Title of Thesis:
E-Banking security and organisational changes.
An action research study.

Thesis submitted in accordance with the requirements of the University of Liverpool for the degree of Doctor of Business Administration by Steinar Birkeland.

15 August 2015.

Table of Contents:

List of Figures:

List of Tables:

Declaration:

I declare that that no portion of the work referred to in the thesis has been submitted in support of an application for another degree or qualification of this or any other university alternatively, other institute of learning.

Copyright statement:

1. The author of this thesis (including any appendices and/or schedules to this thesis) owns certain copyright or related rights in it (the "Copyright") and s/he has given The University of Liverpool certain rights to use such Copyright, including for administrative purposes.

2. Copies of this thesis, either in full or in extracts and whether in hard or electronic copy, may be made only in accordance with the Copyright, Designs and Patents Act 1988 (as amended) and regulations issued under it or, where appropriate, in accordance with licensing agreements which the University has from time to time. This page must form part of any such copies made.

3. The ownership of certain Copyright, patents, designs, trademarks and other intellectual property (the "Intellectual Property") and any reproductions of copyright works in the thesis, for example graphs and tables ("Reproductions"), which may be described in this thesis, may not be owned by the author and may be owned by third parties. Such Intellectual Property and Reproductions cannot and must not be made available for use without the prior written permission of the owner(s) of the relevant Intellectual Property and/or Reproductions.

4. Further information on the conditions under which disclosure, publication and commercialisation of this thesis, the Copyright and any Intellectual Property and/or Reproductions described in it may take place is available in the University IP Policy in any relevant Thesis restriction declarations deposited in the University Library, The University Library's regulations.

1. <u>Abstract:</u>

The thesis considers customer security in a major European bank Bank X. The action research focus is to strengthen the processes and the overall solution for online Bank customers which experience a significant growth and increase in use.

There seem to be a common misperception between the internal staff of the bank and its customers regarding what security is, and the research considers several new security situations in the banking business. Moving from branch-oriented business to a digital orientation within the time space of just a few years has challenged banks to create new solutions for their customers. Such solutions must be secure, but technical security need separation from human security since new approaches as for example social engineering easily can be a source for fraud and losses for customers in a modern digital bank.

This thesis uses action research by interviewing leaders and team members in one security team. The internal researcher role also introduce proposals and suggestions to the team during the research, which locate the action. A connection between stakeholders' security definitions, re-organisations and the end solutions is important to understand, to improve the situation. Findings reveal that internal communications have an external customer's communications effect and that re-organisational tasks should focus to adjust the external factors, not only internal benefits. Re-organisational planning does not increase customer security instantly, but some participants can see long-term benefits. The problem is, however, that the long-term world-view changes continuously, and without adjustments organisations depending on cyber security fall behind in the new, but ongoing battle between usability vs security and cost.

A modern digital bank should no longer act as a traditional bank, but more as an IT company. This claim opens the way for new ideas and solutions, but blending the banking business and the computer industry can be challenging due to the professional distance between the groups. Future re-organisations should therefore aim for cross-divisional collaboration, increasing communication internally and opening routes for a dualistic contact with customers whereby information and awareness campaigns can be just as effective as technical and physical firewalls. The computer and banking industries are now working towards a remote market with a distance to the online-customers, and while the computer industry has experience to perform business with less customer contact, the banks have now also moved from close contact to digital contact. For this reason, modern banks must think differently and understand what the business is and how to secure it, but never forget the major resource and security problem – the human being.

2. <u>Acknowledgements:</u>

Support from my family, friends and my employer has been essential to enabling me to progress all the way through this DBA programme. I would like to thank my wife, Catharina, for being patient and supportive to a man heavily occupied in schoolwork during evenings and weekends for many years. My children Susanne, Andreas and Henrik have been spending less time with their father than desirable, which can be an unfortunate situation, but they have understood the purpose. My other family and friends have been available when needed, to have a chat or just bring my thoughts into other fields of interest.

The actual work with this thesis has taken place under the excellent guidance of my supervisor, Dr Robin Luo, and his support has been essential in enabling me to complete this research. Dr Luo's advice during the research process deserves a special notice and I would like to thank him very much for this substantial effort. I would also like to say thank you to my second supervisor, Dr Paul Ellwood for his feedback and support during the final stage of the write-up and his critical review of the material. His contribution resulted in several important improvements and increased the overall quality of the thesis and learning.

In addition, I would like to say thank you to The University of Liverpool, and to all the tutors, staff and other supervisors that have contributed to making this research and thesis possible. Thank you all!

3. **Introduction of the study:**

The overall focus of this thesis is to determine how a major bank, Bank X, can improve customer security in the new world of digital banking. The sub-focus, which is important to the conclusions of the thesis, is how internal re-organisations in the AFAC (Authentication and Financial Anti-Crime) security team can improve customer security. The research, therefore, examines in combination security and organisational changes. When focusing on security from the business side the thesis eschews consideration of technical discussions and solutions to investigate closely how the human factor plays an important role in the technical world of online banking business. Security management within Bank X is extensive and involves additional teams such as IT Operation, IT security, IT security Architects, and board of Directors/leader group. International standards such as ISO 27002, Standard of Good Practice for Information Security and the Bank X internal Group Information Security Practice. Application owners have a massive responsibility for the security within Bank X and the ability to relate the application owner role, application development and security standards with business risk evaluation and customers' needs and usability is a major challenge. External stakeholders as vendors of security applications, government and legal, domestic and international are other examples of challenges and contributors to banking security.

This research is also a good model for future quantitative studies with an objective attention to the particular situation, aiming to generate improvements to the global situation and the AFAC team.

Bank X is a complex organisation, and its financial strength results from several mergers and acquisitions. The overarching global perspective in the business also depends on local security initiatives in each country, with the AFAC team having responsibility for planning all security solutions within the global market. A key challenge facing the team is managing systems and people across many cultures, each with different perceptions of what a good and secure modern digital bank is. This issue of cultural difference also affects this research since the research participants have different backgrounds and perceptions informed by their own culture and systems. This has the advantage, however, of meaning that the research is a good opportunity to capture global opinions and to evaluate the customers within the same global perspective. All research is therefore concluding global situations, learning and development and local adjustments are circumstances each country must adjust from internal considerations.

The research focus is from the customers' perspective, which also challenges security vs usability solutions. Important challenges are the rapidly expanding use of the Internet and online banking, in particular the trend towards new multi-channel needs for the customers. The traditional banking security experience a replacement by a new attention to smart-phones, tablets, laptops, and other portable devices with a potentially future connection to an online bank or companies providing the customers with payment, digital signing or authentication services.

To increase its focus to the new situation, the bank has performed several re-organisations and attempted to merge online solutions for retail banking with its wholesale and business arms. This requires a different and improved holistic perspective and the scope of the research originates from these changes. The particular organisational change where the phenomena exist is a result where managers from different teams, reassigning to lead several smaller teams with different focuses under the same umbrella of Authentication and Financial Anti-Crime.

The change was a top-down exercise, kept strictly confidential from all team-members until approximately one month before start-up date for the new solution, due to normal Bank X change practise. Few or no tasks where organised prior to the start of the new solution, which has been challenging for the different teams and individuals. The first impression of the staff feedback during the interviews regarding the change and the new functionality, however, was that it was desirable and a change that all persons involved wanted and had asked for. Another impression at the early stage was that Bank X was an open organisation, without any typical cybernetic systems behaviour or common procedures, from the definition of Stacey (2011, pp.66), where self-regulating, negative feedback or equilibrium can exist. The research process continuously evaluate this impression by the researcher.

The staff are very qualified persons, all with higher education within business, leadership, economics or IT technical fields. Leaders have been employed in the bank for several years and are well qualified 'insiders', possessing massive knowledge about the organisation. This can be beneficial, but possibly, also a drawback, as previous assumptions can prevent development and effective organisational change if the willingness or capacity for change occurs in a highly biased self>other placement environment, (Hilbert, 2012, pp. 223)

Several issues needs close consideration due to the many organisational changes and a high level of turnover within the teams. The turnover is not people emerging from the bank, but as internal replacements, due to new positions and openings within the organisation. These

turnovers have a potential negative effect because of poor hand-over processes of products and a lack of continuity.

When introducing the recent change, the research scope for this thesis came up as a wish from the managers of AFAC (Authentication and Financial Anti-Crime). The research initial aim was to analyse the change process and detect needs for adjustments, improvements and other factors, which can have negative effect on the focus of creating a secure Multi-Channel Bank, which attracts customers with its digital solutions, with the organisational change as a trigger for the phenomena description.

The scope origin and develop from the initial thesis proposal and the researcher's role ensures good possibilities to encourage interview candidates to contribute. The thesis proposal design was in collaboration with the managers from AFAC and the reason was to ensure that the attention focus were on the human factor as the most important element for a successful organisational change, effective on a long-term basis. The researcher's role is as an insider, being a member of the AFAC team. The researcher, however, has only been an employee in this role for a short time and therefore it is still possible to perform the research as an insider researcher with a minimum of personal biases, which is essential to the credibility and validity of the thesis.

Investigate any impact of organisational changes and further determine the interaction between banking security from the mobile/online perspective and the modern customer using the new services was necessary to refine. This focus develop further to main fields of interest, but the compromising elements security vs usability in the development of a modern online bank forms the core research element. Security vs usability can be contradictive and need connections to support each other rather as conflicting elements or impediments for the customers.

3.1 The study.

Action research is effective to determine, over time, what the situation is, find and define a problem and further improve the situation. This thesis action is taking place within the AFAC team and it's perception of security for e-banking. The detection of the scope together with the managers of the team also gave indications and format for the literature search and interviews. Interviews of 15 AFAC team members using semi-structural format is the key information from BankX. Action research in this thesis therefore take place where the AFAC team members explain their views and perspectives of the phenomenon, *Organisational changes in AFAC and how this have effect on customer security,* to learn how the past and the

present affect the future and Bank X's strategies and changes. This phenomenon also forms the learning cycle and the action research stages, with the definition of main areas of interests as core elements connected to the phenomenon. The interviews also gave input to the thesis in the form of several suggestions and proposals for improvement, which is brought back into the organisation during the action research period.

This study concerns how a major bank can increase customer security through internal re-organisations, but also discuss that re-organisations without focusing on customer contact and communication will not have any direct effect. The long-term effect is however expected to be successful, but a question can be if the changes are optimal due to the increasingly speed of changes in the market.

A security team in a major European bank has one task – to secure the customers assets and protect the overall business, which now mainly acts as a digital, online organisation. There are still branches, but these are decreasing in number and the trend is clearly towards an increasing focus on e banking as the main channel, (Bank X, internal research, 2015). This trend is significant and a source for near game changing adjustments and a reason for the interest of performing a research of how Bank X can adjust for the future. Changing from physical branches to mobile solutions also changes the security aspect and to be successful in future banking should security vs usability be key development areas. It seems to be the 'normal' that the AFAC security team tends to focus on technical solutions rather than the human factor when re-organisations are in planning stages. 'How can we put together a good team finding the best technical solutions for the future'- is potentially the overarching idea and this idea tends to construct 'walls' between security, IT and banking business teams. These walls generate silo-thinking and decrease cross-divisional collaboration and innovation and even if the technical solutions can be good, there is a lack of internal overview in Bank X which prevents re-organisations developing a focus on the customer as a part of the security, not only a user of a solution.

3.1.1 Information about the results.

Important statements from team members pointing at lack of information and influence during the re-organisation and lack of mandate to have sufficient impact on the technical security solutions bring forward valuable information of the AFAC team and BankX practices. Early impressions from the interviews and literature is that attention to customer focus should generate approaches for research differently than today. The leaders can be more satisfied with the way the organisational changes performs in the AFAC team and are less interesting

in having the team members influencing the strategic choices. The reasons can be several, but 'tradition' is perhaps the most interesting, demonstrating that a culture only develop itself from the inside, where willingness to change is something the leaders need to handle, not only the employees. Neither leaders nor employees forward customer communication as the most important element for success, but there are indications pointing at such effort as to some level effective. However is there less connection between the internal organisation and how this can improve the security directly. This situation is about to change and recent activities in the AFAC team have strengthened the transaction screening, but there is a direct connection to incidents and market trends. It is interesting to notice that the re-organisation this thesis evaluate also is a direct consequence of an incident, which makes the impression of change activities to be re-active, not pro-active.

3.2 Background and the importance of the study:

Initially is the interest and importance of this study the new situation, escalating from a maturing e-business setting where try and fail methods have resulted in monolithic software, where add-on replaces the previous. This can be particularly important in e-banking where the increasing use of mobile devises the last 2-3 years are resulting in new problems. This is not only valid for e-banking, but probably for all modern business, becoming more and more dependent on technology. Technology is also a matter of the people using it and investigating how the users want the new situation to be will be just as important as the situation itself.

3.2.1 The Bank, the team and the researcher.

The company, which is the focus of this research, is one of the Europe's largest banks, considered systemically important from a world financial perspective. (GSIFI – Global System Important Financial Institution). The research examines one particular phenomenon within a global team: Authentication and Financial Anti-Crime, (AFAC), which in turn consists of several minor teams with a common goal; to secure and maintain solutions related to all forms for banking security. The sub-teams are Authentication and Online Fraud Prevention, Anti Money Laundering Solutions and Authentication and Financial Anti-Crime Operations. The AFAC team operates from Scandinavia and the Baltic countries and the team-members and all leaders are located in this region.

The Researcher has a position as a Global Product and Process Manager in the Authentication and Online Fraud Prevention team and is responsible for the Norwegian authentication solutions.

3.3 Areas of interest and key constructs.

3.3.1 Authentication and security in e-banking.

Logging into an online bank in Norway involves the use of strong online authentication methods and BankID solutions, with a third-party solution performing a secure check of the users' credentials. Strong authentication is for example in Norway per definition a confirmation of a person's identification in two separate and independent channels, combining something the user have, (hardware device, mobile), the user are, (biometrics) and the user knows, (username password). All banks can issue BankID access, (Norwegian identification solution), but only after physical identification of the users, which needs a passport to complete a 'know your customer' process. When the user is accepted, he/she can use their BankID in all banks' and other governmental/private web-solutions where BankID exists as the authentication solution. Credit card payment and document signing are other options. The considerations of the Bank X online security solutions concludes the authentication with BankID to be safe technically, but problems occur due to illegal use or by ID theft or fraud committed by the customer. (Bank X, internal research, 2015). A problem is also the high number of authentication solutions within the bank, which have less security, but are more convenient for the customers.

3.3.2 Potential threats.

Instant payment solutions in a global perspective can increase fraudulent behaviour significantly because of uncertainties of the level of security. Customers want to perform purchases and payments from all sorts of devices and the new trend where mobile phones and tablets are the preferred device for accessing banking services increases the requirements for security and awareness, (Bank X, internal research, 2015). The new and convenient instant payment solutions challenges security because of its ease of use and force the banking industry to develop new logon systems. Banks and security companies tend to place their faith with technical solutions, but customers seems to focus more on availability. The security the banking industry provides their online customers are potentially not in alignment with the needs and expectations in the market. To be actors in future banking the industry must change the internal culture and scope when aiming for new security solutions. The thesis is also novel in attempting to address a subject typically seen as a technical matter suited to quantitative methods through a qualitative approach that emphasises the role of humans in banking security.

3.3.3 BankX Values and their use.

BankX use company specific values actively in the day-to-day business. The values are One Bank X team; It is all about people and Great Customer Experiences and it is of interest to recognise if these are effective and are a source for strategy and planning, and as a consideration point for security for the AFAC team. This is also a particular area for literature research – to determine how the bank values affect the security planning.

3.4 Methodology and progress:

Reaching the research goals includes social studies to aim for the inductive with a post-modern philosophy and phenomenology, which can detect the present situation, aiming for the future solutions and suggestions. This methodology need however support from the pragmatic and positivistic mind-set to add the deductive element to the discussion, looking at the past. With this combination, the thesis considers the "what" moving forwards to the "how" in a complete philosophical study where the focus is on people. This methodology is a result of a long-term development of the study, over 2,5 years and the need to create an exploratory study, where a continuous changing organisation requires a similar research format.

3.5 Thesis structure.

The overall rhetorical structure of the research manuscript follows Moustakas' (1994) model with an introduction and statement of the topic followed by a review of relevant literature. Next is a conceptual framework of the model, a description of the methodology and data presentation, resulting in a summary, including implications and potential outcomes. Some adjustments were necessary to be able to describe previous research and the theory pertaining to the topic. The Polkinghorne' s (1989) reporting model, inform about the structure by elements of "...*understand better what it is like for someone to experience that*". (Polkinghorne, 1989, pp 46) in (Cresswell, 2007, pp. 188).

4. <u>Critical Literature Review:</u>

<u>4.1 Introduction:</u>

A critical literature review, (CLR) is the format used within this thesis. This format serves to bring current learning and literature into the framing of the problem statement. The CLR considers leadership, organisational development and change processes, in relation to security problems and how organisational changes can affect e Banking. Areas' of interest organise the literature search and connect the thesis research and the analysis.

<u>4.2 The Literature review:</u>

The literature review demonstrate that organisational changes have an effect on technical and human issues, both internal and external (customers/users) and if the bank fails in its changes and leadership methods, it can fail security wise as well. The scope in this CLR is also to search for reasons for a re-organisation and elements that need to be included in organisational strategy development, as well as to uncover the reasons behind changes and how such can become a success or a failure.

<u>4.2.1 Literature search methods:</u>

The literature search followed a systematic approach with a set of areas of specific interest as guidelines to detect the appropriate literature. The four areas are:

- How bank values affects security planning:
- Concerns which can affect re-organisational planning:
- Changes facing members of local and global teams:
- Security improvement for customers:

There are several sub-fields for the literature search that fall under these main categories. Examples of these are; leadership styles, organisational changes, cultural and ethical reasons for changes, motivational factors, virtual team development and learning, resistance and unwillingness in organisations, cognitive biases, managerial errors and social dynamics, security in e-banking services, customer needs and understanding of e-banking security and services and connect customer needs to organisation impressions. All of these sub-fields will have impact on any changes or in any organisations, but the four main areas of interest form the core literature search with links to the sub-fields and the information such sub-fields provide to the total analysis of the material. The literature analysis is therefore considering all material as either core information or as sub-information with a potential effect on the outcome and evaluation of the problem.

4.3 Research Scope:

The online security situation in Bank X is complex and important due to the high value placed on customer rights and needs in combination with national and international legislation. Recent reorganisation affecting the AFAC team (Authentication and financial Anti-Crime) as this team now having the main responsibility for security issues with a business perspective in addition to develop technical elements. The literature search displays how reorganisations can spring from ideas and assumptions together with strategic thinking, aiming for an overall solution, which places the customer needs in focus.

4.3.1 How bank values affect security planning:

To use organisational visions and missions actively to condition the leaders' mind-sets towards the overall company values is one potential approach, but there is also a need to blend leaders' personal behaviour and leadership styles with the current culture to achieve continuous innovation routines. Leadership routines are essential in any changes and Bank X employees have experienced several organisational changes across many teams, raising the issue of how to increase security, usability and customer friendly solutions by such changes. Crevani, et.al (2010) in Raelin (2012) point at detaching leadership from personality to focus on social interaction and changes within an organisation. Leadership-as-practice, (LAP), is a term in use, which includes moral, emotions and relational aspects, beyond rationale, objective and technical terms. (Carroll et.al. 2008). Leadership in activities are more important due to the authors' than the leader and its person and the 'where', 'how' and 'why' takes the focus away from the'who'. (Raelin, 2012). Organisational changes through leaderful development under the flag of democratic traditions are contradictive to the 'normal' in Bank X, where the leaders' forms the changes without the employees' involvement. Since leaders make changes as top-down solutions, the social perspective and communication of the changes is important for their results. Implementing changes from top management without a willingness to include a bottom-up approach carries a degree of risk. Approaching a change without employee involvement can potentially create unwillingness within the organisation and team members to involve in future strategy development. Leaders need to be explicit about values during a change process, which includes social skills to ensure emotional contents are in relation to implicit norms and values. Heifetz (1998, pp. 14) points out that personal and professional behaviour is important for leaders when planning for new solutions. This leads to increased understanding of the appropriate communication approaches to use in the planning phase of organisational changes. The leaders' background can have impact on

how the environment shapes, Avshalom, and Rachman-Moore (2004) claim that a policy maker tends to favour formalities, where academics blend formal and informal methods. An ethical code of conduct as an integral part of work environment development is a recent trend in Europe, USA and Australia and this phenomenon is potentially an outcome of changes in leadership behaviour and education among leaders. (Adams et al., 2001; Kaye, 1992; Post et al., 2002; Reynolds, 2000; Somers, 2001). The methodology is a managerial practice that consider internal and external stakeholders in a good way to secure environmental development on common understanding, which shapes from leadership behaviour. (Paine, 1996, pp. 477–478) with (Murphy, 1988) in Avshalom and Rachman-Moore (2004). Leadership style will also change during the shifting process of the team. This can lead team-members to become followers or passive subordinates depending on the style. Although Raelin argues that leaders create commitment and continuity of leadership by concurrency, collective focus, collaborative and passionate behaviour (Raelin 2003, pp.14), this can be difficult in a changing environment. Leaders and followers replace ideas depending on the counterpart, which decreases the possibilities of learning the big picture of security. This can in turn affect the e-banking solutions and customer focus, because the big picture is changing from within, by the change of leaders and followers. This will be important to evaluate, because while assumptions can easily be that it is only customers and the market that changes. Organisational values needs foundation to the leaders' mind-set and become a tool for changes, not only empty words. Leaders can also use values to encourage employees to participate in any organisational development, but willingness and trust must be present to create in common. Can there be differences and traditions to trust employees' work tasks, but not participation in organisational strategy development?

There seems to be a gap in the research in respect to how internal circumstances create changed beliefs, politics and ideas in relation to modern e-banking organisations. The reason for this gap can be the rapid development of the mobile world of banking.

4.3.2 Organisational changes:

Internal trust and confidence of the team members' ability to perform is highly appreciated in AFAC. There is an aim to have SMWT's (self-managed work teams), but the reason behind this approach is important to determine. There is a major difference depending on if this practice is by purpose or by coincidence, where a virtual team situation creates SMWT as a necessity to perform. Proenca (2010) suggest that a well-functioning SMWT increase the chances of successful organisational development, but this also depends on how well aligned

the organisational objectives are with the individual motivational factors and social-technical approaches of the leaders. It is the researchers impression that the AFAC team is well connected, but Proenca (2010, pp.339) suggests that informal goals need to derive from informal groups where formal goals, which is measurable, hold the frames. It is also the researcher's impression that the virtual team situation can prevent this idea, even if video meetings, 2-4 weeks interval and physical meetings occur every 6-8 weeks. This can point at a problem with Proenca' s description of SMWT's if the teams are distant in location and culture. If Bank X and the AFAC team then try to have well functional virtual teams across countries and simultaneously attempt to bring together the employees with common missions and vision, goals and work methods, a failure can be the result.

The two-factor theory by Herzberg, (Herzberg, 1964, 1966, 2003), articulated in Hughes, Ginnet and Gurphy (2006, pp. 285), points at motivators and hygiene factors. Recognition of motivators as achievement, recognition, the work itself, responsibility, advancement and growth, should be the basis in any organisation but if virtual teams are the norm, then questions of how the leaders can ensure alignment with the employees' development and standpoints become appropriate. Participative behaviour by the leaders can generate increased understanding that every person has their own state of personal moral development. Such development also affects cultural, ethical and willingness circumstances, which again can be a basis for resistance to changes or organisational knowledge development. Related to overall security thinking, these elements can affect the results, caused by different cultural and moral attitudes. This potential circumstance can challenge managers and leaders to engage in moral development as explained by Kohlberg's six stages of Moral Development, (Trevino, 1986). This model open for considerations at the preconventional level as obedience and punishment orientation and instrumental purpose and exchange. The conventional level, where interpersonal accord, conformity and mutual expectation is sources for new models to the final level, the principled, where social contracting and individual rights together with universal ethical principles, shapes and incorporates into the organisation, (Trevino, 1986). As Bank X's business strategy is to become a multi-channel bank, this will be a substantial factor to organise for a wider scope. The scope needs a focus on security with the business approach where customer behaviour is the measure. This means that business rules are the same across channels, all interfaces should be universal, and it should be possible for the customers to achieve all services in all channels with a common support system. This was the scope for Woolwich Bank in the e-banking adoption and an argument for success in the research by Shah and Siddiqui (2006). It will be difficult for Bank X to gain such solutions because of the

split nature of solutions, and any re-organisation of the AFAC team needs to emphasize the issue of how to gain such common solutions from a common culture and organisation. Shah and Siddiqui (2006) fail to include security in their research and this could be a breach by the authors in the suggestion of multi-channel thinking. Security was not a major element within their research scope, but it will be difficult to perform research of e-banking solutions without blending in security as an important factor. It can be possible to ensure the security approach using common solutions without a core system, but as Shah and Siddiqui (2006) explain, is the majority of the literature found of strategic nature. The same authors also recognise a gap in the literature concerning CSF (critical success factor) studies, which is essential in e-banking. This can be important and if the leaders of AFAC can focus on a common basis for security, the team members can develop similar security systems from analyses and customer measure software, detection systems, etc. This then becomes a social exercise where re-organisations spring from a combination of top-down and bottom-up methods aiming to build the organisation for the creation of an online security system, not building the security system for the creation of the organisation. This is where several authors fail to include the social factor, only considering technical and structural circumstances. Enos (2001), Turban et.al (2000), Regan, and Macaluso (2000) in Shah and Siddiqui (2006) are examples of this understanding.

Re-organisations with a top-down approach, as the latest change in AFAC was, are also a question of scope and motive. To be able to determine the scope of reorganisations during research one must visualise the idea behind them, but a question is whether such changes should include a bottom-up setting to ensure that internal knowledge moulded the outcome. This will be particularly important in an organisation where there are problems getting security ownership transferred into the complete business and culture and increasing the security of the bank's critical applications. Such applications can be the core business system, even if some applications can be outside the regular IT infrastructure. Chris Dunning, CEO of Staples, a major Global Supplier company, expresses this as a major challenge in terms of the protection of data and the banks intellectual properties (Johnson and Goetz, 2007), that will have an effect on the customers' impression of a secure bank. Johnson and Goetz (2007) also suggest that the empowering of security groups is pivotal to achieving organisational understanding of the importance of blending operational and security risks with business objectives. An important question is if the AFAC team should have such increased empowerment to veto possibilities or if this would challenge the balance between Bank X's business and security perspectives. The reporting should be different as well, introducing the

combined perspective into the top-level management. Focusing on business, security and operations also introduces an increasing need to understand that people and organisational culture is the key to a cross-divisional mind-set based on appropriate communication. The literature demonstrate that the changes Banks' experience, moving from traditional to e banking needs different attention and research. Social circumstances needs blending together with structural and technical research and practice, which also forms the idea for this thesis and its research.

4.3.3 Search for concerns, which can affect re-organisational planning:

When planning for organisational changes, leaders need to determine employees and customers' ethical circumstances globally to bring issues together in a common picture. Ethical circumstances can be problematic and arising from conditional bounded moral rationalities, but these rationalities can easily differ from region to region. Calton and Payne (2003). Since ethical values can be different across a global organisation, one important element can be to detect if personal ethical and moral values are in conflict with the company's statements or the team's objectives. This can also be a reason for leaders becoming altruistic in their attempt to satisfy team members, which again can affect security solutions negatively. Altruistic leaders, acting reflexively from individual values, engage in constantly improving any situation, but this does not necessarily give the best results (Trevino, 1986). *"The leaders honest motive should originate from a service oriented approach to the situation and be connected to a mediated relationship between self-transcendence and self-enhancement values, demonstrating and separating intensity and altruistic behaviour".* (Sosik, Jung, and Dinger 2009).

A major organisational change should emphasise social considerations and determine if the new situation is better capable of performing its business due to the customers and business' objectives. This can be in contrast with Bowman and Sing's (1993) claim reported in Quintero (2003, pp.21) that restructuring of an organisation generally is about making changes in the financial and/or organisational form. Through the reorganisation, the bank division responsible for security solutions, AFAC, must demonstrate the capability to be predictive for the customers' user acceptance of the login and web-solution technology. Agarwal et.al. (2009) explore several models for providing explanations and predictions of user acceptance and The Unified Theory of Acceptance and Use of Technology, UTAUT, is considered the most predictive, (Chau, 1996; Davis et al., 1989; Hu et al., 1999; Venkatesh et al., 2003). UTAUT is a combination of several models such as the theory of reasoned action (TRA); the

technology acceptance model (TAM); the motivational model (MM); the theory of planned behaviour (TPB); a model that combines the technology acceptance model and the theory of planned behaviour (C-TAM-TPB); a model of PC utilization (MPCU); an innovation diffusion theory (IDT); and a social cognitive theory (SCT), (Agarwal et.al. 2009). UTAUT is one example and performing an organisational change should include considerations of such models and become a source for potentially developing new understandings of how the end users are attracted to a bank's online services. This will shape an innovative attitude and increase the cognitive aspect of security to include social factors and end users' understanding within the AFAC team. Considerations towards constructs as performance and efforts expectancies, social influence and facilitating conditions will be a result of perceived usefulness, (Jahangir and Begum 2008), extrinsic motivation, job-fit, relative advantage and outcome expectations focus. Such constructs are essential to determine before selecting a model, for example within the frames of UTAUT, but are these theories sufficient or able to contribute to the development of the constructs? Also important in UTAUT are the effect of the perceived ease of use of the root constructs, their complexity subjective norms, social factors, images, perceived behavioural control, conditions facilitating and compatibility important in UTAUT (Agarwal et.al. 2009), and these should be a part of the AFAC' organisational planning and changes. It will be essential to recognise the reasons why these are important elements for increasing security in a bank and its services. The successful inclusion of such models depends on the security team's capability to absorb the extension of the mind-set of the team members and their capability to see security and trust building as a social exercise in addition to a technical one. The UTAUT models are not a part of the research itself and the thesis are not considering what model is correct. This combination or model use can be a source for further researches. In this literature search is the models appearing as potential tools for critical mind setting, and such models are not recognisable within AFAC or Bank X.

4.3.4 Motivational factors within the AFAC team:

Motivation for organisational change creates a need for inclusiveness and organisational learning for the team members to become more effective. Adult learning, andragogy, recognises self-direction, mutual resource acknowledgement readiness to learn by effective role models or leaders and learning by focusing on life, task or problem centred orientation. Additional will learning and motivation as sources for changes and development be dependent of good internal motivators as self-esteem, life quality, self-confidence and self-actualisation.

(Marquardt and Waddill (2004). Knowledge among the leaders of how to trigger motivators can therefore be essential when communication of changes, aiming to avoid resistance and hidden negative feelings occur. Then it can be possible to avoid mistrust of the motives for the change, even if it is necessary and initially positive for the team. Changing solutions by employee's participation will therefore have to be a consideration of action learning approaches, where the learning occur when action take place. Responsible experience can be a significant motivator, but as a part of the development of a plan which potentially can be a new implementation, depending on the continuous development. (Pedler, 1997, Revans, 1988) in (Marquardt and Waddill (2004). Bank X's many changes can lead to negative feelings and the reason can be the possibility that initial positivity can lead to a feeling of acceptance of failures during a change process, with explanations being interpreted as 'just another explanation' if repeated too many times.

