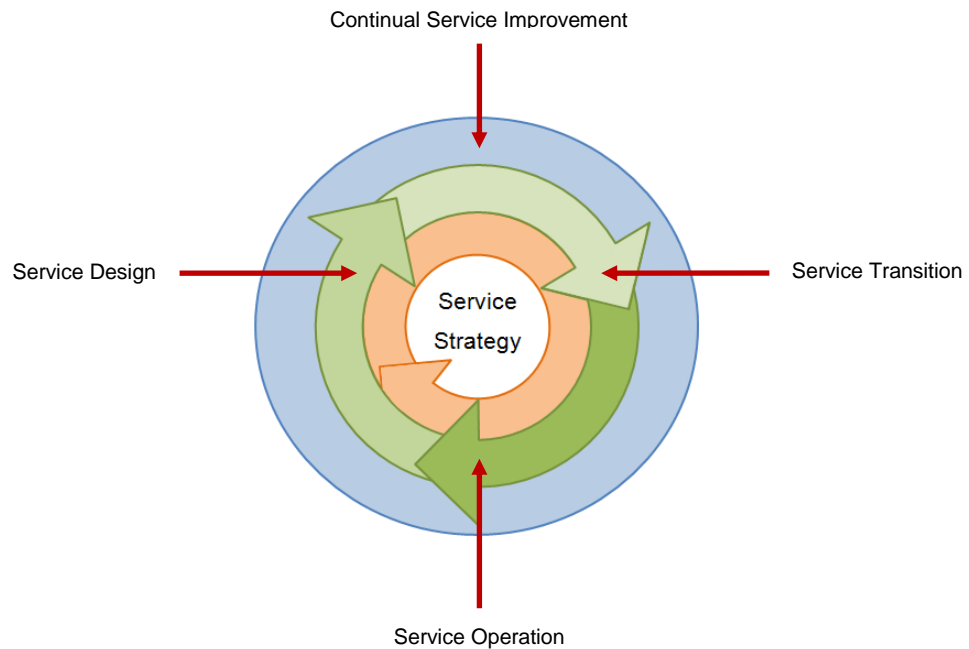


Figure 4. The ITIL Service Lifecycle (ITIL 2012: 4).

As seen from Figure 4, ITIL describes a complete Service Lifecycle consisting of five stages: Service Strategy (SS), Service Design (SD), Service Transition (ST), Service Operation (SO) and Continual Service Improvement (CSI).

If to have a closer look at every stage of the Service Lifecycle in the case company, it can be stated that ITIL SS defines 4 'Ps': *perspective, position, plans and patterns* that any service provider is recommended to follow in order to meet its business objectives. The first 'P' is *perspective* which determines business purpose and helps the case company to identify in what direction it has to develop its business. The second 'P' – *position* distinguishes the case company from other service providers. The third 'P' – *plan* identifies how the case company intends to achieve its objectives. And, the fourth 'P' – *pattern* enables the case company to adopt the way of working towards achieving objectives and addressing new changes (ITIL 2012: 62).

As for the ITIL Service Design phase, it empowers the case company to turn 'service strategy into a plan for delivering service objectives' while providing guidelines for the design, development and management of services (ITIL 2012: 80). During this phase, service portfolios and assets are being defined that encompass the following 4 'Ps' of the case company: people, processes, products, partners.



In terms of the ITIL Service Transition phase, it ensures that new, modified and retired services satisfy current expectations of the case company business. It also introduces Service Knowledge Management System, which enables learning process and increases the productivity of the whole service lifecycle in the case company (ITIL 2012: 140).

Regarding the Service Operation stage, it ensures effective management of all the activities, processes and technologies that allow to delivery and maintain services to business customers of the case company. The main objectives of the ITIL SO phase are: to maintain customer satisfaction through effective delivery and support of the provided services; to minimize the impact of the possible incidents related to provided services on a daily basis; and to ensure that access to the provided services is allowed only to authorized POCs registered in the internal database of the case company (ITIL 2012: 193-194).

Concerning Continual Service Improvement phase, it addresses any changes in business environment of the case company. It also helps the case company to identify and implement improvements in order to maintain business processes at a competitive level through all the stages of the complete service lifecycle (ITIL 2012: 256).

Due to the nature of the research objective, the next chapter provides detailed overview of the case company SD in the light of the most two relevant ITIL stages: Service Strategy and Service Operation.

### 3.2 Service Desk of the Case Company

Service Desk is the main point of contact for all customers of the case company whether customers need to report about incidents within their network or place a service request. Thus, in comparison with the ordinary Help Desk, the case company Service Desk is not only responsible for accepting, analysing and forwarding customer's queries to the related parties, but it is also responsible for actual processing of customers' requests and notifications about incidents. Figure 5 below shows the structure of the case company Service Production department.



Figure 5. Structure of the Case Company Service Production Department.

As Figure 5 illustrates, SD of the case company works in close co-operation with other teams of the Service Production department, especially with Service Operations team which provides the second level support and Service Development team. In order to ensure service coverage outside office hours, a dedicated ‘Duty Officer’ is allocated on a weekly basis for ‘24/7’ customer support.

In their daily operation, SD engineers utilize generic ITSM software application: ‘Efecte’, which allows the case company to conduct its business according to the best practices of ITIL Service Operation and Service Strategy modules. In the environment of the case company, ‘Efecte’ serves as an internal database which contains records of all its devices and contact details of the responsible persons of all its customers. It also works as a ticketing system where customers may send queries concerning networking incidents or service requests. ‘Efecte’ is also utilized as a reporting system, which provides statistics in graphical format concerning certain aspects of SD performance, amount of received and processed tickets, etc.

### 3.3 Objectives and Responsibilities of the Case Company SD

The main objective of the case company Service Desk directly coincides with the statement of ITIL SO module, it is to ‘restore normal service as quickly as possible’ (ITIL, 2012) while conducting communication with the customers in a polite and professional manner, and customer centric attitude towards their needs.

When customer creates a ticket either by phone or via e-mail, SD engineers of the case company are supposed to accept it; classify it by indicating what device instance and service current query is related to; categorize it by identifying whether it is a 'Service Request' or an 'Incident'; and prioritize it by assigning ticket's 'Urgency' and 'Impact' depending on how customers' networking environment is affected. If customer's ticket is in the scope of SD expertise and access rights, ticket is being resolved within the Service Desk team.

In case if customer's query requires advance knowledge or availability of the extended access permissions, SD engineers are required to gather all the related information from the customer and escalate the ticket to their senior colleagues in the Service Operations team.

As soon as the ticket is in 'Accepted' status, SD engineers start fulfilling customer's query, by changing the status of the ticket into 'Solving'; and implementing an appropriate solution within the specified 'Response Deadline'. Since 'Response Deadline' is a composite value, which consists of the device's SLA along with the 'Impact' and 'Urgency' of the related ticket, it specifies the time limit by which a ticket has to be taken into 'Solving' status for further processing.

It is important to mention that all the tickets are processed according to their SLA. Thus, if the ticket with higher SLA appears in the Service Desk queue after the ticket with lower SLA, the latter one will be processed first. Gradation of the tickets' SLA in the case company can be presented in an ascending manner as follows: 'Bronze' (SLA3), 'Silver' (intermediate value between SLA2 and SLA3), 'Gold' (SLA2), 'Platinum' (SLA1). If any additional information is required to correctly process the ticket, SD engineer are advised to request all the necessary data from the customer. While waiting for customer's reply, system engineer are instructed to keep the ticket in the 'Pending' status.

When customer's reply is received, system engineer implements the required solution and changes the status of the ticket into 'Resolved'. Further on, resolved ticket remains in the Service Desk queue for the three working days and then it is completely finalized by the SD team leader, who changes the status of the ticket into 'Closed'. Figure 6 below presents the sequence of processing the ticket.

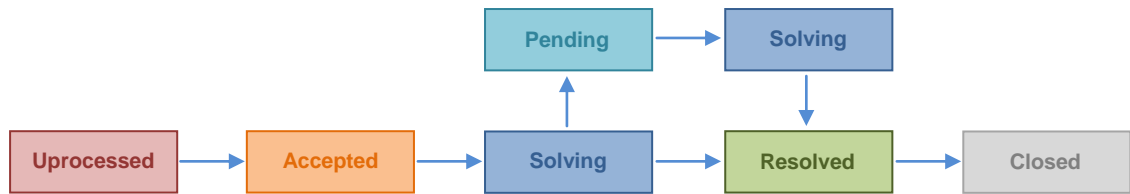


Figure 6. Sequence of Tickets' Processing.

As seen from Figure 6, any ticket goes through the chain of statuses until it is being resolved and finally closed. As soon as the status of the ticket is changed, Efecte sends automatic notification to the customer. It allows the case company to keep its customers updated about the progress of processing their requests.

In addition to processing tickets that are generated by customers, SD members are also responsible for handling notifications about events and alarms from the monitoring system of the case company, where all the customers' devices are being registered and monitored in real time. If something happens with the device, the monitoring system of the case company sends an alarm to the Service Desk queue and system engineers ought to create an 'Incident' tickets if the issue is serious and may affect customer's business flow.

To complete the picture of all SD responsibilities, it is necessary to mention that system engineers are also responsible for maintaining databases of customers' POCs and device instances up-to-date and errors-free.

### 3.4 Current Status of the Service Desk Performance

The current status of the SD performance of the case company can be analysed and described in the light of its 'Q1' objectives for the year 2014. These objectives are presented in Figure 7 below.

Target level	Target Level %	Target Line %	Target Period	Target	Target measured by	Target calculated by
Team	80,00 %	20,00 %	Q1	Customer Satisfaction	School grade from customer	< 70 Grade payout = 0%, 75 Grade payout = 50%, > 85 Grade payout = 100 % Linear max 125%
		20,00 %	Q1	Average response time	Response time is measured when ticket is put to solving state	> 8h payout = 0%, 6,5h payout = 50%, < 5,0h payout = 100% ,Linear max 100%
		20,00 %	Q1	Amount of tickets resolved in SD	% ratio between amount tickets resolved in SD to all ticket	< 70 % payout = 0%, 80 % payout = 50% 90 % payout = 100% ,Linear max 100%
		20,00 %	Q1	First Pass Resolution	Calculated from tickets SD resolves	< 70 % payout = 0%, 80 % payout = 50% 90 % payout = 100% ,Linear max 110%
Personal	20,00 %	20,00 %	Q1	Following Manager Instructions	Manager creates clear instruction what needs to be followed. e.g. SD hand book	Based on managers appraisal, Linear max 100%

Figure 7. Objectives of the Service Desk of the Case Company for Q1, 2014.

As illustrated in Figure 7, the case company SD has a set of objectives which includes 'Customer Satisfaction', 'Average Response Time', 'Amount of Tickets Resolved in SD', 'First Pass Resolution' and 'Following Manager's Instructions' objective. These objectives help managerial team of the case company to evaluate the performance of its Service Desk. Hence, the next section provides detailed analysis of the case company SD performance based on these objectives.

#### 3.4.1 Common 'Efecte' Statistics

According to common Efecte statistics, the main objective of the case company Service Desk is 'Customer Satisfaction'. It is expressed in grades given by the customers on a quarterly basis and constitutes 20% out of the whole Team Target. To achieve this objective with the required results, every member of the Service Desk is required to be polite in communicating to the customer either via phone, or e-mail or in face-to-face meetings. This objective combines all the other objectives and serves as a summary, which demonstrates how customers are satisfied with the services of the case company in general. Statistics concerning 'Customer Satisfaction' are shown in Figure 8 below.

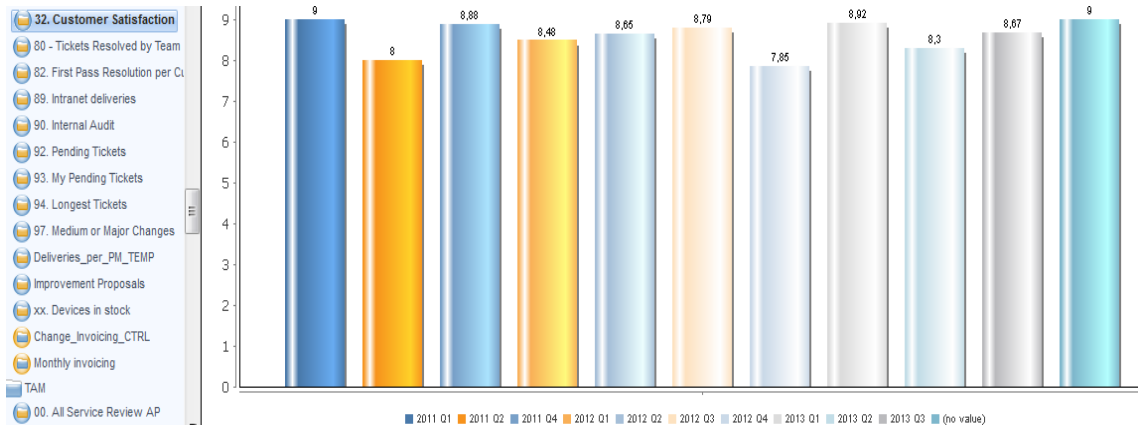


Figure 8. Customer Satisfaction Statistics.

As Figure 8 illustrates, in terms of this main objective, SD system engineers can be proud that the grades given to them by customers are quite high. It is clearly illustrated by every graph, which denotes the grade given by customers to SD of the case company on a quarterly basis.

The next objective, ‘Average Response Time’, stipulates that a system engineer should start working on already ‘Accepted’ ticket in less than 5 hours. Figure 9 below shows the statistics for the average response time in the Service Desk of the case company.

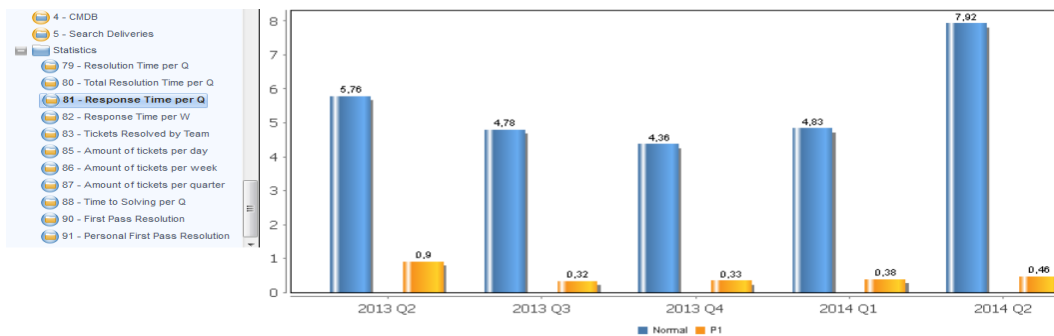


Figure 9. Average Response Time.

Even though the statistics in Figure 9 look perfect, it was discovered through personal observation of the Team Leader that SD system engineers manipulate with the status of the tickets by changing their status from ‘Accepted’ to ‘Solving’ without performing actual work. It is done due to the increasing number of tickets and the necessity to meet the objective. By doing this, SD members meet the objective, but compromise the actual results presented to the customers.

Another objective of the case company Service Desk is the ‘Amount of Tickets Resolved in SD’. It requires SD system engineers to resolve at least 90% of all the tickets that are either received from the customers or generated by the Monitoring System. Statistics concerning this objective are illustrated by Figure 10 below.

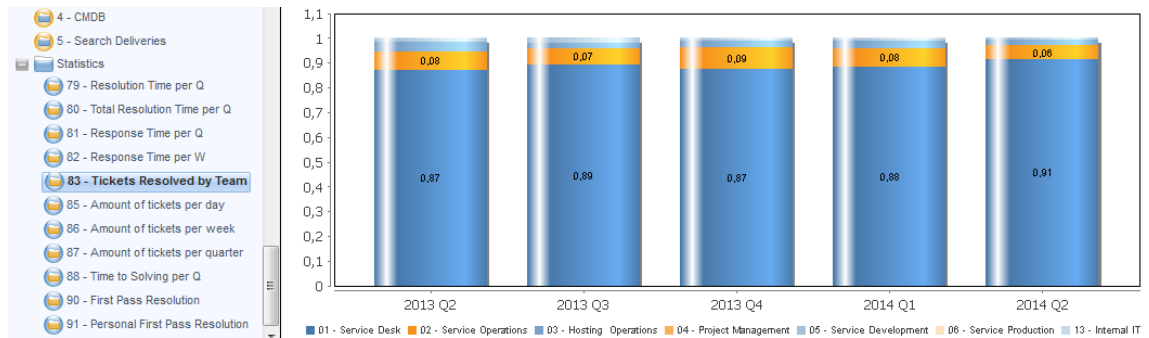


Figure 10. Tickets Resolved by Team.

As Figure 10 shows, it is quite challenging for the SD system engineers to meet this objective, because only in the second quarter of the year 2014, they managed to resolve more than 90% of all the tickets. Considering personal observation of the SD Team Leader, it can be stated that the only thing which does not allow the system engineers to completely satisfy this requirement is the lack of experience concerning certain aspects of technologies and associated services provided to the customers.

Concerning another objective, ‘First Pass Resolution’, Service Desk engineers are expected to resolve at least 90% of all the tickets from the first attempt. It means that they have to provide the solutions to the customers’ queries that do not require any further modifications or improvements. This is shown in Figure 11 below.

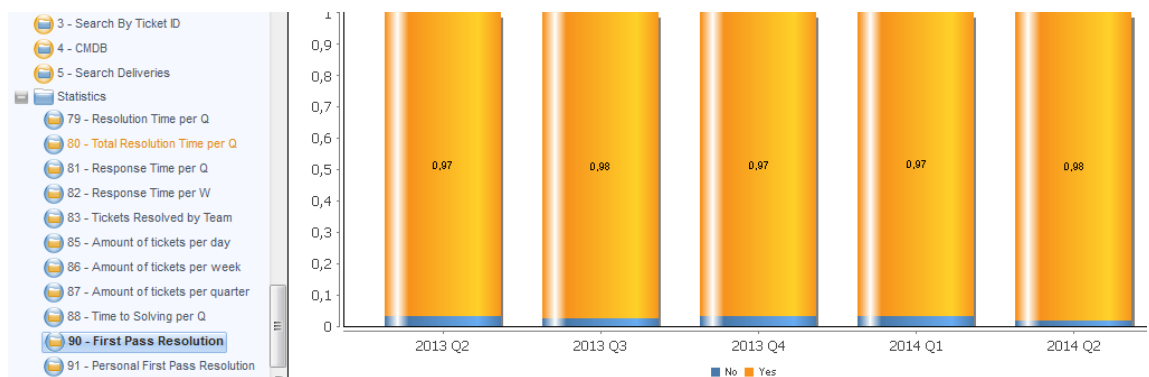


Figure 11. First Pass Resolution.

As seen from Figure 11, SD system engineers successfully meet all the defined requirements related to the ‘First Pass Resolution’ objective, because quarterly percentage of all the resolved tickets in SD team is higher than 90%.

And the last objective of the case company SD is ‘Following Manager’s Instructions’. These instructions are described in detail in the ‘Service Desk Handbook’ and in the ‘SD Daily Tasks’ supplement, which can be found in Appendix 6. It is necessary to mention that in comparison with the objectives already described, the ‘Following Manager’s Instructions’ objective combines daily measurements from ‘Efecte’ and the manager’s personal observation on how every SD system engineer copes with the daily duties. In other words, if the system engineers do not properly fulfil their daily tasks and duties, it will be quite challenging for them to meet the rest of their objectives on monthly, quarterly and yearly basis. Figure 12 below, explicitly illustrates one of the challenges that Service Desk engineers experience on a daily basis.

Date: Last Week		
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ... 6 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ... 6 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ... 6 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ... 6 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ... 6 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ... 6 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ... 6 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ... 6 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ... 6 KB
servicedesk@	Service request in solving status more than 72 hours	la 15.2.2014 ... 8 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ... 8 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ... 8 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ... 6 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ... 6 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ... 6 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ... 6 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ... 6 KB
servicedesk@	Service request in accepted for more than 12 hours	pe 14.2.2014... 6 KB
servicedesk@	Service request in accepted for more than 12 hours	pe 14.2.2014... 6 KB
servicedesk@	Service request in accepted for more than 12 hours	pe 14.2.2014... 7 KB
servicedesk@	Service request in accepted for more than 12 hours	pe 14.2.2014... 7 KB
servicedesk@	Service request in accepted for more than 12 hours	pe 14.2.2014... 6 KB
servicedesk@	Service request in accepted for more than 12 hours	pe 14.2.2014... 6 KB

Figure 12. Tickets Accepted Over 5 Hours.

As seen from Figure 12, some of the tickets remain in the ‘Accepted’ state without being taken care of not only over 5 hours, but over 12 hours. This sample taken in a random manner shows that SD system engineers fail to fulfil their tasks and duties on a daily basis. Despite the fact that SD responsibilities are described in detail in the ‘Service Desk Handbook’ and especially in ‘SD Daily Tasks’ supplement, which can be found in Appendix 6, there is a strong deterioration in SD team performance.



### 3.4.2 Findings from Interviews and Online Questionnaire

Feedback from the respondents of 'One-2-One' interviews and 'On-Line Questionnaire' demonstrate that the SD engineers are certain that their performance will be higher if the scheme of payment is changed. Presently, they receive approximately 80% of their salary for every month of the quarter and the rest 60% at the end of the quarter if they meet their quarterly objectives. They wish the payment scheme would change to the standard one. They would like to receive 100% of payment every month plus extra payment for excellent performance at the end of the quarter.

The salary question became even more acute during the last months, when new SD members have been employed. For the existing SD members, it means that their salary will be even more decreased, because with the increased amount of their team members, the 'Night' shifts for which SD members receive double payment will not occur on a monthly basis, but rather once in two months.

It is worth noticing that various benefits also influence the attitude of SD system engineers towards their direct duties and responsibilities. There were several propositions to provide SD members with company laptops, mobile phones, and free Internet access at home.

As for the working hours, SD engineers expressed their concern about the shifting pattern, which does not ensure proper balance between personal and working time. Even though shifting pattern has been recently adjusted based on the collective proposal of all SD members, there is still some room for further improvements to make sure that all members of SD team would come to consensus.

A possibility to earn 'Flexitime', which is obtained by performing overtime hours and usually used to acquire extra 'days-off' or holidays, is also one of the important factors that can make the SD system engineer to fully commit to their tasks and duties.

In addition to 'Flexitime', SD system engineers consider flexible ways of accomplishing their tasks and duties: at the office and remotely from home, as another positive change that can influence their performance. There were also proposals about establishing normal working hours in the Service Desk, but considering the nature of the SD

operations and the strategy of the case company to provide '25/7' support to its customer, it is very unlikely that such requirements can be satisfied.

Another factor that is quite important to SD system engineers is their ability to actively participate in the company's life and influence their own working environment. In other words, to be able to make proposals and to see that these proposals are really implemented into a real life, but not just left somewhere unheard and unseen; to have the possibility of accessing proper professional documentation related to the existing working tasks and new emerging technologies, which will make them feeling proud that they offer to the customers the best solutions on the market.

Moreover, SD members would like to experience more flexible and considered attitude towards their personal circumstances, e.g. sickness, necessity to take care about children, etc.

Concerning professional growth and career development, first of all SD system engineers expressed their concern about possibility to be promoted. Their common attitude towards career development can be best described by the feedback from one of the respondents, who mentioned that he wants to have clear vision about his carrier development. He further suggests that he wants to know his strength and weaknesses, his area of expertise and his chances to be promoted. And the most importantly statement of his was 'I need guidelines for my carrier development from the managers' side.' (Appendix 1).

The SD members of the case company are also very interested in the internal and external trainings, especially about new technologies that are going to be employed in the company. Hence, they are very eager to have more challenging and engaging tasks in order to learn new things and therefore increase professional expertise.

The feedback regarding relationships in the company revealed that SD system engineers believe that there is a lack of appreciation from some managers and senior colleagues towards SD team and the tasks that SD team is responsible for. Apparently, SD system engineers feel that their daily working tasks are insignificant and not important. Especially, it concerns some senior colleagues from the Service Operations team, who allow themselves to humiliate SD members or make them feeling stupid when they ask for help. It is necessary to point out that such relationship among the

colleagues does not comply with the professional ethics and must be promptly eliminated.

The SD system engineers also emphasized that personalized feedback from their direct managers about their achievements or a positive remark from customer could significantly increase their willingness to perform better.

In addition, some SD members expressed their concern about unjust treatment from their direct managers. They think that there are favourites in the team who are given more preferences over the other team members in terms of their behaviour, tasks and responsibilities. Moreover, SD members mentioned that in order to improve working atmosphere in the team it would be beneficial to have more out-of-office activities in informal environment.

#### 3.4.3 Feedback from Other Departments of the Case Company

Although representatives of other departments require the SD members to perform minor adjustments concerning certain internal processes, they are quite satisfied with the SD performance on a general scale. As Appendix 3 demonstrates, SD members are valued by other employees of the case company for their responsible attitude to work and ability to efficiently handle customer's requests.

#### 3.4.4 Benchmarks from External Expert

As for the feedback from the external expert shown in Appendix 4, it is evident that work engagement is not an issue in her team, because her company motivates and encourages people to achieve better results and not to stay in amorphous state. There are no doubts that it is easier to maintain high work engagement in a big company because of the greater opportunities for the career growth. Nevertheless, practices of the external company can be treated as benchmark and consequently taken into consideration to meet the objectives of the current research.

### 3.4.5 Results of the Interview with the Internal Stakeholder

In general, internal stakeholder approved provisional proposal, especially the sections concerning *working conditions and processes*, and *personal interrelationships*. As for the salary, rewards and benefits, it was mentioned that proposed changes require rigorous planning and some of them cannot be immediately implemented because of the status and the nature of the Service Desk operation.

Even though some of the earlier mentioned suggestions were completely approved, internal stakeholder was interested in the research outcome and requested to continue generating the final proposal only with minor adjustments, because it provides clear awareness of possible areas for improvements in the Service Desk team.

### 3.4.6 Results of Personal Observation

According to the personal observation of the SD Team Leader, it was noted that there is a tendency for 'Ringelmann Effect' in the team. This phenomenon was first discovered by agricultural engineer Max Ringelmann in 1913 and later formulated by Forsyth (2010: 293) as a tendency when '... people ... become less productive when they work with others'. Ringelmann empirically proved that efficiency of a group gradually decreases as the group size increases, as it is shown in Figure 13 below.

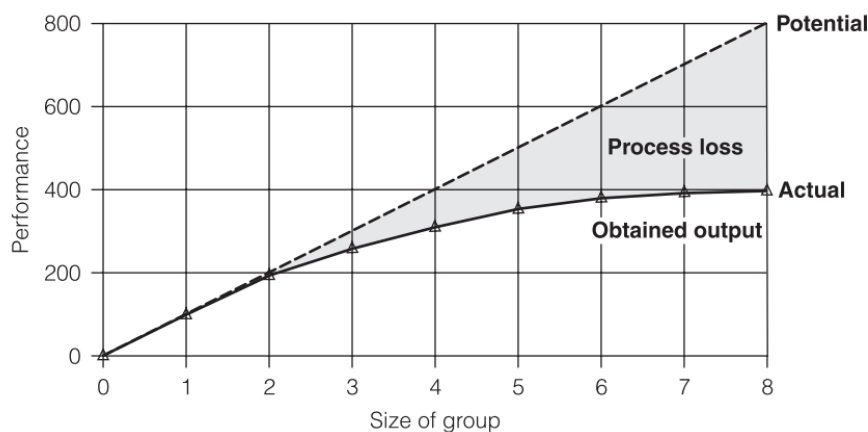


Figure 13. Ringelmann Effect (Forsyth, 2010:294).

As illustrated in Figure 13, the more members a certain group contains, the lesser efforts every member of this particular group applies to meet a defined objective. As a

result, the performance of the whole group correspondingly decreases and the actual output is far below the potential target.

This phenomenon is caused by the psychological factor called '*social loafing*' – the reduction of motivation and individual efforts from people when they work in groups as they subconsciously rely on each other in performing a common task.

This is exactly what is currently happening in the team, because factors that increase social loafing are clearly present in the Service Desk of the case company. One of them is *unidentified personal input*, when people know that they are not personally evaluated and that their input is not measured while they have to perform a collective task. Another factor, which causes increased social loafing is *free riding* - when people do less than their team members, hoping that 'others will make up for their slack' (Forsyth 2010: 296).

As for the next factor, called *sucker effect*, it is characterized by the situations when individuals tend to contribute less to a common goal as they are concerned that others will think negatively of them because they work too hard and contribute too much (Forsyth 2010: 296). In other words, they are afraid of being guilty in setting the objectives too high for other team members to handle.