Any organisational change that involves online banking needs measures from which top management can learn how the e-banking security status and strategies can develop. Tools, for example performing or introducing UTAUT models, self-declaration exercises, SWOT or cost/benefit analyses need incorporation at all levels of the bank, not only for the business, but also for the re-organisation itself. Such indicators can display the health of the team and its activities, generate additional reporting strategies and be tools for future changes. Such measures needs connection by action learning to the motivational factors and the organisation must understand why the tools can generate motivation by its results. Motivation within groups, communication, leadership and the organisation itself can generate an identity feeling where motivation origins from organisational identity as a simple for of social identity. (Haslam, 2001) in (Cornelissen, Haslam and Balmer, 2007).

Online banking is about making services available to customers, but the motivation is also a sense of convenience (for consumers) and cost-savings (for the banks). Lichstenstein and Williamson (2006) claim that convenience is the main motivator for consumers to use online services, but as this opportunity is available, all actors also must admit that it is not only about the change and about adoption of new technology. What is the motivator for the bank, if not convenience? If a solution is convenient for the bank, will it not necessarily be so for the users and changes for such reasons will generate a continuous exercise of learning and adjustments over time for customers and the organisation. This CLR suggest that all employees must change their attitude from being the experts towards a listening modus of learning, as much from customers experiences as from the technical competence gained from specific courses and activities.

4.3.5 Changes for members of the AFAC team:

The Bank X and the AFAC team operates both local and global, e.g. all members need to communicate with internal and global perspectives and realise that customer security needs separate solutions, depending on the location. This means that AFAC as a virtual team and the new world of online banking also makes customer communication virtual. Koskosas (2012) points out that good communication is such virtual teams is essential in security management procedures and communication of security goals must be trust generating. Inter-organisational trust within an e-commerce context is under evaluation in several studies, (Gefen et.al, 2003; Gefen and Straub, 2004; McKnight et.al. 2002) in Koskosas (2012), and an important element to be able to recognise changes and communicate the changes internally and externally from the overall Bank X' perspective. The virtual team aspect is in relation trust, found in studies by (Ridings et.al. 2002; Sarker et.al. 2003) in Koskosas (2012), claims virtual environments and trust are global challenges. It makes it complicated to educate, inform and communicate across the organisation as the local groups, through its virtual existence, experience slightly different cultures and ethical constrains from country to country. This also points to the need for cross-cultural communication, but Anawati and Craig (2006) note that such communication can decrease performance by its form and by the content, which creates a need to consider practical linguistic differences together with technical challenges, even if using English or other common language within the same organisation. Global virtual teams can also have a negative effect on behavioural adaptation (Anawati and Craig, 2006), and it can be difficult to ensure that learning, and knowledge development, are captured correctly. This creates a need to undertake organisational development by introducing complex adaptive thinking. If facilitating the local and global teams is appropriate, it can be an opportunity where possibilities are visualised. This can again create a "change from within" mentality, (Choi et.al. 2001), ensuring flexibility and cross-cultural approaches.

Managing virtual teams and organisational changes will be a practice of ensuring correct or intentional organisational or structural security focus, but from a brief introduction to the AFAC team in 2014 of the old Tuckman (1964) model, further presented in Raelin (2003), where forming, storming, norming and performing are the elements, there was no or little facilitating by the leaders during the first physical meeting after the latest change. The leaders' who attempt to use this model demonstrate that without engagement with any objective at all the stages, the result can be a discussion about a model, not actual security or customer focus through the model. Morale needs to be determined in the forming stage and a coaching leader style should guide the team towards storming, using active listening to detect

conflicts, and demonstrate concern and well-being for the employees. The leader should 'join' the team at the norming stage to ensure independency thinking, but still focusing on the process, (Raelin (2003, pp.106-107). A potential gap can be visible in the Tuckman model, and Raelin's interpretation of this, is the ability to use it in virtual teams. Building a team and introducing organisational changes using this model has become difficult within the AFAC team, but one reason can be a lack of monitoring of each step and performance levels, to align them with the objectives of the change. Virtual teams need boundaries but O'Neil (1999) display a concern of how to use models as the Tuckman model correct, creating the correct links within the teams'.

4.3.6 Trust generating activities in AFAC:

A global team structure also makes internal problems global and there are different practices worldwide regarding capturing customers' needs. Team members in one country can develop resistance and an unwillingness to participate in an overall strategy, claiming that the local circumstances do fit in with the global setting. Generating trust will be essential and leaders need trust from their staff to form the correct national and global strategies, but customers also need to demonstrate trust to the bank. Such trust is essential and customers need to be able to rely on any e-banking solution. With the rapid evolution of new mobile devices, smart-phones and applets, new requirements for ease of use lead to a potential breach in the alignment between the users and the product owners or providers. Ahenkora (2012) explain these gaps, but without addressing communication, perceived security (internal and external), and how to detect what the customers actually want or need. Detection of emerging trends is therefore a requirement, which needs to be included in any new organisational planning. Trends should be reasons for changes and the several various perspectives of interaction with customers to more effectively perform interaction in the market that Omariba et al. (2012) presents, will create good reasons for the organisational changes within the e-banking business. The trends within customers need for 24/7 banking services available everywhere, decreasing time-to-market for new solutions and renewal of complex back-office solutions can be opposing to security and privacy. These perspectives can result in a complete security framework, effectively demonstrating the worldview and the need to visualise such. Both of the above authors, (Omariba, et.al. 2012; Ahenkora, 2012) however, lack a focus on the human interaction between the customers and e-banking security teams. Although Koskosas (2012) clearly adds to the understanding of these issues by stating that understanding internal

culture in order to increase technical security is affordable, this author still does not focus directly on human security and customer culture.

Corporate customers are global and dependent on global solutions, but the national needs are still different. E-businesses, such as Online Banking is dependent on trust, from not only its customers and market, but also an overall impression that security is about increasing trust for all involved in operational activities in e-business. Trust must come from 'within', which supports the empowerment of a security/business team aiming to group all business under the trust-generating umbrella. Banking has experienced a major change in recent years, moving from merchants to online services and this is also an issue of moving trust from people to technology; but the people are still there, only with different assignments. A bank must ensure its e-business to secure all of Velmurugan (2009) six dimensions: confidentiality, integrity, availability, legitimate use, auditing and non-repudiation, and this is potentially affordable with a distance between the business' internal culture and its customers and external stakeholders. This means that the overall corporate security policy should be a management strategy to understand the causal nature of trust, internally and externally (Velmurugan, 2009). The risk of fraud requires an online bank-ensuring customer's identity, but customers also need to ensure the identity of the banking online service; but even if this is common knowledge, is the organisational attention dualistic as proposed. It should be obvious to all security employees that a bank needs to look into transactions, but this can also generate distrust from customers, who may start to perceive surveillance from banks and authorities as an unwanted activity. Building trust to protect customers is important, according to Velmurugan (2009), in addition to transparency of the technology and methods; and this is an issue of communication and knowledge development, across organisational, cultural and human borders of professionalism. However, the level of trust is not necessarily a connection to one dimension. The research by Lichstenstein and Williamson (2006) suggests that customers display significant distrust in respect to banks, but only considering distrust to the staff. For online banking, this was not as important, since the participants' highlighted convenience and ease of use. This study is from 2006 and there may since have been changes and challenges to this result, nonetheless, it is an interesting conclusion by Lichstenstein and Williamson (2006) that trust is less important with online solutions than with transactions in bank branches. A successful focus on the Internet, as a medium to communicate trust and security is in the researcher's opinion essential to achieve.

In the literature, there are currently different results about the use of security and trust as a means of potentially increasing the level of customers. If customers have the impression that

security and trust are superficial services this can give an impression that the issues 'just are there' and the bank misses the opportunity to attract customers by acting beyond what is understandable or interesting to its audience. The AFAC team should create information as well as solutions to demonstrate the bank's integrity and its concern with ensuring the safety for its customers. Agarwal et al. (2009) highlight the importance of this in changing the focus of customer attraction from creating new services to including a demonstration of security and trust generative information. For an organisational change to be successful in this context, one needs to create measures of what the customers and the employee's expectations are in respect to the change. Such expectations need to be the basis of the change and organisational planning, but it is the researcher's impression that customer communication was out of the scope for the recent change in the AFAC team due to the literature explanations by Agarwal et.al. (2009). If the organisational change is a result of a crisis or an incident there is also a need to investigate the elements of this that the organisation can learn from and act reflexively. Corbacioglu and Kapucu (2006) demonstrate that learning can originate from organisational, technical and cultural capacities as existing sub-factors to direct learning. These researchers mean that learning should come from organisation and coordination, informational infrastructure and the ability to learn from experience (Corbacioglu and Kapucu, 2006), and this is also an indication that employees should be part of a change which is a result from an incident, and such action can be a contributor to internal and external trust. The culture should demonstrate the ability to learn and adapt during response operations, but if the culture (employees) do not have any influence on the organisational change this learning would be lost.

A challenge in security groups is potentially a lack of designated staff with a scope to define and align trust and make this issue a part of the overall strategy for the team and the organisation. Shah and Siddiqui (2006) points out such measures for business purposes, but the development of technical solutions, customer measures and social changes will be important for management at all levels to learn the complete picture. The important element will be to generate understanding of the reasons for re-organisations from an ill-structured or wrong setting to a new model. In a complex and social context such reasons will, be subjective social constructs (Shah and Siddiqui, 2006). The business situation will be under continuous change, but considerations must be set if the solution is to change strategies or re-organise. The latter, in itself, does not guarantee success if the management fails to point at the correct reasons and elements to form a new strategy in addition to forming a new team.

4.3.7 Security improvement for customers:

Technical security as a solution is not within the scope of this thesis, but the ideas and thoughts behind the solutions are. Direct and 'live'fraud attempts are also important for Bank X's AFAC team. This includes anti-money-laundering checks, with the e-banking organisation creating continuously development of security needs. New threats, such as vulnerabilities to Trojans (computer virus) and other hacking methods appear as a global problem due to new technology and changes in people's habits and trends in device-replacement. This can create a need to discover and prevent new kinds of automated attacks, originating from new technology and new, devices that are more powerful. CAPTCHA's, an acronym for "Completely Automated Public Turing test to tell Computers and Humans Apart" (Li et.al 2010), is one solution, but an evaluation of the user friendliness of such tools is essential. From the Internal Bank X results in Norway there is an impression that authentication solutions are now safe, but this can only ever be a temporary state of affairs and will become invalid relatively quickly if updating of systems are not done by users. Personal ID theft seems to be an increasing problem, (internal reporting), which also is a reason for creating new solutions and information in addition to awareness campaigns etc. focused on e-bank customers and security staff. Security tools and systems must be logical for the users. Hertzum et al. (2004) quote Whitten and Tygar's (1999) definition of e-banking security systems as:

"Security-related software is usable if the people who are expected to use it -

1. Are reliably made aware of the security tasks they need to perform;
2. Are able to figure out how to successfully perform those tasks;
3. Don't make dangerous errors; and
4. Are sufficiently comfortable with the interface to continue using it."

This can create a need for evaluation of the total security both as integrated or independent solutions, resulting in an unpredictable security solution where the results vary. Hertzum et al. (2004) make a strong point of this, but a comprehensive and complex system can itself be its own worst enemy.

Phishing, Man in the middle, Man in the network, Trojans and fraud committed by family or friends (Hanacek et al. 2010) are all some of the most common security breaches, all with the common goal of gaining access to personal ID and passwords from the user (Fatima, 2011). A new challenge is the increasing use of smartphones and tablets, although the considerations by recent experiences of these are stating such devices as secure, (internal Bank X reporting), demonstrate vulnerabilities due to applications and sim-card attacks.

Methods such as hardware fingerprint captures, security detection scripts and filtering, encryption and biometrics are important within online banking, and a security teams' approaches to this will have an effect on the total user experience. General internal knowledge in Bank X claim that customers want to be able to log into their bank at all times and from all types of devices, but one question is if the bank should allow this or if internal and strict control is necessary at the existing level. Overlay services, (third party services using the bank systems), can for example be a threat to e-bank security because of lack of control of the third party solution. This is important to AFAC, because of the connections and conflict between the customers' ease of use and security. Usable security is important as the intention is to match principles and demands, *"against user knowledge and motivation",* Hertzum et al. (2004). Customer knowledge is the approach of creating an appropriate combination of automated services and instructions where the customers act secure by knowledge, which provides a deeper understanding, beyond checklists and static instructions (Hertzum et al. 2004). This is important, because new security products, e-banking and modern customers also need modern instructions, in the form of interactive software, chat or active help applications. It is interesting that Dourish and Redmiles (2002) separate theoretical and effective security, and a new concept of perceived security, which takes into account the users' subjective perception of the potential risks of using e-banking (Jih et al., 2005 in Hertzum et al., 2004). Perceived security can be in relation to perceived usefulness, which is also an element suffering from an internal/external miss-alignment. Re-organising for customer security purposes is only one scope in AFAC, and the Bank X in general. If this is true, all changes are apparently dualistic, where the external impression is to improve for the customers, but the real goal is to make a better business for themselves. AFAC's perception of customers' needs and requirements regarding e-banking solutions and security needs to inform the reorganisation from the bottom-up so that the perceived usefulness and security in the market actually form what AFAC and Bank X can offer. It is also important to compare appropriately to the bank itself and the bank's security and realise that technology alone is not sufficient for the users of e-banking services to have trust to the systems. Banking studies cited in Jahangir and Begum (2008) explain the importance of security and privacy for the acceptance of online banking (Hernandez and Mazzon, 2007; Chen and Barnes, 2007; Sathye, 1999; Hamlet and Strube, 2000; Tan and Teo, 2000; Polatoglu and Ekin, 2001; Black et al., 2002; Howcroft et al., 2002), while Roboff and Charles (1998) make it clear that although people's understanding of the security risks in e-banking is weak, some awareness is present.

A key element is that even when customers rate a bank's security as good, their confidence to the technology was weak (Howcroft et al., 2002, cited in Jahangir and Begum, 2008).

The AFAC team could determine methods to investigate security differently by including qualitative and quantitative elements into the decision-making processes. One method can be to introduce for example the Analytic Hierarchy Process (AHP), which is a multi-criteria decision-making tool using hierarchal methods, including goals, sub-goals, factors and alternatives as the multi criteria decision making tool, (MCDM) introduced by Saaty (1990) and discussed in Syamsuddin and Junseok (2009).

AHP creates distance from opinions and personal agendas through four steps in the decision making process:

- *"Structure the problem into hierarchy.*
- *Comparing and obtaining the judgment matrix.*
- *Local weights and consistency of comparisons.*
- *Aggregation of weights across various levels to obtain the final weights of alternatives"*

(Zahedi, 1986) in Syamsuddin, I. and Junseok, H. (2009).

Attracting customers to e-banking solutions can be an automatic process, and this is becoming a new trend in the market. Pointing at improved security can be one element in this process, but this seem not to be the situation in Norway. To attract customers to one particular e-bank is a competitive approach, potentially dependent on 'word-of-mouth', (WOM), which is an "*informal mode of communication between private parties concerning evaluation of goods and services*" (Sing, 1988, in Ahmad and Hasan, 2011). WOM consider more influential on customers' judgement of a solution than other written marketing approaches, and this is an element to consider when user-friendliness vs security is under evaluation. This means that customer loyalty, satisfaction and positive market reputations are dependent on the customers' level of "*satisfying accessibility, convenience, security, privacy, content, design, speed, fees and charges"* (Ahmad and Hasan, 2011) and needs consideration when security solutions are designed. This thesis research bring the qualitative elements together to focus on AFACs leaders and employees evaluation of 'what's behind the decisions' and if for example the AHP topics introduced by Saaty (1990) are understandable to the AFAC team and affordable to use to create a better world-view of the security. One future example of action can thereby be that the AFAC team could work more closely with Bank X's marketing division to ensure compliance with the "*crucial characteristics of service intangibility, inseparability, heterogeneity, fiduciary, and perishability and lack of transfer*

of title", (Zeithaml et al., 1985; Harrison, 2000), recognised by marketing scholars (Ahmad and Hasan, 2011).

Introducing new elements, such as biometrics, for customer authentication, authorisation and identification can be a new challenge, which will be important to test in the market segment. Bank X is investigating several biometrical solutions and with this work comes a requirement to demonstrate how AFAC personnel can recognise which method customers find acceptable. The leaders must define what global position Bank X has for its customers in respect to its banking solutions. The huge number of legal authorities regulating e-banking worldwide (Fatima, 2011) means that finding one common solution can be impossible. This situation is itself a security challenge. If biometrics is a consideration for a global security solution, there is a need to discuss the customer acceptance of its definition. Biometrics is a "*measurable physiological and behavioural characteristic that can be captured and subsequently compared with another instance at the time of verification"* (Fatima, 2011). Systems can use fingerprints, iris' scanning or facial structures as physical measures, in addition to data entry patterns such as keyboard or mouse behaviour in combination in a complete authentication setup. There are five main components available as biometric measures: sensors, feature extractors, template databases, match and decision modules. (Moskovitch et al, 2009, Anil et.al, 2008) in Fatima (2011). This creates a challenge in respect to national legislation, since biometrics is dependent on governmental approval, individually and globally. It will also be challenging for customer acceptance since the nature of the solution, involving storing personal information, can be controversial for some customers.

Such elements are also about trust generating efforts. The customers need to trust that the bank's solutions are secure and that the bank will only use the information for its intensions. Conversely, the bank needs to trust the customer's behaviour and attitude, especially keeping their secret login information confidential from others. The definition of trust is explained, (Anderson and Weitz, 1989, cited in Flavian and Guinaliu, 2005) as "…*one party's belief that its needs will be fulfilled in the future by actions undertaken by the other party*", but this must be mutual. Demonstrating trust or distrust when implementing new security solutions can be an impression based on false premises. This is dependent on the capability to communicate the intensions towards the customers, and points at another reason to include marketing elements as one factor within security development. Trust can be a strategic tool to achieve long-time objectives such as loyalty and good reputation, depending on the capabilities and consideration needed to generate dual trust, and this is important within the AFAC team.

Trust and satisfaction are two important factors for e-banking customers. A focus on generating trust for customers through business strategies also serves to generate a clear understanding of what trust is. Additional analyses need to design solutions to determine what customers consider their trust factors. DeLone and McLean's (2003) updated IS (Information Security) success model, is an example of how IS impact at the individual and organisational level, and Lee and Chung (2009) build on the individual constructs of system quality, information quality and interface design quality, and their subsequent impact on trust and customer satisfaction.
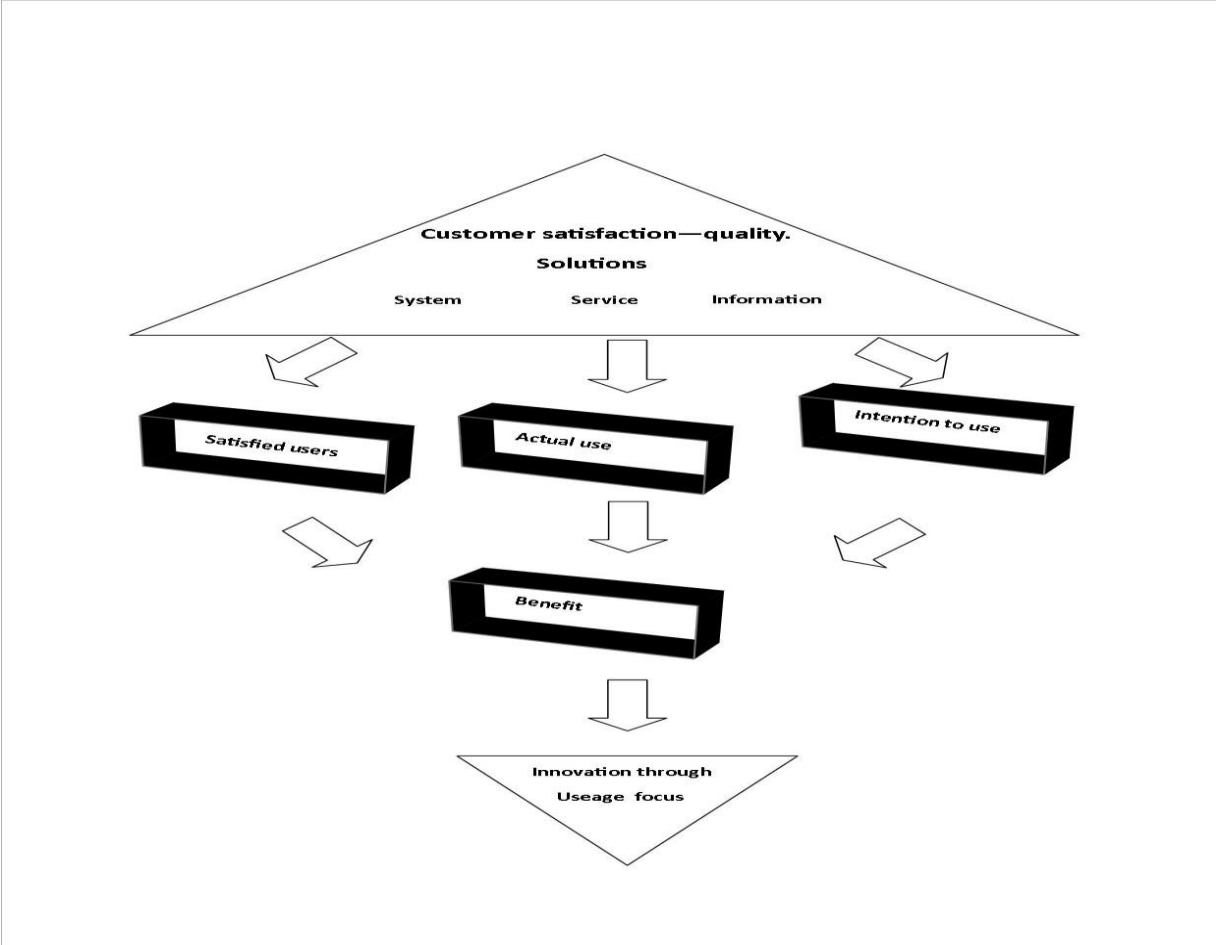
Figure 1: New focus on DeLone and McLean's (2003) updated IS success model.

It is important to recognise that Lee and Chung (2009) clearly recognise a connection between trust for mobile banking and customer satisfaction. There may be a problem with their hypothesis since the authors briefly consider if trust generation should spring from business or IS, but the impression is that the authors point at IS as the most important stakeholder and contributor for trust generation and customer satisfaction. This may be a source for challenges, however, and one aim of this thesis is to detect if the AFAC business viewpoint is the correct generator for trust and customer satisfaction.

4.3.8 Customer security – what is the personal understanding of being secure?

Security is more than a word meaning, 'the bank and money are safe'. Being secure, feeling secure or acting securely are examples of security-angles, depending on from where a person is using or thinking of the issue. Physical security is less important with fewer branches, but still customers can have a virtual picture of someone ensuring that their money is safe. This means that AFAC needs to understand what makes the bank's customers feel secure, rather than assuming that all solutions introducing another 'block' necessarily increase customers' feelings of security. Having such strong solutions that customers do not use them may actually decrease security, as long as options for easier systems are available. Critical and social reflections by leaders can help determine which psychological reasons potentially shape defensiveness' within the team, founded by emotions and threats (Argyris, 1994, pp. 81). Leaders have to create a picture of why the organisation possesses or develops resistance to innovation and thus to form an organisation with the scope to overcome this bias and combine sociological and technical circumstances. Together with a re-organisation it will be necessary to 'unlearn' old traditions (Argyris, 1986); introducing new ways of working, but this will be dependent of the leaders' abilities to be aware of meanings and behaviours, which otherwise might prevent an effective new phase becoming a reality. This means that leaders' abilities to recognise biases, noise and misinterpretations are crucial to avoiding hidden pitfalls (Raelin, 2010). Cognitive biases need to be connected with problem recognition as a common procedure, (Keil, Depledge and Rai, 2007), but to take advantage of the discovering of these biases it is necessary to challenge employees' illusions of control with real awareness. By such awareness, a team can avoid managerial missteps, initiated by a lack of understanding of cognitive biases and other social dynamics; promoting new directions, which eliminate a potentially escalating negative. This focus is also supported by Ford and Ford (2010, pp 26), who supports the idea of different approaches towards organisational changes rather than relying only on technical and convenience motives.

Lichstenstein and Williamson (2006) made an important observation that there is a need to determine the relationship between customers adaptation issues regarding online banking and trust, in (Black et.al. 2002). Another issue is the emergence of a society of individuals needing support (Zuboff and Maxmin, 2003), generating a need for additional strategies for relationship and customer management (Gebert et al. 2003), and customer experience awareness (O'Loughlin et al., 2004), which should be combined with demographics.

4.3.9 Customer needs and understanding of e-banking security and services:

When planning internally for re-organisations, it is the researcher's subjective impression that this is more an exercise of convenience rather than one that focuses on acceptance of an important solution for customers. The team-members are aware of how important Internet banking is for many customers. In addition to a drop in transaction cost of 80 per cent, internet banking relations only takes place by e-mail, online searches for information on news/topics, travel, training/education and health, (Calisir and Gummesson, 2008). This fact also indicates that it is a tremendous challenge to understand customers' perceptions of security as a service. The new organisation can include social factors to its security portfolio to ensure that one outcome of the organisational change is a different mind-set towards how security is understood among its audience.

Security thinking is now normal in a bank, but ongoing organisational changes with a scope to improve the situation can turn out badly if the focus is only on parts of the company's worldview. Modern e-banks must be capable of detecting customer needs seen from a total perspective. Security is the overwhelming and overarching element that prevents people in the bank from thinking holistic when focusing on customer needs. Cosma and Gualandri (2012) recognise in their book several customer needs and from the internal researcher's observational role it is easy to claim that the focus within the AFAC team is to create a secure online bank. Although the complete picture of customer needs varies and Table 1 below describes a suggestion for this complete picture. The table also indicates the numerous potential customer portfolios, which all need secure and trustworthy online solutions.

Customer Field of interest	Bank X' solutions to Business/private needs
Entrepreneurship	Share and hybrid, corporate financing, private equity funds
Speculation	Hedge funds, derivative instruments, structured products
Investment	Investment funds, units and indexes, linked, discretionary asset, management, bonds, debit accounts
Retirement	Pension funds
Protection	Insurance policies
Liquidity	Current accounts, retail financing
Philanthropy	Not-for-profit organisations

Table 1: Needs and Product solutions for private customers. Source PWC-ORFEO (2009) in Cosma and Gualandri (2012)

Including all needs and product solutions in a customer satisfaction survey would be a massive research task, which is beyond the scope of this thesis. From these descriptions of potential portfolios, it is clear for the observer that all leaders and staff need to re-think the security scope and detect where and what solutions they need in order to generate trust and customer satisfaction. It will be important to detect what the security scope of AFAC is, and to find relationships between this scope and trust generation actions in combination with customer satisfaction measures.

This moves the direction of focus into several open cultural questions where definitions of social and organisational circumstances will be the foundation for organisational changes. It can be unclear what the internal culture is like and how the external (customer/market culture) definition and demographic is combined when an organisation plans for changes. A collective programming of the internal population with the scope to detect and distinguish groups is one definition of cultural thinking. Hofstede (1991), as expressed in Brown and Buys (2005), identifies a number of cultural dimensions. These dimensions are power distance, defined as inequality measures which one culture accepts as normal. Uncertainty avoidance measures un-comfortable issues within a culture because of uncertainty and ambiguity. Masculinity is the respective emphasis given to gentler values such as life qualities, personal relationships, service and care-taking etc., compared to more aggressive ones such as assertiveness, performance success and competition. Another dimension of culture is the degree of individualism, where group vs. individual performance affects the situation, while long-term orientation is a separate dimension that also has an effect on organisational changes and their results. Even if this definition based on Hofstede (1991), anchored in local research, it is interesting that the detection of cultural thinking in a South African society with major cultural differences brings out the same values as for globally perspectives, demonstrating that diversity in cultural thinking perhaps is too narrow. This idea is supported by McCoy et al., (2005), who states that "...*Assigning the same cultural values to all within a nation-state may be overly simplistic, given the cultural diversity within many nations, and the unique cultural values held by individuals regardless of national ethnicity*", in Brown and Buys (2005). Using these cultural dimensions is important in order to understand why the company performs organisational changes and what the motivation and the goals is based on. Security thinking is about detecting all links, including cultural circumstances, not just focusing on the weakest link. Tjøstheim (2007) exemplifies this, as security is something, which has a separation in threats and vulnerabilities. What exactly are these issues? One can raise questions that the search for the weakest link makes a leader or

employee miss the full picture, which is a recognisable perspective in the Bank X solution. This changes the idea of bank security from a technical perspective to a socio-cultural problem where the organisation itself is the weakest link, and by changing it rapidly, the security can actually decrease as a result. It is interesting to observe what Anderson (Tjøstheim, pp.12, 2007) says about how the stress to create system-based approaches to analyse files and logs, fails to point at the people and cultural thinking of the people behind cryptographic errors, behind detection scripts and their reasons or motivations to act as they do. Online banking generates logs and detection data, but attention must be devoted to what the analysis is, what the idea is behind these and how logs and analyses can improve a situation if the cultural perspective in those systems are just 'there'.

Johnson and Goetz (2007) recognise this challenge where the authors state that security systems are 'bolted on' rather than being 'infused into' the setup. These authors miss the social perspective connection to the organisation and its culture, claiming that security thinking is a balance between management of risks and avoid inhibiting business. This idea is good by itself but does not ensure participation from the complete organisation, nor internal/external cultural issues and alignment. A different approach, which the AFAC team claim to emphasize, is a focus on security from the perspective of the customers and the business can be used as an opportunity, rather than an obstacle, to ensure that breaches do not occur,. Nevertheless, this is not efficient if the incorporation into the complete company fails. Johnson and Goetz (2007) argue that education and information about security issues must start at the top of the organisation, but that middle management can be a major hindrance in the development of a security culture. Additional arguments can be missing communication and cross-divisional collaboration to ensure appropriate understanding, not only at management level, but also within the complete culture.

Online banking is a relatively new way of approaching the banking business, but the recent development of smart phones and tablets brings another dimension into the picture. Customers are now aiming to do their banking businesses everywhere, not only from their home computer, which generates new challenges for technologies and security. It is still the individuals' decision to use the new possibilities, but the new strategies mean that merchants getting fewer and customers can almost be 'forced' into a new world of banking. This can be a good example of innovation diffusion. Lichstenstein and Williamson (2006) cite Rogers' (2005) explanation of this as containing the five attributes of relative advantage, compatibility, complexity, 'trialability' and observability. These considerations have not been a source of research in the literature about organising e-banking business, although the

transition from traditional banking to the new situation is partly the scope of Shah and Siddiqui (2006), who consider when to divide research into strategic, operational and technical issues for success. E banking is interactive in nature, which is a new opportunity to reach and gain new customers. Trust, as explained above, is however important to include, and customer security is an element the re-organisational perspectives need to blend in with strategies, operational and technical issues as a foundation for the business. Shah and Siddiqui (2006) argue that integrating all channels into a 'package' is important to avoid inconvenience. These authors might be right, but it is necessary to evaluate how an organisation can plan for a 'package' when teams and divisions have clearly separated tasks in respect to their responsibilities. Mols (1998) separates internet activities from traditional banking, but it is the researcher's impression that this suggestion can be outdated, due to the massive change of internet devices and peoples' new habits. Such a separation will be difficult to maintain in operational circumstances, given common platforms of solutions and social engagement towards customers, since customers will fall under a different definition and organisational unit. Values can be a tool to create such common platforms and internal social engagement in an organisation. Consciousness can allow leaders and staff to uncover hidden objectives and this can be particularly important in a company where IT security is a major determinant of success, as with modern banks. Dhillon and Torkzadeh (2006) claim that there are a range of social and organisational factors that can be a fundamental aspect within security stakeholders and by creating a distance to the previous individualistic approach to the values, Shaw (1980) suggests organisational values can now be at a group and organisational level (Weick and Bougon, 2001 in Dhillon and Torkzadeh, 2006). Dhillon and Torkzadeh (2006), however, also cite a need to share and develop values by assessing these as individual constructs to make it possible to develop understanding at a group or organisational level. Bank X's values; Great Customer Experience, One Bank X Team and It Is All About People, as a foundation for "A Great European Bank", are good values, but it can be challenging to separate these and incorporate them at individualistic and group level. From the literature do the review demonstrate that corporate planning uses Bank Xs' values actively, but with too little focus on security vs. usability. Dhillon and Torkzadeh (2006) fail to bring forward this setting at all in their research, which is a signal that security vs usability can be a gap in development of security research models.

4.3.10 Connect customer needs to organisation impressions:

Security is not only the protection of physical buildings or login pages on the Internet, but it is a mind-set, which due to changing behaviour and trends needs continuous regulation. The banking industry is experiencing a new trend, or possibly a mega-trend, where there is a need to support growing market for using mobile devices for banking. Expectations from customers are changing and access to banking services will be just as natural from an IPhone as from a computer. This creates challenges for banks, since the traditional single channel access has now become multi-channel banking. The question of whether security is a critical success factor in e banking is an important issue for consideration in the literature. Enos (2001), Turban et al. (2000) and Regan and Macaluso (2000) all address security as a technical factor, as does most of the literature referred to by Shah and Siddiqui (2006), and shortcomings to this approach are a key theme in this thesis. Internet banking is now different and security is becoming a social problem where new methods, for example phishing, are gaining popularity with hackers.

Albrechtsen and Hovden (2009) focus on user support issues where security seems to be an issue in which uncertainty undermines what staff want to know or what they think they need to know. If this idea relates to customers, it can raise questions of what this group really knows and needs to know and further aligns this knowledge with the security team within the bank. It can be beneficial to connect the determination of customer needs to the need for a re-organisation within the security team. Such connection needs to include the reason and expectations for the change from the customers' perspective in a complete strategy-visioning process, with a correct focus. Albrechtsen (2006) emphasises a user-involving approach to gain effective awareness of security issues, and organisational changes must be a result of such ideas. Albrechtsen (2006) underestimates how customer awareness can be a part of a security strategy and an organisational change, due to the major trend where customers become mobile and online. The main problem is not the trend of moving technical banking from personal to online services, but to capture customers' feelings, opinions and relationships that occur with the new solutions. To change to a non-technical perspective and focus on a company culture and personal commitments to increase e-banking security development and management can be difficult and confusing. Koskosas (2012) clearly states the need for cultural understanding to increase technical security. Incorporating such understanding with knowledge of the wider picture and global perspectives is important when expectations of an organisational change are to gain increasing security. Security strategies and visioning building on the ideas by Albrechtsen (2006) is necessary but not sufficient.

Strategies for operational effectiveness are about creating internal circumstances, and the organisational change in AFAC is aiming at operations, not necessarily customers. Bank X needs to aim beyond operational effectiveness and strategic thinking and determine methods to make a substantial difference from the competitors. Outperforming rivals is about making better values for the customers or make the same, but at lower cost. Looking further ahead than traditional strategic thinking is therefore also a matter of understanding that the product must be better to be a genuine competitor in the market. In security, this is a question of providing better information, which is potentially just as important as providing good technical solutions. *"..delivering greater value allows a company to charge higher average unit prices; greater efficiency rates in lower average unit cost"* Porter (1996). This means distancing from traditions and focusing on how the bank will reach its goals. If Bank X wanted to use an IKEA philosophy, for example, where self-service is a strategy to cut cost it would be impossible to retain high customer cost for the products. The banking industry is near to become 'IKEA', but still charging the same fee even if customers perform many tasks automatically in an e-bank. The replacement of service personnel with computer-aided solutions, meaning that those customers will rarely visit a branch. Is this what customers want or is it the banks' perceptions? By pushing e-banking solutions and new elements of security to customers, the responsibilities for security is also outsourcing towards the users. If the management realise that investments in security are also investments in trust and value creating products, which in turn can result in higher available prices in the market, a new foundation for strategic thinking, customer values and revenues can be possible (Porter, 1996).

The literature demonstrates that modern e-banking needs an extraordinary focus on trust in the market, internal communication, active and innovative behaviour for the future and planning and performing organisational changes, with these issues acting as guidelines to improve customer security. This statement bases itself on the description between the impression of the situation and the literature, but the following research will reveal how AFAC' perspectives of changing these issues by determination of the organisational mind setting.

5. The Phenomenon, Methodology and Problematising processes:

This section describes the methodology selections relating them to the problematising process. The initial philosophy behind the thesis research, post-modernism, combines the pragmatic vision to blend the past, present and future perspectives in a phenomenological design in a qualitative, subjective, and mixed method research model. This is contradictive to the phenomenological study intention, but can be an element which forms the phenomenon and the overall concept of the study if awareness of the separation is taken. As performing an exploratory study is it equally important to demonstrate awareness and avoid contradictive methodologies. Explanations of the epistemological and ontological assumptions provide the guidelines for the model. The section further explains the data collection, storage, coding and sampling processes. Finding the correct blend of theory is essential, and the different perspectives: behaviourists, humanists, constructivists, cognitivists and social learning (Marquardt and Waddill, 2004), are all sources for developing an appropriate research model.

5.1 Descriptions and position of the researcher:

Action research is in use in the thesis, where the researcher act as an insider. This is a difficult approach depending on the researchers ability to evaluate preconceptions and own knowledge, revealing extensional levels of reflective and reflexive thinking (Bain et.al.1999). Creating personal distance to preconceptions, an insider researcher need to suspend these by '"*epoche' in order to 'bracket existing personal beliefs, preconceptions and assumptions",* from Husserlian theories in (Hassard, 1991). Without this approach can an insider researcher experience conflicts with stakeholders needs and opinions, political or ethical circumstances (Creswell, 2007; Coghlan and Brannick, 2010), or decrease the possibilities to evaluate and critically integrate own knowledge of the situation with the new information. Ethical circumstances in action research appear as human interdependency, cogeneration of knowledge and power relations (Hilsen, 2006) and the early recognition of this need for reflexion is important. One key goal for an insider researcher must be to establish and maintain the role to create new academically and organisational knowledge of high relevance. (Björkman and Sundgren, 2005).

The researchers' role duality, practitioner and researcher is also as a change agent, where the primary access to data and the organisation in combination with secondary access to the more specific organisational parts relevant to this thesis. A flexible perspective may enable an insider researcher to achieve and use any results differently, (Björkman and Sundgren, 2005) by the access and closeness to the data, if the personal perceptions and impressions not form

the results, but are critical elements within the discussion. The potential negative influence perceptions create using eclectic methodologies, hindering the researcher from finding the root cause and performing evaluations on symptoms. Rigorous research must blend with usefulness and detection of blind spots demands self-reflectivity and reflexivity, which the Kantian statement well support: "…*Perception without conception is blind, conception without perception is empty….difficult to move back and forth between perception and conception may find them stuck in reflexive acts and unable to help us see anything other than doubt and relativity as the core of the human condition."* Weick (2002).

The postmodern approach to this research problem is also about being open to new possibilities and looking away from old conservative solutions. Even if Bank X is relatively new, because of several mergers and acquisitions there are conservative forces within the bank that can decrease the effect of an innovative culture. Transforming the research to an understandable language is a journey of finding the best possible methods and perspectives. The researcher must be liberal, the creation of research perspectives is also about challenging conventional wisdom, and the assumption (Kilduff and Mehra, 1997) in Johnson and Duberly (2000), advocate; that no method is the single developer of any truth must be the core in a postmodernist mind-set. The paradox in such research is the eclectic approach, (mix and match) and the search for the paradox itself, which challenges the validity and acceptance of an exploratory, sociological research, (Kilduff and Mehra, 1997), where 'thinking outside the box' to find the answers is the basic in the research design.

5.2 The Action:

This research has been active for approximately 2,5 years in a continuous changing environment. This is a major challenge to action research as any proposals and solutions need implementation and evaluation, but time short frames can be significant obstacles. For example has the research scope, the phenomenon and the organisation, AFAC, changed during the research, but still with some influence of the results. The researcher has actively contributed with proposals, where some has been implemented and others not. A new registration solution for customer support reduce time to register new customers and is a direct improve. Similar has a Mobil authentication solution been strengthen as a result of massive customer contact and willingness from management to include this in the portfolio. Another example is new software that reduces customers ordering processes for new hardware tokens. Other proposals to become more global and develop global solutions has not

shown any definite results, but the frames and willingness for new approaches is met positively by the managers.

Another key element in the action within the research is the ongoing re-organisational processes that AFAC have seen the effect of. The team is now changed again, using the same procedure as the main change this thesis consider. A top-down process, kept secret until launch date. All these changes are shaping an action research, which need to develop simultaneously with the organisation to be valid.

5.3 The Phenomenon:

An explanation of phenomenology in its core definition is a study of a conscious phenomenon: or "*an analysis of the way in which things or experiences shows themselves. The term "phenomena" is derived from the Greek verb, which means to show oneself or to appear.*" (Sanders, 1982, pp. 354).

The phenomenon of interest is: *Organisational changes in AFAC and how this have effect on customer security.* Defining a phenomenon is a process of finding the root cause, not by the change itself, but the ideas behind the change. These ideas were the reason for designing a model where the researcher needs to explore the participants' mind-sets, recognise how effective the organisational change is, or what to do to improve the situation. The phenomenon research therefore consists of a group of employees who all have an experience of a recent change. The research needs to discover the reason for the change, and whether the employees' believe that the customer experience improves because of the change. Any recognition of the problem due to this explanation needs to reflect the phenomenon and clearly state the connection between these descriptions.

The problem statement derives from the title: "*how is a major organisational change affecting collaboration and cooperation in a new global security team setting – is the customer perspective improving?*".

The thesis title "*Organisational impact on Bank Security Solutions from a business perspective – how can internal organisational changes and communication solutions affect and improve security*", expresses the research scope. Security is the core task of the entire team and must underpin the overall result from an improved customer perspective. The descriptive and interpretive phenomenological methodology in combination defend the search for the essence of this phenomenon, from an epistemological approach, and the search for the ontological inductive angle will bring forward the participants' personal and social views.

Comparing the literature search and the internal search for information together with observations form the problem statement development becoming essential parts of the total understanding of the core problem. The interviews reveal information that crosses academic boundaries and fields of interest, but the phenomenological approach reveals in-depth knowledge of the previous and current situation.

The research scope, problem statement and evaluation of the phenomenon is an exercise the researcher and one manager determined at an early stage of the research. Adjustments were made to the initial proposals to specify the actual situation which the manager recognise a situation.

5.3.1 The research philosophy and the problem:

Creswell's (2007, pp.71-81) focus on the four qualitative paradigms, post positivism, constructivism, advocacy/participatory and pragmatism, each of which can inform the practice of research in separate directions is a reason for reflections to develop individual ideas of how to approach a study. Knowledge development through the research will be dependent on the methodology and philosophy. Understanding the aim of the research is also about understanding the philosophy behind it, which in this case is a phenomenological approach. Separating Husserl's descriptive phenomenology from Heidegger's interpretive model provides the researcher with clear and distinctive alternative directions. Adopting a philosophical distance from Heidegger's '*being and time*' ontological ideas, which again is an inspirational source for hermeneutic or interpretive research models, makes it possible to use Husserl's basic ideas (Gill, 2014). These ideas move into the epistemological descriptive method, making a transcendental reduction of the phenomenon. The development of a descriptive method is dependent on the researcher's ability to ensure the suspension of his own assumptions and presuppositions. Research must aim for the core of the phenomenon, which in turn will establish "knowledge of essences", (Husserl, 2012 pp.3, cited in Gill, 2014). Sanders's phenomenology demonstrates a descriptive methodology where organisational studies make explicit the implicit structure (essence), and meaning of human experiences. The sample size recommendation by Sanders (1982), having 3-6 participants in a phenomenological study is in conflict with this research' sample size. However can a larger sample size strengthen the value of the eidetic reduction, where the concrete expression of the phenomenon leads to the essence by intuition and reflection, (Sanders, 1982). Studies of a minor team's changes, is also a search for the essence of why a phenomenon occurs and how it affects the result.

5.4 Research methodology:

The epistemology and ontology behind the research are important to the possibility to its ability to contribute new knowledge from the phenomenon. The phenomenon requires a search for the essence of the subject matter, which is the reason for using the Husserlian epistemological approach and the descriptive methodology by Sander (Gill, 2014). The challenge of covering all areas of the essence is however a reason to look beyond Husserl and include Smith's interpretive Heideggerian phenomenology to reach an understanding of the participants' personal and social world in the organisational changes. Inductive values will provide the research with increased possibilities to capture personal meanings as an extension to the initial essence of knowledge (Gill, 2014). The researcher's insider role is also as an observer, which defends a combined research philosophy and methodology, because of the improving factor; including data from several sources. Assumptions and presuppositions are not equal to observations, but such a dual approach will make it possible to generate an open model and compare interview analyses with other data by interpretive methods. Interlevel dynamics is important in phenomenological methodologies because of the initial assumption of a social constructionist perspective to analyse individuals' shared interpretations, where the participants belong to separate sub-teams. (Coghlan, 2002). Organisational identity is phenomenological (Corley et al. 2006, cited in Gill 2014), which also defend Smith's IPA as a powerful tool. Organisational studies lack good phenomenological methodologies, however, and Gill clearly expresses the need to search for the experienced and the organisational identity, using dynamic approaches, and this also defends the method combination selected here (Gill, 2014). Selections of data collection, storage of data, documentation and data generation follows appropriate research choices and structure, as will be described in the remainder of this chapter.

5.5 Description of the problem:

The identification of the problem is extremely challenging in this situation. Bank X has 35,000 employees, and the problem affects staff locally and globally, potentially crossing divisions and work areas. To be able to contribute to accepted new solutions and theory it is important to demonstrate the connections between literature and the specific situation in Bank X. The phenomenon relates to how the AFAC team perform their organisational changes and how this affects customers and the overall security level. Customer needs' is also a question about balancing security, trust and confidence, but if the organisational or social changes are

wrong or insufficient, there will be an unintentional reduction of the overall organisational/ customer relationship.

The literature search has discovered several connections between social and organisational situations that can decrease customers' understanding or acceptance of Bank X's security and e-banking solutions. Motivational factors, acceptance of the internal changes, cultural development and the virtual team situation are all important to explore. Additional circumstances are cognitive biases, managerial miss-steps and social dynamics, all of which will have effect on the internal solution and the customers' impression of Bank X's e-bank. All these elements can prevent a good connection between customers' needs and the overall organisational impression of having a correct security and service level.

Kolb's experiential learning cycle (illustrated below) provides an effective model of the stages within the research.
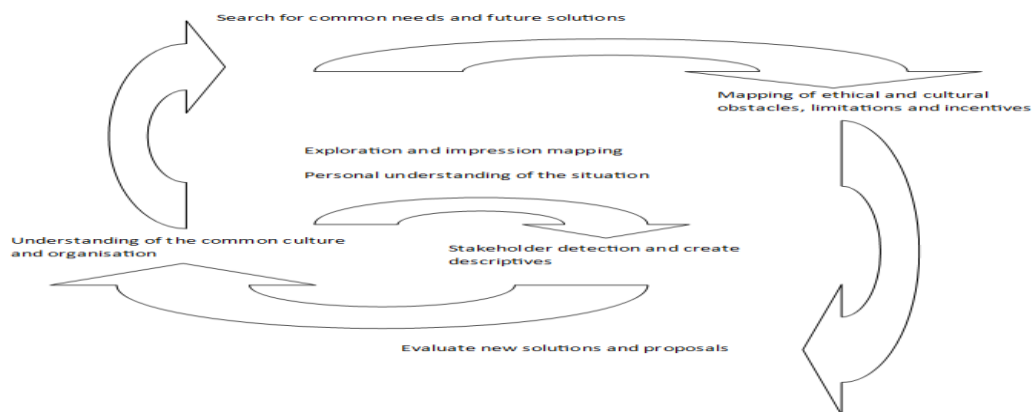
Figure 2: Learning Cycle, core

The stages within the cycle include elements from Schein's ORJI model, which evaluates observations, reactions, judgements and interventions to develop the researchers focus on their own thoughts and ideas in order to compare and analyse the covert behaviour in a self-reflective way (Coghlan and Brannick, 2010, pp. 28). This will be important to ensure learning and development and the learning cycle, Figure 2, is a combination of an action research cycle and a learning cycle. These adjustments parallel the original learning cycle, advocated by Zuber-Serrate and Perry (2002) in Coghlan and Brannick (2010, pp. 11). This developing learning cycle provides the research with a good insight of all content, including processes and premises.
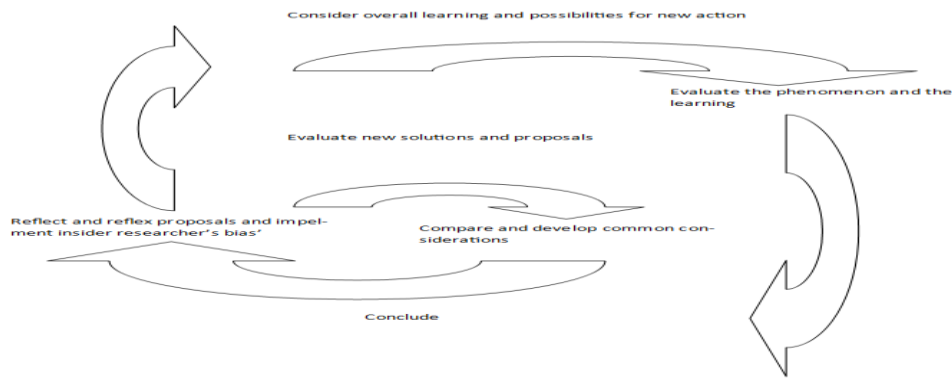
Figure 3 Learning cycle stage 2

Reflections and core initiatives can affect the research itself in the generation of data and meta-data and a systematic approach in the learning and research process is of significant value. Figure 3 therefore explain the final stages of the learning cycle process.

The interviewing processes is part of the complete learning cycle, from detecting to understanding and analyse and a detailed explanation of the interviews and the contribution to knowledge is in the research and knowledge gathering section of the thesis. Questions for the interviews spring out from the need to explore experiences, reflections, conceptualisations and further experimentation in order to increase learning about the internal circumstances (Coghlan and Brannick, 2010, pp. 28). The literature research demonstrates that the social perspectives are important to understand to achieve successful research. By connecting the literature to the problem and interviews in the form of a learning cycle, this will effectively increase knowledge of the organisations' levels of understanding.

5.6 Research – knowledge gathering:

The data collection activities follow the Husserlian philosophy where multiple participants have experiences of the same organisational changes (phenomenon). Interviews of a maximum of 15 participants in combination with observational data is the scope and describes an individual study, where the experiences are in focus. The research also follows the qualitative characteristics of LeCompte and Schensul (1999) entailing field focusing, multiple data sources in words or images, inductive, recursive and interactive analysis, subjective views of the perspectives and meanings of the participants, and human behaviour displayed in a frame of social-political/historical context or a cultural lens (Cresswell, 2007, pp. 38). Moustakas (1994) uses phenomenological research approaches as a model to describe 'what' the participants experience and 'how' they experience it. Despite the reference to Moustakas phenomenology, this method is not a good approach in this research and knowledge gathering

due to its epoche, bracketing, which Husserl also emphasises as an important concept. For this reason, the hermeneutical approach to phenomenology is effective, because of the inclusion of the researchers' observations and interpretations in the work. Van Manen (1990) describes hermeneutical phenomenologist research as determining a phenomenon and processing this appropriately. Reflections on essential themes and writing a description of the essence with a strong relationship to the topic of inquiry in a balancing creation 'of the whole' is also a potential approach. In this approach the research is an interpretative process where the researcher 'mediates' between different opinions and meanings by the experiences themselves (Van Manen, 1990, in Cresswell 2007, pp 59).

5.6.1 Data Collection:

Data collection within this research is a combination of observations, where the researcher acts as a participant, being an insider to the situations and interviews. All participants are working in AFAC from August 1st or before, 2013 and all have accepting voluntarily on a general request to be a part of the study. The interviews are semi-structured where the format is either face-to-face or by live video. All interviews are set up to use video sound recording or voice recorder solutions. The video interviews are set up using Lync communication tool on Bank X's secure data connections where the researcher and participant are located in private offices. This secures the quality and confidentiality of the actual interview data. Common field issues and the information collected are stored as transcriptions and computer files, in line with Cresswell's definitions of data collection activities in qualitative research (Cresswell, 2007, pp 120-121).

Observational notes follow a transcript process and are organised in a temporary journal of material and comments within the thesis in NVivo software. A brief diary supplements the observational notes. This horizonalization of the data is the basis for the clusters of meanings which is the material the analysis origins from. The first part of the analysis is the textual description, written from the clusters of meanings and explains what the participants' experience. The next step, a structural part, explain the variation and structures within the phenomena experienced. Moustakas (1994) adds another step where the researcher also describes their own experiences of the phenomenon and its' influence, which in this thesis is a part of the analysis chapter (Cresswell, 2007, pp. 61)

To achieve appropriate data, the encoding of the material aims to detect the circumstances of the phenomenon, describe it, its experiences, meanings and the essence of the participants. With this in focus, a data analysis spiral was forming to handle data collection, data

managing, reading and memoing, describing, classifying, interpreting, and representing/visualising all the data in the account of the analysis.

5.6.2 Storage of the data:

A copy of all files was stored to an encrypted memory stick and further to a designated secure computer used throughout the thesis work to ensure the accuracy of the data. An encoded log file covering all audio files secures the anonymity of the participants, as well as the documentation of the data during the transcript phase. Transcription of the interviews to drafts, and NVivo provides the foundation for the analysis of the material.

Notes and the researcher diary are stored safely, and are only available to the researcher. Similar is all consent forms and information letter stored on the same computer. Implementation and coding of the transcripts, notes and articles was the next step in order to sort the material into groups and classified data. The groups match the research literature and areas of interest were set to be able to recognise search words, topics and specific circumstances having an effect on the results.

Observations of internal documentation, processes and daily routines add a subjective value to the interviews, but can be a source of potential bias during the analysis work. Several internal reports, presentations and descriptions are available, but considerations to avoid breaching any policies or exploit confidential material or information are very important. Customer data is under protection by Norwegian legislation, but the technical or strategic circumstances are business-oriented secrets, which could be devastating to reveal.

5.6.3 Sampling and data collection:

Precision in sampling is important, and to evaluate the correct combination of representativeness and precision to achieve a credible sample is essential. Easterby-Smith, Thorpe and Jackson (2008, pp.215) argue that it can be better to be imprecisely right than being precisely wrong, which means that correct representation is perhaps better than good precision. Just as in quantitative studies, it is important to ensure rigour by systematic and self-conscious research design and data collection. Data must stand independently for other researchers to use them aiming for the same result and the production of a coherent explanation of the phenomenon.

The methodology in this phenomenological study does not use systematic or non-probabilistic sampling *"...to identify specific groups of people who either possess characteristics or live in circumstances relevant to the social phenomenon being studied"* Mays and Pope (1995). The participants all have the same experiences with the re-organisation. The participants are also

motivated to contribute to the research with an interest to improve the situation and gain increased customer security.

Data collection within this thesis is an exercise with several sources. There is participant and non-participant observational data, semi-structured interviews and internal and external documentation and literature. Criterion sampling is the strategy within this research and the premises are that all participants have been experiencing the same phenomenon - the organisational change, which became effective January 1st, 2014. A classification of the participants is leaders or employees with the ratio 1:3. All male participants. No age data. This makes the relative-frequency distribution of the qualitative data to be as set out in Figure 4 below:

Role	Frequency
Leaders	5
Team members	10
Observatory (not included in statistics)	1
	16

Figure 4: Relative-frequency distribution

$$Relative\ frequency = \frac{Frequency}{Number\ of\ observations}\ Leaders = 0,33,\ Employees = 0,67$$

This sampling method is supportive of phenomenological studies but it is essential that all participants have experience of the same phenomenon, which in this thesis research is the organisational changes within the AFAC team. Sanders' phenomenology points at a sample size of 3-6 persons, while Smith's model requires at least one participant. (Gill, 2014). These statements challenge the initial sampling rate of 15 participants and thus need to be a source for further considerations. Polkinghorne (1989) supports a sample size of 5-25 participants for phenomenological studies, which justifies the approach adopted here (Cresswell, 2007, pp.120).

5.6.4 Interviews structure and format:

The planning phase for the interviews during 2014 led to the creation of a frameset of information that was missing from the researcher's viewpoint. The research and literature are the basic materials and are important to allow the comparison of Bank X's specific situation with similar situations in the banking industry and within other industrial bodies globally. The

creation process was particularly difficult due to ongoing changes within Bank X, and it was necessary to determine the circumstances for one specific organisational change by implementing an unfreeze, change, refreeze episodic change focus. Partly adopted by Lewin's (1951), ideas to ensure a limitation of the scope, using an episodic approach and mind-set to the change. This period spans from August 2013 until December 2014 for the research perspective and the proposals from the results are visible from end 2015. This results in an observational, planning, research and implementing period of two and a half years.

The researcher sent invitations to the complete AFAC team during the first week of November 2014 and all participants accepted by returning a signed consent form. A brief introduction prior to the interviews where information to participants that they had the right to drop out of the research at any time was important. Fifteen participants attended the interviews in addition to an additional interview with an internal observer, which was a relatively new staff member.

All interviews took place during the two first weeks of December 2014 with the use of Microsoft Lync.

The interviews consisted of 26 questions, including a separate leaders/team-members perspective, particularly important as the background focus. The questions were in four groups: initial, background, potential mistakes and potential improvements, to allow a wide scope of data collection and to give the participants room to express opinions in depth. These groups are coherent with the definition of the interesting search areas, and consistent with the literature and data collection. In order to collect all relevant information follow-up questions were necessary for some of the participants. All questions and participants' data followed a coding structure to ensure an appropriate analysis, and the anonymity of the participants. The interview questions were a combination of open questions and scaled/closed questions in a semi-structured frame-set, which aimed to engage the interviewee to provide the researcher with appropriate information without disturbance or comments from the interviewer. In addition to the audio/video equipment, an interview protocol was the researchers' tool to secure the correct and accurate format for all participants in a controlled setting.

The interviews took 30-45 minutes to perform, interviewing each participant only once. All questions are included in appendix one.

5.6.5 Coding:

Following Creswell's example, and categories arrangement using epoche/personal bracketing, significant statements, meaning units, textual description and structural description (Creswell,

2007, pp. 170). Further, the researcher importing all responses from each set of questions notes into NVivo in a new structure. All text files from the transcripts were auto-coded at first. A secondary coding separated the questions and responds indirectly, groupings including bank values, concerns, information behind the re-organisation, planning, roles, security focus and suggestions and solutions demonstrate a connection between the topics and the phenomenon. Qualitative data sets in a node structure within this description are without rated questions, which can be valued as quantitative data. The qualitative research model, however, aims for a subjective and interpretive analysis of this simple statistical data and therefore there is no need for formal hypothesis development or testing. The topics of interest connect the qualitative analysis model with the critical literature review, the interview data and the analysis. A simple source and node classification model generate a basic understanding of the participants by gender and role as the core categories.

6. Analysis structure and methodology:

6.1 Introduction:

This section demonstrates how the analysis of the data provides a basis for the results. The section consists of a description of how the analysis design is, the coding selections, horizontal and vertical and how the data generates appropriate interpretations of the phenomena. A description of the data grouping and representation method and the method which forms the NVivo database is also an explanation of the forming of the analysis itself and the textural/structural sections in chapter 8. Performing a phenomenological analysis of the data demands coverage of four levels: descriptions of the phenomena from the interviews, determination of the invariants emerging from the descriptions, development of noetic/noematic correlations and creation of an abstraction from the noetic/noematic correlations. The final step consists of intuition and reflection or eidetic reduction. Noema follow a categorization as the 'what' and noesis as the 'how' while the essence becomes a 'why' of the experiences (Sanders, 1982).

6.2 The analysis:

Analysis according to the coding principles aims to describe the personal experience of the phenomenon. The researcher's personal experiences need to be set aside to establish a correct focus on the participants' information and opinions relating to the phenomenon. Significant

statements about how the participants experience the topic extract from the interviews in addition to sources such as articles. A horizonalization of the data was performed, where a list of statements, equally valued, results in a set of non-repetitive and non-overlapping statements. Grouping this list into meaning units/themes for further comparative processes is essential to be able to perform further analyses. Determination of the participants' 'what' and 'how' is the next step. Structural descriptions, represent 'how' the experiences happen, while textual descriptions provide 'what' the participants experience. Combining the textual and structural descriptions results in a composite description where the 'how' and 'what' forms a passage or the essence of the phenomenon. This process is Cresswell's simplification of the Stevick-Colaizzia-Keen method. (Creswell, 2007, pp. 159). With this approach, data analysis and representation follows data managing, reading/memoing, descriptive, classifying, interpretive and representative/visualizing steps. A data analysis spiral is the result of this process, and the overarching research methodology use Kolb's learning cycle, (Figure 2 and 3), connects the research and analysis methodologies. This learning cycle adopts a pragmatic approach to the research where learning is a consideration of an ongoing movement from a concrete experiment, via reflective observations, abstractive conceptualization and active experimentations as a basis for returning to the concrete experiment (Easterby-Smith et.al. 2008). The combination of social constructionism and pragmatism also creates a problem in terms of advocating the phenomenological perspective, but the epistemological elements of social constructionism, invention, meanings, reflexivity, and conversation, sense-making and understanding also defend the subjective/inductive phenomenological design. Nominalism as an ontological perspective raises a discussion of the establishment of truths and recognising facts as human creations (Easterby-Smith et.al. 2008, pp 62-63), but the pragmatic philosophy supports the idea of irreconcilable dualism, which can be a combination of naturalistic pragmatism and social phenomenology (Schutz in Fereday and Muir-Cochrane, 2006). Developing hypotheses is also an exercise of balancing methodologies for the analysis. The phenomenological design of the research can easily develop into a trial and error phase where adjusting questions and answers to a designated methodology becomes more important than achieving correct descriptions, debate and insight into the actual phenomenon where knowledge about a complex and holistic picture of the situation is particularly important. The analytical design follows the guidelines for qualitative methods by Ritchie and Lewis (2003), Morse and Richard (2002). Smith et al. (2011) also advocate this phenomenological methodology, which is in use in their research. The main principle is interrelating interpretivism and reflexivity in a balance with a pragmatic viewpoint and transparency

(Smith et.al. 2011). This results in a generic method, in the phenomenological framework, which can be independent of quantitative analytical approaches, and where the researchers' interpretive approach is more important in a qualitative perspective. "*Adopting a generic qualitative research approach can help to ensure data collection methods and analytical strategies best suit the research question posed rather than trying to fit the question to a particular philosophical stance*" (Morse and Richards, 2002; Patton, 2002; Ritchie and Lewis, 2003, in Smith et al., 2011).