*Unclear, contradicting and not challenging objectives* turn to be one more factor which causes increased social loafing in a team. According to Forsyth (2010: 297), a common goal of a group is supposed to be 'challenging rather than too easily attained'. He also argues that advantages of working in a group can be lost if the common task is too simplistic. Moreover, *lack of personal involvement* when people do not enjoy what they are doing or do not value the results to be achieved, also contributes to the increased social loafing in a group. And the last factor that causes social loafing is *decreased identification with the group*, which describes the situations when people prefer not to associate themselves with a certain group because its mission is perceived by others as unimportant and not worthy to be proud of. If to put it blankly, when members of a certain team think that they are second rated.

### 3.5 Strengths

Taking into consideration quarterly statistics from Efecte, it can be stated that in general performance of SD system engineers is adequate to the defined SD objectives. This is confirmed by relatively high grades given by the customers shown in Figure 8.

SD system engineers can boast with the fact that almost 90% of all the tickets are resolved in their team, which means that SD team members possess versatile knowledge and skills concerning different networking security technologies and associated services. Service Desk is also appreciated by employees of other departments of the case company for responsible attitude to work and for their efficiency and professionalism in implementing requested changes and handling incidents as demonstrated in Appendix 3.

Based on the personal observation of the SD Team Leader, it can be affirmed that all SD members are trying to create positive customer experience by communicating to clients in a positive and professional manner.

### 3.6 Weaknesses

In order to understand how to improve the performance of SD system engineers, it is necessary to identify and recognise the weaknesses in the SD operation of the case company which can be formulated as follows.

First of all, to meet the objective of the 'First Pass Resolution', SD engineers keep holding resolved tickets in 'Pending' status waiting for customer's explicit confirmation that everything works as expected. Even obvious requests that have been already completed are waiting customer's approval for days, instead of being resolved. Consequently, such action does not show the true picture to the customer about ability of the SD engineers of the case company to resolve the case from the first attempt.

Secondly, SD system engineers keep changing the status of the tickets from 'Accepted' into a 'Solving' in order to meet the objective of 'Average Response Time', but do not take any actions regarding these tickets. This action also compromises the trustworthiness of the statistics presented to the customers and makes customers confused why some straight-forward requests are staying in 'Solving' status for several days.

Thirdly, some members of the SD team do not punctually update the tickets that are in 'Pending' status for more than 4 days. 'Closed' tickets that might contain customer's requests for further actions are not given proper attention either. This is explicitly illustrated by Figure 14 below.

505.	Change	FNSST-117364: Incident INC0311308 -- comments added	24.02.2014 09:36	01. Platinum	Normal	4 - Closed
506.	Information	FNSST-117532: PW81814 - Maintenance Notice	26.02.2014 13:42	01. Platinum	Normal	4 - Closed
507.	Incident	FNSST-119206: INC0320992 Not able to login into VPN	24.03.2014 16:20	01. Platinum	Normal	4 - Closed
508.	Information	FNSST-120709: Sähkökatko pitäjänmäen laitesalissa 12.4.2014	10.04.2014 16:06	01. Platinum	Normal	4 - Closed
509.	Incident	FNSST-117699: Forte Monitoring Event for: Oyj-NIO-Kristiansand-TDCMPLS4	28.02.2014 17:58	04. Silver	Normal	4 - Closed
510.	Change	FNSST-118735: PW82132 - Maintenance Notice // ##134367##	17.03.2014 23:01	04. Silver	Normal	4 - Closed
511.	Incident	FNSST-120292: Forte Monitoring Event for: Oyj-MK-Skopje-MSSVPN10CI	07.04.2014 19:08	04. Silver	Normal	4 - Closed
512.	Incident	FNSST-120293: Forte Monitoring Event for: Oyj-PL-MNSAP125	07.04.2014 19:12	04. Silver	Normal	4 - Closed
513.	Incident	FNSST-120302: Forte Monitoring Event for: Oyj-UA-Kiev-MSSVPN10CI	07.04.2014 19:41	04. Silver	Normal	4 - Closed
514.	Change	FNSST-118539: FW: LSKT: vpn tunnuukset	14.03.2014 08:05	DNA	Normal	4 - Closed
515.	Change	FNSST-120097: Snapshotit kahdelta palvelimelta ma 7.4.2014 klo 11:00	03.04.2014 23:06	DNA	Normal	4 - Closed

Figure 14. Closed Tickets with E-mails.

As seen in Figure 14, several closed tickets contain e-mails from the customers. Some of these e-mails may include messages with automatic notifications, but some e-mails may contain 'follow-up' requests that require urgent attention of the Service Desk. More 'Efecte' samples that prove deteriorated performance of the case company SD can be found in Appendix 5.

The most disturbing weakness of SD members, which I encountered as a team leader, concerns their attitude and corresponding actions towards 'backing up' of the devices and participation in the internal projects. On the one hand, these two tasks do not seem to be urgent or important, but on the other hand if they are not promptly completed, they may cause serious damage to the reputation of the case company as a trusted service provider. For example, if the case company does not have the latest backup of the configuration file from a certain customer's firewall, it will be quite challenging to re-create the whole networking environment of this particular customer if the firewall fails to function.

If to summarise all the weaknesses in operation of SD team, it is obvious that there is a lack of enthusiasm among SD members in performing monotonous daily tasks. As Appendix 2 demonstrates, SD members consider telephone calls and internal projects as disturbing factors that do not allow them to meet their objectives. But, paradox of the situation lies in the fact that these "disturbing factors" are Service Desk direct duties and responsibilities, described in their 'SD Handbook' and 'SD Daily Tasks' supplement presented in Appendix 6.

### 3.7 Key Challenges

Taking into account all the collected data, it can be concluded that main challenges that stand on the way of enhanced performance of SD team directly correspond to low work engagement, specifically because of *Salary and Benefits; Working Conditions and Processes; Professional Growth and Career Development; and Personal Interrelationships* in the company.

If to have a closer look at these challenges and their manifestation in the Service Desk of the case company, they can be formulated and summarized as illustrated in Table 2 below.

CHALLENGE 1: Salary and Benefits	
<b>A</b>	Current salary scheme does not encourage SD members to produce extra effort for increasing their personal performance. They just apply as much effort as necessary to meet quarterly objectives of the team.
<b>B</b>	There is no reward scheme for outstanding performance.
<b>C</b>	SD benefits package is narrow.
CHALLENGE 2: Working Conditions and Processes	
<b>A</b>	Absence of the dedicated testing environment and the limitations in utilising required software tools. This situation contributes to the problem of a low work engagement, because inability to conduct a proper testing discourage system engineer to completely dedicate themselves to performing their daily tasks.
<b>B</b>	Despite the fact that all the activities of the SD system engineers of the case company can be measured by Efecte, e.g. how efficiently every SD member handles his daily tasks, only 'Following Manager's Instructions' statistics are included in the personal objective. Thus, the actual constructs of 'Following Manager's Instructions' objective are not officially evaluated. Evaluation of this objective entirely depends on subjective opinion of SD Manager.  Moreover, total SD objective consists of personal objective, which constitutes 20% of the whole target and team objective, which constitutes 80% of the whole



	<p>target. This situation negatively influences personal motivation of every SD member because SD members can hardly influence the final results from the personal perspective.</p> <p>As a result, SD system engineers tend to ignore their direct responsibilities e.g. processing tickets in the 'Unprocessed' and 'Unprocessed Events' queue. Instead, they just rely on their peer colleagues in completing these monotonous tasks, while concentrating on more challenging tasks that require creativeness, and as Appendix 1 suggests, 'involve professional planning'.</p>
<b>C</b>	Current guidelines concerning SD Daily Tasks allow SD system engineers to manipulate with the tickets' status, which does not contribute to strong and trustworthy relationships with the customers.
<b>D</b>	Whenever any monotonous and time consuming task, which results might not be appreciated or even needed, has to be completed in the case company, it is assigned to the Service Desk. In addition, some representatives of other departments allow themselves to assign tasks to the Service Desk when the due time for the completion is almost expired. Such practice does not make any SD member proud that he belongs to the team.
<b>CHALLENGE 3: Professional Growth and Career Development</b>	
<b>A</b>	There is no defined scheme of career development. In majority SD system engineers are not aware what exactly they have to do in order to be promoted. In some cases, instead of educating and preparing existing members of SD team for emerging positions at higher levels, company hires specialists outside the company leaving their own people in the same lower positions for several years.
<b>B</b>	SD members are not fully supported in their endeavours to specialize in the areas of their own interests, e.g. only in hosting services. Instead, they are required to have general knowledge and skills about every single technology utilized in the company, which consequently leads to the situations when SD members just scratch the surface of everything everywhere without deeper knowledge or understanding.
<b>C</b>	SD members have very limited possibilities to deal with challenging tasks. As a result, SD members have very thin chances to educate themselves.

CHALLENGE 4: Personal Interrelationships	
<b>A</b>	There is a contradiction between verbal instructions received by SD members from their Team Leader and their Service Desk Manager concerning changes in the environment of the case company.
<b>B</b>	There is no defined culture of communication neither among members of SD team nor between SD team and other departments. Some members of Service Operations team are reluctant to use inappropriate remarks towards members of SD team.
<b>C</b>	SD members do not feel themselves as valued employees of the case company. They do not feel that they are personally appreciated for the things that they are doing on a daily basis.

Table 2. Key Challenges of the Case Company SD.

As Table 2 illustrates, some challenges that stand on the way of the case company SD towards high performance are very common to any other company. There are not doubts that employees in other companies would not be concerned about the salary and benefits, or working conditions and processes. On the other hand, there are few challenges that are only specific to the case company. For example, challenges related to personal interrelationships and career development. Nevertheless, since these challenges were defined, it is necessary to find theoretical background on how to approach them and consequently find practical tools on how to tackle them in real life. Thus, next section of this study is going to make an overview of the available theoretical knowledge about possible solutions that can be applied to handle the challenges of the case company SD.

## 4 Best Practice of Work Engagement

This chapter explores essential theories on employee engagement in existing literature. It begins with an overview of major theories related to employee engagement, subsequently progressing to discussing employee engagement and individual differences and finally, exploring the drivers that can be applied to tackle research challenges. This section is also dedicated to generating Conceptual Framework based on the CSA and literature sources on a subject matter.

### 4.1 Engagement in General

If one asks whether the concept of work engagement has been already present in academic literature, it is worth mentioning that first the concept of engagement was introduced by Gallup organization in 1990s in business environment (Schaufeli 2012: 3). At that time, it was defined as ‘employee engagement’ and was perceived in terms of organisational and continuance commitment, and extra-role behaviour.

In academic circle, the concept of work engagement has also emerged in early 1990’s to define ‘an individual employee’s cognitive, emotional, and behavioral state directed toward desired organizational outcomes’ (Shuck and Wollard 2010: 103).

Since the publication of original work by Kahn in 1990, the term of work engagement has become increasingly mainstreamed into management, business and human resource development fields. To the date, more than 250 peer-reviewed articles have been published in scholarly literature on work engagement (e.g. see Wollard and Shuck 2011; Schaufeli and Salanova 2010; Bakker and Demerouti 2008), which evidences the constantly evolving interest towards the concept’s development. However, the growing literature possesses certain challenges, such as absence of a universal definition which directly leads to problems with measurement and management of employee or work engagement as such.

Although in the literature, the terms of work engagement and employee engagement are often used interchangeably, this study follows the same approach. The most important thing is not to confuse work engagement with the notion of job satisfaction, because job satisfaction only defines how a certain employee is happy about his or her

job. As for employee engagement, it is a multidimensional concept, which describes how passionate an employee is about the job, how dedicated an employee is to company's needs and to which extent an employee is willing to make an effort at work.

According to Kahn (1990), the founding father of the term, employee engagement encompasses three aspects: *physical*, i.e. spending energy to accomplish employees' roles; *cognitive*, i.e. thinking about the organization, management and working conditions; *emotional*, i.e. feeling positively or negatively about the organization, management and working conditions.

To further understand the level of attachment individuals expressed towards their roles, Kahn (1990) turned to motivation theories that explained the individual's need for self-expression in their work lives (Aderfer 1972, Maslow 1954). In addition, he conducted a qualitative study on the psychological conditions of personal engagement and disengagement at one architecture company. As a result, Kahn (1990: 694) differentiated between 'personal engagement' and 'personal disengagement' meaning "behaviors by which people bring in or leave out their personal selves during work performances". Furthermore, he defined three psychological variables that affected engagement or disengagement at work, namely meaningfulness, safety and availability. In other words, he concluded that employees were more engaged at work when they saw their performance as meaningful and when working in safe environment being psychologically available.

Likewise, May et al. (2004), found that employee engagement depends on meaningfulness of the job and role, safety of the environment including supporting relations with supervisors and colleagues, and psychological availability. Grounded in empirical evidence, May et al. (2004) concluded that meaningfulness influenced the most the employee's outcomes in terms of engagement.

Another approach to engagement is presented in the 'burnout' literature, which analyzes employee engagement as opposite to burnout (Maslach et al. 2001). More specifically, Maslach et al. identify six areas of work-life that lead to either burnout or engagement as depicted in Figure 15 below.

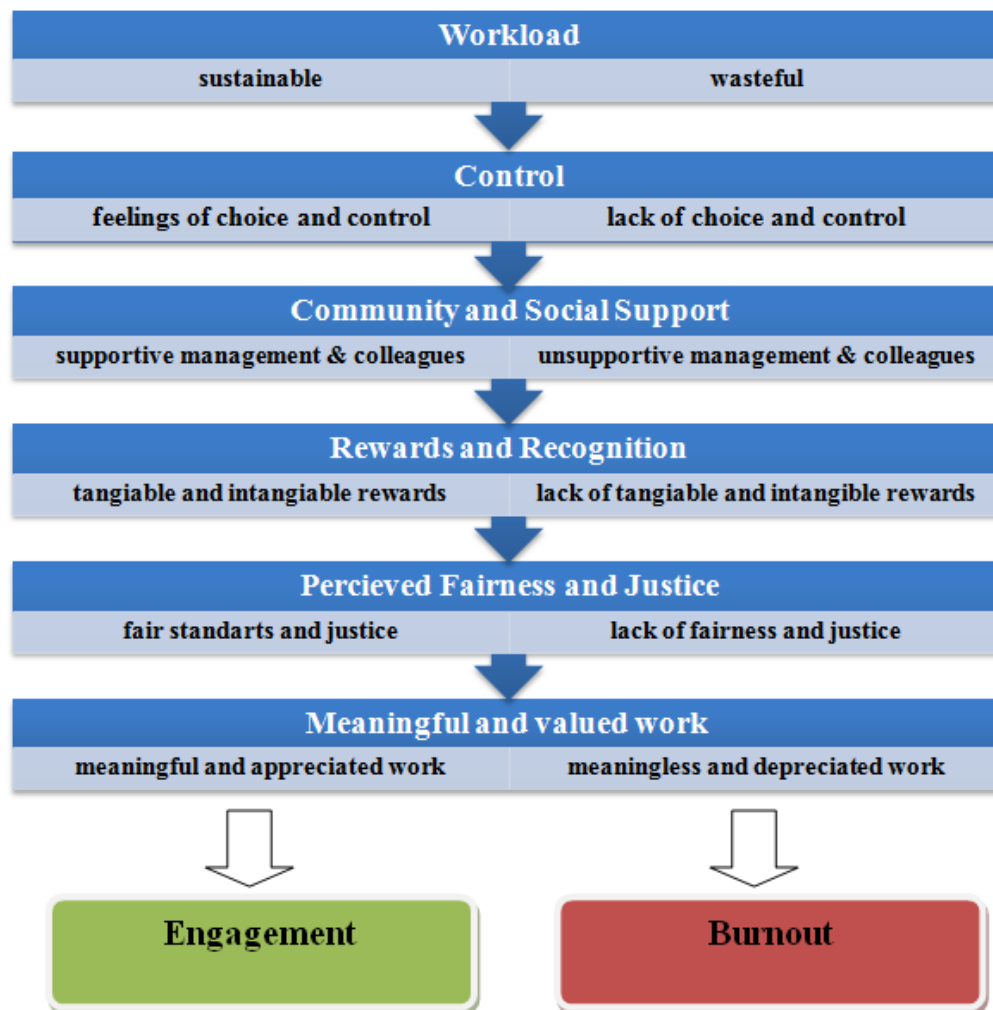


Figure 15. Work Engagement Vs Burnout.

As seen from the model of work engagement in Figure 15, Maslach et al. (2001) support findings by Kahn (1990) and May et al. (2004) on meaningfulness being associated with employee engagement. Similarly, Holbeche and Springett (2003), claim that individuals actively seek meaning through their work and, if an organization does not provide a sense of meaning they are seeking, they will most probably quit. Furthermore, an organization ought to create conditions of shared purpose to connect employees at an emotional level. Only then, the high level of engagement is possible.

Although, earlier studies (Kahn 1990; Maslach et al. 2001; May et al. 2005) clearly indicate criteria for engagement, they fail to explain why employees respond to these criteria with different level of engagement. Some answers can be found in social exchange theory (SET), which argues that the level of engagement depends on 'rules' of ex-

change (Cropanzano and Mitchell 2005) meaning that when employees receive tangible and intangible benefits from their employer, they feel obliged to respond in similar way, i.e. repay to the employer. Saks (2006) continues that one way employees repay their employer is through their level of engagement. In other words, the more employer demonstrates gratitude through disseminated benefits, the more engaged employees are.

In recent years, more and more studies sought to understand a connection between antecedents and consequences of employee engagement. One of the small-scale studies carried by Saks (2006) in Canada, claimed that psychological variables that led to job engagement were different from those that led to organization engagement, thus, distinguishing between two types of engagement: job engagement and organization engagement. Furthermore, the same study concluded that employee engagement influenced positively business outcomes echoing a meta-analysis conducted by Harter et al. in 2002. Although ‘...employee satisfaction and engagement are related to meaningful outcomes at a magnitude that is important to many organizations’ (Harter et al. 2002: 272), engagement as an individual construct effects individual-level outcomes first. Therefore, it is reasonable to believe that employee engagement is rather relevant to individuals’ attitudes, reasoning and behaviors.

The International Survey Research (ISR, 2004) elaborated on interrelationship of employee engagement and business outcomes further, producing evidence that organizations can attain high results only through emotionally engaging employees and customers. Similarly, Ott (2007) refers to the research conducted by Gallup Organization (2004), which concluded that higher earnings of businesses directly depend on higher workplace engagement. Overall, these studies allow claiming that higher employee engagement definitely leads to better business outcomes.

## 4.2 Employee Involvement and Engagement

Recently, the literature on employee engagement has been enriched by numerous studies researching connection between employee involvement in work-based decisions and meaningful engagement. Employee involvement is generally understood as employees’ ability to contribute to decisions made by management (Lucas et al. 2006).

For example, Truss et al. (2006) argues that employee engagement increases when employees feel that upper management considers their opinions. The same study concludes that, unfortunately, modern enterprises often fail to provide conditions for the employees to express their opinions which lead to weakening employee engagement. Likewise, Hyman and Mason (1995) state that known employee involvement schemes do not provide employees with opportunities to influence upper level decision making.

Another research conducted by Robinson (2006) evidences that employees tend to use their skills inadequately when they cannot participate in work-based decisions. Similarly, researchers at Towers Perrin (2003), claim that employees are more engaged when they are given an opportunity to make decisions related to their work. Purcell et al. (2003) elaborate on the topic further, stating that employee involvement in work-related decisions is an important driver of employee engagement. Furthermore, Beardwell and Claydon (2007) see employee involvement as essential tool of “soft” Human Resources Management which is built on recognition of employees’ voices and ideas, thus providing grounds for their engagement.

Another topic researched in this field concerns the interrelationship between management control and employees’ engagement. May et al. (2004) found that employee’s engagement largely depends on the perception of safety which may be hindered by management control. Deci and Ryan (1987) continue along the same lines, saying that if employees feel more control over their responsibilities they demonstrate better engagement at their work.

Konrad (2006) emphasizes the importance of high-involvement practices at work places as a tool to foster positive behaviors among employees and, thus, ensuring better performance. In the words of Guthrie (2001: 181), management practices that encourage employee involvement are ‘resulting in a workforce that is a source of competitive advantage’. Lawler and Worley (2006) elaborate on the topic further, arguing that high-involvement practices can be effective only if employees are given power. By “power” the authors mean the employees’ ability to make decisions related to their performance. The level of employee’s power can vary from minimal influence to highest possible. For example, an employee may simply provide some suggestion that is considered by others when making decisions, which can be defined as minimal influence. Alternatively, an employee may be responsible for some individual work-related decisions that will lead to important outcomes and which can be defined as highest possi-

ble influence. Lawler and Worley (2006) conclude that employees demonstrate the best engagement when they are granted with the highest possible level of power.

As the literature on the topic evidences, employees demonstrate higher level of engagement when they are given an opportunity to communicate their thoughts and ideas to upper management. Furthermore, managers play crucial role in creating an atmosphere of trust where importance of each employee's voice is recognized. In theorists' view high level of involvement is one of the keys to enhancing engagement among employees. Thus, it is of utmost importance for any organization to create and foster high-involvement practices based on recognition of initiatives and powers expressed by employees.

### 4.3 Context and Employee Engagement

As literature evidences the concept of employee engagement is context bounded, meaning that the level of employee engagement differs in various national, cultural, organizational and occupational contexts. The researched contexts include specific organizations, industries, countries and global.

According to Towers Perrin (2003), employee engagement varies in different industrial sectors. In overall, it appears that employees working in non-profit sectors demonstrate higher level of engagement. Such findings are truly interesting especially if we admit that non-profit sector is a less-paying one compared to private sector. It appears that there is more to employees' engagement than monetary motivators. Indeed, the word engagement itself implies certain degree of altruistic commitment to one's vocation. In contrast to this view, Truss et al. (2006) reports negative experiences of employees working in the public sector compared to those working in the private sector. These negative experiences included bullying and harassment resulting in employees' dissatisfaction and disengagement. Obviously, such findings are alarming for the managers working in public sector. However, it is also important to address bullying and harassment as factors that affect employees' engagement across all sectors.

In terms of cross-national studies on the phenomenon of employee engagement, the most known ones are Galup studies (2004) about employee engagement in Asia and Oceania and International Survey Research (2004) on prime movers of employee engagement.



The first source reveals evidence on low levels of engagement in such countries as Thailand, China, Japan, Australia and New Zealand where less than 20 per cent of employees felt engaged. The latter study provides staggering information on employee engagement across different industries with nearly 160,000 respondents in ten most developed economies of the world, namely: the United Kingdom, Germany, France, the Netherlands, the United States of America, Brazil, Canada, Australia, Hong Kong and Singapore.

The same International Survey Research (ISR 2004) demonstrates great alterations in employee engagement among the researched countries. For example, in the United States of America, employee engagement scored more than 70 percents while in France it was less than 60 percents. In addition, the study demonstrates large variety of prime movers of employee engagement. For example, in the United Kingdom, employees felt more committed to their jobs if the company guaranteed long-term employment. In Australia and Hong Kong, credibility of the management was an important factor that influences employee engagement. Having compared the results, the ISR (2004) concludes that organizations across the world must be aware of four major variables related to higher employee engagement: career development, company's credibility in employees' and public eyes, leadership and empowerment. Of these four, career development was found to be the most influential factor in employee engagement.

In Finland, a small scale study on employee engagement conducted by Wolf (2012: 2), who identifies three factors that deprive employees of engagement: high workload, work-related stress and lack of career development opportunities.

Evidence from the global research on employee engagement provides us with invaluable insights into what drives employee engagement. Yet, comparative analysis of levels of employee engagement among different countries as well as generalization of finding across the nations should be treated with certain degree of caution. It can be argued, that each country is a subject to many specific variables, such as culture for instance. This is why, researching the level of employees' engagement against the norm of the native country provide us with more credible findings.

#### 4.4 Employee Engagement and Individual Differences

The literature on interrelationship of employee engagement and individual differences predominantly belongs to the psychology field. Some authors view employee engagement as a product produced by conditions in the workplace (e.g. Miles 2001; Harter et al. 2003), while others believe that engagement is something that is produced by an individual irrespectively of outer conditions (e.g. Goddard 1999). However, there seems to be a general agreement that individual differences may have significant impact on work performance. (e.g. Kahn 1990) Furthermore, many authors argue that individual differences play a crucial role in determining an employee's potential level of engagement (Robinson 2006). More specifically, individuals perceive and categorize events and situations according to their unique reference system, which includes their experiences, knowledge, expectations, needs and interests. Bowditch and Buono (2001: 46) use the word "personality" to describe this "perceptual filter or frame of reference which influences our view of the world". Thus, it is argued that individual perception of environment "shapes and directs how engaged an employee is, rather than some objective understanding of an external reality (Kular et al. 2008: 10).

Emotional experience was defined as another factor related to impact of individual differences on engagement (e.g. May et al. 2004). In the words of Wilson (2004: 99-100), "feelings connect us with our realities and provide internal feedback on how we are doing, what we want and what we might do next... Being in organizations, involves us in worry, envy, hurt, sadness, boredom, excitement and other emotions". According to Robinson (2006), organisations should create environments where positive emotions are fostered, such as for example pride and involvement. Only then, higher employee engagement can be achieved. Similarly, Cooper (1997) and Heimer (1999) emphasize the link between properly managed emotions and high productivity and effective performance.

Personal relationships have also been found to influence workplace engagement. For example, some research evidences that there is a link between family stress and work-related stress (Moore 2004) while others point out to the importance of positive relationships at work-place and their impact on work engagement (Locke and Taylor, 1990).

Many authors argue that employee engagement is connected not only to individual differences but also to socio-cultural factors (Ferguson, 2007) meaning that culture and overall atmosphere or climate in company influences the degree of employee engagement. In the words of Schneider et al (1990: 254), “the climate of organizations merges out of the naturally occurring interactions of people”, yet it is a collective perception which is directly attributable to leadership strategies. Culture, on the other hand, is much wider concept that encompasses collective values, beliefs and principles specific to particular organization (Ravasi and Schultz, 2006). Figure 16 represents a simplistic interpretation of Glisson’s model of organizational social context (2007: 739).



Figure 16. Culture, Climate and Work Performance.

As seen from Figure 16, Glisson’s model includes three components, where ‘Organisational Culture’ determines ‘Organisational Climate’, and ‘Organizational Climate’ in its turn influences ‘Work Performance’ of employees. Hence, Glisson’s model allows to overview the concept of work engagement from socio-cultural perspective.

Despite the fact that there are numerous models of work engagement available for adoption, all of them have similar constructs known as work engagement drivers. Work engagement drivers are viewed by many scholars as driving forces that enable or evoke employees to perform a certain type of action. These driving forces of work engagement are discussed in more detail in the next section.

#### 4.5 Drivers of Employee Engagement

Robinson et al (2004) suggests that the core behaviours for employee engagement include trust in the employer, willingness to work to make things better, ability to see the big picture of a business, understand the context, be respectful and helpful to colleagues, be open to new developments and changes. With this in mind, he argues that the key drivers to support these behaviours or, in other words, employee engagement,

include effective leadership, opportunities for development, internal cooperation, insurance of well-being and transparent and clear human resources policies and practices. According to Cufaude (2004), if a manager employs a philosophy of 'servant-leadership' which advocates supporting and serving those around, the environment becomes 'highly engaged'. Soltis (2004: 2) continues, 'if managers aren't engaged their employees will unlikely respond to any efforts to engage them'. Thus, personal work engagement of management is equally important for inspiring employee engagement. Blizzard (2003) argues that relationship of employees with managers directly relates to the level of employees' work engagement, which suggests that managers are supposed to pay extra attention to their communication with the employees.

Another driver of employees' engagement is defined by Lawler and Worley (2006), who claim that employees' engagement increases if the employees are given an opportunity to make decisions regarding their performance and the quality of their working lives. In practical terms, it means that even a relatively low level of influence, such as for example participation in the decisions made by others, boost the engagement of the employees.

Positive emotions are also defined as an important driver for employees' engagement. For example, West (2005) argues that better commitment is achieved when employees experience positive emotions in their working environment. It is in line with Robinson (2006) who advocates creation of working environment that fosters such positive emotions as involvement and pride.

Furthermore, some studies emphasize the link between emotions, well-being and employees' engagement. According to Crabtree (2005) employees that feel positive about their jobs will also likely show more commitment. Schaufeli and Bakker (2004) see engagement itself as a positive experience that enhances wellbeing and work outcomes.

As literature on work engagement evidences, the concept of employee engagement is broad and complex. One can address it from many perspectives that are related to individual differences, involvement and context.

In overall, it can be argued that employee disengagement occurs as the result of poor management when managers fail to establish friendly working relationship with their subordinates and foster positive working environment in which each employee feels

appreciated and valued. Furthermore, when management does not provide employees with an opportunity to participate in the decision making process and develop professionally, the level of engagement drops.

The literature also suggests that employees' commitment depends on such factors as amount of work-related stress, emotional experiences and meaningfulness of work (May et al. 2004). In addition, many studies claim that career development opportunities are significant movers in enhancing employee's motivation, involvement and ultimately engagement. Such evidence implies that roles of managers should be extended beyond management and into understanding better human needs, hopes and expectations.