Further, an explanation in a figure in Smith et al. (2011) (Figure 5), points out the relationship between qualitative methods and quantitative approaches, which lead the analysis methodology development into the inductive approach.
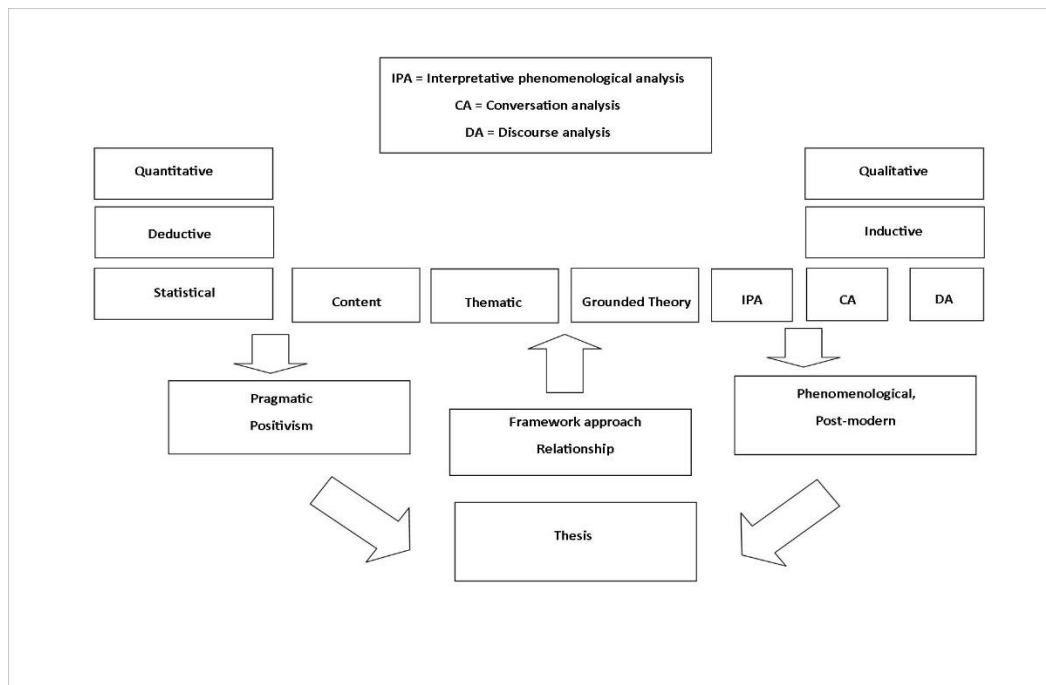
Figure 5: Relationship between qualitative methods and quantitative approaches – use in Thesis, Source; Smith et al. (2011)

This model clearly separates the deductive approach where statistics, hypotheses testing, and new theory is in focus. The positivistic approach will have an objective methodology and aim for the deductive. Such a framework and matrix model can be suitable with grounded theory as described by Glaser and Strauss (1967), but this is not suitable for this research model, leaving interpretative phenomenological analysis, conversation analysis or discourse analysis as the alternatives. Qualitative studies are about subjectivity, inductive data perspectives and interpreting the material and it will be important to recognise the fact that "*the challenges of identifying an appropriate qualitative design include distinguishing between similar methods*

and avoiding over immersion in the epistemological underpinnings of the chosen method instead of focusing on meeting the study aims." (Sandelowski, 2000, in Smith et al., 2011). The study aims in this research are to determine how re-organisations can influence customer security in a bank. This means that an interpretive approach of the material is crucial, since the information comes from the bank itself, not as statistical data where a new theory is the aim. This approach does not indicate that hypotheses still cannot be in use as a term instead of areas of interest. The hypothesis testing will then be an experience of evaluating qualitative data, mixing methodologies, but with the terms 'area of interest' forming valid assumptions instead of hypothesis.

Introducing the concept of pragmatism also results in a need to introduce the three systematizing concepts of abduction, deduction and induction, as presented in Peirce (1960). Pragmatism is a theory of inquiry with models of indeterminacy and originality (firstness – abduction), compulsion effect and negotiation (secondness – deduction) and continuity, relatedness and generality (thirdness - induction. (Peirce, 1960, in Åsvoll, 2013). Separating abduction, deduction and inductive data will be important to understand the meaning and purpose of the hypotheses and the collected material, in addition to finding the relations between the three concepts. The material collection in the inductive and subjective mind-set and the phenomenological approach as the basis creates a need to analyse with a method, which is suitable for the material – aiming for the expectation and definition in the problem setting. Such analyses also need to reflect the researcher's viewpoint and philosophy holistically, and is not in conflict with a rigid research methodology development. Åsvoll (2013) supports this fundamental idea, "*The most important outcome is that segments of current qualitative methodology have commenced to evolve their own methodological platform based on, among others, a number of post-modern, moral and interpretative perspectives and assumptions - The interpretive case study researcher attempts to derive his/her constructs from the field by an in-depth examination of exposure to the phenomenon of interest. This trait of interpretive case study puts an onus on the researcher.*".

A top-level analysis structure demonstrates that the data is transportable and transparent through the complete model and that the gathering, organising and the analysis methodology is comprehensive and appropriate to visualise data and form results from the research. This methodology considers the need for rigorous data, validity and saturation across the model.
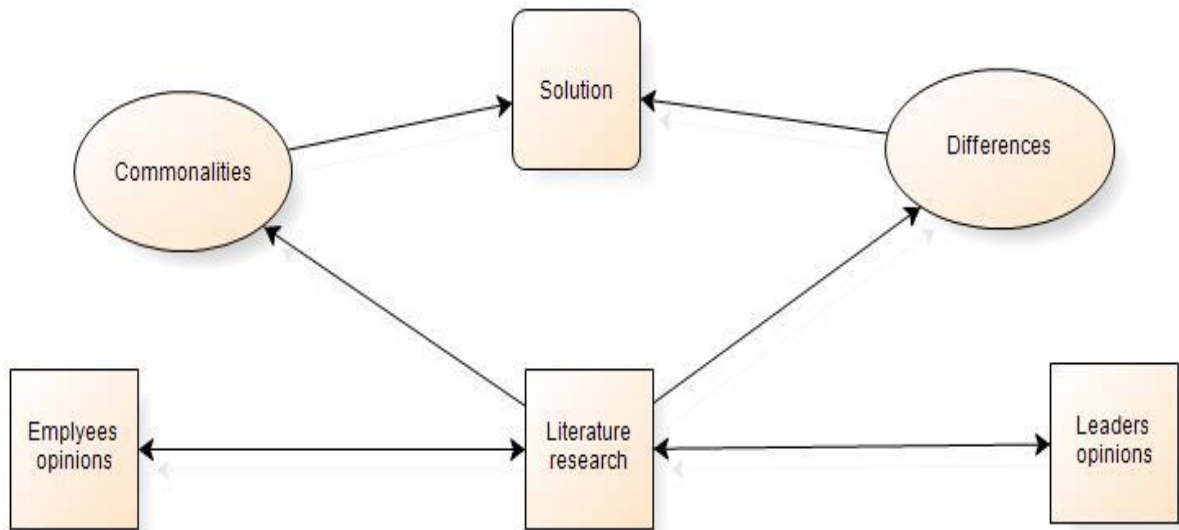
Figure 6: Data analysis model.

The coding processes create a set of statements and key areas for analysis, and a horizonalization of the data was necessary. This work led to a view of the data as a core set of non-repetitive and non-overlapping segments of data. This horizontal model creates a framework for further analysis of the data set.
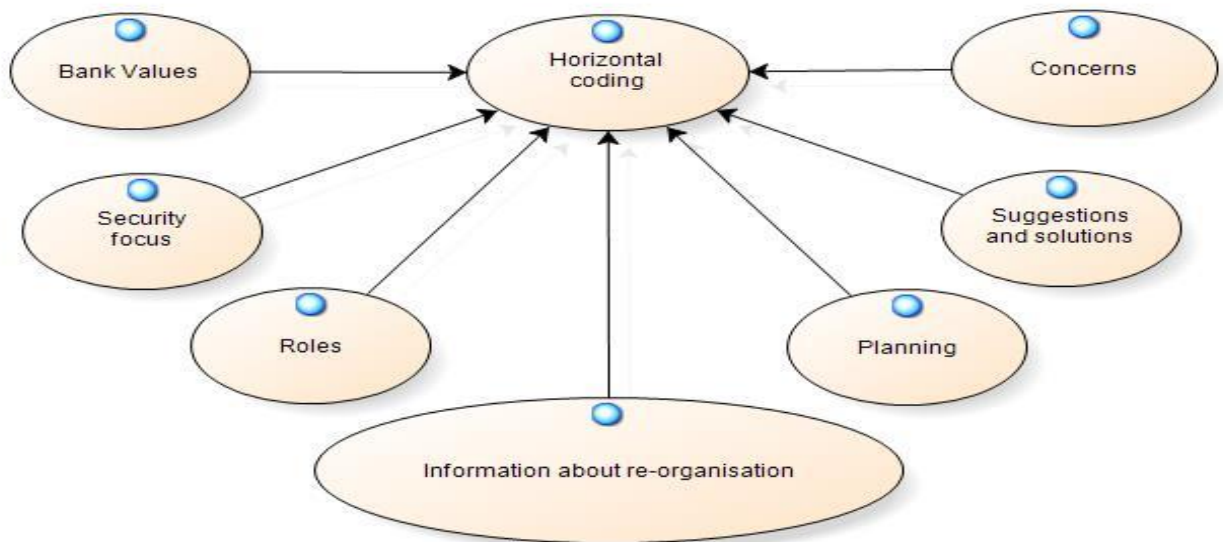
Figure 7: Horizontal data model.

This horizontal model highlighting the data with the purpose to create a coding structure and develop the data towards areas of interest and assumptions instead of using formal hypotheses. The area of interest development description is in detail in the next chapter. Area of interest set one evaluates the bank values and area of interest set two concerns the situation.

For example, information about re-organisations match area of interest set three and the group's security focus, roles, suggestions and solutions and planning is the foundation for area of interest set four – search improvements for customers. By this organisation, it is possible to recognise potential improvements across the material and relate the topics and areas of interest together with the organising model to a future suggestion.

All horizontal nodes introduce a set of attributes from the interviews and additional sources as CLR, problematizing process and articles/journals as demonstrated below. This coding structure resulted in a data set, which is available for analysis and search, and it is possible to incorporate additional coding during the project by entering new text directly into a word-cloud. This makes it possible to visualize word frequencies, attention areas, and potential connections. From an initial coding list where grouping the questions into the areas of interest was the horizontal coding structure as within the description in Figure 7.

Further is the coding structure displaying how the initial and horizontal coding connects in Figure. 8-10 as follow:

Name	Sources	Referen
101-001 -What has been your role in the AFAC re-organisation and structure since August 2013~ Brief explanatio	15	15
101-002 -Do you have different security focus, seen from the 'customer perspective' now, than before August 2013	15	15
---	0	0
P10	1	1
P11	1	1
P12	1	1
No. The need to change was present. No direct results. Operations has not been a success.	1	1
P13	1	1
P14	1	1
P15	1	1
P2	1	1
P3	1	1
P4	1	1
P5	1	1

Figure 8: Initial coding. Questions and participants example.

Figure 9: Questions coding

Figure 10: Horizontal coding by the areas of interest

Figure 11: Nodes compared by number of items coded

Nodes compared by number of items coded visualize the groups and nodes.

6.3.1 Grouping and distribution of data:

The qualitative data is organised in a simple frequency distribution, listing the distinct values and their frequencies, how often they occur and evaluate a relative-frequency distribution. This introduces relativity or calculations ending up with percentages or other values (Weiss, 2008, pp.35-88). Organizing and grouping the quantitative data and the observations into classes (categories) and treating these as distinct values will result in valid frequencies and relative frequencies and distributions of the data set. Examples of data grouping is single-value grouping, limit grouping or cut point grouping (Weiss, 2008, pp.35-88). This research model presents a single value grouping and selections of the groups representing graphically by the use of histograms.

Casual modelling is not in use in the analysis as an evaluation of the sample size since this needs to be large enough to create confidence of a possible replication in new samples, but since, here, the research scope is limited to the AFAC team, without the statistical need for a larger sample, casual modelling would not be appropriate. The assumptions of statistical models can be included in further research where a demonstration of shared common characteristics between dependent variables and casual models is present, in order to show the individual effect from separate contributions of predictor variables.

Logical regression testing is a simple form for visualising values of observed and registered variables. This method is useful for this analysis and for displaying data in histograms. The definition of logical regression analysis is:

"Logic regression analysis – DV= a single dichotomous category variable and PV is one or continuous and/category variables, quality assessed by model X2, regression weights and odds ratios and options possible as simultaneous entries of all predictors, hierarchical logistic regression-entry of variables in a sequence determined by the researcher and a stepwise logistic regression, sequential entry of variables according to their predictive values." Easterby-Smith, Thorpe and Jackson's (2008, pp.285), Weiss (2008, pp. 570-585) Analyses translation to text and by forming the information and identifying this in relation to the three interconnectional concepts; functions, variability and construction, make the text become understandable as individual and particular items (Potter and Wethrell, 1988, in Easterby-Smith, Thorpe and Jackson, 2008, pp.182).

Figure 12: Word map – most frequent words from interviews.

This chapter evaluate how the coding design is and how the areas of interests are in use to form the coding. The next step is to develop further the areas of interest, which can be possible to use within this research mixed model from the explanations in the next chapter. Much work in the next chapter focus to evaluate how an inductive interpretative analysis can take advantage of abductive and deductive circumstances.

7. <u>Area of interest:</u>

7.1 Introduction:

This section considers the development of the areas of interest and the initial assumptions for this task. Comparing abductive, deductive and inductive with the philosophy, where the abductive represents pre-theoretical assumptions, the deductive represents theoretical assumptions and the inductive represents the empirical assumptions. This is the foundation of the area of interest development to develop an understanding of the 'what' and the 'how' in the research and to make the assumptions valid for a qualitative, subjective and inductive analysis by interpretative phenomenological methodologies

7.2 Assumptions development:

Focusing on abduction can generate statements, which can be temporarily true, and these statements can form the initial assumption development. Blending in existing theory brings forward the deductive element, which also includes the theoretical hypotheses. This can also generate a problem because of the possibilities to test deductive hypotheses, as empirical facts are higher than for abductive data. *"Deduction cannot produce new hypotheses or assumptions, because it is fundamentally self-referring. Only abduction can further new, useful hypotheses."* (Åsvoll, 2013). The reason for the introduction of this methodological description is the fact that a researcher also needs to consider deductive as an element, which is not applicable singly. Abduction originates from empirical fact to theory and deduction generates theoretical hypotheses, but induction builds from theory to empirical facts (Åsvoll, 2013). Is it still possible to combine pragmatism with phenomenology and qualitative research models? Yes, because of the separation of qualitative and quantitative induction where qualitative induction is based "*upon 'a stream of experience' of different parts whose evidential value needs to be estimated by the investigator,* Peirce (1960, paragraph 2. 759), not by a definite collection of numerable instances, which constitutes quantitative induction, as in Åsvoll (2013). The initial work concentrates on generating assumptions from observations and logs made from the presence of the researcher within the phenomenon. The premises only consider the inside of the bank and the connection to the literature is the next step. This next step connects the external literature and theories to the internal.

The connections between literature and the research model reveal a set of premises that form the analysis, which derives from the data collection philosophy. The abductive theories divide the research and analysis into core premises (guidelines), such as:

- Bank values –Core values are interpreted and incorporated into the team
- Concerns –The team have no concerns about future re-organisations and the current situation.
- Information behind the re-organisation is necessary
- Planning –The planning for re-organisations are interpreted in the team.
- Roles –Leaders and team members have clear roles before and after the re-organisation
- Security focus and suggestions for future solutions –new solutions are a part of the mind-sets within the team.

Transforming these initial abductive premises into induction makes it possible to perform an interpretative analysis by induction, from experiences and theory without any deductive hypothesis testing. Deduction represents the theories that connect to induction and abduction, without numerical testing. This will be an A-D-I model where D and I are initial instances of A. *(This can be articulated as an abductive (pre-theoretical hypotheses)–deductive (theoretical hypotheses)–inductive (empirical hypotheses) design,* (Åsvoll, 2013)*.* Vygotsky's (1978) developmental theory points at deductive terms as the interpsychological level (D), proximal zone of development (F) and semiotic mediation (E). D in this research is the primary, the dialogue between leaders and team workers or the team members' dialogue with customers. Learning about the situation should take place within the team. E represents the challenges that become evident by development, F, within the team. A deductive viewpoint can therefore be set as the following deductive premises.

- All cases of D interweave with E
- All situations of F interweave with E
- F and D are interwoven cases as a conclusion.

The inductive phase is to conclude that all D equals E and all D equals F, thereby stating that E also equals F. This analysis can in turn demonstrate that there is a concordance between the deductive theories and the inductive empirical world.

(Based upon Åsvoll, 2013, concept of a deductive phase in a interpretative research strategy)

Developing hypotheses and research in general part of the consideration of personal bias. Hypotheses can be a set of reflections where the researcher's judgments relate a desired outcome. It is important to evaluate one's own expectations due to the methodology, rather than making interpretations that match previous assumptions, resulting in being over-critical of contradictory evidence. Competing hypotheses must be a source for evaluation with the

goal of ensuring rigorous research (Thomas, 1977). All hypotheses/assumptions in this study have been subject to such considerations.

The following set of area of interests' assumptions is a development of the abduction and deduction phases and is therefore valid for a qualitative, subjective and inductive analysis by interpretative phenomenological methodologies.

7.2.1 Assumptions set one – How do Bank Values affect security planning:

- Incorporation of bank values in security planning now is not sufficient.
- Incorporation of bank values in security planning was better before the recent organisational change.

This area of interest set aims to determine if the core banking values have any impact on the security planning. The researcher is of the impression that the core values (One Bank X team; It is all about people and Great Customer Experiences) are a source for strategy and planning, but at a level that do not allow them to be incorporated in organisational changes. The core values form the overarching goal; A Great European Bank, which create values for its customers and owners. Great customer experiences as a core value should trigger customer needs as being highly important in any planning, but security and usability can be two contradictory elements. It unknown whether technical circumstances rule out a great customer experience, but the experience needs to include trust and confidence in the online bank. Customer experiences are not good if for example a "great wall of passwords" transforms the experience from good to poor due to complexity. Shah and Siddiqui (2006) suggest measures as an important tool in re-organisations, and it is now difficult to recognise if any changes spring out from values, re-organisation, leadership or other internal reasons. This lack of measures, determines what the status of the freeze point is, (Lewin, 1951), and this is now an issue that prevents research from concluding a success rate for the change itself. The interviews aim to create knowledge of how the AFAC team members understand Bank X values in relation to their individual thinking and personal impression of the re-organisation. This learning can evaluate if organisational changes on a group level can have an impact on the overall understanding of organisational values. Dhillon and Torkzadeh (2006) propose that individual understanding is necessary, but fail to recognise external circumstances in their research. It is therefore interesting to observe if AFAC team members have a wide Bank X value scope in their impressions and security planning.

7.2.2 Assumptions set two – Search for concerns, which can affect re-organisational planning:

- The AFAC team members have many concerns about the recent re-organisation.
- The AFAC team members have many concerns for future changes in the organisation.

This assumptions set will develop an understanding of an issue that Johnson and Goetz (2007) point out; empowering security groups is pivotal to achieve organisational understanding of the importance of blending operational and security risks with business objectives. It is unclear if potential organisational concerns originate from a lack of empowerment of security groups within the AFAC team or if concerns are about the current re-organisation itself. It will be of interest to determine this difference since the goal with the recent re-organisation was to increase the overall security. The interview aims to challenge this goal and investigate if the team understands the goal differently than the scope and if concerns regarding future change plans is without creating better security for the solutions.

7.2.3 Assumptions set three – Information about changes for members of the AFAC team:

- The AFAC team want more information and become part of re-organisations
- Leaders and team members in the AFAC team have different opinions of how re-organisations should develop.

Changes in organisations are also a question of involvement of people. This assumptions set will consider if any staff want to be included in the process of making the new organisation. A separation between what the staff want and what the leaders want explains why the outcome can be different depending on the approach. Heifetz (1998, pp. 14) claims that employees become passive subordinates or followers if the leaders fail to demonstrate explicitly behaviour when planning for new organisational solutions. Corbacioglu and Kapucu (2006) contribute to understanding how learning can emerge from disasters or incidents, and such learning will be essential to incorporate in organisational development. As an observer, it is an impression that the recent change is a long-term planning process from the leaders' side only, and because of the many incidents and uncertainties about the organisation and tasks within the employee group, it will be important to investigate if the employees want more inclusiveness in change processes.

7.2.4 Assumptions set four – Security improvement for customers:

- Team members in the AFAC team do not have a customer focus when designing new security solutions.
- Customer focus is not sufficient within the team after the re-organisation
- Customer focus was better within the team before the re-organisation

Customer focus is included in one of the core values in Bank X, 'great customer experience'. This assumptions set aim search to investigate how customer focus implicates when security is in a planning process. It is also important to determine if security focus is better after the recent re-organisation than it was before. Little research exist covering customer perspectives and security in e banking (Lee and Chung, 2009). The authors describe mobile banking and three quality factors associated with such banking models - system quality, information quality and interface design quality. The interesting finding is how the three quality factors influence and affect consumers' trust and satisfaction with the online bank. This research considers if the internal value is in use or if the team only consider this as 'something – not important'.

The literature recognises the core of the hypotheses/assumptions and is the basis for the analytical guidelines. The analyses demonstrate how the assumptions are correct or not according to the interviews in relation to the literature and observations. The core areas form the assumptions and aim to determine the research participants' "how and what" mind-sets, and the analysis searches for keyword results to give clear connections and conclusions as to whether or not the assumptions can provide the research with an appropriate result. Testing the assumptions within this thesis strictly follows an interpretative methodology, which will be valid for the statistical data originating from scale questions in the interviews. This mean that an inductive interpretivist approach replace the deductive hypothesis/assumptions testing within the analysis.

To create a good analysis it will also be important to include the phenomenon itself in the considerations. The problem statement "*how is a major organisational change affecting collaboration and cooperation in a new global security team setting – is the customer perspective improving?*" is an item for measures, but a definition of what to measure is essential. Security is a wide scope, spanning from pure technical installations or solutions to the subjective feeling of being secure while entering an online bank. Tangible or intangible security differs, and the scope in this research is to investigate how the employees think Bank X's customers feel about the overall security. There are no statistics available from the customers' perspectives, and this fact is itself an indicator of an inappropriate internal

approach towards customers' opinions. User statistics describing the level of satisfied users comparing this with other competitors do not provide any proof of security, only usability. It is difficult to measure the qualitative data in relation to the problem statement and this fact forms the analytical methodology. Organisational changes are an area that is challenging to analyse, since measures are intangible and unpredictable. How can we know that the result would have been different with or without the change? The analysis for the organisational change is therefore also within the same scope and subjective manner.

The problem points directly at the internal customer perspective as the research area, and the research only considers how the staff, as an internal evidence base, experience customer security from the specific change under consideration. This is a clear limitation to the thesis, and is an item for further research.

8. <u>Analysis:</u>

8.1 Introduction:

The analysis section describes the interviews, showing how the data generation forms sufficient material for an appropriate analysis and the methods and methodology. The analysis is both textual for the backward-looking perspective and structural for considering feelings and opinions. This approach also separates the 'what' and the 'how' and increases the knowledge from the assumptions development. The 'what' elements, using statistics and retrospective perspectives clarifies the objective past in a textural section. The structural section is more important where the 'how' is formed by qualitative data supported by empirical hypotheses. This dualistic analysis method is a way where the essence of the phenomenon becomes visible to the researcher by perception and conception of the situation in combination. Weick (2002). The result presentation is in identical chapter headings for both textural and structural analyses which also separates the outcome differently by the areas of interest.

8.2 Results:

The interviews went very well, with the participants being genuinely interested in the research. The management was supportive of the research and encouraged all team members to contribute with their knowledge to improve the team and internal organisation. Audio files are the core material for this analysis. These files are in an organisational structure, as a numeric system to recognise questions and participants, and extracts from notes and transcripts.

From the first transcript of the interview material, a set of abdicative premises was deriving as an initial phase to perform the actual coding. This coding is in combination with the CLR (Critical Literature Review), and additional articles to be able to detect existing theories together with the outcome of the interviews. The study, where a combination of pragmatic and phenomenological approaches forms the analysis, is in an organisational format from which it is possible defending the need for detection, since an *"..Interpretative case study is dependent on theory in order "to see the visible in the invisible"* (Erickson, 1986) or *"to make the unconscious conscious"* (Gudmundsdottir, 1990, in Åsvoll, 2013). Following the ideas of the interpretative case study by Ericson (1986), to reach understanding in the analysis about the connection between theories and practice, further develop the researcher mind set and learning about the situation. The analysis is organised as one textual (what), and one structural

(how), description of the interviews and research material. The textual part familiarises the researcher with the outcome and connects CLR, guidelines/premises and the participants' feedback and responses. The essence of the textual and structural analysis forms; needs transformation and connection, the suggestions for the future.

8.3 Textual analysis of the data set.

All participants in the study have the same experience of the same phenomenon, as previously being employees in the old organisation and now have roles in the newly created AFAC team. Following up on the initial description of the analysis, this section undertakes a textual analysis of the data set with the separating areas being information about the latest re-organisation, concerns within the team, planning, roles, security focus and suggestions and solutions. The textual analysis is the backward-looking perspective where the historic, naturalistic part of the data is under evaluation from a pragmatic point of view. This view represents what the participants experience but the retrospective "what" element needs to be connected to the 'how' structural analysis.

Even if the organisational change was aiming for new attention and new tasks, the majority of the employees report that their roles and tasks are mainly the same as before. Only three of 15 participants point at a changed role, but the answers also have a connection to the appointment of new leaders to new sub-teams. The phenomenon/experience needs an explanation so that the impressions of 'what happens' are clear for the researcher. (Moustakas, 1994, in Creswell, 2007, pp.159).

8.3.1 How do bank values affect security planning:

The incorporation of Bank X's values into the culture is important. Values in this context represent this banks' vision and guidance for the complete staff. Comparing the before/after situation in relation to the recent organisational change provides the research with interesting and divergent answers, but even if the values intension is to increase the situations to a better 'after change' situation, the impression of such effect in AFAC is not very high. The value "Great Customer Experience" experiences a good increase in its rating, but not overwhelming. The value "One Bank X Team" has the weakest increase in rating in the participant group, which supports the initial impression of an internal invincible distance between teams/managers and cross division distance. Silo thinking comes up as a phenomenon to the value question, which the in-depth analysis will consider further. Silo thinking limits the incorporation of core values into Bank X, due to the separation of internal and external approaches to these. Assumption set one considers if the values had a higher

focus prior to the recent organisational change and whether the current uses of the values now receive insufficient attention. There are no indications present from the interviews that values have more attention due to the re-organisation, but during the re-organisation process, values was as examples to follow.

An AFAC team member clearly pointed out a need to become more holistic and emphasise the value "One Bank X Team" better. AFAC team members are not involved in projects in other divisions in the bank, which can be confusing and lead to a reactive response. As product owners of authentication solutions it is not good that the team is left out from developments about the use of such services since, without knowledge of the global perspective, it is difficult to create a new set of structures and common solutions. This can reduce the number of compliant services and product development, as being set aside will not contribute to overall knowledge and understanding of needs. There is no doubt that AFAC/Bank X should aim to be compliant to customer needs, usability and security or business values. What is the most important element is also a question about attitudes and human values in addition to internal policies and decisions. This also brings forward a potential problem where personal values need to make sense in relation to corporate values. Values, seen at their most basic, are a tool to display a picture of what an organisation considers as good or bad, important or not or desirable or not (Thomas, K. 1975). Laszlo (1973), in Thomas (1975) argues that individuals are not *"abstract observers perceiving facts in pristine purity"*. This means that even if employees experience the use of values, this issue has to become an element beyond something 'that is just there', and needs to be related to facts and goals. Values must become directives for people's behaviour as facts they recognise and are confident with, which Maslow (1963) also support in his mind breaking assumptions. Bank X's values can be an item 'just being there' and, from the interviews, it is the impression that both leaders and employees need to incorporate these differently. Making values as a tool for scoping projects is a possible suggestion, which increases the staff's experiences of the values as 'active'. In particular, the question "*Can you describe what your impression is of the efficiency of the AFAC team before and after the re-organisation due to (the values)*: reveals that all participants have problems separating the answers and the situation by the values.

8.3.2 Search for concerns, which can affect re-organisational planning:

There are concerns regarding the efficiency of the recent change. This is also an indication that the change-scope is wrong. The researcher recognise complaints regarding the number of

reorganisations in the Bank X system and this can be an indication of an over-emphasis on change, which in turn moves the focus from customer security needs, to organisational needs. Confirmation of this lies to some degree in the general impression that none, or very few, directly improved results are evident beyond the change itself. The current solutions would have occurred anyway is a statement from a number of participants. *("..the change did not have any big impact to customer security", "..not better for customers", "..still not working good", "..the change was a good idea, but it takes time to see improvements", " customer focus not necessarily increased by the change"*), (participants' statements).

Participants experience confusion about tasks, and people – who is doing what- reflecting the way that the organisation as a whole performs re-organisations and creates difficulties in following new situations. One observational example was that a worker had three different managers from three different teams in one year, and, taking into account the time to learn and grow into a new role, this worker state the learning periods as less productive.

Other concerns and experiences reveal an internal staff distance-to-topic situation, which is slow processing and operational action, delay in implementations and critical updates, etc. The ongoing paradigm shift from traditional banking to online banking can be a critical problem if the pace and capability to follow the new paradigm is absent because of internal problems. This means that not only will the bank create new solutions for the market, but also new solutions for the internal organisation and strategy development. The interviews explains that the staffs are aware of this change, but they also experience problems detecting correct solutions. Project teams are not aware of each other and some lack of communication and coordination exists. This concern is not only valid for AFAC in relation to communication and collaboration with other divisions, but also between different AFAC teams. This raises the issue of whether such internal confusion is similar within other teams as well, which could mean that a fundamental communication and collaborative problem exists throughout the organisation.

Separating AFAC into sub-teams, involving people from both retail and wholesale banking backgrounds, was intentional a good idea to bring separate groups together. This has happened in theory, but many interview participants put forward silo thinking and failure to cross communicate as essential problems. This is particularly valid for the operations team, which can experience organisational isolation, as a potential problem area.

Many levels and many managers within AFAC, as an example, can also be involved in situations in other departments as well, and the statements from the interviews need further action and evaluation beyond the scope of this research. Increasing team-internal flexibility

and the scope for less silo thinking within AFAC should be affordable and is within the team's management scope, but, from the interviews, the approach to change this seems not to be effective. These experiences are similar for the managers and the team members, meaning that all know about the problem, but the desire to search for a solution is not sufficient. The reason for this situation can be complex and deep, and be a problem-focus orientation instead of a problem-solving orientation. Silo thinking, as the internal definition of groupthink, has a potential relationship with leadership styles and self-promoting leaders who want to have fast decisions without involvement. Leaders as archetypes can prevent dynamics and inclusiveness by their behaviour and personality. Changing archetypes, by detecting them, uncovering processes and legitimate them by stressing the essential; by whom and their means (Tsoukas and Chia, 2002), is therefore an important activity. Leaders must become aware of their leadership styles and their impact and learn how to prevent groupthink by changing their own behaviour. Internal ambivalence relating to systems and processes can occur with inappropriate approaches to changes and, with a top-down approach, the change can be negative even if participants find it positive. With the correct leadership style, uncovering pre-assumptions, delegating responsibilities, avoiding explaining casual laws and executive dictates or dominant variables can all help avoid ambivalence, for example a coaching model (Piderit, 2000).

Analysing the retrospective part of the interviews also reveals similar, but more direct responses to the situation described above. As an observer, it is the researcher's impression that the bank is not cross-divisionally collaborative, even if this is a core value and focus area. A recently hired employee, participating through an unstructured interview, providing the research with additional data, also easily mentions this as a problem, particularly when trying to implement or collaborate to implement new solutions. Because of the rapid changes in online fraud and online security there is a question as to whether the change is actually preventing development by itself – i.e. is the re-organisation improving security for Bank X's customers at all by the change? Especially one sub-team, AFAC Operations, several participants recognise as not functioning well. Some participants even point at this area as a failure or a flaw, but AFAC managers are in the process of improving this situation. Several new staff are currently being hired process to strengthen the sub-team, but there are not any clear answers as to whether it is the internal or the external circumstances behind the poor performance. If the reason is the changes in the market then it could be valuable to strengthen the team, but this also creates several internal organisational challenges. The new hiring processes are also a reactive process, rather than deriving from a proactive analysis of the

situation. The first impression is that the team members are closer to recognising the failures in the operations team than the managers are and this can be an indication of a need to include the team more in organisational changes.

8.3.3 Information about changes for members of the AFAC team:

Team members in general give several examples of reasons and suggestions for improvements, but in the view of the researcher, the opinions presented by the team members is asynchronous from that of the team leaders. *("..focus on ease of use", "..focus on cross-channel development", ".. focus on new technology", ",,focus on market", "..need more customer understanding", "..focus on mobile users", "..Payment transaction improvement", "..focus on attracting customers".)* (Employees statements from interview – Q404-018). *("..need to create stable banking industry", "..focus on new players in the market", "..need to focus on digitalization, globalization and generic tools".)* (Leaders statements from the interview – Q404-018).

This is an example of a distance between opinions of the customer perspective and the need to communicate with customers and users of security products. Here, the split in opinions is not directly between leaders and workers, but is related to the tasks and group that the participants are involved in. It is a clear impression, by the researcher, that customers should be a part of the focus, but not necessarily too much. This is a dangerous situation since the banking industry has changed from traditional banking to become more an IT company with e-banking as the product, as one participant explained the situation. This new mobile-market mega-trend within the industry also creates a need for closer contact with users of the solutions, but the willingness to engage and find outward - in systems is not universally present. The internal culture and behaviour is that the bank is the expert – 'we know the solutions'– which is not necessarily good. The team focuses on changes; particularly valid opinions for the leaders, but the reason behind these can be difficult to understand. Is the change for an internal need or because of customer needs? Can the trend in the market take the focus away from the internal focus of changes or are the changes themselves the problem?

Bank X is a major, global body that will have a natural power distance, but an 'invincible distance' between the nearest leaders/workers can be the situation and the impression from interview statements. Evaluating the change itself, and how leaders and workers experience this, demonstrates a difference in how well the incorporation was. The leaders express opinions of a different change model, while the team members are more satisfied. The reason for this difference may be that leaders are more familiar with the reasons behind a change and

the expected goals, but it may also be an indication that team members are less interested. The lower interest in changes can be a result of too many changes, changes that have a low impact, and a lack of involvement in the recent change.
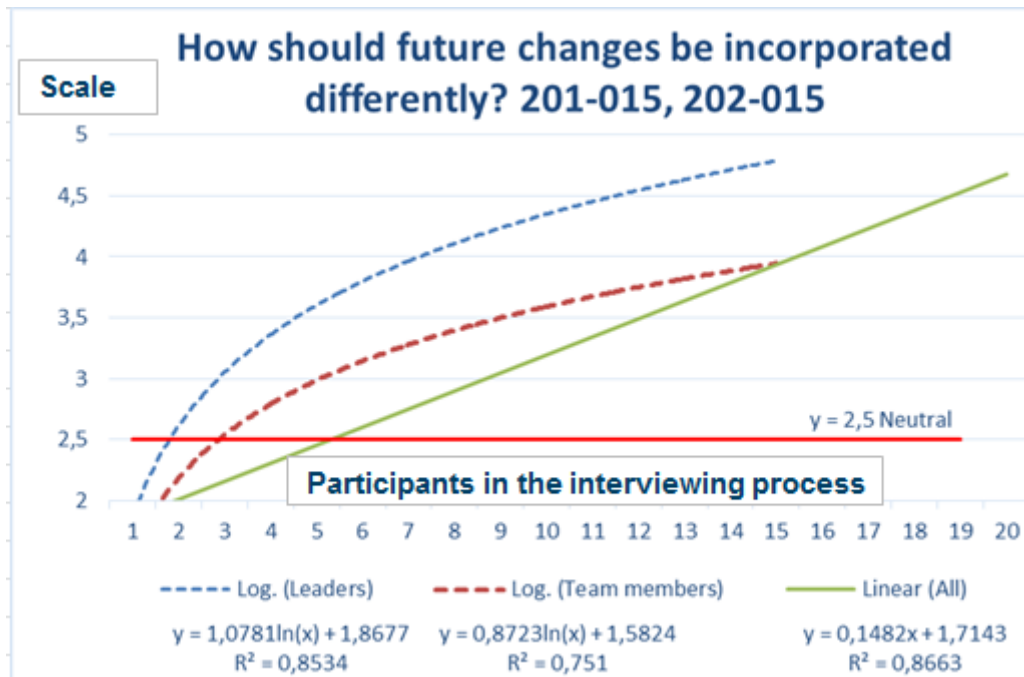
Figure 13: How should changes be incorporated differently?

A simple regression analysis demonstrates that there are differences in how leaders and team members understand organisational changes. This method can be used in prediction and forecasting of any data set, using dependent and independent variables. The method is in use throughout the thesis. The independent variables will act as the 'predictor. Using regression analyses can uncover relationship between variables, but this is a simple form of displaying data. Causal relationship between dependent and independent variables can be one result, but false relationships or illusions can also be the outcome.

- The independent variables, X, is displayed as the participants, 15 persons.
- The dependent variable is displayed on the Y axis where the scaled answers form the data, 1-5.
- The regression model relates Y to a function of X and **β**
- $Y \approx f(\mathbf{X}, \boldsymbol{\beta})$
- The linear regression display a straight line through the set of the regression data (n) as a reference element. The linear regression focuses on the conditional probability distribution of y given X, to make a prediction of the value of y.

R^2 lines in the graph show the number of answers higher than the lowest value (2), the percentage of answers in each group and the total that would probably have made the change

differently. Y represents the feedback frequency. While leaders are more satisfied than the team members with the incorporation of the recent change, this can also be an indication to the leaders of a need to change their practices. Team members are in general satisfied, but this can also be an indication of resignation and feelings of 'this is the way it is'. R^2 points at high values, but the graph does explain the differences in this particular question. The level of satisfaction for team members might demonstrate that a change was necessary as seen from the team members' perspectives, and there is more high-level feedback from the team members as well. A presentation of a potential miss-alignment between leaders and team members, where the leaders express higher satisfaction with the implementation of the change and the team members are satisfied with the change in general. 20 per cent of the leaders' and 33 per cent of the team members' answers were below 'neutral', indicating that several team members are dissatisfied, even if the total level of satisfaction is higher than for the leaders. Power distance in Norway and Scandinavian countries is very short, but even if the working tone is natural and open, there are still some problems. It is not clear whether or not the 'invincible distance' connects to power distance, communication or the virtual team setting, but minor challenges in regard to this issue are recognisable from some of the participants. Most participants are satisfied with their current organisational situation, but the interviews still give a different impression. Attention needs to this as a potential source of resistance to changes, individually or collectively, especially if workers are incapable of identifying themselves with new situations, new practices or new leaders (Ezafe, 2001). The experiences revealed here could indicate that the organisation is in danger of self-developing both resistance and the invincible power distance explained above.

The analysis can provide answers to this dual organisational challenge by focusing on communication and internal structure, in addition to reasoning.

Asking for a consideration of whether the participants recognise Bank X as an organisation that can manage to follow up customer trends and market changes in the future reveals several angles and opinions. The team has some optimism, but feels that several areas need a different focus for this to become the situation. Two major obstacles are the distance between internal teams and the time to market for new solutions, which is too long. The research material is good here, since it consists of many suggestions for improvements for the future.

There are, however, several opinions present in the teams pointing at a changed or increased security focus because of the change. There are also statements of the change as something emerging from an attack form hackers towards Bank X and the online banking solution, which can demonstrate a reactive process in the bank. *(".."the change is a result of an*

attack"), (A leader's explanation and respond to Q101-003). This reactive change, acting from an incident, reflects a strategy which need a capturing awareness process for the employee group, but only two people identified an increased strategic focus at this point of the interviews. While 60 per cent of the leaders emphasize strategies as important, only 10 per cent of the team members did so. These calculations are valid through the interviews statements and answers and demonstrate a gap between management strategic thinking and employees' capability of seeing this as important, which is an important issue to recognise. The responses from the employees are that strategies are a leader's task, not something for the team, which can be a dangerous point of view. Assumption set three aims to discover if such a distance is present and if this can be a source for a lack of communication or little information from managers to the team when changes are in planning. The interviews can confirm that this misalignment to/from team/managers is indeed present, and this is an important concern for future changes.

This attitude can prevent input in the bottom-up format and in turn decrease the management's ability to capture important ideas and opinions from within the organisation. Assumption set two considers if this missing bottom-up approach is also a reason for the current and future organisational changes. Top-down approaches may affect strategic planning because of misalignment between leaders' and team-workers' basic understanding of strategic development and its origin.

8.3.4 Security improvements for customers:

Assumption set four is a consideration of customer security, and how organisational changes directly affect focus and strategies. This is perhaps the most important evaluation, and the overall picture provides these evaluations with sufficient information to perform an appropriate analysis of assumption set four. A strategic approach like Bank X's can be in line with Sull's (2007) description of strategic thinking as a linear process where *"managers sequentially draft a detailed road-map to a clear destination and thereafter implement the plan."* (Sull, 2007). Such an implementation, however, can make it difficult to incorporate new ideas from the team, the rest of the organisation and the customers. Even if the strategic plan is, at some level, a discussion point within the team it perhaps remains difficult to admit that the original ideas were based on flawed assumptions. These assumptions are not necessarily a flaw because of a poor original idea, but because the rapid change in the online banking segment has led to changed needs, which is not easy to recognise without seeing this work as a continuous process. AFAC' unfreeze, change, refreeze methodology, and

incorporates several points of potential measurement. The interviews do not give examples of such measures and what the conditions for the stages are, which in turn can demonstrate an inconsistent way of applying the top-down strategic planning in the team. One leader, however, clearly recognised a potential problem with this strategic process, stating, "*the landscape is getting more online and mobile. Now Bank X is more an IT company than a traditional bank, but we fail to take market shares due to poor strategies.*" (P6). This statement considers the situation as a threat to Bank X's core business model, which could be a serious potential future problem. A further issue is revealed by statements as 'such strategic thinking is traditional' and generates a 'this is how we do it' idea where the 'no need to inform' setting is the normal. This contradicts the growing need to imbue retail banking with new products.

One suggestion from a team member is to focus more on business development in order to recognise the business elements from the customers' perspectives and thus determine what the customers want and need in terms of security. To reach such understanding, increased collaboration with Customer Support teams is valuable and necessary, since they recognise the problems directly from the customers. Statistical data from Customer Support can provide many answers as to where the problem is, but these answers still need to be a part of the business and security planning in a cross-divisional strategic framework. One response aligns the core mission with such a development, where covering all areas is the most important factor. A lack of people in the bank that are willing to take responsibilities for appropriate background work is a topic the participant highlights as a symptom, but not the core problem or a part of the phenomenon. If this is a symptom, it is also an indicator of the misalignment of organisational changes, where an aim for change itself, not the tasks or reason behind it, is the originator for the changes.

Customer satisfaction levels are lower for Bank X than its competitors, (internal statistics) but the organisation is aware of this problem. What to do about increasing customer satisfaction, however, is apparently not common or current knowledge, although perhaps one observer's statement that there is a lack of team spirit towards customers that indicates the problem. The research setting is one where organisational changes can potentially increase a customer's online banking security. If closer customer contact does not make sense to the staff, however, it will be difficult to improve the customer satisfaction level, and this can be a false or missing strategy indicator. There is a need, therefore, to close the gap between customers and AFAC by adopting a broader conception of strategic development, and the argue and interview statements suggests that staff recognise that this is currently missing and needs consideration.

Visibility of the leaders is something brought forward as a problematic issue. One participant claims that the managers are less visible than before the recent change. It will be important to investigate if this is correct and if there are any changes in the team-internal communication forms. Due to the spread location and the global setting of the team, much of the communication and leadership presence is virtual.

Further, it is interesting that one manager claims that changing the focus from technical to customer needs with the new organisational form, creates these major topics experiences interpretative development in common, not as separate fields of professions. Several participants identify strategic thinking as one of the most important elements for development, but there is little engagement in finding what strategies are important to increasing customer trust. If the focus is changing from the technical towards customer needs, it is not clear whether a new set of strategies need to be developed, and whether this focus must transfer effectively from the managers' desks to those of the staff.

Strategies development for focusing on the customer as the source of information are not well enough, as Bank X, annual report for 2014 confirms. The experiences are that strategies do not follow an end-to-end description, but only consider a solution for one point or one project. Investigating the understanding of current business threats also indicates a need for more innovation and innovative possibilities. The market changes and new business trends such as heavily increasing mobile use demand innovative releases more frequently. Overlay services (organisations that are not banks creating payment solutions directly into customers' accounts), is one example where innovation and new mind-sets are a need. Several participants recognise this as a future threat to the bank, but are vaguer in terms of solutions such as allowing overlay services on the bank's premises. Instead there are statements that focus on some form of 'negative innovation', where 'how to stop this from happening' is the main idea. There are claims that security decreases due to overlay services, but it must be possible to separate what security issues are potentially raising and address them. The customers want easy solutions and if the bank's login systems are too complex, the customer will move elsewhere. Comparing 'traditional' online-banking with the several new actors in the market, such as Google, Facebook and others, with their social and user-friendly solutions, it can be tempting to use online banking services provided by the banks as 'followers' instead of market leaders with a currently near monopoly situation.

The motive for Bank X's simplification strategies can therefore be a reactive process instead of a proactive plan, which is the internal impression and opinion of the process. Creating a single point of contact for customer information is an excellent proposal from one participant,

but it will also be important to align the information in a two-way workflow to engage in knowledge sharing and learning. An example is the new approach where Big Data is an area of concentration. Some AFAC team members have started work on a technical implementation, but without a logical model as a foundation. What to search for, scope definitions and how to use the new data captures, is, in the researcher's opinion, a critical area for investigation. There is research supporting the new focus area and no knowledge sharing has taken place, which is a signal of insufficient communication, collaboration and systematic innovation. The AFAC leader announced this area of concentration as something started, but also that there is a need for new ideas and resources, but this makes the approach reactive to the recognition that a new detection solution is necessary. The organisational change has from this perspective initially contributed to increased customer security, but will implementation and new solutions have happened without the change? These are examples that point at the simplification process in AFAC/Bank X is more a replacing process, not necessarily easier for the customers.

Another trend in the online banking market is that customer behaviour changes very fast. New mobile devices attract customers, and continuous development of easier systems in the banking industry makes customers less loyal to the banks. New products and interest campaigns are reasons to change bank, and this evaluates as a challenge, and an opportunity. Interviewees say that Bank X needs to act faster, but not in what direction and how. Awareness that the customers need 'Banking from anywhere' and simpler logins using, e.g., biometrics, but the discussions of "how to do it" seem to be missing.

Making new solutions in a global perspective is about recognising the global frame. AFAC is a global team and Bank X is a global bank, but does that mean that global banking solutions are the right thing to do? AFAC collaborates internally as a virtual team, business is crossing borders, but a customer in Norway does not automatically have the same needs as one in the Baltics. This is a misalignment, and currently implementation of a new hardware token can create difficulties: it replaces an old solution in Finland and people are satisfied, but the new hardware can be too complex in the Norwegian market where simplifications have a higher appreciative value. None of the research participants' points out any problems with shaping global solutions, on the contrary, they seem to embrace this idea. Why one solution automatically fits into the global framework of authentication settings is for most people essentially a matter of assumption and opinion.

Ease of use is important to new solutions for one participant. Highlighting usability over security is potentially the correct approach because of the risk that too complex functionalities

can result in customers selecting easy and less secure authentication methods. It is a paradox that the new hardware security token is very complex despite fact that the risk of customers using a basic login with a static username/password continue to be present, even if the customers need to perform additional authentication to perform all services. Third party actors can recognise this complex logon solution and make online banking easier for customers by decreasing security, but potential perceived high trust as the new situation. Statistics from the mobile application confirms this statement even if it is easy to use the strong login which is integrated into the app. Out of 916959 logins, 770614 or 84 per cent (internal statistics) used light login which is the least secure method. An assumption is that this high, light login user number will increase even more with new and complex hardware/software authentication. These figures demonstrate that Bank X is failing to provide new and easier security solutions, which is an indication of an inappropriate focus. The focus currently is on security, new solutions without consideration of what the customers want and are willing to use, and this can lead to a misalignment within the organisation. Misalignment can originate from the organisational changes and a lack of communication, but also too little focus on knowledge sharing.

The trend points to an increasing level of mobile bank users and one participant recognises the potential threat that Bank X is incapable of following without this customer focus. Innovation is not sufficient and the reactive approach results in a too-long-to-market time. As an observer, is it easy to see that this knowledge is present, but without appropriate action on the knowledge, transformative strategies are not effective. Poor and old-fashioned solutions can affect the customer share, as this is not a stable condition. Customers change their banking business more frequently, which is another threat the interviews reveal. Technical solutions are working well, but problems adopting new solutions are challenging the organisation. One important question in the research was whether Bank X is capable of following up on new trends in the market and, if so, how. The answers vary, and it is interesting to determine the differences of opinions between managers and team members. It is also interesting to recognise that one participant claims Bank X has improved its ability to follow up on new trends in the market. This also means that the same participant is of the opinion that the situation now is not sufficient, and that there is a need for a 'maturing period' for the new organisation. During this period, which the participant suggests should be 1-2 years, the AFAC team need to distance themselves from the technical trust approach and increase internal communication. Staff need to be involved in the development of new solutions and it will be important to recognise the right persons and knowledge to accomplish this. The

participant clearly recognises improvements in the capabilities for the organisation to orient itself towards market trends, but more or different actions are required. One leader also points out that the time-to-market period is too long and classifies this as a potential threat. Several other participants comment on this long time-to-market period as important, together with a complex development system with many cycles to pass through and the continuous lack of development resources: all of which are internal threats with many dimensions. For example, one participant claims that time and money losses are a direct consequence of not being able to act at the same speed as the market changes. The same participant also includes potential causes to this problem in relation to organisational changes, the wrong competences in the wrong places and a definite need for the organisation to 'open up' and bring the focus back into trust and security development processed together with the customers and the market. In contrast to these statements, one leader claims that Bank X and AFAC are capable of following market threats, although recognising simultaneously that the market trusts the bank is necessary.

The fact that some staff members see a strategic problem, but also a strategy adjustment problem is positive, since it helps prevent a potential 'blindness' in the organisation, but also negative for the organisation if the strategies are unbound to other parts of the company. This is more worrying if we consider local and global strategies and if the local leaders are incapable of transforming their ideas to global processes.

Full commitment from the top management in the bank is something that the participant considers extremely important, and the transformation in the mind-set of the employees from old-fashioned thinking to becoming a modern organisation and bank demonstrates that some level of optimistic behaviour is present. This optimism contradicts the claim that 'silo-thinking' still exists throughout the bank. This participant points out 'silo-thinking' as a major problem, even if the AFAC management considers this as an important issue to prevent. A lack of cross-divisional co-working and the missing 'One Bank X Team' value feeling is a reason for the introverted behaviour within separate teams, and as stated in the thesis, this is potentially the major problem to solve. To move the focus away from the 'what to do' method to a 'how to do it' mind-set seems extremely difficult and creates a need for its own strategy and planning. One participant confirms this change of mind-set in the interview and claims such changes to be essential to achieving success.

Too long a time from idea to market is an issue several staff point at, together with the fact that there is a need for more agile working methods in the bank. It is difficult to recognise important stakeholders and solutions from other divisions and this is another confirmation of

the communication problem brought forward by a team-member. Another team-member places all market definitions and the discovery of market trends and threats directly to the GEM group. (General Executive Managers). More innovations, new digital banking solutions, the need to look outside the bank for solutions and a clear need to follow market trends by more investments is stated as important by the same person, which is a signal that there is confusion of where the responsibilities are. Whether it is at the top level or in the team is impossible to decide from this statement, but this is in itself a symptom of a deeper problem. Potential problems as this can be in relation to cultural and communicational circumstances where the aim needs to escape from equilibrium, or the status quo situation, to develop a culture that dares to explore, challenge and demonstrate innovative capabilities. If top managers at all levels open up and design new strategies with the staff, encouraging them to bring forward ideas, which easily can be tested out, it can be possible to become pro-active, focus on customers and the market and develop an AFAC team that can lead changes towards the future and a new global online banking situation. These suggestions and important statements originate from several team members and leaders, 80 per cent, and are an indication of a misalignment between managers' individual perceptions and the idea of innovation and progressing in the same direction with the overall team.

Following up on the threats and market trends, it is essential to recognise areas for improvement and how to bring innovative initiatives into the organisation. Indications from the interviews are that efficiency is good, but the organisational system is a problem. Simple and easy tasks take too long and there are several examples of such flaws due to organisational problems and development. IT developers must remain focused on their core tasks – developing systems logically designed by business without any discussion of the needs in the market or other business circumstances. Critical comments about the solution itself are good, but not about customers' potential acceptance of the product. Such issues should be a part of the planning phase, not during the prioritising or implementing process, but unfortunately has this been the case in several occasions. As an observer, the researcher has had many experiences of this, and improved communication during planning and market testing among all parties in the solutions could improve and shorten the time-to-market period. For example, the time-to-market period is two years for enabling OTP (one-time passwords) on mobile devices, even if the mobile solution is available and the customers want the solution. This is also about willingness to discuss openly in all fora and remember the core reasons for the presence – being a bank for the customers – not some instance customers must have to manage the daily living. Such willingness to discuss openly is also about acting

honestly towards customers and improving coordination of developments internally and externally. One leader clearly recognises low levels of coordination between divisions as a field for improvement, which is important and relevant in the overall picture. A team member confirms this is by claiming that the internal AFAC team does not act as one unit towards the remaining bank and that coordination problems occur. A lack of a mandate to make decisions on a higher level to AFAC is perhaps another symptom and reason for changes since there are issues in acting as one team, proposing and initiating cross-border solutions due to a wrong or insufficient mandate. This can also be a reason why communication outwards from AFAC is not good – a willingness to push ideas without possibilities and to let them 'live' is absent. Narrowing the security scope is a suggestion from management. The reason behind this is that the banks' global focus dominates in some settings and the local circumstances need to become more important. This is a suggestion for improvement other participants point to as well, and it is brought forward in the interview process. The fact that the global/local focus on new ideas the thesis presenting occur in several AFAC discussions, demonstrate its importance and a potential cultural problem – to determine what area to act on will then be important. Improvement suggestions are a new task focus, task mapping and overall comparisons of new and existing tasks and ideas.

Several participants see improvement potential in usability vs. security and, in particular, in the mobile device development. Customers want easy login, but also trustworthy solutions and information about what the bank produces is essential. One improvement factor is to determine what and how to inform customers about security, fraud, Trojans and other security threatening possibilities without scaring customers and generate mistrust.

The following structural analysis will investigate the data available and search for patterns and anomalistic trends, where leaders can be of a different opinion than the staff. The area of interest list is, in the researcher's opinion, also the essence of the potential problems or symptoms and the list become a source for improvement suggestions for the AFAC team.

8.4 Structural analysis of the data set:

Investigating how the experiences are for the participants is more challenging. This is considering feelings and opinions and there will be several ways to explain, depending on the role or personality. Separating "what" from "how" is also an exercise of completing the essence of the phenomenon by a pragmatic retrospective view to forming a systematic and wide picture for evaluation.

8.4.1 How the Bank Values is affecting security planning:

Several concerns regarding the past/current situation are recognisable from the interviews. One major potential obstacle is the possibility that Bank X has 'outgrown' itself, meaning that the expansion of the bank is not under the same alignment as the culture, strategies or organisational development. The many department or divisions remain within their own frames where 'silo-thinking' prevent new solutions from implementation. Team members recognise missing collaboration with other departments or projects and there is a sense of a lack of clarity due to the distance between the AFAC team and other parts of the bank.

As an example, the introduction of overlay service companies into the market can create a need for new strategies. The market change creates a possible future solution where such companies can generate trust from their customers and the customers start using their solutions. The solutions these companies offer are easy and simple payment services, apparently secure enough for customers. These uncertain premises can result from complex bank-sector solutions. Easy systems is something the customers want, but it is not an impression from the interviews that usability vs security is a challenging contradiction. Many participants point at such solutions as threats to the bank, and experience this as difficult and important.

Political changes and new technology are other elements brought forward as business threats in a futuristic perspective. Simple solutions from the description above have support in the new directive, (PSD2- Payment Service Directive v2) from the European Commission (2015) which could be a future problem for the banking industry. Hay (2015) raises a questions as to whether this can turn traditional banking upside down and the internal discussion in Bank X and the AFAC team is demonstrating several worries regarding the new PSD2 directive. This political change is a circumstance Bank X has to investigate relatively soon, but the impression is that awareness does not yet match plans for action. The observer's role also reveals that the same concern not only consists within the AFAC team, which most participants mention, but also within several other divisions in Bank X. Other competitors in addition to BSK (Banking Standardisation Office Norway) and Finance Norway, express PSD2 as a future problem in common meetings.

Evaluation of such important solutions as third party payments affecting the bank is decisions to take with focus on business, security and organisational values. Using values as a tool is important and the interviews aim to detect if the situation has improved as a direct result of the change, seen from the values perspectives. The values; Great Customer Experience, It's all about people and One Bank X Team before and after-change ratings from the participants all

answers show that the situation now is better than before. This is the same tendency for all values, which proves that the overall opinion of the change is good; despite the different opinion of the communication in the previous answers.
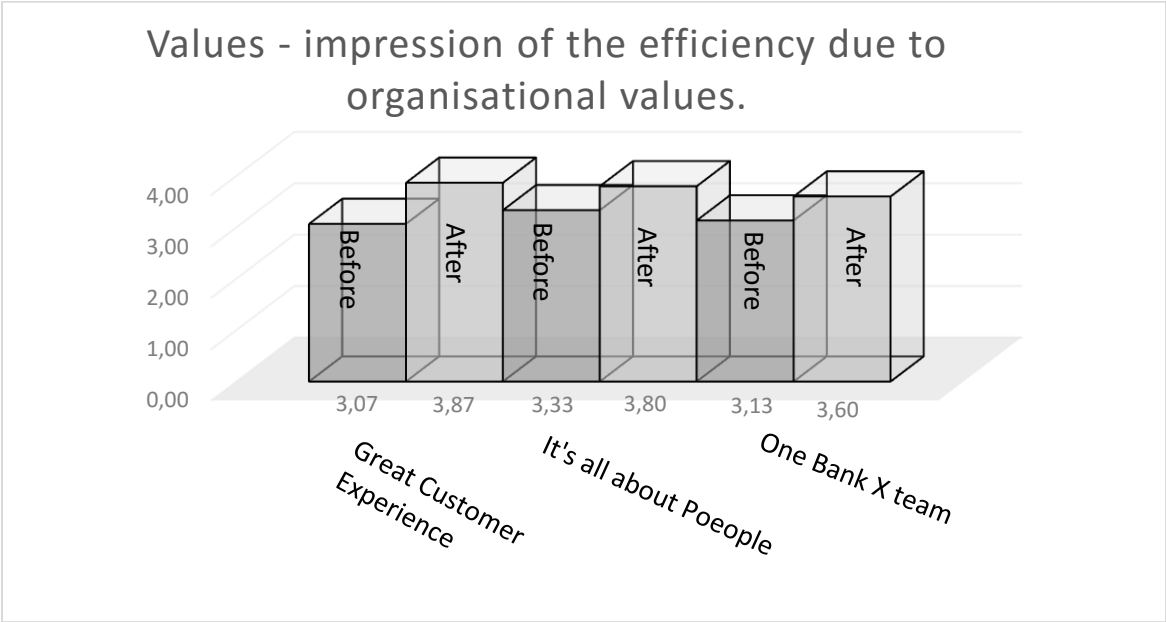
Figure 14: Values Impression – organisational values.

Virtual team building is different from those of physical teams in many areas, and should be a significant part of the organisational planning. This holds true for virtual customer contact as well, which makes it necessary to find good approaches to perform this important task. From the observer's perspective, virtual team building is not in focus within AFAC, or even a part of the day-to-day business, even if virtual tools are in use both internally and externally. New solutions for customer advisors to have meetings with customers are under development in the bank, but this is as a separate project outside the AFAC team. It is the meetings themselves, which is in focus, and there is no attempt to learn from the virtual processes in any department. AFAC could be a frontrunner in the development of virtual communication in the bank with the aim to learn and share knowledge about how-to. Seen together with statements from the research participants that some knowledge sharing processes have given positive results can be a new focus aimed at not only what the organisation learns but also how learning occurs. If virtual teams' are locally oriented, such teams can increase the possibility of appreciating local circumstances, but it is better to look for similarities than differences in a virtual global working environment. DeRosa et al. (2004) clearly state that virtual team/virtual contact is less productive than face-to-face communication, particularly in the matter of trust generation. When Bank X now introduce virtual contact with customers as well as internal teamwork usage, it can be difficult to capture needs and essential behaviour, which in turn can

decrease the possibility of strengthening customer security. Customers' demographical variety and cultural separation can therefore be a reason for internal biases and misalignment in the bank-customer relationship. Culture awareness is an issue for consideration for security development in order to blend needs and solutions with internal and customer behaviour and mind-sets (Anawati and Craig, 2006).

Participants inherit a degree of old style 'silo-thinking' from the previous organisational structure, and this is difficult to change, but without changing how people think it is difficult to change the outcome or achieve any effect of the new systems. The interviews even reveal that some opinions of the company is that it is 'big and clumsy' in its day-to-day business. This clumsiness can effectively prevent developing any processes where the scope is to improve by learning from the customers and market forces and, simultaneously, it can be a reason for not taking any chances.

An important outcome of the research is to determine what factors for improving customer security are and what elements the participants consider essential for the future. On an overall basis, the suggestions are to improve all forms of communication, stakeholder focus and global perspectives, legal knowledge within the team, monitoring and fraud focus, faster implementation, ability to act as one unit, mission focus, convenience security, mobile solutions, security vs. usability, alignment of country policies globally and customer communication. All of these suggestions origin from the interviews, but the pattern is still that a core of elements is present throughout the AFAC team. Combining these elements and findings with existing literature and observations can make it possible to see how to improve, not only what to improve. It is an underlying concern that the interviews provide few concrete suggestions of how to improve, but an indication emerges from the question where the participants explain the most important single factor to accomplish improved customer security.