#### 4.6 Commercial Models of Work Engagement

Work Engagement discipline became so popular in business environment that some commercial organisations started providing consultancy services and associated visions of work engagement to the interested parties. Even though all of them claim that their model of work engagement is the best on the market, in the current research only three commercial approaches to work engagement are reviewed.

The first model of our choice belongs to Towers Perrin's consultancy firm, which argues that emotions and rational attitude towards work are the key elements of employee engagement. They view emotional construct as indicator of personal accomplishment at work. While, rational attitude was described as the level to which an employee associates himself or herself with the company and its objectives (The Towers Talent Report 2003: 1-6).

The Towers Perrin consultants define 10 drivers of work engagement. This set of drivers include: 1) interest of managers in employees' wellbeing; 2) challenging working tasks; 3) customer centric nature of the company; 4) possibility to take active part in decision making; 5) opportunities for carrier growth; 6) positive reputation of a company; 7) friendly and co-operative working environment; 8) availability of various resources; 9) senior management vision; and 10) decision making authority. Hence, as the Towers Perrin (2003) postulates, the stronger these ten drivers are, the higher the level of work engagement.

The next work engagement model of our choice was developed by Aon Hewitt Corp., which specializes in human capital and management consultancy. According to their model shown in Figure 17, there are 21 drivers of employee engagement that are all interconnected and related business outcomes.

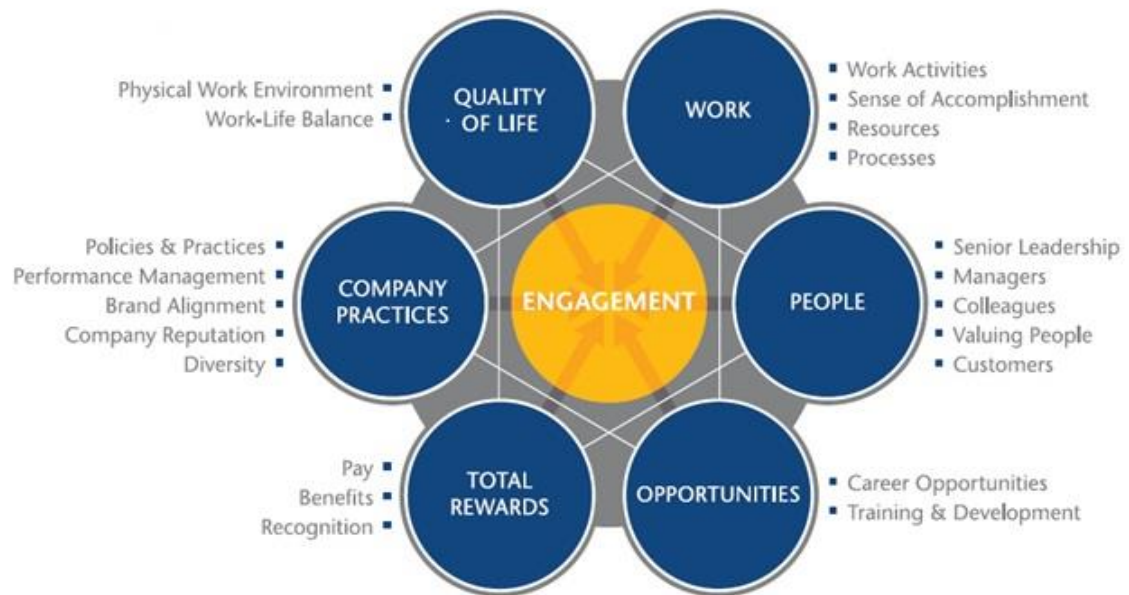


Figure 17. Employee Engagement Model (Aon Hewitt 2011: 7).

And the last commercial model of our choice is the model of Gallup organization (Van Allen 2008-2010: 2), which was developed in 1998 in the form of the employee engagement survey. This survey includes twelve statements or elements that were suggested to companies in order to define and evaluate the level of work engagement of their employees (Van Allen 2008-2010: 3-4). These twelve statements are presented in Table 3 below.

- 1) I know what is expected of me at work
- 2) I have the materials and equipment I need to do my work right
- 3) At work, I have the opportunity to do what I do best every day
- 4) In the last seven days, I have received recognition or praise for doing good work
- 5) My supervisor, or someone at work, seems to care about me as a person
- 6) There is someone at work who encourages my development
- 7) At work, my opinions seem to count

- 8) The mission or purpose of my organization makes me feel my job is important
- 9) My associates or follow employees are committed to doing quality work
- 10) I have a best friend at work
- 11) In the last six months, someone at work has talked to me about my progress.
- 12) The last year, I have had opportunities at work to learn and grow

Table 3. Twelve Statement of Gallup (Van Allen 2008-2010: 2).

As seen from Table 3, statements of Gallup organization (Van Allen 2008-2010: 2) cover all the areas of work, starting from employee's awareness about his or her duties and finishing with identifying the possibilities for career growth and professional development. Hence, this model provided a comprehensive tool for interested companies to evaluate the level of work engagement of their employees.

Summing up all the information about work engagement, it is necessary to point out that the concept of engagement at work became popular only in the recent decades. The discipline of work engagements can be considered as an umbrella term, because it combines the best practices from various sub-disciplines related to performance management. Best practices of work engagement are presented in the form of drivers with corresponding actions points. Therefore, the next section is going to extract only those drivers of work engagement that can be employed to tackle the challenges of the current research.

#### 4.7 Conceptual Framework

After detailed introduction of the main concepts of work engagement, current research is going to adapt and utilize the fusion of the specific work engagement drivers taken from the various work engagement models. The choice of the drivers is conditioned by their suitability to effectively tackle the challenges identified in the current state analysis. Therefore, the conceptual framework is built as shown in Figure 18 below.

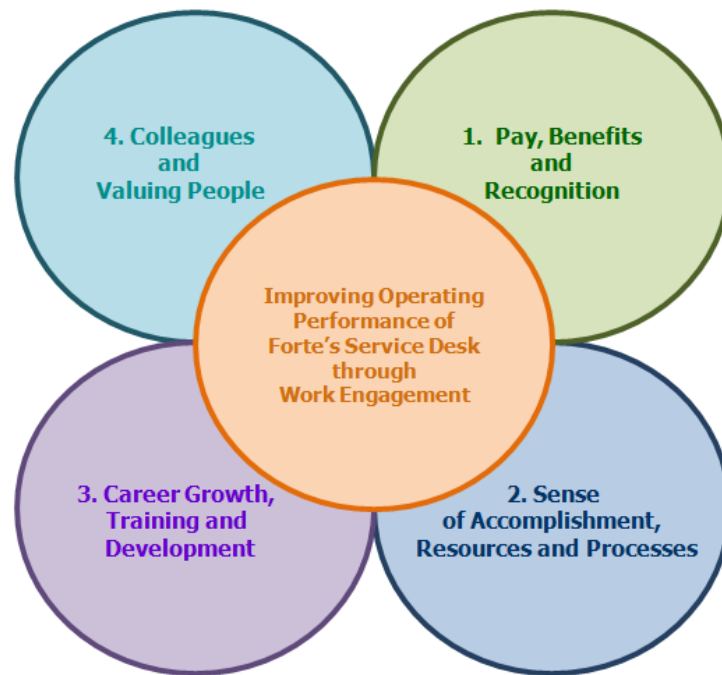


Figure 18. Conceptual Framework.

As shown in Figure 18, the conceptual framework comprises four drivers of work engagement. The first “petal” of the conceptual framework includes ‘Pay’, ‘Benefits’ and ‘Recognition’ drivers, which are going to be used in relation to the challenges with *Salary and Benefits*. The second “petal” of the conceptual framework combines ‘Sense of Accomplishment’, ‘Resources’ and ‘Processes’ drivers, which will be applied to address the challenges with *Working Conditions and Processes*. The third “petal” of the conceptual framework is composed of ‘Career Growth’, ‘Training’ and ‘Development’ drivers. These drivers intended to be employed in terms of challenges with *Professional Growth and Career Development*. Finally, the fourth “petal” of the conceptual framework contains ‘Colleagues’ and ‘Valuing People’ drivers, which will be acquired to tackle the challenges with *Personal Interrelationships*.

It is necessary to mention, that every work engagement driver has its own corresponding action points. Therefore, the drivers of our conceptual frame work and their associated action points are presented in Table 4 below.



1. Pay, Benefits and Recognition	
A	To establish just and fair salary scheme.
B	To motivate employees with various rewards.
C	To provide a wide range of benefits.
2. Sense of Accomplishment, Resources and Processes	
A	To provide employees with all the necessary resource to perform their work.
B	To make employees to be personally interested in their direct responsibilities and in the results that they can achieve.
C	To provide clear and concise working instructions.
D	To define an official set of rules describing co-operation among the departments.
3. Career Growth, Training and Development	
A	To promote hardworking and enthusiastic employees.
B	To encourage and support employees in their endeavours. To provide continuous training and coaching of employees.
C	To give employees an opportunity to show their strong angles.
4. Colleagues and Valuing People	
A	To ensure that all employees are aware about all the processes in the company.
B	To develop the culture of internal communication.
C	To foster the sense of self respect in every employee.

Table 4. Work Engagement Drivers and Corresponding Action Points.

As Table 4 illustrates, every action point of the selected work engagement drivers, constitutes to a certain type of recommendation on how to increase the performance of the employees. Hence, being equipped with work engagement drivers and their practical recommendations, this study is going to apply acquired knowledge to tackle the challenges with the performance of the case company SD.

## 5 Building the Proposal

Based on the Conceptual Framework and analysis of the acquired data during the second round of data collection, this section builds a provisional proposal on how to increase performance of the SD team of the case company through selected drivers of work engagement.

### 5.1 Initial Proposal

Considering that challenges defined in the Current State Analysis encompass various aspects of working life of the SD system engineers, recommendations of the provisional proposal are built to directly address those challenges. Hence, Figure 19 demonstrates the logical structure of the relationships among previously defined challenges, selected work engagement drivers with associated action points and practical recommendations.

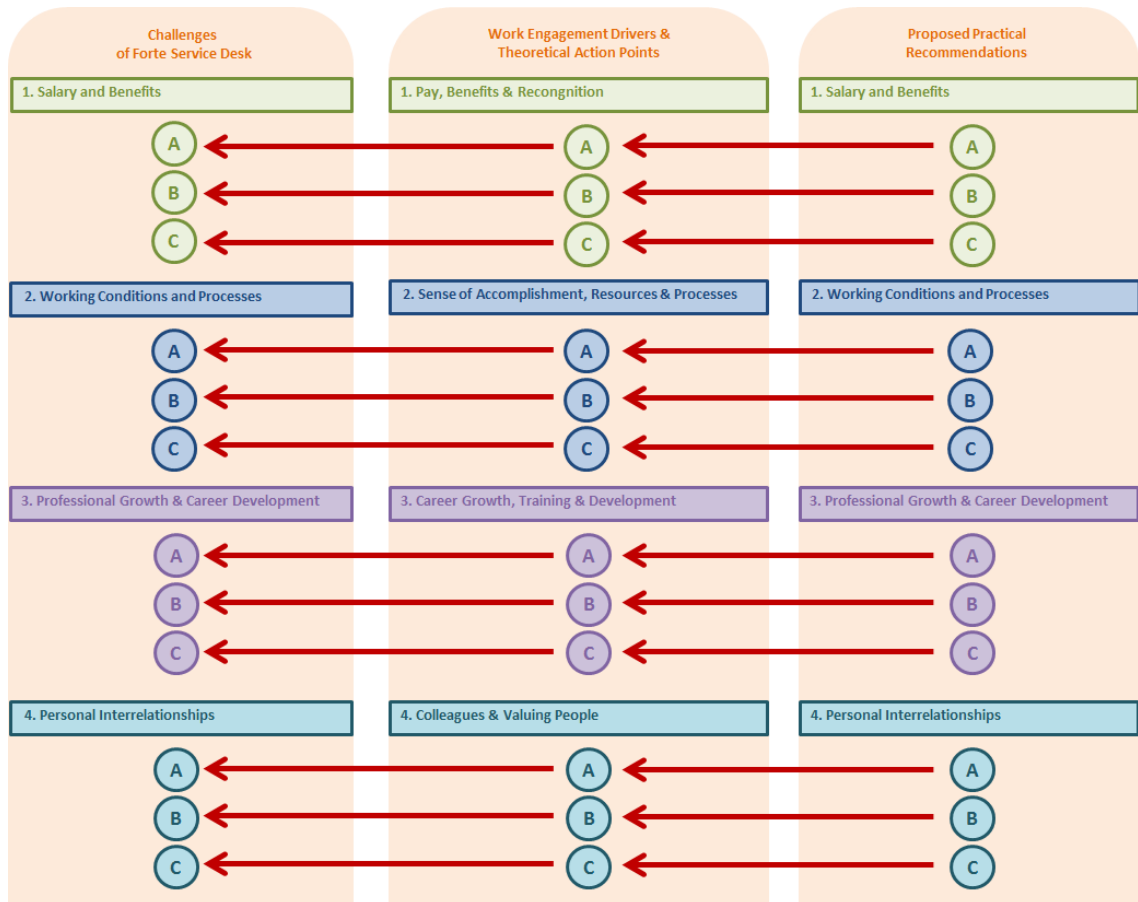


Figure 19. Logical Structure of the Provisional Proposal.

As seen from Figure 19, every practical recommendation of the provisional proposal is based on the theoretical action point from a specific work engagement driver. And, theoretical action point driver, in its turn, is chosen to address a certain challenge. Therefore, this logical structure allows explicit demonstration of how provisional proposal was built. As for the actual practical recommendations of the provisional proposal, they are presented in Table 5 below.