The list of these factors is:

- AFAC is not acting as one team
- Silo thinking within AFAC
- Communication problems
- Poor coordination between teams within AFAC and also outwards
- Team management
- Changes in focus
- More resources

- Strategy improvement
- Tools
- Best practice thinking, supplier focus
- Internal alignment
- Supplier focus
- Execution of new products

It is interesting to observe that the list is not consistent, e.g. no single factor appears more important than the others do. Is this a problem itself – if research demonstrates that there are a massive set of problems in the organisation in a way that leads to blindness of the core issue? The participants' description of how they see the latest re-organisation as an action resulting in improved customer security explains that the change is not effective in employees mind. Asking, *"Can you give examples where customer security has improved because of this re-organisation",* resulted in a massive two third of the participants saying clearly "no". There are few comments pointing at positive changes in customer security, and some examples are:

- Improved communication through different channels
- Execution portfolio. CIA - Malware monitoring is better
- Better utilizing. Best practice thinking. Supplier focus. Better alignment internally
- Retail to corporate bank knowledge has increased
- Simplification increases. Globalising focus. Better flexibility internal.

Only 40 per cent of the participants recognised positive elements and it will be important to evaluate if this is a good result or an indication of a failed change. An important comment, "*it is too soon*" (to see any effect from the changes), can also be an example of expectations in respect to results in the bank. If the expectations were for immediate results, then the status will be a near failure. The researcher can also claim that long-term focus is dangerous in security thinking, due to the rapid speed of changes in the market.

The elements from the analysis reveal several important areas where improvements can be a development area due to customer security. Connection to the customers and detection of the customers' needs is the most important area in the researcher's opinion, but internal communication, cross-department collaboration and a different strategic focus will be essential basics in the future in order to achieve success and create a modern bank in a digital world.

8.4.2 Search for concerns, which can affect re-organisational planning:

There are many analyses of organisational changes but, from the explanation by Weick (1999), it is important to realise essential differences and processes. There are distinctions between episodic, discontinuous and intermittent changes and changes that are continuous, evolving and incremental. Evaluating the recent change from a macro perspective can reflect an episodic culture, but when the insider researcher aiming for a micro perspective within the research process can recognise ongoing adaption and adjustments, from the ideas by Orlikowski (1996) in Weick and Quinn (1999). The team members, nor the leaders, which can indicate that an essential and incremental organisational change process occur, do not recognise this continuous adjustment. Why communication of change happens after long development and secrecy, is a question that is making the implementation episodic, without adjustments during the process. The adoption of Lewin's (1951) three stages of change; unfreeze, change and refreeze was communicated as a well-known and frequently used approach by one leader, but is it good, or even in use? A contrary position put forward by Hendry (1996) sees Lewin's three-step method as shallow, which also indicates that the methodologies is use in the bank can be old-fashioned and insufficient. Modern organisations can with benefit investigate the use of freeze, rebalance, unfreeze, which Argyris (1990) point at is more appropriate in continuous change processes, in Weick and Quinn (1999), but this takes a different approach for the organisation to follow. Is episodic or continuous changes, by the conceptualisation or inertia the better strategy of change?

It is the researchers' impression from the interviews that strategies are leader tasks and something participants know about from presentations, but have little or no impact on. This is particularly valid for organisational changes. This creates a lack of sense-making and perhaps a gap in changing from planning to execution. It is interesting to compare the participants' statements with, for example, Sull's (2007) strategy loop, which consists of making revisions, making sense, making choices and making things happen. From the interviews, it is clear that effort is expectations in AFAC on making choices and revisions, but less so on making sense and implementing the ideas. As an observer, this is also the experience, as strong leaders, in the sense that they emphasise their own ideas, miss the opportunity to qualify their decisions. Questioning concerns for the future results in many comments, and an average of the participants explain that the future can be problematic. Examples of concerns and the participant experience of the situation are:

Bank/Team does not cover all areas. Silo-thinking. Closed organization. ID theft
Better connections between teams needed
Paradigm shift-not keeping up. Bank slow. Gap to Digital Banking.
Team distance
All ok
Efficiency is low
Many levels. Many managers. Miss connection to other teams
Silo-thinking. Less flexibility among teams. AML->AOFP
AFAC ok
Collaboration with digital banking
Action improve
Unclear areas of work. Distance to other teams
Faster deliveries needed
Faster deliveries needed
Learning in market not good. Need to be collaborative in the market

Table 2: Internal concerns. Quotas from the interviews.

Indication of improvements are present since one participant (team member), is very optimistic for the future planning. This person clearly recognises a massive level of investment in strategic thinking, knowledge development and customer focus. The same person is significantly more optimistic now than 1.5 years ago, which suggests some positive effects from the recent reorganisation. Questions can be asked why only one of 15 persons are recognising these elements and being optimistic, but the interview answers are not able to determine any obvious reasons for this diversity of opinions.

8.4.3 Information about changes for members of the AFAC team:

Team-members, rather than managers highlight communication as a missing element in identifying different needs and perspectives about learning from customers. To engage in customer feedback as a source for learning also needs a registration and sharing plan and can be a significant task where a potential new AFAC learning and research group could be supportive for new learning. Impressions from the research and observations are that learning, knowledge sharing and information sharing is currently an occasional rather than a systematic process with a well-defined basis. The diagram in Figure 15 below demonstrates a difference in how the leaders experience the communication of the latest re-organisation compared to the team members.
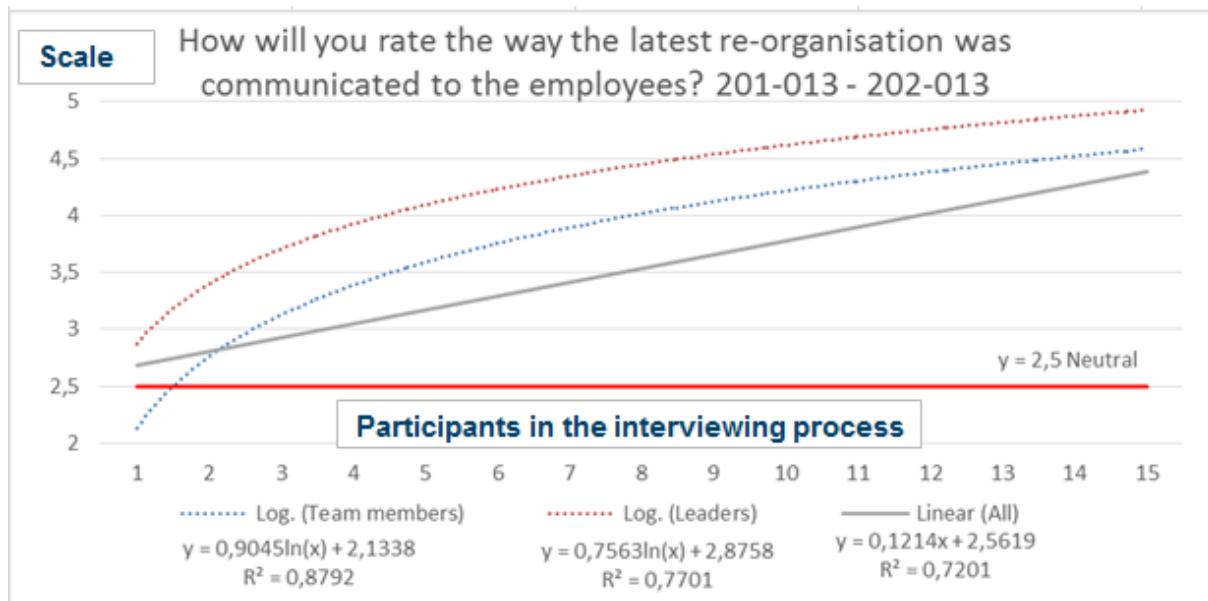
Figure 15: Rating of latest re-organisation communication.

It is interesting that the leaders are more satisfied with the communication of the change to the employees than the employees are themselves. One should also notice that comments from some leaders clearly state that the way the communication was given was inappropriate with comments such as; *"could have been done differently, very poor information before, but well after and the information from the announcement point was good, but the process was an overall disappointment".* Similar is the team member comments pointing at the same issues; good information from the announcement, but this was too late. One team member even explained the change as "*Shocking change. Not good approach at all. Not knowing anything. Poor info after announcement of change".* This picture of the change experience reveals an important issue; leaders and employees do not have the same need, concluding that they have different comprehensions of the experience itself. The value of the quantitative data in Figure 15, demonstrates a very interesting result where only one participant replies below the neutral point of 2.5, when rating the latest re-organisation from a reflective viewpoint. The qualitative comments from the interviews are interesting as these also reveal elements of dissatisfaction, as explained above. Figure 15 show a difference between the statistical data and the qualitative comments from the interviews, which are interpreted as more negative from the overall perspective.

Learning from outside the bank is important to one leader, but it is difficult to find a pattern in the interview of how to gain learning from customers. This is a problem the leader partially confirms when pointing out the need to improve usability over security. The resource problem and poor communication, both internal and external, and lack of overall understanding of the

solutions are the situation. Another leader clearly mentions that Bank X and AFAC are capable of meeting market challenges as the organisation is now specialised in security handling. Increasing the personalisation of the online bank is an important area of improvement, but this leader also highlights a major concern: the inconsistency of the long and short-term focus and planning for the improvement of the security solutions. It is a question whether this inconsistency is a result of ongoing organisational changes or if the situation is better now than before, but it is an important observation from a leader. It is also difficult to understand why this is a problem if the leader has a focus on the problem, and can be an indication of a wider challenge; how can the leaders achieve acceptance of their suggestions higher within the organisation?

The textual analysis above reveals some experiences that connects with cultural issues and power distance. How this power distance interprets in both AFAC and Bank X's overall culture is important to understand when addressing changes or new proposals. The researcher suggests the power distance to be unintentional and to some level invincible or hidden, but it is still there. If this is true, there is also a lack of awareness of and an unwillingness to admit that power distance can hinder development, since strong leaders 'have it their way' at the end of each discussion. This can be particularly important taking into account that Bank X is multicultural, even if it mainly operates in the same region (Scandinavia/Northern Europe). Multicultural leadership will be different from monoculture organisations and Mäkilouko (2004) states this as a significant problem. Mäkilouko (2004) recognises three leadership styles: task orientation was the main leadership style, but also cultural blindness, ethnocentrism, parochialism and in-group favourers seems to be commonly accepted or common practices across the cultures. Task orientation is recognisable within the AFAC team, but to create engagement with relationships between AFAC specific tasks in combination with connecting tasks, can potentially generate better cultural empathy and clear strategies across borders. These strategies can be a foundation to maintain and develop team cohesion and reduce cross-cultural problems since the team can have a feeling of what the team spirit is like. Cultural problems solving, where leaders create team interests across cultures and where culture empathy generates a willingness to learn about these to the point, where the result can be mutual feelings and understanding. It is the impression from the interviews and from observations that quarterly physical team meetings within one of the AFAC sub-teams can be in line with the experiences from Mäkilouko's (2004) and help the team members' focus on how they experience cross-cultural differences.

8.4.4 Security improvement for customers:

It is clear that the opinions within the team are many. They spans from overall satisfaction of the team and the re-organisation to dissatisfaction for the same circumstances. Leaders and team members are easy to recognise from a distinctive difference in the reasons for and methods of change. This separation can indicate a level of distance between management and workers, which can be negative for future changes.

Another clear picture is the traditional behaviour during planning and implementation processes. Where workers want to be included, leaders are more restrictive and points at 'this is how we have done it traditionally in Bank X'. This can be a signal of a cultural problem where a 'top-down' approach is the template instead of a bottom-up solution. Signals from the interviews provide the researcher with information that loyalty to decisions is high, but the opinions of what is the best for the bank and its customers not are the same. Contradictive answers about the level of inclusiveness of change processes can, on one side, be a confirmation of a cultural problem or ignorance and resignation of any possibilities to contribute in future changes within the employees. Leaders and employees are misaligned and it is the leaders that want employees to participate at a higher level than they are comfortable with.
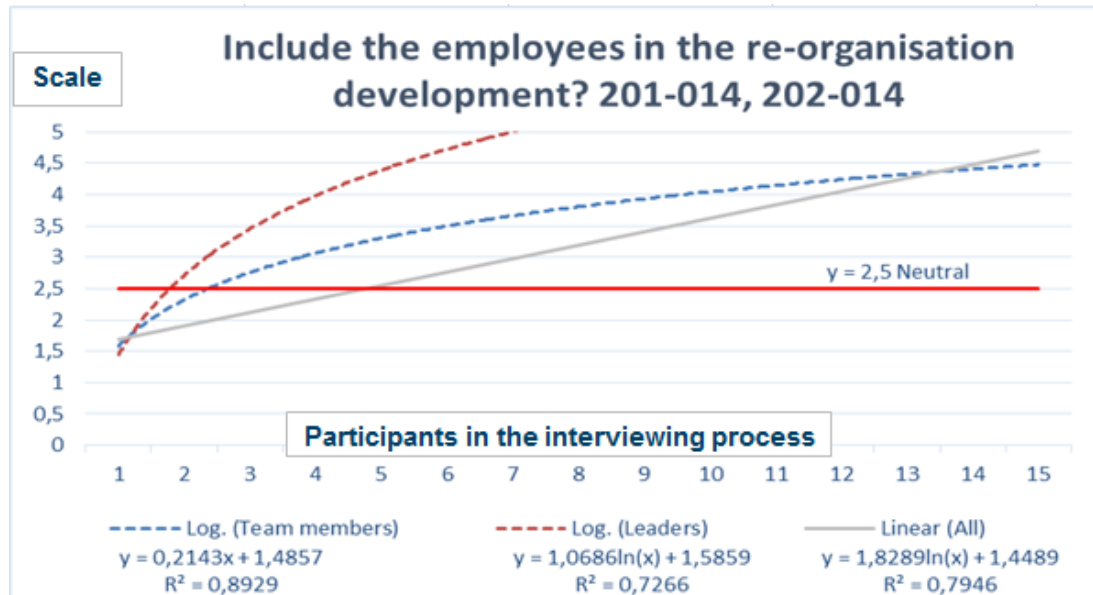
Figure 16: Include employees in the re-organisation development.

Seen in the light of the result from question 201-014, 202-014 in Figure 16, where the leaders being more satisfied than the team members with the way the recent reorganisation was incorporated, it is now also clear that the willingness level for team members to participate is lower than it is for the leaders. The result is in general very good from an overall perspective

where 89 per cent of the leaders, 72 per cent of the team members and 79 per cent of the overall participants are above the lowest feedback. 67 per cent of all participants are replying to be over 'neutral', wanting to be involved in the planning. There is still a significant number of persons wanting to be a part of future changes, confirming that even if recent changes were good, staff and leaders want to contribute. 40 per cent of the leaders and 33 per cent of the team members' answers were below 'neutral', however, also indicating that an effort to include people within the AFAC team can give good results.

Developing security measures purely from internal ideas increases the bank security, but paradoxically reduces customers' security because of their desire to avoid complexities. The absence of a cultural customer-reflective perspective at AFAC can thereby, paradoxically, reduce customers' security if overall security increases. The interviews reveal that this paradoxical situation is a familiar element, but that the participants do not have any critical thoughts as to how to improve the situation or handle the fact that banks are about to lose their monopoly of being the core monetary body in a modern world.

One team member claim that the business area within the bank simplifies too much in order to attract customers, but also has the opinion that usability suffers from a strong or too rigid security paradigm. Therefore, we have one division working to attract customers, while another close down the initiative by placing security over business. Security should therefore be a natural part of any project and development, not as an obstacle, but as an opportunity. This can only happen if the bank discovers common goals and needs cross-divisionally, with shared research and planning. There is a potential risk that trust from the customer will decrease if Bank X develops new solutions compromising usability over security.

The organisation can have a common reactive pattern in the day-to-day business work tasks. One participant in the research states that a multi-dimensional change within Bank X is necessary to achieve good collaboration between internal departments' and developing common solutions for the customers. If such multi-dimensional change perspectives are missing can this also suggests the presence of a suppressed opinion of the situation and an organisational condition demonstrating significant weaknesses in the innovative and futuristic orientation. Bank X's tradition of 'doing it like this' and 'this is how we do, it' is cited in the interviews when asking for reasons behind the lack of information and participation within strategic development and change processes. Traditional thinking must change dramatically in the search for new ideas; developing the example from one manager claiming that Bank X becomes more like an IT company than a traditional bank. The same manager also points out the danger of failing to take new market shares due to poor strategies, which can be an

indicator of an uncomfortable situation where a known but not admitted status is preventing unconsciousness to become valid information and knowledge.

The interviews also aim to detect the participants' viewpoint and knowledge about trends in the market which can affect Bank X or the customer security either positive or negatively. The analysis contains explanations, but the aim of the questions is to reach a deeper understanding of trends and potential threats. Very soon into the interview-process, the participants became more reflective, and open. The answers reveal an understanding of enlightening customer contact in a deeper manner and some participants point out the need for better communication with the customers.

9. Discussion and suggestions for improvements:

9.1 Introduction:

The discussion follows the ideas from the literature search and interview material. Sorting the fields of topics into main areas provides a foundation for suggestions and solutions. The areas - all with customer security as the main issue - are:

- Definition of a modern bank
- What are the leaders' responsibilities
- What are the employees' responsibilities
- How to define security
- Customer security strategies
- Suggestions for the future solutions

9.1.1 Modern Bank – a definition:

First, it will be important to recognise what a modern bank is. If the idea of a banking business is transformed from physical contact with customers as the core element to one where ATM's, and PC's are being replaced with laptop's, tablet's and mobile devices, then the bank becomes akin to an IT corporation. We must also recognise the diversity of customers, spanning from personal, SMB's, large organisations, global corporates and governments. All of these customer groups have different opinions of what a secure bank is and all have different routines and processes for handling their bank business. There is a significant level of risk involved in a digital financial world as well, since money transfer can be done easily to anywhere in the world with potential fraud, money laundering and financing of terrorism as the result. This is also a picture revealing the diversities of risks and evidence of the big problem – what is the meaning of customer security and the bank and how can a bank cover the full picture? To compare these ideas the car manufacturer, Tesla, can be an example of an industry in change. Traditionally the car industry is concerned with engines and design, but Tesla is perhaps more an IT company than a car company is, even if the main product is the car. Tesla has a need for security, updates of the car are online and all selling is by online solutions. In the same way, banks still handle people or companies' money, but most contact with customers is online and solution updates are online. The success of Tesla shows that new directions, breaks with tradition and daring to challenge the industrial standards can be important elements to achieve success.

Similar to Tesla, should Bank X be a frontrunner and dare to take new initiatives regarding products and security? Investments in multi-device login possibilities will be necessary and biometrics is a great opportunity but also a tremendous security challenge. Standardisation of biometrics is necessary, and if Bank X is at the front of the development, then it can have a major impact on the future product standard. Testing of biometrics on mobile applications is a procedure, but only for light login, but there are now possibilities to enable strong authentication using fingerprints, voice or other new connection points. No other banks in Norway or Scandinavia have strong login in their authentication and the first bank will probably have much publicity. There is also a need to provide information about biometrics to create trust in the market, meaning that knowledge sharing and communication is mandatory whether it is for current or new solutions.

The definition of internet banking consist of many elements beyond security. The AFAC team consider security issues from business and customer perspectives and it will be essential to understand the connection to other business areas and recognise the worldview. The IBM, (Internet Banking Model) expounded by Mäenpää (2006) in Liza (2014), displays the core elements in a worldview and how it all connects. This research's first concern was to explore how to improve customer security, but the literature, observation and interviews generate a need to understand that customer security is far more than login pages and secure solutions.
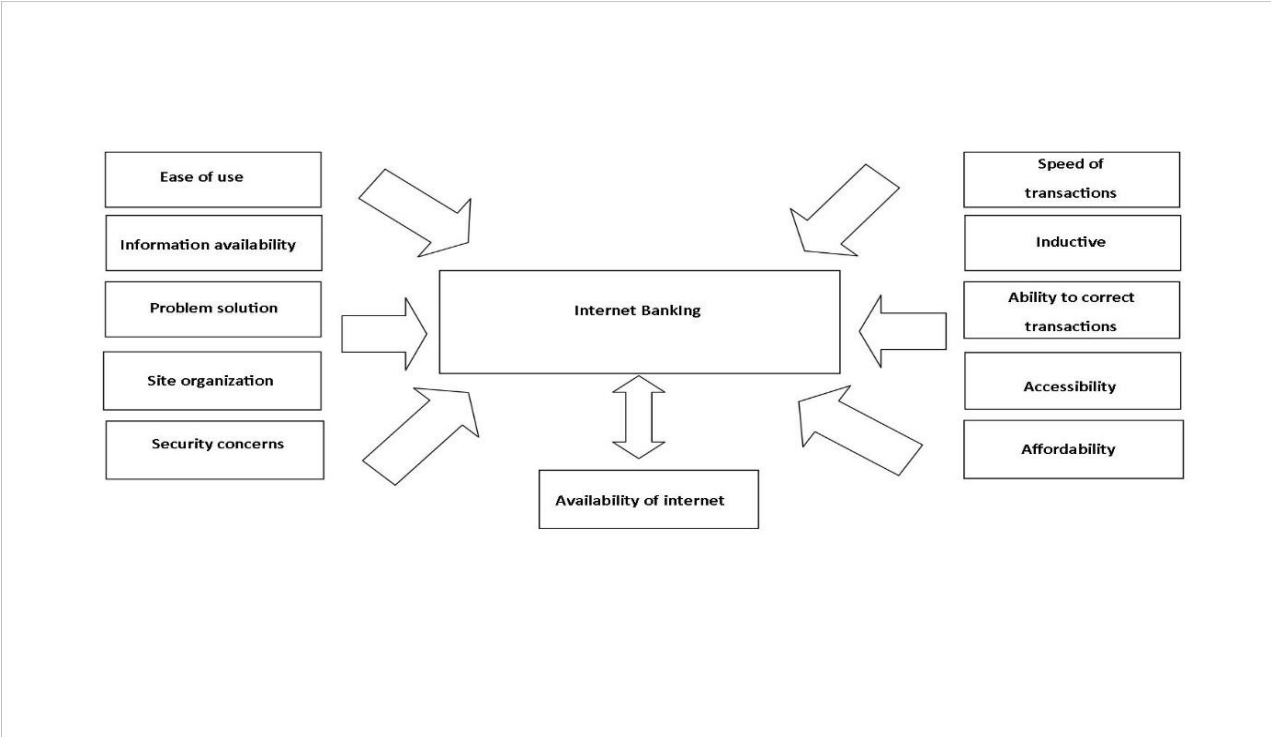
Figure 17: Interpretation of IBM, (Mäenpää, 2006 in Liza, 2014)

Liza (2014) defines security concerns as a service and move the field of business from something tangible and explicit to an intangible topic as a foundation for subjective evaluation, trust generating and heterogeneous. The ability to improve customer loyalty and retention and increase profitability is therefore dependent on good services, which security concerns are. The citation; "… *delivering quality service is essential for success and survival in today's competitive banking environment* (Yonggui et al., 2003, in Liza, 2014), defines this position well. One theme is to create awareness of where in the hierarchy customer security is for the employees and leaders in a bank, another issue is the awareness of security for the customer. Figure 18, taken from Liza (2014), reveals that most customers define security as most important but other services in internet banking also score highly. The precise questions asked in the research, and the definition of security can, however, have an impact on the results and be a reflective issue for the results in this thesis. The difference is visible in other research, for example Gonzales (2004), where customer values and measures are included in the survey. New focus and new angles for information and communication can therefore be necessary within AFAC to increase awareness of fraud; hacking and new internet swindles that influence the total picture.
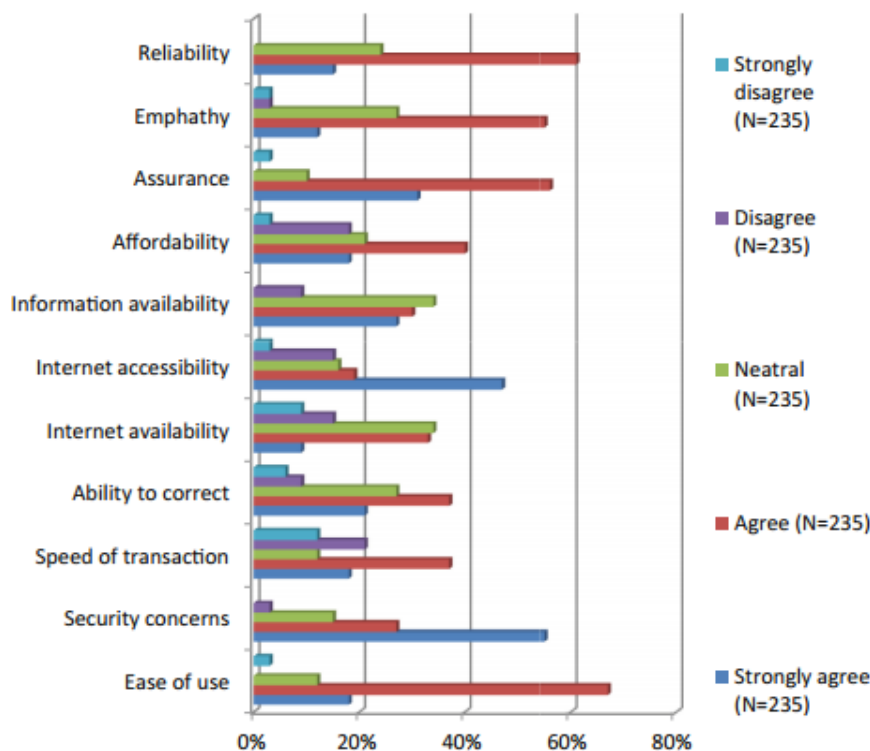
Figure 18: Source, Graph of participants' views of internet banking variables, Liza (2014)

Investigating customer security is a question of investigating how customers understand security internally and externally. Leaders and workers must understand the complex factors

of security as intangible and heterogeneous and something that must not be cost driven, but driven by measures of satisfied customers. An argument that "*... the current researcher agrees with Johnsson and Gunnarson (2005) who found out that 'applying the internet with solely focusing on cost reduction may lead to high supply chain effectiveness while potential customer value opportunities may be ignored'* Liza (2014).

9.1.2 Customer security – leader responsibilities.

The analyses show that Bank X is in a new situation and that the managers to some level have recognised the need to be proactive concerning new trends and products in the banking sector. This need for proactivity, however, does have to take account of the feelings within the organisation, and its culture, if it is to be successful in developing appropriate strategies for the future. The interviews highlight important information regarding the AFAC team's understanding of the situation in respect to the pragmatic 'what' and the phenomenological 'how' descriptions.

Leaders' connection to employees is important and moving away from what the concerns are to how the connection and communication is will be an essential and new way of leadership behaviour. The Leader-Member Exchange (LMX) method has potential as one tool for such a development in communication strategy. Mäkilouko's (2004) research and the descriptions of the teams 'how' feelings in the structural analysis may be extended and connected to the LMX method, as described by Graen and Uhi-Bien (1995), as another angle of a relational model. This model is perhaps more appropriate than situational leadership due to the difficulties in achieving common team feelings and behaviour because of the differences between the individuals' and the collective values implicating the overall teamwork (Kirkman, Gibson and Shapiro, 2001, pp. 16). The sociological problem where power distance is very different in the countries the workers live in, even if they are in the same region, is challenging and potentially under-valued. It is one issue that Baltic workers can accept inequality as a normal phenomenon and a functional aspect of working, in a way that Scandinavian countries, that have extremely low power distance levels, would find unacceptable. Because in each country the AFAC teams are self-managed, working teams, (SMWT), and research points to the possibility that acceptance of SMWTs is significantly lower in cultures that are used to high power distance (Kirkman, Gibson and Shapiro, 2001, pp. 19). At the same time, it can also be an obstacle, since the Scandinavian culture is almost 'unnatural' or extreme, where all workers have the same rights and benefits. It is an area for further research as to whether such equality can generate or mask hidden agendas, such as

aiming for the top, being a leader, manager can be justified by demonstrating strength and management – not leadership remaining 'under the power distance radar' using leadership methods and personal behaviour.

Strong leadership is essential in any team or organisation. Power distance and workers experiencing too much 'freedom', even within the frames of a structured SMWT can also generate a 'lattice structure', where unmanaged approaches to problems and situations can occur. When leadership exercising from a distance, it can result in having effectively leaderless teams or group. A lattice structure in an unmanaged approach resulting in a long time to reach a consensus when crises appear (Shipper and Manz, 1992). Such situations can need a new organisational structure where self-development and self-managed people are the outcome. The impression from how the participants experience the organisation is good and freedom and self-development is present, but the frames need adjusting to visualise the goal and to attain short routes to other resources and key staff.

The problem of "skilled incompetence" is a phenomenon Argyris (1986) recognises as important. Similar to Bank X, good leaders reach a point where decisions are difficult to take and circular movements with self-arguing of own understanding is the result. Observational discoveries by the researcher recognise defensive routines. These routines emerge from mixed messages situations, appear continuously, and escalate from poor or misunderstood processes and procedures. The result appears to be something naturalistic, claimed as originating from within. The research focus of this thesis can be within the frame of such explanations, since the participants' experiences clearly demonstrate excuses, mixed messages and long discussions leading nowhere. If leaders within an organisation, such as the AFAC team or Bank X, are willing to search for such answers, it is necessary to look into the claim from Argyris (1994). These are claims where social and critical reflection during a process can make a leader find the questions, by evaluating their own behaviour, understanding what psychological reasons exist within the organization of emotional and threatening issues, and determining 'why' employees have a defensive approach, contemporaneously (Argyris, 1994, pp. 81). Are these explanations also indications of a leadership problem, which is deeper than expected or can the 'what' and 'how' pragmatic and phenomenological interpretations be of such a character that a wrong impression is the result? As an internal observer, there are some situations displaying problems, but there are also good measures with excellent conditions, little problems and a high level of worker satisfaction with the leaders and the organisation. How can these contradictions emerge as explanations for solutions?

9.1.3 Customer security – employees' responsibilities:

When moving the focus from leaders to staff there is also a matter of trust and responsibilities. It is the workers' task to generate and maintain customer contact, define customer needs and provide leaders in Bank X with appropriate information to develop good strategies and support to the staff. One thing is the clear responsibility, but more important is to develop the culture, awareness and innovative behaviour from within. The responsibilities for the staff themselves to behave as a SMWT is essential and it is impossible for the leaders to make improvements without bottom-up information. Milikin et al. (2010) show the connection between productive in less cohesive and more cohesive teams very well in relation to the self-management level. The authors consider several self-influence strategies blended with self-leadership formulations in order to distance their research from the traditional strategies for behaviour and the environment. Letting a team experience intrinsic motivation by the possibility of redesigning their own tasks and responsibilities can increase the collective effectiveness. Leaders in Bank X need to focus on instructing how team members can distance themselves from dysfunctional patterns of thoughts so as to enrich their tasks and improve the functioning of the SMWT in an overall setting (Milikin et al. 2010). This means that the leaders must give opportunities, but the team must seek them actively and recognise the self-leadership environment.
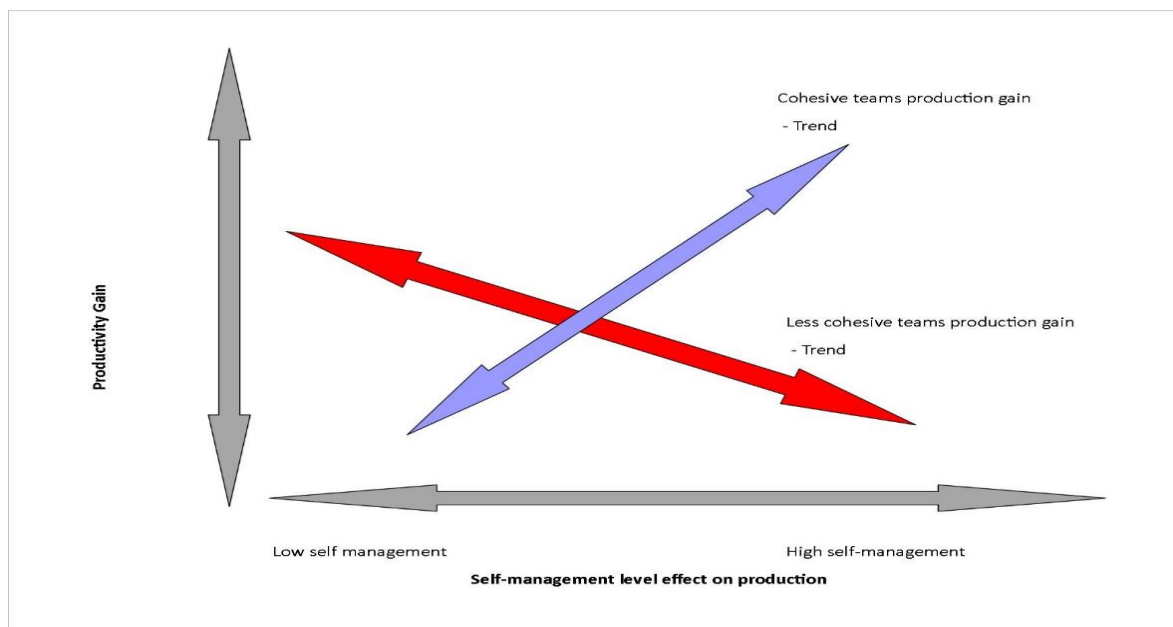
Figure 19: Productivity gain as a function of interaction between module intra-team cohesion and module self-management. (Milikin et al. 2010).