<b>Provisional Proposal 1: Salary and Benefits</b>	
<b>A</b>	To consider the possibility of implementing a new salary payment scheme, according to which SD system engineers would be able to receive 100% of their salary for every month of the quarter plus extra bonus at the end of the quarter depending on the level of their performance. If new salary scheme cannot be implemented due to company's policy, then the existing payment scheme should be at least flexible and adjustable in order to adequately address all the turbulences of the global economy and changes in the Service Desk itself.
<b>B</b>	To introduce reward scheme for outstanding personal achievements. For example, if the whole SD team or a particular system engineer exceeds defined objectives, they could be rewarded with 105% or 110% of payout.
<b>C</b>	To extend SD package of benefits, e.g. free Internet access at home.
<b>Provisional Proposal 2: Working Conditions and Processes</b>	
<b>A</b>	To create a dedicated testing environment and provide SD system engineers with all the necessary software tools and access rights.
<b>B</b>	To make system engineers to be personally interested in their direct responsibilities and in the results that they can achieve by officially defining, monitoring and evaluating personal contribution of every SD member towards fulfilling 'SD Daily Tasks' specified in Appendix 6; and by introducing new scheme of objectives, where at least 50% would contribute to personal achievements and 50% would demonstrate achievements of the whole team.
<b>C</b>	To review ccurrent guidelines concerning SD Daily Tasks in order to eliminate any possibility for SD members to manipulate with the tickets' status.
<b>D</b>	To reconsider existing practices on how to handle time consuming tasks and

	tasks that are obtained from other departments.
<b>Provisional Proposal 3: Professional Growth and Career Development</b>	
<b>A</b>	To create a defined scheme of career development for every SD system engineer. To give priority to SD members to be promoted whenever a new position at the higher levels of Service Production department is available. To provide personal feedback to every SD engineer about his professional growth.
<b>B</b>	To balance processes of educating SD system engineers on a general scale and supporting them in their endeavours to be specialized in the technologies of their own interest.
<b>C</b>	To provide SD members with the possibility to handle challenging tasks without effecting their direct duties and responsibilities.
<b>Provisional Proposal 4: Personal Interrelationships</b>	
<b>A</b>	To provide SD team with coherent and confirmed instructions that have been discussed and approved by all members of managerial team.
<b>B</b>	To educate SD members and representatives of other Service Production departments about internationally recognised culture of personal relationships in business environment.
<b>C</b>	To foster the sense of self respect in every SD member for their team and for the tasks that they have to perform on a daily basis.

Table 5. Provisional Proposal.

As seen from Table 5, practical recommendations of the provisional proposal are built in accordance with the theoretical action points of the specific work engagement drivers. Proposed practical recommendations are specific to the environment and working conditions of the case company. Therefore, it can be stated that provisional proposal addresses all the previously defined challenges, thus providing comprehensive set of tools for improving operating performance of the case company Service Desk through work engagement.

## 5.2 Validation of the Proposal

As soon as the provisional proposal was generated, it was presented to the attention of the internal stakeholder of the case company for validation. Even though most of the provisional proposals were accepted, internal stakeholder made several specific comments.

To be more precise, in terms of *Salary and Benefits* proposal, it was mentioned that new salary scheme (recommendation 1'A') and package of benefits (recommendation 1'C') cannot be immediately implemented as they require rigor planning and approval of all the stakeholders of the case company. Instead, internal stakeholder suggested concentrating on developing a scheme of rewards (recommendation 1'B') that would encourage SD system engineers to increase their performance.

As for proposal related to *Working Conditions and Processes*, internal stakeholder expressed his concern about new scheme of objectives, which would constitute 50% of the personal achievement and 50% of the team's achievements (recommendation 2'B'). It was mentioned that implementation of this scheme has to be done with extra caution as it may pose certain risks to processing all the tickets. It is due to the fact, that SD members might start taking care only about 'quick-to-fix' requests accumulating required scores to meet their personal objectives, while more time consuming tickets would be left intact. Nevertheless, it was decided to leave this recommendation in the proposal set, because it can be implemented in combination with the close supervision of the Team Leader.

Moreover, internal stakeholder mentioned that reviewing current guidelines concerning SD Daily Tasks (recommendation 2'C') will not alone eliminate possibilities for SD member to manipulate with the status of the tickets. According to the stakeholder, the most important thing in this matter is to have manager's personal involvement into the monitoring on how correctly the tickets are being processed. In addition, the stakeholder suggested including this task into the personal objective of the Team Leader.

Regarding *Professional Growth and Career Development*, stakeholder mentioned that it is always challenging for the small company to define the precise scheme for career development (recommendation 3'A'). Nevertheless, it was agreed that this recommendation will remain in the proposal, as it also implies providing every SD member with a

personal plan of professional development. This plan can help SD system engineers to understand their strong angles and things that they have to improve.

Furthermore, stakeholder was concerned about providing SD system engineers with the possibility to handle more challenging tasks (recommendation 3'C') as it might lead to the situations when SD system engineers will just ignore their direct duties and responsibilities, while concentrating on challenging tasks. Thus, it was agreed that supervision of the Team Leader is also required to determine the level of involvement of SD system engineers in dealing with difficult and complicated requests.

Therefore, being equipped with the comments and suggestions of the internal stakeholder, provisional proposal is going to be modified and presented in the next section.

### 5.3 Final Proposal

After careful analysis of the feedback of the internal stakeholder, the set of provisionally proposed recommendations was reviewed and modified. This allowed generating the final proposal, which is presented in Table 6.

Recommendation 1: Salary and Benefits	
<b>A</b>	To consider the possibility of introducing a reward scheme for outstanding personal achievements. For example, if the whole SD team or a particular system engineer exceeds defined objectives, they could be rewarded with 105% or 110% of payout.
Recommendation 2: Working Conditions and Processes	
<b>A</b>	To create a dedicated testing environment and provide SD system engineers with all the necessary software tools and access rights.
<b>B</b>	To make system engineers to be personally interested in their direct responsibilities and in the results that they can achieve by officially defining, monitoring and evaluating personal contribution of every SD member towards fulfilling 'SD Daily Tasks' specified in Appendix 6; by introducing new scheme of objectives accompanied by the close supervision of the Team Leader and Service Production Manager, where at least 50% would contribute to personal achievements and

	50% would demonstrate achievements of the whole team.
<b>C</b>	To review current guidelines concerning SD Daily Tasks and to establish personal involvement of the Team Leader in order to eliminate any possibility for SD members to manipulate with the tickets' status.
<b>Recommendation 3: Professional Growth and Career Development</b>	
<b>A</b>	To create a defined scheme of career development for every member of the case company SD, so all the system engineers would be aware about their professional strengths and weaknesses. To provide personal feedback to every SD engineer about his professional growth.
<b>B</b>	To balance educating SD system engineers on a general scale and supporting them in their endeavours to be specialized in the technologies of their own interest.
<b>C</b>	To provide SD members with the possibility to handle challenging tasks under the supervision of the Team Leader and the Service Production manager.
<b>Recommendation 4: Personal Interrelationships</b>	
<b>A</b>	To provide SD team with coherent and confirmed instructions that have been discussed and approved by all members of managerial team.
<b>B</b>	To educate SD members and representatives of other Service Production departments about internationally recognised culture of personal relationships in business environment.
<b>C</b>	To foster the sense of self respect in every SD member for their team and for the tasks that they have to perform on a daily basis.

Table 6. Final Proposal.

As Table 6 illustrates, practical recommendations of the final proposal were modified and adjusted in accordance with the suggestions of the internal stakeholder in order to ensure their efficient implementation for improving operating performance of the case company Service Desk.

## 6 Discussion & Conclusions

This section provides discusses and summarizes the current study; evaluates its rigor, validity and reliability; and suggests possible development scenarios of the case company Service Desk in the future in relation to the best practices of work engagement.

### 6.1 Summary

This study investigated how to improve operating performance of the case company Service Desk through work engagement. The necessity for this improvement arose from the situations when Service Desk engineers of the case company tend not to fulfil their daily tasks and duties, even though they had all the necessary instructions on how to complete them.

Since this situation required urgent treatment, the research objective was to determine strengths and weaknesses in a daily operation of the case company Service Desk and to generate proposal with practical guidelines for Service Production management team on how to improve operating performance of its Service Desk engineers through increased work engagement.

To conduct an investigation, *action research* was utilized due to the fact that it is the most suitable research approach for the practitioners who take active part in observing and analyzing the situation, adjusting and modifying it, and if necessary moving into a new direction. To secure research rigour, validity and reliability, research data was collected from multiple sources and in three rounds.

To achieve research objective, first of all, this Thesis conducted *current state analysis* in order to examine strengths and weaknesses of the case company Service Desk, and consequently define business challenges based on the first round of data collection.

As soon as business challenges were identified, respected literature sources were checked on how to improve the performance of the case company SD. Results of the acquired data and the fact that the case company is a customer centric organisation, which processes are built according to the latest ITIL recommendations, the most suitable tool for finding solutions to the research challenges of this study appeared to be Work Engagement discipline.



Further on, Work Engagement discipline was analysed on a global scale and compared to the identified challenges during the *current state analysis*. Therefore, the most suitable drivers of Work Engagement discipline that could be used to tackle challenges of this research were defined. And, this resulted in generating *conceptual framework* of the research.

Moreover, to re-confirm the results of the current state analysis, the second round of data collection was conducted. Hence, based on the *conceptual framework* and results of the second round of data collection, provisional proposal of practical guidelines was generated.

As a final step of this research, provisional proposal was presented for the attention of the company's stakeholder. As soon as his feedback was received, which contributed to the third round of data collection, the final proposal was generated in order to meet the objectives of the current research.

Summing up the results of this Thesis, it can be stated that current study allowed identifying the strengths and weaknesses in operating performance of the Service Desk of the case company. Based on this information, it was possible to define the challenges that stand on the way of increased performance of the case company SD. To tackle the challenges related to *salary and benefits*, current study suggested introducing a new reward scheme for outstanding performance of the SD system engineers. In this regard, managerial team is planning to implement this reward scheme in the next quarter of the year 2014. In terms of the challenges with *working conditions and processes*, this study suggested creating a dedicated testing environment for the Service Desk system engineers. Thus, senior colleagues from the Service Operations team started working on this project. In addition, it was advised to introduce a new set of objectives in order to make every member of the case company SD to be personally interested in the final outcome. Therefore, managerial team is planning to review the current set of the SD objectives. In terms of the challenges with *professional growth and career development*, this study proposed to create the defined scheme of career development for every member of the SD team. This study also suggested coaching SD members in their endeavours of dealing with challenging tasks. Furthermore, Service Production Manager as well as the SD Team Leader intend to create personal plan of career development for every SD member. In terms of the challenges with *personal interrelationships*, current study advised fostering self-respect in every SD member and educating

them on internationally recognised culture of inter-personal communication. Hence, Service Production Manager and SD Team Leader cultivate friendly and professional communication style among all members of the Service Production department.

## 6.2 Managerial Implications

In order to efficiently implement suggested proposal into practice, it is extremely importance to address managerial implications by assigning required activities and associated action points to the dedicated responsible persons from the managerial team. Therefore, managerial implications towards improving operating performance of the case company Service Desk through work engagement are presented in Table 7 below.

<b>Activity 1: To Make Salary and Benefits Packages More Competitive</b>	
Action Points of Final Proposal: <b>A</b>	Responsible: <b>Vice President</b>
<b>Activity 2: To improve Working Conditions and Processes of SD Team</b>	
Action Points of Final Proposal: <b>A, B, C</b>	Responsible: <b>SP Manager and SD Team Leader</b>
<b>Activity 3: To Enhance Professional Growth and Career Development of SD Team</b>	
Action Points of Final Proposal: <b>A, B, C</b>	Responsible: <b>SP Manager</b>
<b>Activity 4: To Improve Personal Interrelationships in SD Team</b>	
Action Points of Final Proposal: <b>A, B, C</b>	Responsible: <b>SD Team Leader</b>

Table 7. Managerial Implications.

As Table 7 illustrates, every proposed activity and associated action point is assigned to the members of the managerial team. Although it may seem that Service Production Manager and Service Desk Team Leader are overloaded with responsibilities, the required action points can be implemented in a relatively short period of time as they do not require major re-organisations in the company, but patience and willness of the responsible persons.

The only thing that managerial team has to take into account is that implementation of suggested proposal is not one time solution. On the contrary, in order to maintain ex-

cellent operating performance of the case company SD team, it is necessary to secure high level of work engagement on a continuous basis.

### 6.3 Validity and Reliability Evaluation

Taking into consideration earlier discussed requirements of the valid and reliable research this study has made a considerable effort in producing the outcome which is valid and reliable. It was achieved by three rounds of data collection that help to understand the strengths and weaknesses of the case company Service Desk, to identify research challenges and consequently find the answer to the main research question.

To contribute further to the research validity, both qualitative and quantitative research methods were employed. Moreover, to secure data triangulation, current research utilized multiple data sources: SD engineers, Service Production Managers, managers of other departments of the case company; and various data collection techniques: interviews, questionnaires and personal observation.

As for possibility to replicate current research, it can be successfully accomplished, because it is conducted in the environment which is common to any IT company and because current research contains detailed description of data collection and analysis methods and techniques.

However, there is a possibility that another researcher will obtain different results with the same study, since most of the research is context bounded with outcomes dependant on such variables as time, environment, respondents and personal perception of the subject matter.

### 6.4 Further Development

There are not doubts that managers play a crucial role in working life of their subordinates as well as in the success of the whole company. If managers are able to create a positive working atmosphere and make all their team members to be completely engaged in their daily working activities, performance of the employees will increase, customer satisfaction will be higher and as a result, competitive advantage of the company will improve.

Keeping in mind the importance of employee engagement as the key driver for increased performance, Figure 20 presents author's interpretation of two possible hypothetical scenarios of further development of working life of the case company SD in relation to the customer satisfaction and competitive advantage of the case company.

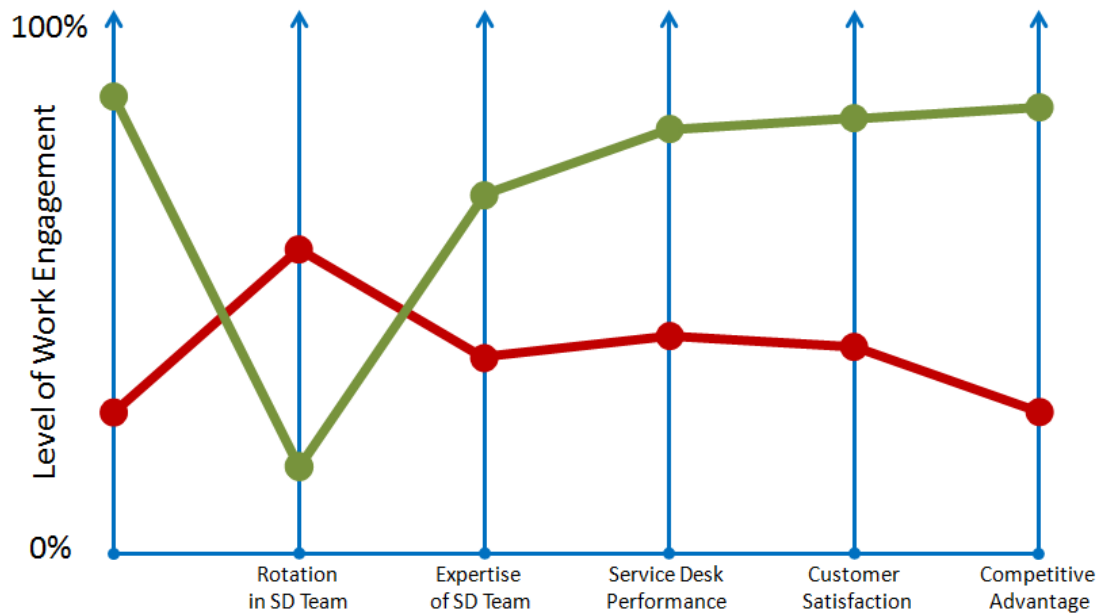


Figure 20. Scenarios of Further SD Development.