There is a need to balance the level of self-management since team participants performing at too high a level of independency can jeopardize the collective performance and reduce team cohesion (Milikin et al. 2010).

Transforming these responsibilities to customer needs and customer security is a question of structure and routines, where the balance between bottom-up information can make leaders knowledge good enough to determine if the focus is correct. For example, private banking in Europe is growing and the need for wealthy customers can be a template for the overall customer base. High quality service includes elements such as tailoring services to requirements, anticipation of client needs, long-term customer relationship orientation, personal contact, and discretion and investment performance (Molyneux and Omarini, 2005). Notice that security is not among the important customer needs for high-end private banking, but the average customer will probably have the same initial needs.
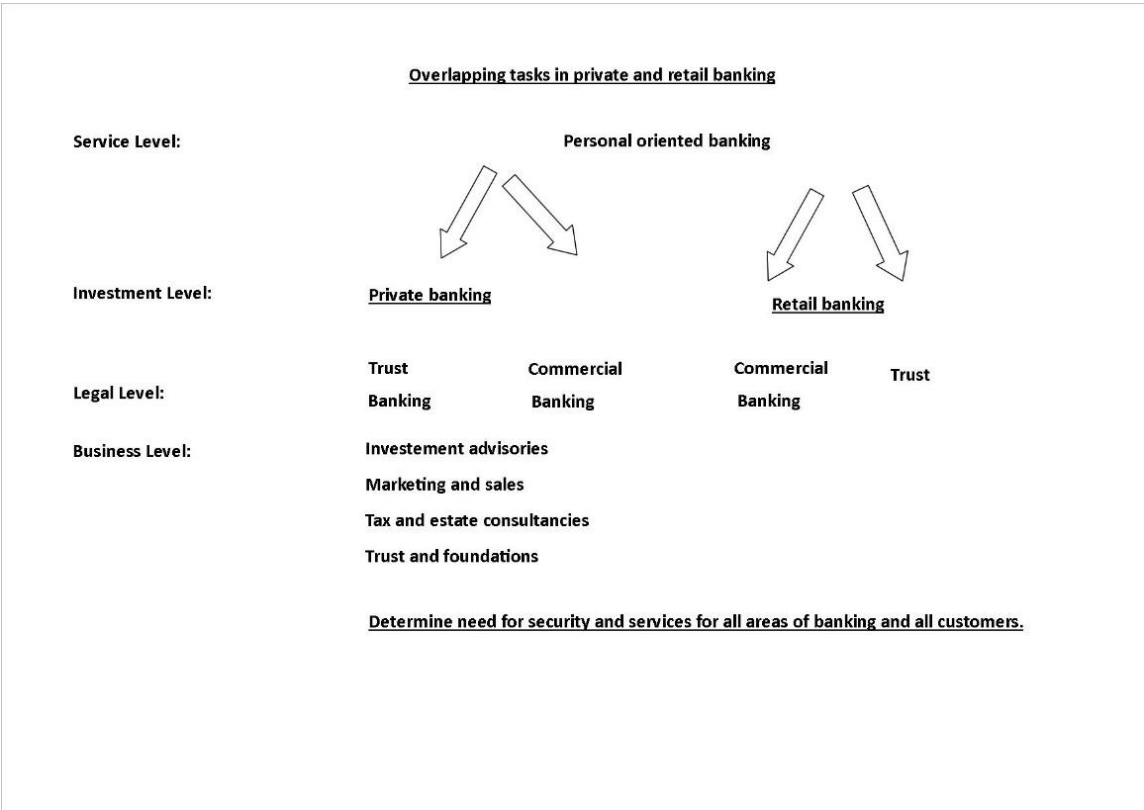
Figure 20: Source - Private and Retail Banking overlap. (Molyneux and Omarini, 2005).

There is also a need for Bank X to translate customer requirements into specific design targets and use these targets in the overall planning. Such planning includes security, as a part of the service, which means that even if the customers do not recognise security as a prioritized need, statements of these as a service and something the customers take for granted is necessary.

Such planning will be a quality functional deployment (QFD) and two areas are particularly important to improve in QFD planning:

- Customer requirements needs communication throughout the organisation
- The specifications need a statement of completeness and be traceable to the customers' requirements and needs (Gonzales, 2004).

The workers' responsibility in the SMWT situation is to recognise the needs and efforts in relation to security, but this can be a task with a dual focus if the customers are more concerned about the banking business than security. Information and communication with customers will therefore be even more important since the focus is beyond security, and this needs evaluation. If the workers want to be included in strategic development, development of new security solutions or making systems that can be interpreted as difficult for the customers, bottom-up information must be acquired to ensure the accuracy of the information to the leaders. Workers need to create analytical and reporting tools that enable understanding of the complexity of the situation and to avoid suggesting developments that customers will distrust. Using the Customer Window Quadrant (CWQ) as a tool to classify customers' security requirements can be effective, and the researcher in the Bank X case, clearly sees a need for such tools in the planning stages of the new global online bank. For example; RBO (Retail Banking Online) is another new solution under the AFAC umbrella, which is a top-down installation that generates much noise internally. It is the workers' responsibility to report such noise and problems, and the CWQ quadrant will reveal what is important for the customers. This knowledge must generate attention from the developers of RBO in a way that adjustments can be possible.
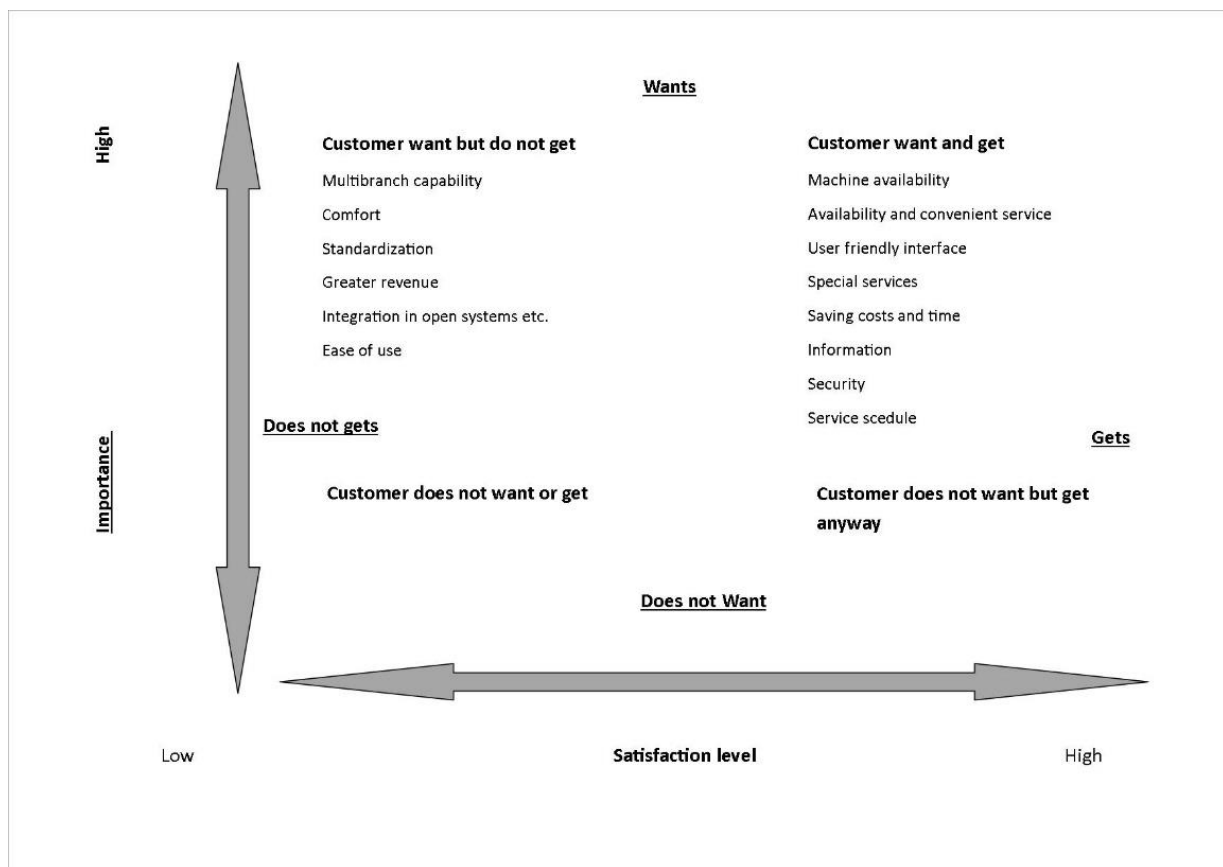
Figure 21: Data from, CWQ quadrant example. (Gonzales, 2004)

In Figure 22 below, Gonzales (2004) sets out customer requirements, demonstrating that security is of relatively high importance, although it is only ranked fifth in the total listing, shown in Figure 25. Deploying new solutions must consider such research in order to align the bank's perceptions with the customers' requirements, and making new security solutions is challenging because of the many combinations of solutions to consider. All AFAC SMWT must communicate with the responsible people for all other requirements and together design a matrix that covers different possibilities served from many divisions and teams. All teams must also ensure appropriate customer communication from their perspectives and the AFAC team can act as a facilitator in such processes for collaboration and cross-divisional cooperation with the goal of creating the best possible bank for the customers. Only by such action can security be a part of all services and incorporated in all solutions.
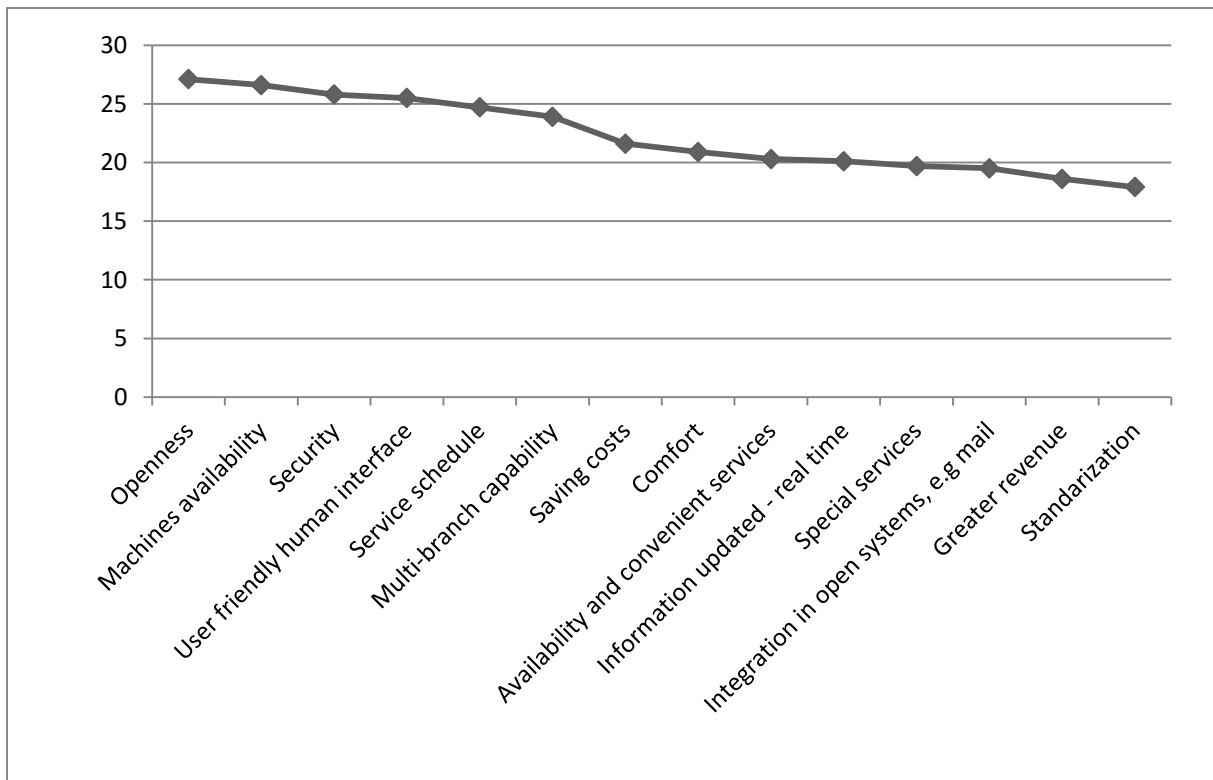
Figure 22: Customer Values sorted, all measures. Metadata from Gonzales (2004)

Within the analysis, it has been important to determine the employees' interpretation of the company values, explore what they are and what the internal banking environment believes customer values are. Evaluating previous research, it is clear that the internal bank values are different from the customers' values (Gonzales, 2004). Bank X's values have a customer focus, but on a higher level than the reference data displayed above. Business perspectives in Bank X could benefit from aligning current value research with the business planning to determine how the business framework can improve in relation to what the market expects. In Gonzales (2004), security scores highly, but security is not the single element most customers appreciate to be important. Other values, such as openness, availability, user-friendliness and service schedules, together with multi-branch capability, are important to customers. Particularly important is the fact that customers still want branches, but this is an obvious contradiction to Bank x' plans for the future, where a significant reduction in physical branches occur. In Norway are 88 percent of the bank customers using online services and 68 per cent are logging in on weekly basis. There are also 44 percent mobile users, up from 39 per cent during the last year. The number of bank branches are decreasing 10 per cent in the period 2011-2015. (Finance Norway statistics) The graphical view in Figure 23 below, shows that security ranks lower on direct questions sorted by measures of what is the most important value, according to the Gonzales (2004) research.
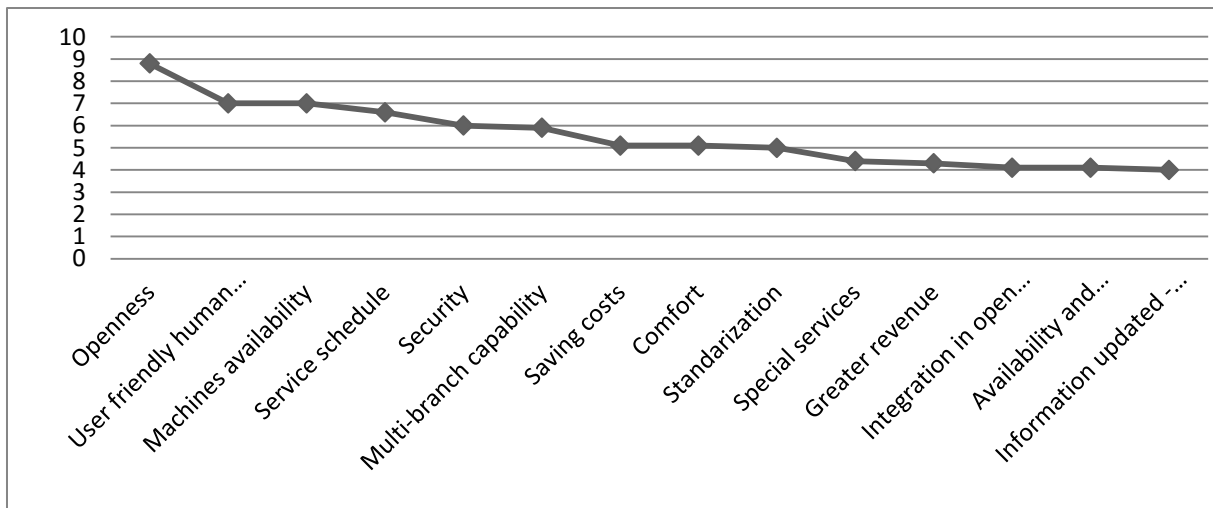
Figure 23: Customer Values sorted by most important. Metadata from (Gonzales, 2004)

There are no findings in respect to Bank X, comparing customer values and the level of importance for either customers or staff. Displaying existing research and metadata can be supportive in the planning stages of developing a new focus on values, internally and externally.
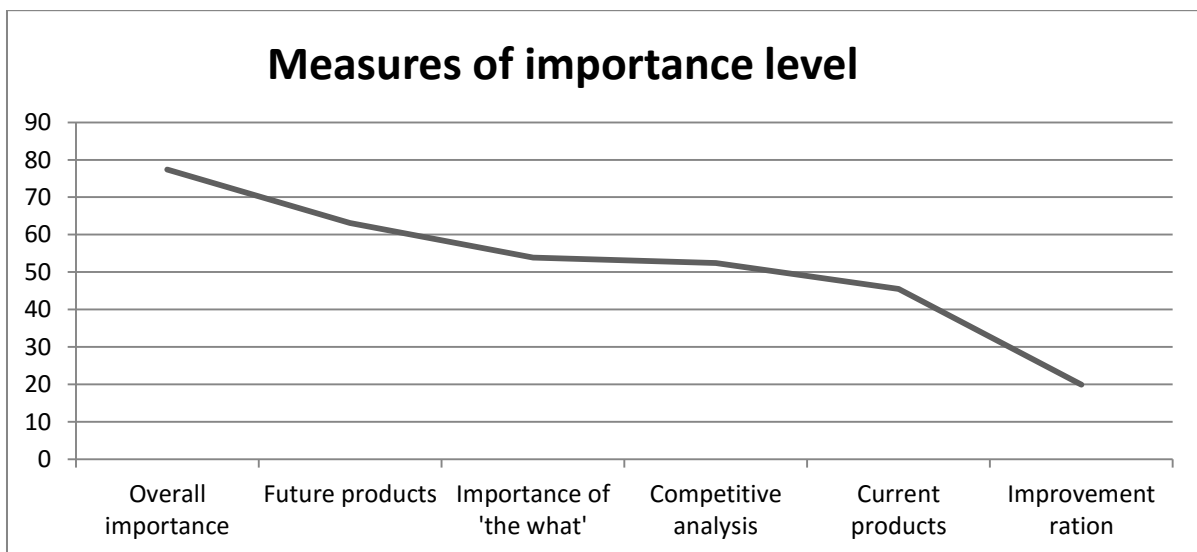
Figure 24: Measures and importance level. Metadata from (Gonzales, 2004)

Customer values in relation to measures and the importance levels in use in the research by Gonzales (2004) display that improvements and current products score lower than the viewpoint that overall banking is important in relation to expectations of future products. This indicates that the expectations of innovative behaviour and renewal of banking is important and needs to be proven to decision makers to understand the continuous change process happening in this industry. The graph below combines the measures and the values to

visualize the fact that security is of less interest for the customers than the bank. The reason for this can be the situation where customers take for granted that a bank is secure and does not emphasizing the issue well enough. This will be important to consider in awareness campaigns to provide the customers with information at a correct level.
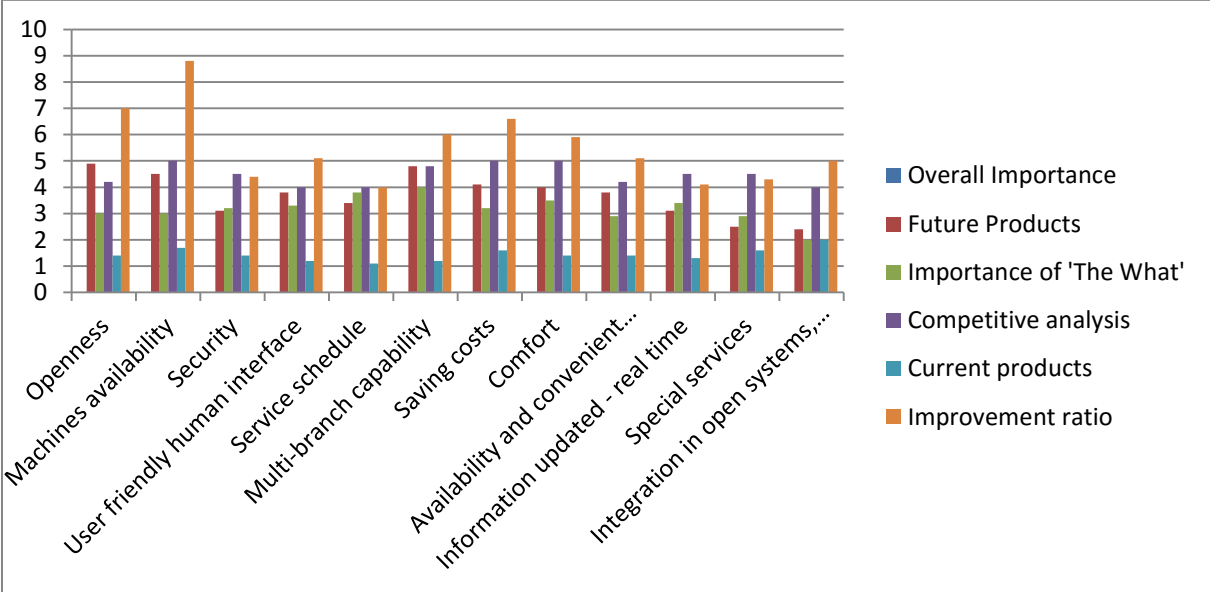
Figure 25: Customer requirement evaluation. Metadata from (Gonzales, 2004)

From the AFAC interviews and the answers is it a surprise that none of the participants recognise the connection between security, future possibilities and customer relations due to cross-divisional systematic development. Seeing security as a service within all products and solutions is a new way of thinking, and a good opportunity for the workers to demonstrate their bottom-up capabilities and responsibilities in combination with self-development.

9.1.4 How to define security:

The development of this research also constructs a picture of how to define customer security and how to understand it. The interviews investigated what the participants' experiences are and how they experience the phenomenon of "what". The assumptions direct the research into organisational values, potential internal concerns, organisational changes and customer security improvements. Blending the literature research and the interview material results in a picture where the current internal comprehension of customer security is misunderstood. It is the impression that AFAC consider customer security a tangible solution, which needs to be there, and that all customers grade this as the most important issue in online banking. Defining customer security differently as an intangible service, which need to be a seamless part of all variables in a modern bank also changes the 'how' factor – how can AFAC understand what customer security is. Trust and confidence from customers will be a result of

the complete banking solution where security is the 'black box' – it is just there, as something expected and natural. In the new mobile world, security is becoming more important: new threats and situations occur on daily basis. Fraud, hacking and cyber-crime increases, but customers are still confident and satisfied. For these reasons, awareness campaigns can become more important than the actual tangible solution, since human mistakes cause the majority of incidents and breaches. The discussion will therefore be to consider how AFAC can improve any intangible security, meaning creating feelings among customers that the security is good. Tangible security – hardware and software solutions – is per se measured and under strict control and it is difficult to explain to customers. Simultaneously is it necessary to explain technical circumstances, but with a non-technical language to create trust.

Intangible security will be pro-actively working to inform customers about social engineering in a way to reduce the likelihood of customers clicking hyperlinks on web-pages or in e-mails, while increasingly the likelihood of them avoiding web-pages which can contain viruses or Trojans and helping customers understand the importance of using strong passwords and not giving information about these to anyone. Hacking by social engineering is becoming a serious problem due to stronger technical solutions and hackers using either hunting or farming as techniques to gain information. The hunting method aims to get information from persons through minimal interaction, while in farming hackers establish closer connections with their victims over longer periods. This means that fraud is becoming more common and information can increase security in a way that awareness is the security itself- not the technical solution in the first stage. The bank/AFAC must have sufficient technical solutions available to capture fraudulent behaviour when information leaks provide hackers with sufficient information from customers to perform an attack. Trust in this relationship, is when customers rely on the bank to have fraud filters available, but new attacks challenge the banks first-line security continuously; and awareness campaigns should give the best result.

Replies from the interviews can demonstrate that AFAC are considering new technical solutions and awareness campaigns. The comment "*AFAC moving to overall customer mind-set and focus on more holistic thinking*" is positive, but the same person also states that it is still silo thinking within the team. A strategic plan to separate and align tangible and intangible security is therefore needs to be developed.

Such strategic planning must follow Porter's (1996) ideas of becoming a complete strategy, activity based and unique and it must recognise security as a product to sell, not an expense for something necessary to avoid losing money. Security planning for customers' needs to

involve planning for future business and fully supported by a willingness to invest in the product. People are both the problem and the asset in all business and organisational planning without planning how to communicate with these people will be insufficient.

9.1.5 Customer Security Strategies:

In AFAC, customer security strategies concern both business and technical solutions. There are not many comments from the interviews that customer focus is recognisable within the existing strategies. Customer focus is present, but on an inside-out basis, not in a dualistic two-way communication process where knowledge from outside reaches the decision-makers appropriately. There are attempts and processes to look at information and trends, but the clear impression is that there is no high-level research providing a foundation for the strategic planning of new security solutions aimed directly towards the customers. The fact that Bank X has 50+ authentication methods is a signal that the global strategy planning has been malfunctioning over a period and that new installations without a strategy to replace or reduce the number of solutions in the global bank. National schemes for authentication are necessary, but global schemes exist yet are unused. There are, however, strong signals in the bank that changes are necessary, with simplification as the core element and driver. The question is if simplification is for the benefit of the bank or for the customer, Intel Security (2015).

9.1.6 Suggestions for the future solutions by the participants:

The participants in the research recognise several trends in the market affecting the bank. Trends mean changes and the replies provide the research with impressions and suggestions for solving the new market trends. The information is high-level, but it was not difficult to find good answers, and the answers were many and varied. Comparing the suggestions from the AFAC team with future proposals and research findings will be a significant contribution of the research. This is not a part of this research scope, but as an internal researcher and observer are several suggestions also recognisable within other parts and divisions in Bank X. A large-scale research can be essential to create knowledge of how different divisions can experience the same problem and shape a worldview of the cultural situation, which is much more complete.

Table 4 below is a summary of the most common suggestions from the AFAC team and the leaders. The textural and structural analysis is a result of the table, but a complete overview displays the diversity further.

AFAC team suggestions for the future:

- *Increased internal communication. Involving staff. Find the right people for the right places.*
- *Escape from the previously old-fashioned styles and strategy*
- *Remove silo thinking within the team and cross-divisionally.*
- *Need more innovations. Look outside the bank. Changes must follow market trends. Need different solutions. More investments needed. More attention to market*
- *Need change in mind-set. Inherited challenges. Bank X test app is good. Need incremental learning*
- *Big and clumsy organisation. Need to take chances. Need agile way of working. Organisational changes in digital banking is a challenge. Misinformation and overview of solutions and stakeholders*
- *Need to listen to customers (AFAC). Now only ask after incidents. Reactive, not proactive behaviour.*
- *Reactive perspective now. Need to become more proactive. AFAC is not leading the changes. Mandate is needed*
- *Shorten time to market.*
- *Fewer development cycles can help faster development (organisational). Too long time to develop new products. Lack of resources and people must be in focus*
- *Processes must provide faster implementation. Wrong competencies in wrong places. Need to open up. Security needs focus.*
- *More agile work. Time to market must be shorter... New focus needed for ongoing changes*
- *Generate trust in market is necessary. Learn from outside. Threat in Bank X is IT and poor communication. Usability is not good and need better understanding (overall).*
- *More specialised and personalisation of Netbank is a need. Long and short-term focus must be consistent.*

Table 3:AFAC team suggestions for improves for the future.

There are surprisingly many suggestions and the variation is significant. One can ask if such feedback is good, in the meaning that the team has fully focused on and engaged with the

bank, or if the team members recognise massive errors and sources for changes that are difficult to communicate into the organisation and the leaders.

9.2 Assumptions validity from the analysis:

Re-organisations are changes in terms of system and people adjustments, aiming to improve the situation, which in this scope is the customer security improvements. The conclusions in relation to the assumptions in Figure 26 below, therefore, give clear individual results for each variable and a comparison with the related/connected assumptions from the visual framework explained as:
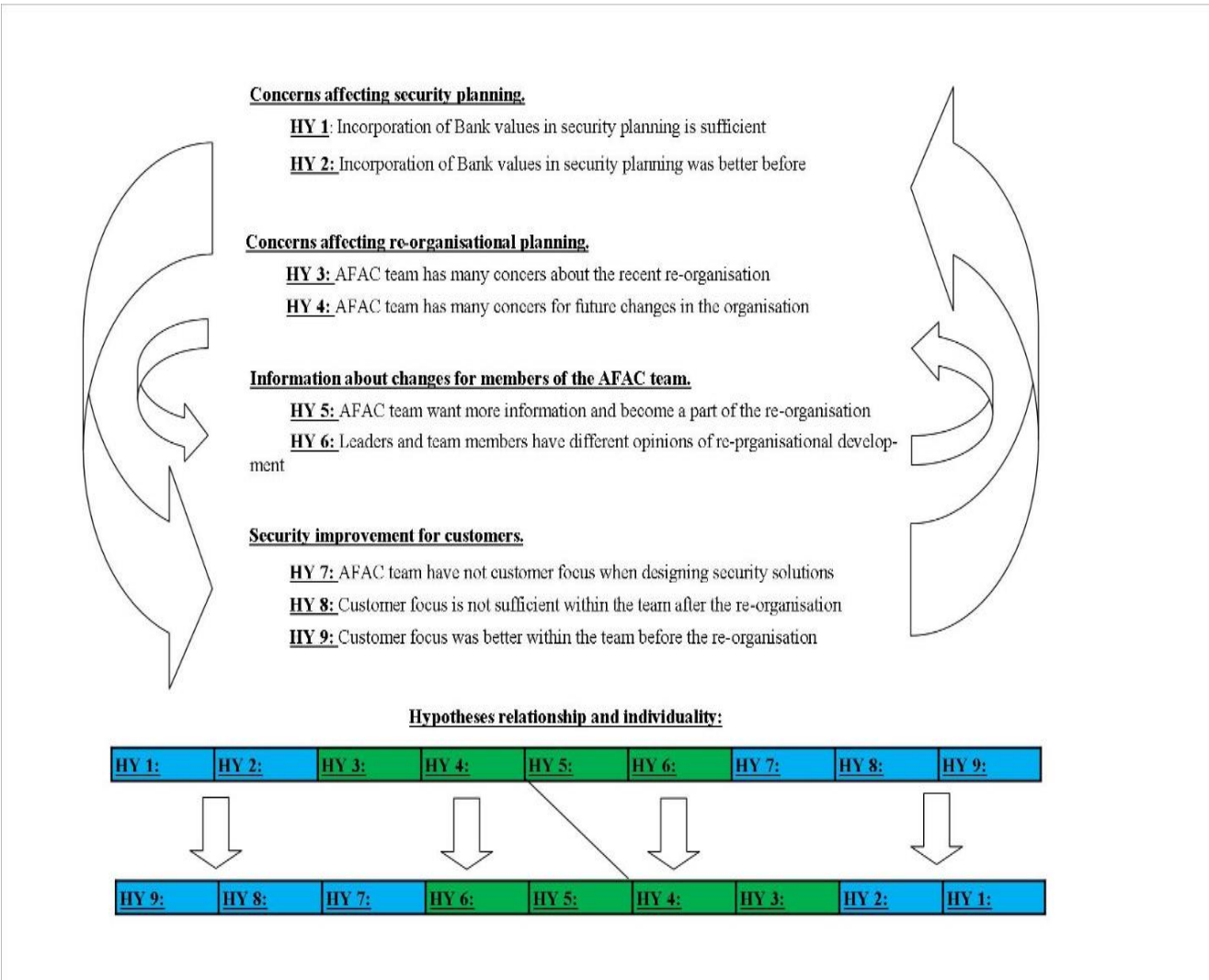

Figure 26: Hypotheses'/assumptions relations and connections

9.2.1 How the Bank Values is affecting security planning:

The four hypotheses/assumption sets are independent, but also connected to provide a result with a wide perspective of the situation in Bank X. Concerns for the security planning relate to changes preventing or increasing the possibilities for the AFAC team to provide the Bank with appropriate plans from re-organisations.