As green vector of Figure 20 suggests, if managerial team of the case company ensures high level of work engagement of SD members by implementing proposal of this study, they will reduce internal rotation in the team to minimum – experienced SD members will not be leaving the company in search for better opportunities. Consequently, expertise of SD members will grow, which will lead to increased personal and team's performance. As a result, high performance will secure high level of customer satisfaction and competitive advantage of the whole company.

It is evident that higher level of engagement among employees will result in improving performance of the case company Service Desk. Thus, it is important to employ practices that will enable and foster employee engagement. Positive management that focuses on employees' needs will result in better productivity, customer satisfaction and financial performance of the whole company. In addition, findings of the current research as well as practical proposal presented in this study needs to be viewed as a broad strategy that requires contribution and involvement of all the case company members on a continues basis.

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## Appendix 1. 'One-2-One' Interview

Question:

'What factors will make you interested to work at the case company for the next 5 years and perform your daily tasks and duties at the utmost level?'

Answers of Respondent: 'A'
First of all, I want to be respected by my peers and my managers as a human being and as a professional. All the attempts of bullying must be promptly eliminated. It especially concerns our senior colleagues, who used to make a laughing stock of a person who made even a little mistake.
I want to have realistic demands and responsibilities from my employer, and if any extra work has to be done, there should be a financial reward for that.
I think that we need one more personal target: "Team Work and Co-Operation". This target should show our ability to work in a team.
Since we have more SD members, we have less evening and night shift and consequently our salary is getting even smaller than we had before. So, it would be nice if our salary will be adjusted according to the situation so we could stay more or less on the same level.
At the moment, we are 'fighting' for something which is supposed to be ours (our salary) by our right. We are not fighting for something extra. So, it would be nice to introduce some sort of scheme of bonuses.
It will be better if our personal objective would be 50%, and the rest 50% would manifest our team contribution. In this way, we have more personal influence on the final result.
I would like to receive personal reports about my achievements / performance on a weekly basis, but this has to be done in a strictly private manner. This will help me to keep up in shape and know the areas where I have to improve myself.
With all my respect to SO team, I would like to have separate statistics from them.

<b>Answers of Respondent: 'B'</b>
Possibility to have internal and external trainings.
In terms of salary, we need our full payment, so we would not need to struggle for what already belongs to us, e.g.: 80% and 20%.
For more responsibilities we should have corresponding financial reward.
Possibility to learn new stuff on a daily basis and to choose what you want to learn to satisfy your interests, e.g. hosting or secure access, etc.
Positive feedback from managers and responsible persons that would acknowledge my accomplishments.
Better co-operation and respectful professional communication with other team members.
Equal and just attitude to every member of SD from the management so there would not be favourites or mistreated persons.
Possibility to be promoted.
To have a chance to specialize and concentrate on one technology, and not on everything and everywhere.

<b>Answers of Respondent: 'C'</b>
Good working atmosphere.
If you ask question you get the answer without feeling stupid or humiliated.
Listen and consider proposals of mine.
Engaging working tasks where you can learn something new.
Clear and not contradictive objectives and guidelines from managers.
Proper balance between working and personal time.

<b>Answers of Respondent: 'D'</b>
Constant training
Learning new things by doing
Help from senior colleagues by doing challenging task
Benefits in the form of salary or cultural tickets
Informal working environment and relationships
Team spirit so all the members of the team would be treated equally and would be equally responsible for their tasks and duties, and behaviour.

<b>Answers of Respondent: 'E'</b>
Money plus benefits, e.g. laptops, mobile phones, internet.
Instead of extra bonus for good work, we just get what already belongs to us.
Shifting with normal office hours.
Ability to earn 'flexitime'.
More challenging tasks that involve professional planning.
Possibility to work remotely
Proper professional documentation related to working tasks.
Professional communication when you are asking for help or advice.
Out-of-office activities for everybody
To feel and know that you propose to customers the best solutions on the market, so it would make you proud.
Possibility to make proposals and to see how proposed things are really implemented.
Personal testing environment and possibility to experience what customers / end users experience, e.g. mobile token.

<b>Answers of Respondent: 'F'</b>
Challenging tasks to work with.
To be promoted to the higher level.
Increase in salary.
External trainings.
Positive work atmosphere.
Flexible ways of working: in the office or remotely from home.
Flexible working hours.
Clear and not contradicting working instructions and guidelines.
Benefits, e.g. culture coupons, etc.
Respect and appreciation for the things that I'm doing at work.

<b>Answers of Respondent: 'G'</b>
Continuous internal and external training, e.g. 1 or 2 external trainings per year and a couple internal trainings per month about emerging technologies which are being planned to be utilized in our company.
Clear vision about my carrier development. First of all I want to know my strength and weaknesses, my area of expertise and my chances to be promoted. I need guidelines for my carrier development from the managers' side.
In terms of our payment, it would be nice if our salary scheme would change. So we could get 100% of our salary and earn extra for excellent performance.
Trust and respect from our front managers for the things that I am doing at work.
Flexible and considered attitude to personal circumstances, e.g. sickness, other personal matters, etc.
Possibility to have professional testing environment and preferably personal one. Better working tools for diagnostics and troubleshooting.
Better operational instruction about our add-on services, e.g. Splunk, Performance Monitor, etc.
Professional and respectful communication among team members.
It could be nice if my peer colleagues could propose help if they see that somebody really needs it.

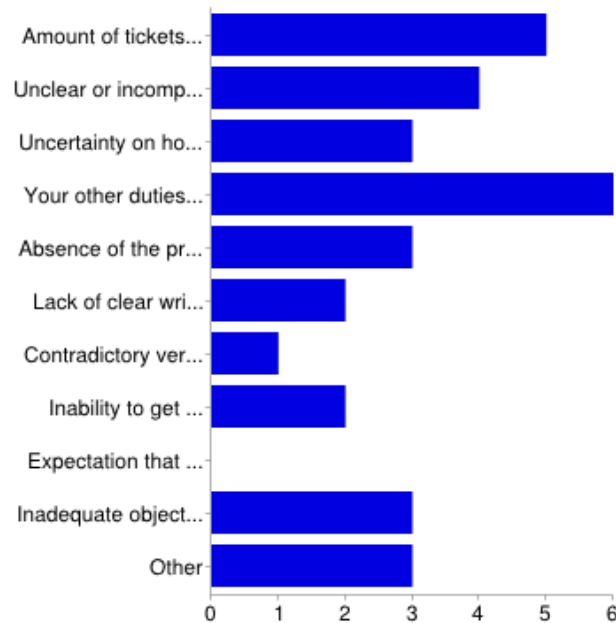
## Appendix 2. On-line Questionnaire

## 7 responses

[View all responses](#)[Publish analytics](#)

## Summary

What factors can prevent you from fulfilling your 'SD Daily Tasks' and consequently meeting your 'Q' objectives?



Amount of tickets that you are handling	5	16%
Unclear or incomplete requests from the customers	4	13%
Uncertainty on how to handle a case from a technical point of view	3	9%
Your other duties and responsibilities, e.g.: handling of telephone calls, internal projects, etc.	6	19%
Absence of the proper testing environment	3	9%
Lack of clear written instructions on how to fulfill your 'SD Daily Tasks' or handle certain cases	2	6%
Contradictory verbal instructions from your Team Leader and SD Manager	1	3%
Inability to get an advise from your senior colleagues	2	6%
Expectation that your peer colleagues will handle the tasks as good as you do	0	0%
Inadequate objectives	3	9%
Other	3	9%

### Appendix 3. On-line Focus Group

From managerial perspective what SD system engineers should:	
<b>Question:</b>	<b>START doing, because they are not doing it?</b>
<b>Answers:</b>	<p>Update CMDB cards for deliveries when Customer takes a new service into use.</p> <p>Taking responsibility on tickets they have. Trying a bit harder to solve the issue further until escalating, this way they would learn more.</p> <p>Some kind of internal audit method etc should be developed, so that licence expiration and insecure config issues etc could be avoided. (like leaving SSH access open on Internet when new device is installed.)</p>
<b>Question:</b>	<b>CARRY ON doing, because they are so good in doing it?</b>
<b>Answers:</b>	<p>Excellent reaction times and good attitude to work tasks.</p> <p>In general I think servicedesk does a good job.</p> <p>Provide customers with quick and accurate changes and incident handling as now.</p>
<b>Question:</b>	<b>STOP doing, because you would not like them to do it?</b>
<b>Answers:</b>	<p>Processing terminations. This should only be done via orders.</p> <p>When they ask for help and you explain what should be done next or how to proceed, often some other guy comes next day to ask about the same ticket. So if they ask something then handle the case or at least write the information in the internal comments.</p> <p>Variation in quality of Service review materials provided by SD is huge. Stop using screenshot of Spectrum when showing SLA status in materials. Spectrum shows only what devices are working at that second when screenshot is taken. We do have SLA monitoring tools available (infoview) be done via orders.</p>



#### **Appendix 4. Interview with External Expert**

**Question:** What do you do in the company to increase work engagement of your SD system engineers?

**Answers:**

- 1) We make sure that all system engineers understand how important they are and how important what they are doing.
- 2) If we see that system engineer wants to learn new things, we encourage him.
- 3) We try to make team spirit stronger and stronger. From time to time, we have common activities outside the office.
- 4) Our senior system engineers always ready to help our junior ones.
- 5) Our system engineers work on trust, we do not constantly monitor them and never boss them around.
- 6) We reward our system engineers for the good work with small presents.
- 7) We sent our system engineers to trainings.
- 8) I am trying to be an example for them.
- 9) If system engineer or his child is sick, he can stay home and work remotely.
- 10) When we extend our staff, first of all we promote people who already work for us and showed themselves as good workers.

## Appendix 5. 'Following Manager's Instructions'

### 1) 'Tickets Accepted Over 5h' queue:

#### a) Efecte:

Ticket status	Identifier	Latest status change	Updated
1 - Accepted	FNSST-116753: LYNC Speed needs Improvement	13.02.2014 10:01	13.02.2014 10:25
1 - Accepted	FNSST-116755: Cross Wrap	13.02.2014 10:08	13.02.2014 10:26
1 - Accepted	FNSST-116765: chigago-AP1 issues	13.02.2014 10:39	13.02.2014 10:48
1 - Accepted	FNSST-116773: Wifi Bluesky AP FR-NEF-1	13.02.2014 11:21	13.02.2014 11:42
1 - Accepted	FNSST-116783: FW: VPN getting Disconnected Frequently	13.02.2014 12:32	13.02.2014 11:42
1 - Accepted	FNSST-116819: INC1257625 - RE: Partners Portal - Datawarehouse Support - External user in Infra	13.02.2014 19:04	13.02.2014 20:51
1 - Accepted	FNSST-116800: Tukiaseman SSID julkaisuopynto	13.02.2014 14:20	14.02.2014 00:28
1 - Accepted	FNSST-116834: access to service portal	14.02.2014 09:27	14.02.2014 09:56
1 - Accepted	FNSST-116816: RE: OIB tanitsee VPN tunnelin	13.02.2014 18:38	14.02.2014 10:06
1 - Accepted	FNSST-116843: Mobile-SSID to APAC	14.02.2014 10:40	14.02.2014 10:40
1 - Accepted	FNSST-116836: question about adding a rule for SSL VPN	14.02.2014 09:32	14.02.2014 10:42
1 - Accepted	FNSST-116839: Radius ja verikon tunnusisuus	14.02.2014 09:55	14.02.2014 10:48
1 - Accepted	FNSST-116844: yhteydet hitaalla	14.02.2014 11:00	14.02.2014 11:00
1 - Accepted	FNSST-116866: Incident INC0304195 -- comments added	14.02.2014 12:56	14.02.2014 14:05

#### b) Outlook

Date: Last Week

servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ...	6 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ...	6 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ...	6 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ...	6 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ...	6 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ...	6 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ...	6 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ...	6 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ...	6 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ...	6 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ...	6 KB
servicedesk@	Service request in solving status more than 72 hours	la 15.2.2014 ...	8 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ...	8 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ...	8 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ...	8 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ...	6 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ...	6 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ...	6 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ...	7 KB
servicedesk@	Service request in accepted for more than 12 hours	la 15.2.2014 ...	7 KB
servicedesk@	Service request in accepted for more than 12 hours	pe 14.2.2014...	6 KB
servicedesk@	Service request in accepted for more than 12 hours	pe 14.2.2014...	6 KB
servicedesk@	Service request in accepted for more than 12 hours	pe 14.2.2014...	6 KB
servicedesk@	Service request in accepted for more than 12 hours	pe 14.2.2014...	7 KB
servicedesk@	Service request in accepted for more than 12 hours	pe 14.2.2014...	7 KB
servicedesk@	Service request in accepted for more than 12 hours	pe 14.2.2014...	6 KB
servicedesk@	Service request in accepted for more than 12 hours	pe 14.2.2014...	6 KB

### 2) 'Unprocessed' queue:

Identifier	Company	Person	User Level	Updated
FNSST-117732: palvelutiedote / service notification				01.03.2014 23:46
FNSST-117734: Telle on avattu Palvelupynto 1057620. 000000001057620				01.03.2014 23:46
FNSST-117735: Telle on avattu Palvelupynto 1057698. 000000001057698				01.03.2014 23:46
FNSST-117736: Palvelupyntonne 1057620 on ratkaistu. 000000001057620				01.03.2014 23:46
FNSST-117737: Palvelupyntonne 1057698 on ratkaistu. 000000001057698				01.03.2014 23:46
FNSST-117743: reports			Responsible User	02.03.2014 17:57
FNSST-117747: INC0314455 cannot use teamviewer version 9			Basic User	03.03.2014 05:46
FNSST-117758: TLA-Mobile WLAN issues			Basic User	03.03.2014 09:08
FNSST-117759: FW: VPN user for Levi			Main POC Contact	03.03.2014 09:09
FNSST-117760: No one can login to VPN Junos Puls in Sweden all is getting wrong credentials when they try.			Basic User	03.03.2014 09:10
FNSST-117762: RE: No one can login to VPN Junos Puls in Sweden all is getting wrong credentials when they try.			Responsible User	03.03.2014 09:13
FNSST-117763: VS: Yhteyks Lync-palvelimelle ei toimi!! (Forte #D:FNSST-117751#)				03.03.2014 09:22
FNSST-117764: VS: Yhteyks Lync-palvelimelle ei toimi!! (Forte #D:FNSST-117751#)				03.03.2014 09:23
FNSST-117765: VS: Yhteyks Lync-palvelimelle ei toimi!! (Forte #D:FNSST-117751#)				03.03.2014 09:30
FNSST-117766: FW: RTG-lahitteet eivät kulje			Responsible User	03.03.2014 09:31
FNSST-117767: Banglanki s8e2aite vpn			Responsible User	03.03.2014 09:32

### 3) 'Unprocessed Events' queue:

Event	Device	Device SLA	Severity	Device priority	ProbableCause	Management URL	Status	Created #
1.	Oyj-FL-DC-WLAN-Kiv_master-MNSWLAN128C36	01 Platinum	1. High - Prevents Business	1. High	WLAN ACCESS POINT IS DOWN	https://10.6.0.22:4343/	4. In use	03.03.2014 05:33
2.	Oyj-FL-Dula-TDCMPLS10	05 Silver 2	1. High - Prevents Business	1. High	DEVICE HAS STOPPED RESPONDING TO POLLS		5. Returning	03.03.2014 06:13
3.	Oyj-FL-Monitoring-Poller	04 Silver	1. High - Prevents Business	3. Low	PROCESS IS DOWN		7. Disposed	03.03.2014 06:14
4.	Oyj-SE-Jakobsbergsgatan 22-TDCMPLS500	03 Gold	1. High - Prevents Business	3. Low	DEVICE HAS STOPPED RESPONDING TO POLLS		4. In use	03.03.2014 06:15
5.	Oyj-MNSAP105	03 Gold	1. High - Prevents Business	3. Low	WLAN ACCESS POINT IS DOWN	https://132.171.12.10:4343	4. In use	03.03.2014 08:32
6.	Oyj-FL-MNSAP105	03 Gold	1. High - Prevents Business	3. Low	WLAN ACCESS POINT IS DOWN	https://132.171.12.10:4343	4. In use	03.03.2014 08:32
7.	Oy-Ab-RO-Turda-MSSFW12RO	04 Silver	2. Medium - Causes harm to business	3. Low	MANAGEMENT AGENT LOST	https://1.200.200.160	5. Returning	03.03.2014 08:34
8.	Oyj-FL-Monitoring-Poller	04 Silver	1. High - Prevents Business	3. Low	DEVICE HAS STOPPED RESPONDING TO POLLS		7. Disposed	03.03.2014 08:46
9.	RU-KRASNOGORSK-MSSFW300CRO36-RU	01 Platinum	2. Medium - Causes harm to business	1. High	HIGH CPU UTILIZATION	https://172.29.177.1/	4. In use	03.03.2014 08:51
10.	KZ-Taraz-MSSVPH10CRO36-RU	01 Platinum	1. High - Prevents Business	3. Low	DEVICE HAS STOPPED RESPONDING TO POLLS	https://10.171.166.1	4. In use	03.03.2014 09:08
11.	Oy-Ab-RO-Turda-MSSFW12RO	04 Silver	2. Medium - Causes harm to business	3. Low	MANAGEMENT AGENT LOST	https://1.200.200.160	5. Returning	03.03.2014 09:10
12.	Oyj-KR-Daegu-MSSFW15I	05 Silver 2	2. Medium - Causes harm to business	3. Low	BANDWIDTH UTILIZATION WARNING			03.03.2014 09:20
13.	Oyj-KR-Daegu-MSSFW15I	05 Silver 2	2. Medium - Causes harm to business	3. Low	HIGH CPU UTILIZATION	https://1.100.158.114	4. In use	03.03.2014 09:32
14.	Oyj-US-Man-s027-SGW300C	01 Platinum	1. High - Prevents Business	3. Low	DEVICE HAS STOPPED RESPONDING TO POLLS	https://1.100.162.106	4. In use	03.03.2014 09:33

### 4) 'Pending' tickets

- 03. SD Tickets in Pending > 4 Days
- 04. Accepted Tickets > 5 hrs
- 05. Tickets with new e-mails
- Abandoned Tickets
- Account Managers
- Active Customers
- Amount of Tickets per SE - Quarter
- Amount of Tickets per SE - Year
- Amount of Tickets per Team - Quarter
- Check for SD Users
- Companies and Responsible Users
- Escalated to 3rd party

Ticket status	Identifier	Latest status change	Updated #
2b - Pending Customer	FNSST-120058: RMA: Continuous reboots of FGTS0B3G09624378	04.04.2014 08:56	04.04.2014 08:56
2b - Pending Customer	FNSST-119147: Monitoring Event for: Oyj-AE-s124-MSSFW10CI	03.04.2014 10:03	10.04.2014 14:49
2b - Pending Customer	FNSST-120166: VL: Timantiset, Finngrid Yritysverkko, Vantaa Jumbon myymälä	11.04.2014 00:02	11.04.2014 00:02
2b - Pending Customer	FNSST-120808: Huotokatkotja palvelimilla vkt17	11.04.2014 11:20	11.04.2014 11:20
2b - Pending Customer	FNSST-120417: VPN kirjautumisongelma	11.04.2014 15:42	11.04.2014 15:42
2b - Pending Customer	FNSST-120807: Pseabay site temporarily problems	11.04.2014 17:07	11.04.2014 17:07
2b - Pending Customer	FNSST-120081: allow SMTP Lukko -> LAN	14.04.2014 09:00	14.04.2014 09:00
2b - Pending Customer	FNSST-119939: Monitoring Event for: Oy Ab-RU-Moscow-SGW10	14.04.2014 09:27	14.04.2014 09:27
2b - Pending Customer	FNSST-120638: Monitoring Event for: Oyj-RS-MNSAP135	14.04.2014 09:30	14.04.2014 09:30
2b - Pending Customer	FNSST-120904: Monitoring Event for: International PCL-CN-BJS-Cargo-MSSFW15I	14.04.2014 09:42	14.04.2014 09:42
2b - Pending Customer	FNSST-119966: Juha-Matti Kyntäjän poisto yhteyshenkilöstä	14.04.2014 09:55	14.04.2014 09:55
2b - Pending Customer	FNSST-119712: Monitoring Event for: International PCL-FI-Town-MSSFW15I	14.04.2014 11:10	14.04.2014 11:10

### 5) 'Solving' tickets

- 01. Tickets to Close
- 02. SD Ticket in Solving > 3 days
- 03. SD Tickets in Pending > 4 Days
- 04. Accepted Tickets > 5 hrs
- 05. Tickets with new e-mails
- Abandoned Tickets
- Account Managers
- Active Customers

Ticket status	Identifier	Latest status change	Updated #
2a - Solving	FNSST-120169: Yhteyshenkilöiden vaihtuusalmaukset / Winnova	07.04.2014 21:47	07.04.2014 21:47
2a - Solving	FNSST-120173: FW: Valtuutuslomake PPSHP	07.04.2014 21:47	07.04.2014 21:47
2a - Solving	FNSST-117537: SSLVPN Sähköille	03.04.2014 15:39	14.04.2014 14:40
2a - Solving	FNSST-121061: POC	15.04.2014 09:57	16.04.2014 08:37
2a - Solving	FNSST-120644: Monitoring Event for: Oyj-IN-MSSFW10I	14.04.2014 13:36	16.04.2014 15:19
2a - Solving	FNSST-119304: Palvelumuutoksia	25.03.2014 12:28	16.04.2014 21:29

### 6) 'Closed' tickets

505.	Change	FNSST-117364: Incident INC0311308 -- comments added	24.02.2014 09:36	01. Platinum	Normal	4 - Closed
506.	Information	FNSST-117532: PW81814 - Maintenance Notice	26.02.2014 13:42	01. Platinum	Normal	4 - Closed
507.	Incident	FNSST-119206: INC0320992 Not able to login into VPN	24.03.2014 16:20	01. Platinum	Normal	4 - Closed
508.	Information	FNSST-120709: Sähkökatko pitäjännäen laitesalissa 12.4.2014	10.04.2014 16:06	01. Platinum	Normal	4 - Closed
509.	Incident	FNSST-117699: Monitoring Event for: Oyj-NO-Kristiansand-TDCMPLS4	28.02.2014 17:58	04. Silver	Normal	4 - Closed
510.	Change	FNSST-118735: PW82132 - Maintenance Notice // ##134367##	17.03.2014 23:01	04. Silver	Normal	4 - Closed
511.	Incident	FNSST-120292: Monitoring Event for: Oyj-MK-Stoppe-MSSVPH10CI	07.04.2014 19:08	04. Silver	Normal	4 - Closed
512.	Incident	FNSST-120293: Monitoring Event for: Oyj-PL-MNSAP125	07.04.2014 19:12	04. Silver	Normal	4 - Closed
513.	Incident	FNSST-120302: Monitoring Event for: Oyj-JA-Kiev-MSSVPH10CI	07.04.2014 19:41	04. Silver	Normal	4 - Closed
514.	Change	FNSST-116539: FW: LSKT: vpn tunnuksat	14.03.2014 08:05		Normal	4 - Closed
515.	Change	FNSST-120097: Snapshotit kahdelta palvelimelta ma 7.4.2014 klo 11:00	03.04.2014 23:06		Normal	4 - Closed

### 7) Out of SLA tickets

<b>Ticket information</b>	
Type (static)	2a - Service Request
Ticket type	Change
Link to this ticket	Link to this ticket
<b>Ticket status</b>	
First Pass Resolution	3 - Resolved
Latest status change	Yes
Region	15.04.2014 15:20
Service Group	Europe
Service	Network Security Services
	Security Gateway
<b>Priorization</b>	
Impact	3 Low - No significant business impact
Urgency	3 Low
<b>Priority information</b>	
Priority	11 CHAP105
SLA Attribute	01. Platinum - Service Hours 24/5
Response Deadline	15.04.2014 15:09
Priority Class	Normal
<b>Forti Statistics</b>	
Forti SLA Deadline	15.04.2014 15:09
Response date	15.04.2014 15:19
Responded Within SLA	No
Forti SLO Deadline	15.04.2014 15:09/15.04.2014 15:09
Resolution date	15.04.2014 15:20
Resolved Within SLO	Yes
Include in SLA statistics	Yes

## Appendix 6. SD Daily Tasks

'CLOSED' Tickets:

- 1) Do not close tickets yourself!
- 2) If 'Closed' ticket appears in your queue with unread e-mail message:
  - And, no further actions are required from our side, then open the ticket, read the message and close it by saving.
  - And, further actions are required from our side, immediately create a new ticket including all the relevant information in the 'Internal Comments' field, especially the reference number of the 'Closed' ticket, e.g.: 'For additional info, refer to the closed ticket: FNSST - 55555'

'PENDIGN' Tickets:

- 1) Put ticket in 'Pending' status if you need to wait for a customer's response or for a appointed date of any change.
- 2) Every day check '03 - Service Desk Tickets Pending for over 2 days' queue and update your 'Pending' tickets.
- 3) If customer does not respond to your queries 3 times, call the customer to clarify the situation. If you still cannot reach the customer over the phone:
  - Send 'Ticket Closing' notification and change ticket's status to 'Resolved'
  - Update 'Resolution' field and 'Internal comments' field with the notification: 'Ticket Closing' message has been sent to the customer'.

NOTE: if you are dealing with 'RMA', 'Termination', 'Delivery', 'Medium / Major' change tickets, request updates approximately every 5 days until the ticket can be resolved (subject to further discussions and alterations).

'OUT OF SLA' ('SOLVING') tickets:

Every day check your tickets and make sure that neither of them is being solved for more than 5 days! If you notice that the deadline is getting close, immediately ask for help from your senior colleagues!

'ACCEPTED' > 5 hrs & 'Unprocessed View' queue:

- 1) Make sure that 'Unprocessed' queue is always empty! As soon as the ticket arrives, process it and change its status to 'Accepted'
- 2) Make sure that any ticket, which has been already accepted will not stay more than 8 hours in 'Accepted' status. Try to start solving the ticket within 8 hours.

#### 'P1' Tickets:

Put Impact and Urgency of the ticket to 'High' under the following conditions:

- 1) Customer informs us that their Business Critical site / connection / service/ application does not function properly irrespective whether it is 'Incident' or 'Service Request' (subject to discussion).
- 2) Customer explicitly specifies that this is an 'URGENT' matter either via phone or in the e-mail

NOTE: ASAP does not mean 'URGENT'!

#### 'NOTIFICATIONS'

If you receive the ticket where customer schedules any changes for the future:

- 1) Accept the ticket and most importantly put YOURSELF as a 'Support person'
- 2) Inform the customer that we will be ready for the change at the appointed date and time, and change ticket's status to 'Pending'! Remember not to keep the ticket in 'Accepted' status till the actual change!
- 3) Create Outlook notification and send it to [sd\\_team@casecompany.com](mailto:sd_team@casecompany.com)

NOTE: whoever happens to be on the shift at the Time of the Change, must take the ticket under his/her name and complete it, if the person who originally accepted the ticket is not available (e.g. sick leave, different shift, etc.).

#### 'TELEPHONE CALLS'

Every member of SD should take equal amount of incoming calls! (subject to availability)

#### 'EVENTS'

- 1) At least every 30 minutes check 'Unprocessed Events' queue
- 2) Create a ticket out of the event if the corresponding device is not available for more than 1 hour (subject for discussion)
- 3) As soon as the ticket is created, ask the customer to check the status of the device.
- 4) While you are waiting for the reply from a customer, put the ticket in 'Pending' status

#### 'REPORTS'

Person on the Night Shift must upload 'Traffic and Security Analysis - Monthly Reports' to corresponding customers' folders in the '24-portal' of the case company.

'BACKUPS'

Person on the Night Shift must take backups on Thursday!

'PROJECTS'

Every member of SD should make adequate contribution by taking active part in ongoing projects!

'ABANDONED' tickets:

If abandoned ticket appears in the common queue:

- And, no further actions are required from our side, then open the ticket, read the message and abandon it by saving.
- And, further actions are required from our side, immediately create a new ticket including all the relevant information.