HY 1, that incorporation of bank values in security planning now is not sufficient, is a valid hypothesis, based on the interviews and the evaluation of literature. The reason is the impression of the use of values, as an issue is not incorporating in the security work, only as a part of the overall picture. Figure 14, "*Values Impression – organisational values. Internal*" demonstrates well the incorporation of AFAC after the change, but not directly in relation to increased customer security. Values are internal tools, used for internal purposes, which does not help the security level. HY 1 indicates that the values are an object for adjustments or implement customer security in the usage internally and externally. 'Great Customer Experience' is a value that security falls under directly, but 'One Bank X team' needs the implementation of an internal awareness of a wider scope to be effective. Customer security should be a part of all discussions about values and re-organisations. The last value; 'It's all about people' should be concerned with how to increase awareness and customer focus in all tasks in the organisation, and is perhaps the most important single value in the bank in relation to re-organisations. All employees should learn that 'people' not only consider employees, but also customers and collaborating companies, etc.

HY 2, Incorporation of bank values in security planning was better before the recent organisational change, but does seem to be neutral. No findings, nor any indications or statements pointing at the change, have had any positive or negative effect. This means that HY 1 explains a security-planning situation as not sufficient and, in relation to HY 2, it is the situation the same as before. There are some indications, however, that it is too early to see any results of the change, but there is no evidence that the situation will improve without further adjustments. These adjustments must include new focus areas and put the customer and the communication in the first line of priorities to be able to being about a direct improvement for the customers because of a re-organisation.

9.2.2 Search for concerns, which can affect re-organisational planning:

HY 3: that the AFAC team has many concerns about the recent re-organisation is visible through replies from the interviews. Lack of inclusiveness and a low impact of the team in improving the situation before the announcement is a concern many team-members and

leaders express strong feelings about. This indicates that making a change as a top-down approach is not necessarily effective, but it is necessary to separate peoples' opinions from the result and process. A team without impact on its own situation will potentially not support decisions, but this does not seem to be a problem within AFAC. The engagement is high and the passion for the work is good, since no AFAC members expressed a negative impact or direct negative statements regarding the result. The process gets the critique of the pre-informational conditions, but the satisfaction level after the announcement is good. The information in the post-change period is sufficient and good, but there are still concerns about the low level of impact on adjustments or new changes. Team members state that they almost expect new changes, and this can be interpreted as an early stage of resignation or 'this is how it's done' approach. Such approaches by team members can be dangerous on a long-term basis and decrease any effect of change initiatives. Effective SMWT should have empowerment of their own situation, even if a leader must be present, but in a 'virtual' attendance.

Figure 27 sets out the quantitative data showing that the leaders have more concerns than the team member does, which is difficult to explain.
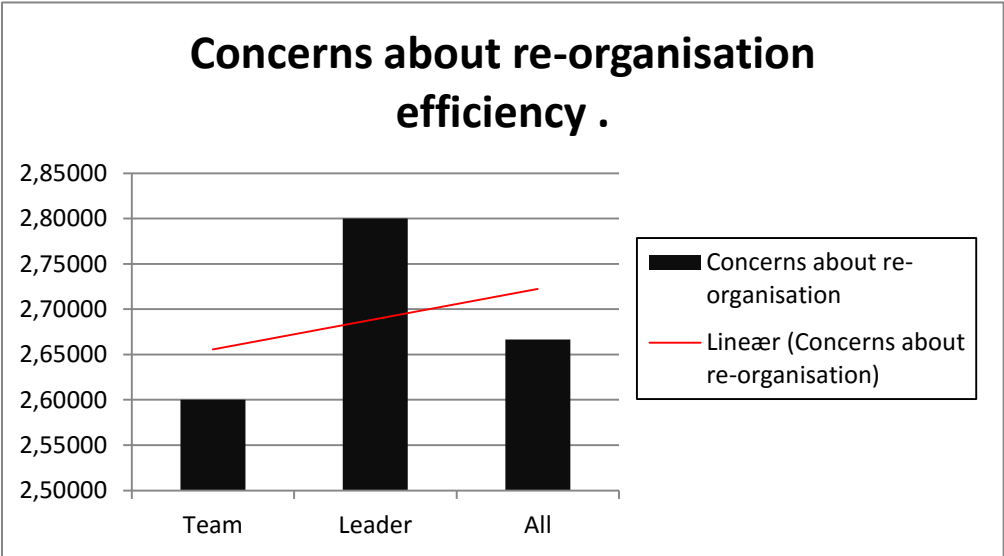
Figure 27: Internal concerns of AFAC members in relation to the recent re-organisation.

All averages are above the 'neutral' value, but are there lower levels of concern among team-members in relation to lower interest or are the leaders closer to recognising disturbing elements in the solution? Several concerns are revealing from leaders and team- members regarding areas for future attention. The list of concerns and the fact that these issues are genuine problems also demonstrates the deeper focus available from qualitative data.

9.2.3 The HY 4 concerns are:

Statements from the interviews in relation to HY 4, concerns, are many and divergent and Table 5 below is a summary of the data following the analysis in the previous chapters.

Concerns and areas of attention for Bank X

- *Digital revolution, Google etc. Simplification. Compromising usability vs/security. Separate communication unit. Create a single point of contact with customers/internal. Be reflective and consolidated.*
- *Customer behaviour changes. Need to adopt faster. Crucial.*
- *New market.*
- *Mobility and biometrics need attention. Banking from anywhere.*
- *Facebook, Google etc. Ease of use. Payments and transactions attention.*
- *Digitalization. Globalization. Generic focus. Multi-language solutions. People get global. Trade-off's from traditional banking good?*
- *Online devices. Ease of use. Cross channel development. Technology*
- *Mobile banking. Business focused. More mobile development. Assume competitors are more innovative. Involve customers in development. (Bank x Next) as example. Time to market is too long.*
- *Low rates and difficult market have impact. Unstable customers. Change the bank faster to online solutions. Core - be secure. Capable to do so? Maybe! Overlay example. Technical ok. Problem adopting solutions*
- *More mobile users*
- *Customers move/act faster. Unfaithful customers. Also an opportunity!*
- *Market focus on technical solutions. Become more mature. Need better understanding of customers*
- *New technology*
- *Small. Other business simplifying too much. Attract customers. Not by security - usability suffer from wrong security focus - same answer as 404.017*
- *Mobile world*

Table 4: Concerns and areas of attention for Bank X.

Similarly, the picture of what business threats the AFAC team recognise display some differences between leaders and employees, which is an indirect concern for the future of the bank and the team. This table demonstrates that several business areas have a direct impact on

the working area of AFAC and will be an additional source of information for the suggestion for improvements.

9.2.4 Business threats recognised:

Statements from the interviews in relation to HY 4, business threats, are also many and divergent and Table 6 below is a summary of the data following the analysis in the previous chapters.

Recognised business threats

- *Fraud towards new e-bank. Reputational threats*
- *Multidimensional change is fundamental. Financial sector and core banking.*
- *New players in the market. Google etc. Overlay services.*
- *Failure of compliance and trust*
- *Less use of our solutions. Ransom= poor design and obstacles with policies etc.*
- *Landscape getting more online and mobile. Now an IT company more than a traditional bank. Fail to take shares in the market by poor strategies*
- *Corporate fraud*
- *Corporation needs 'One Bank x team' thinking. Need new services. AFAC not involved in personal development from start in projects. New solutions without AFAC knowledge.*
- *Stay/increase bank compliance. Increase process improves. Compliance requirements difficult. New regulations in the market. Need correct operative processes*
- *Competition from third parties (overlay services) and timely manners.*
- *Overlay services, apps, and reduced security caused by these.*
- *Technology changes. Political situation*
- *Core banking focus. No monopoly on banking services anymore. New competitors (Google etc.). Need to create stable banking industry. Consider legal, secure and customer fraud*
- *Small. Other business simplifying too much. Attract customers. Not by security - usability suffer from wrong security focus*
- *New actors in the market. Not sure if these are market driven.*

Table 5: Recognised business threats

These strong expressions are not only concerns for the bank, but also concerns that the AFAC team should handle, and the answers state that additional organisational changes are necessary

to handle new solutions and increase customer security. The conclusion of HY 3 and HY 4 is, therefore, that there are many concerns present that can affect Bank X, directly (HY 3), as team-concerns and indirectly (HY 4), as higher-level company concerns which AFAC needs to consider.

9.2.5 Information about changes for members of the AFAC team:

HY 5 considers the level of information the team-members receive and to what level this group was involved in the recent organisational change. HY 6 evaluates if leaders and team-members have different opinions of the re-organisational development and both assumptions relate to each other. The statements regarding this question vary significantly between the leader group and the team-members. While team-members mostly express dissatisfaction, the leaders are of the opinion that information about re-organisations is unnecessary. While 60 percent of the leaders clearly state that, there is no need for information and additionally 20 percent are neutral and only 20 per cent would 'like to see more inclusiveness', it clear that this unwillingness to collaborate with the team in the future is not good. 90 per cent of the team-members state that the situation was not good and appreciation of information and participation early in the phases' is a consideration. The most challenging part of this difference in statements is the difference in opinion and communication format. The leaders do not see any need for information, but the team-members want it! Due to the overrepresentation of employees wanting more inclusion, 78 per cent in total, being negative or neutral, there are reasons for a different evaluation of the success of the recent re-organisation. The conclusion of thesis HY 5 is therefore that there is a need for more information and team-members should be part of similar changes in the future, HY 6.

9.2.6 Security improvements for customers:

One direct question asked was if the participants have a better security focus now (December 2014) than before August 2013. The replies from the team-members uniformly show that this is not the case. Only three persons, all leaders, state that this focus has improved. Extending the question to include security and user experiences returns a similar but more positive answer set, although not very positively crediting the change as a reason for an improvement for the customers. The customer security areas which have seen improvements are in respect to communication through different channels, execution portfolio and malware monitoring, best practice thinking, supplier focus, retail to corporate knowledge sharing and simplification globalising and flexibility. Recognition as positive to these areas is 35 per cent of the participants, while 65 per cent clearly state 'no'. Leaders identified 40 per cent of these

improvements. Further explanations from the participants point out that it is too early to see any changes, but when in a process can any changes provide results? It is diffusing if one clear goal with the change was a different customer perspective, and what period this goal should be within. However if this perspective was not included in the change communication to the AFAC team is it an open question why not. A success rate for the change needs to consider if the customers recognise any differences, or at least if the bank has a different mind-set towards the customers. This seems not to be the case and indicates that the background was not on customer focus but strictly organisational. Evaluating HY 8 and HY 9, the conclusion is that customer focus was not better before the re-organisation, HY 9, and the situation has not improved as a direct result of the change, HY 8.

HY 7 considers if AFAC had an insufficient customer focus in the design and planning phases of security solutions. There are no any good indications or measures of this assumption and it was therefore not possible to make any conclusions. Due to the answers given and the observations, in combination with experiences, it would be reasonable to conclude that there is probably too little focus on customers in the security planning.

9.3 Assumption summary:

HY 1	Assumption partly supported:
Incorporation of bank values in security planning now is not sufficient.	Bank values usage is not an effective tool in AFAC security planning
HY 2	Assumption not supported, no changes
Incorporation of bank values in security planning was better before the recent organisational change.	Indications from team members that values not were more appropriately in the old organisation
HY 3	Assumption supported
The AFAC team members have many concerns about the recent re-organisation.	Several AFAC members are concerned about the reorganisation in relation to information and influence.
HY 4	Assumption supported
The AFAC team members have many concerns for future changes in the organisation.	Several AFAC team members are concerned for changes in the team and in the bank in general.
HY 5	Assumption supported
The AFAC team want more information and	AFAC team members clearly miss

become part of re-organisations	information about the reorganisation. The leaders are not of the same opinion and this separation of viewpoint can indicate a problem in change strategies.
HY 6 Leaders and team members in the AFAC team have different opinions of how re-organisations should develop.	Assumption supported The leaders recognise no or little need for information or involvement by the team. However are new leaders of a different opinion than the leaders that perform the change.
HY 7 Team members in the AFAC team do not have a customer focus when designing new security solutions.	No conclusion. Propose supported Few recognitions of indications are that customer focus are the reason for the changes in security solutions. Bank interests seems to be the main driver.
HY 8 Customer focus is not sufficient within the team after the re-organisation	Assumption supported AFAC team members does not bring forward claims that customer focus is sufficient.
HY 9 Customer focus was better within the team before the re-organisation	Assumption partly supported The analysis concludes that the customer focus was approximately the same or to some level better before the change.

Table 6: Hypothesis'/ assumption summary

The analysis of the research findings allow the researcher to argue that there are several areas with a major potential for improvement in the AFAC team, in respect to the problem statement; "*how is a major organisational change affecting collaboration and cooperation in a new global security team setting – is the customer perspective improving?"*. The subjective analysis aimed to determine how the re-organisation could improve customer perspectives, but there were no evidence or statements explaining that this is the situation. There are no research in this thesis, which investigates the reasons for the change and how the planning leads to the current result. It is obvious that leaders and team-workers are misaligned in several working areas, not only in change processes in the AFAC team.

10.Suggestions for future changes and solutions:

10.1 Introduction:

This section considers suggestions for changes for the AFAC team with the aim to improve customer security. Actions in the current environment can increase the security, but organisational changes can shape the team and its sub-teams to generate engagement for specific areas. Customer communication is the key in this planning and evaluation and the hypotheses'/assumption conclusion form the proposals.

10.2 Results:

Researching and considering organisational becoming and pluralistic evaluations is about finding the right ontology. Organisational change is a process of avoiding the impression of change and pluralism as threats or intrinsic aspects of managements (Kildruff and Dougherty, 2000), but represents opportunities and necessary action to avoid remaining in the past with a state of equilibrium. The literature search and internal research have concluded that there are a set of changes or adjustments, which can improve Bank X's position in the market, national and global. AFAC as a team have the opportunity to influence the global situation due to its global team structure and this is essential for new models.

The suggestions separate by a long-term and short-term focus and as to whether they are national or global. The suggestions are in the form of a gradual and systematic setup, which need connections between each step to be effective. An over-arching goal with the suggestions is to create a new 'world-map' of the situation, determine how it is now and how it can be in the future.

All Suggestions are resulting from direct proposals from the interviews, but the evaluation and analysis creates the level of importance and numbering. The observer role are also influencing with adding internal knowledge and understanding of the proposals.

It is of interest to recognise that AFAC and other internal divisions emphasize a new way of development, including simplification and short time to market, but several participants recognise human resources as an obstacle to achieve development or updates. This can be a consideration of a security problem in its own nature, as IT reject, hinders or slow down any reorganisation or other development business tries to achieve. The IT development resource bottleneck is for this reason an element that AFAC must improve to avoid Bank X acting in an environment without alignment with the market and the competitors.

10.2.1 Time perspective:

Planning new solutions and initiatives

Introducing 'Big data' – what and how to analyse?

How to be in front of innovation in the market?

What are the long-term needs?

How to become innovative?

Communication plan

Evaluate product portfolio

Plan for how to evaluate product portfolio

Stakeholder analyses

Determine different roles outside the team – who does what?

Determine immediate needs and updates

Market knowledge

Who are the customers?

Evaluate organisation

Evaluate internal team knowledge and personalities

Figure 28: Time perspective for planning.

The suggestions move the focus from 'what to do' to' how to do it'. This is an important change for the AFAC team since it will demand an organisational adjustment and introduce cross-team communication as a necessity to be able to perform the changes. A cross-department approach is also necessary to reach the goal – how to change the team mentality.

Evaluating internal knowledge is important to blend the correct people and skills into the different sub-teams and the main team. This will be essential as a foundation for organisational planning and a first step, together with an organisational evaluation. Such an evaluation must include information about how the team works and interacts, individually and as a team, together with the ability to achieve good communication externally.

Performing a customer analysis and classifying these private persons and companies by perceived values and needs will form the basis for customer information and product development. Such market knowledge will align what the customers want, what the customers need and what Bank X, AFAC team will focus on.

On a short-term basis, it will be possible to detect and implement immediate requirements from the market knowledge acquired.

Focusing on mid and long-term needs will be the next step to determine organisational roles outside AFAC, aiming for an overview of 'who is doing what' in Bank X. Included in this

step is to connect the roles with the people and determine correct stakeholders. An appropriate stakeholder analysis will additionally provide knowledge of future approaches for getting support and resources for new solutions.

All product and process portfolios need appropriate analyses, including standard information for each solution. Only by having similar information can comparisons be effective and valuable for the planning. Initially, the focus must be on 'how', not 'what'.

Communication planning as a pluralistic approach, team-internally, bank internally and externally, can create clear and concise guidelines of standard ways of sending, receiving, storing and using appropriate information.

Focusing on long-term planning includes several stages, connecting each other. A separate group of people should work on these issues and suggest to the team plans and proposals in a standardised format. With a good overview of all circumstances in the previous changing stages, it will be possible to perform planning and make suggestions, and, if accepted by the AFAC team and its leaders, a new specialist group can work on how to implement the proposals.

Creating such systematic processes will also create engagement in a future organisational change, increase empowerment and involve all AFAC members, locally and globally. Excellent world-views and new understandings will be one result where the 'how' factor will dominate, supported with appropriate and already captured knowledge of the 'what' and the 'why'. Sense-making and the readiness level, team-internal and external, will be a secondary element with a directly customer oriented focus, orchestrated by people and team spirit. Such an approach also means that Bank X's values incorporates as a natural part, i.e. 'One Bank X team', 'It's all about people' and 'Great customer experience' directly become an active part in each step, plan and organisational development. People and 'how' in focus!

11. Further research:

The thesis has considered security within modern digital banking from customer and AFAC perspectives. How one team can increase customer security with re-organisation explains that there is a need to perform internal changes to keep up with the external circumstances affecting customer security and banking as a core business using digital channels as the main contact point. Organisational planning is an exercise to engage in new considerations to find the best combination of internal knowledge possible to adjust the business to new trends and markets. Further research should, therefore, consider how viewing organisational planning in terms of banking relationships towards customers could have positive effect on the overall security and business combination. It is the organisational change itself which is the research area, but in the detection and proactive aspect. Such research can develop new methods to blend different internal knowledge and stakeholders to find new combinations of work groups and teams that are capable of detecting new business threats and opportunities. A wider scope with a significantly larger sample size could give other answers in both the qualitative and quantitative data sets, which by triangulation could provide the research with a higher level of valid material for analysis. The goal can be to find information on a deeper layer and give additional value to, for example SWOT analyses.

Customers' definitions of security is one area that needs new research. This can give the bank, the AFAC team and other businesses alternative and additional information about what the perceptions of security are and make it possible to create awareness campaigns directed towards customers and users. How to overcome social engineering and strengthen the 'human firewall' is one of the most important topics in the new world of banking but little research has found on this topic.

One new security area is the use of biometrics. The use of biometric techniques require a major effort in developing technical solutions and generating trust so as to achieve their general acceptance as a strong and secure solution for the future. There are massive changes and increasingly innovative activities where new devices appear online and can use biometrics. The new introduction of IP version 6 will also open the way for new devices and a normal home will in the future have internet access in a wider range of equipment than currently. Biometrics can be included in many of these devices and will be important to combine with security in watches, cars, TV's etc.

Big data will be a problem and an opportunity due to the many new internet-connected devices and many combinations of biometrics and new organisational solutions should grow out from the new needs and situations.

Figure 29:Future research areas

Figure 29 displays the areas from where the future improves can be effective. The picture is a meshed overview where all focus areas connects to each other, meaning the result need to reflect improvements to all areas. Cyber security can be one new definition for AFAC to follow when planning for new changes and customer security makes the overall goal to achieve. All of these areas for further research relate to this thesis' problem statement and will be valid sources for the development of an increasing understanding of the new global internet business world. The areas are future oriented and from the research, there is a clear need for new methods to find the answers to these challenges. The proposals are also a result were the research are transforming from the initial pragmatic and the positivistic 'past' view of the data. The last part of the research philosophy use the postmodern approach to study the 'now and the future' in a social rather than just a technological sense, by extending the methodology. This combination also form the proposals where the possibilities for future improves are reflecting AFAC statements, literature and the current situation.

11.1 Gap in literature:

The preliminary literature search uncovered a gap in studies at the point at which business perspectives and customer security in e banking are in combination. Little material findings where customer focus results in a new balanced authentication solution, covering all security regulations a major financial institution possesses. Exploring the leadership styles and the organisational change within cyber security also revealed literature gaps where the previous and new organisational solution have an aim to detect how a new team derives from previously separate groups to increase customer security with a human perspective. Solutions are scholarly theories or practices without academic sustainability, but are not in relation to each field of profession in combination. This means that the analysis is also an exercise of developing judgements of information without testing the theories or by implementation. Much theory is also considering physical or technical security and the mind-set of security organisations is not focusing on people and subjective settings.

12. Reflections and Learning:

The initial implications of this thesis, to develop professional and academic knowledge, and bridging these fields of learning, has been an essential goal to achieve. The thesis results and knowledge will be an important asset for Bank X and AFAC for future changes and strategic solutions, and the thesis will similarly be a source of academic reference due to the combination of the practitioner and scholarly mind-set and learning for the digital banking industry.

Starting on the thesis and the exposition of the research objectives is also a beginning of the learning cycle. The objectives from the start are still valid, but the reflection and evaluation of the learning processes show that the result directs more to subjectivity and people than the original intention. The research focus has shifted from internal, solution and technical oriented learning to a combined people oriented and technically security problem, which is also a demonstration that with different core research, a different philosophy and expectations e-banking security will experience a new enlightened phase in relation to customers.

The important learning from this study is the recognition of an organisation in change and the fact that performing action research/action learning in a 'live' environment also includes changes in the problem statement, processes, methodologies and the people forming the internal culture. Research over longer periods in large organisations will have challenges to adjust to the living organism that the culture can be, and this is particularly important in social studies from a qualitative perspective. In Bank X, it has been very difficult to remain focused on one specific organisational change when massive changes internally and externally have forced the top management to take new actions for the entire company. New market trends with mobile solutions, fraud and hacking make it necessary for Bank X and AFAC to change from being a passive dinosaur to become an active game-changer and front-runner to keep up with the competitors. It is clear that the research can contain biases in relation to such circumstances, but the investigation within one team will still be valid, and there are opportunities for transferability to other parts of the bank, which justify the methodology and overall result as academically and professionally valid.

One important point of learning from a major body such as Bank X is the recognition of groupthink and silo environments. AFAC consists of several sub-teams and it is important to improve the collaboration between these. AFAC, as one team, will also need to extend the focus outside the organisational team limitations, but performing this research has made it clear that many levels of groupthink can exist in a complex culture. One important definition

of groupthink is *"...groupthink occurs where teams close up against outside messages and strive prematurely for unanimous agreements for a course of action. Promotional leaders-promoted their own preferred solutions – produced more groupthink, discussed fewer facts and reached a decision more quickly than groups with non-promotional leaders.* (Firth-Cozens and Mowbray, 2001). This definition is a reason for reflection as it is also about acceptance of either groupthink or fast decisions or non-groupthink in an open environment, where embracing new ideas and discussions is the norm. During the research, it has become clear that the managers are self-promotional and the reason for the existing silo thinking and the team members in AFAC accept this and thereby participate to sustain an invincible barrier to other departments in the bank in addition to a distance from the customers. A valid question from this reflection is whether modern society's increasing tendency to demand strong leaders capable of making fast and good decisions is about to destroy itself from the inside with a consequent unconscious closure and distancing from others.

In the thesis design phases, the plan was to achieve knowledge about the problem/situation with a phenomenological and interpretive view by the determination of informal data. This design is a 'Voyage of Discovery', Bryman (1984), where the qualitative focus also defends no use of hypothesis testing. Knowledge generation by qualitative interviews using un-structured or semi-structured questions is the main method and the exploration of the organisational and human consciousness is both a reflective and reflexive exercise (Edie, 1962). The reflexive elements as contradictions, internal politics, roles and career opportunities are all elements that have an effect on the interpretation of the interviews and therefore the result.

One research goal was to determine how the team members make their decisions, analyse the interview and academic material and design proposals for improvements. This goal soon became an item for evaluation in so far as including the team members' opinions and possibilities of participate in the change development. This extension of the goal is effective due to an additional visibility of the effectiveness of all stages of the change processes.

13.Thesis Contribution

The thesis research results contributes to several areas, both internal in BankX and external. Internal can the results provide AFAC management with valuable information as well as other management can learn from the AFAC team experiences. External will the data be valid for all bodies operating online with a need to authenticate and identify people. It will be interesting to see the thesis as a contributor to create awareness of the new trends and actors in the market, which can be similar to disruptive innovation in the traditional, the e-banking and online payment market. This possibility can be trend shaping and important to detect by the following proposals for the thesis' contribution:

Internal, whom	Contribution
AFAC management	Knowledge directly from the staff
AFAC Management	Ability to re-think change practices
BankX management	Extend internal learning/globalising knowledge
BankX management	Increasing knowledge of how to determine customer needs
BankX employees	Recognise a need for improved communication and cooperation

Table 7: Internal, whom - Contribution

External, whom	Contribution
Other Banking industry/all	Recognise an increasing need for customer contact/communication
Other Banking industry/all	Recognise the need for rapidly changing security solutions
Other Banking industry/all	Internal assumptions must match customers' need
Other Banking industry/all	Increasing knowledge of the need for awareness for changes
Other Banking industry/all	Simplification, cross organisational learning, globalisation focus must improve, but not move from local focus

Table 8: External, whom - Contribution

14. **Conclusion:**

Researching security is a matter of security definitions, separating physical and non-physical security within the situation. In the banking business, the differences between old-style security and modern solutions are tremendous, internally, but the market change to online banking, which is impossible to reverse. This makes the physical contact between business and the users decrease. Investigating customer security and how to increase this by organisational changes in a bank, raises many questions and several scenarios, all with potentially different outcomes, depending on the framework and viewpoint of the definition of security. An organisational change within a security team is also a source of knowledge development internally and externally and the reasons and purposes need to be clear. Interestingly, the research and interviews demonstrate little focus on customer needs in security design, but also a lack of value proportions is obvious.

Initially, the bank did have a strong interest in investigating customer security and the problem statement was set with the researcher and a manager as a common practice. Not only has there been several organisational changes in the bank and the AFAC team during the research period, the market has changed considerably in the same period. The continuous changes are on one side good for the customer, but for business, not able to perform internal changes at the same speed, as the market trends or competitors can be devastating. This can create reactive behaviour and planning, and the proactive mind-set can reduce, and this is a key-element in the discussion and research where organisational changes and e-banking security blend in the same model. It is a question of blending human behaviour, learning and knowledge development with cyber-technology that now enables digital contact everywhere and every time on every device possible. It is of interest to determine and make a statement of this situation because of the effect it has had on the research.

The research reveals several differences between the internal mind-set and the customers' perceptions of the definition of security. Needs and values are different and performing organisational change under such circumstances is a practice without an appropriate scope for the goal – i.e. what the goal is. The phenomena all participants experience is a change without any possibility to interact or influence the solution, demonstrating that communication is missing or at best insufficient. Reflecting on the eideic reduction where the 'what', (Noema), the 'how', (noesis) and the essence of the phenomena, the 'why', result in understanding of the complex situation. This understanding is that no one knows what will happen in a change, no one knows how and no one knows why. Based on this, is it clear that even if some leaders

have a goal, the same leaders do not have correct connection with their employees, and thus lack sense-making. Customers are not in consideration, which means that the communication of the purposes of the change lack support, internally and externally. One may argue that customers do not know about the internal change, but the internal changes still are influencing the customers. Changing organisations in such circumstances will generate a reactive organisation with reactive goals, purposes and understanding, without any initial support. The 'unfreeze-change-freeze' change approach is by these explanations very wrong, as no-one other than a few leaders are involved in the process. Shallow changes are the result and a reason for adjustments and corrections only focusing on the symptoms, not the problems. To be able to develop proposals and improvements where the leaders are in such a strong position is also about leadership awareness – what kind of leadership styles exists and whether there are any strong personalities, which by their leadership, make the decisions in a self-promoting way. Silo-thinking and groupthink as behaviours is existing, and the statement has by support from several interviews and will be essential to evaluate further.

Insufficient communication is an issue revealed in the research. There was no evidence of plans or communication lines or strategies beyond the formal organisational map. Customers only communicate with support or Contact Centre staff, and there are not any formal statistics of what their opinions are, considering security. This means that the AFAC team responsible for security miss the opportunity to design security with information about usability opinions from customers. Usability and security are contradictory by nature, but this is also the most important single factor to focus on. This focus cannot be an internal exercise, which only will include the developers' opinions about the usability, which are inevitably biased by the fact that they have made it.

Several staff make comments about too long time-to-market periods for new products. This is common for both leaders and team members and there are no signs that the re-organisational change so far has made any improvements to this situation. The research has not investigated in depth any reason for this particular problem. The problem for such long periods can be less agile methods of progressing in projects, but this is also a leadership problem. Conditional circumstances such as budget cuts, staff replacement and new misaligned business approaches are problems in themselves, and if organisational changes are without a scope that includes the overall picture, the change will fail to improve and shorten the deliveries to the market. Competitive benefits are lost and internal frustration can increase as a result. Customer frustration where observations of other banks constantly being ahead in innovative development can reduce business and contribute to less customer security. The security

problems are dependent on rapid updates and immediate communication to the customers to generate trust to the e-banking systems and any organisational change in AFAC failing to reduce or focus on time-to-market as a goal is a failure by nature where increased customer security is the topic. Feedback from the interviews and the internal research states such failure, but the recognition of this is better from the team members than the leaders.

Bank X has a good set of values. Apparently, the values are in use, but given direct questions, the interviewees were uncertain of what to answer. The questions' aim was to observe a difference between the pre and post-organisational change due to security, collaboration and communication in relation to the banks' values. The analysis from the research can conclude that values are in use, but mostly as an alibi in early stages or in internal documentation. The values are 'just there', and values without connection are potentially not well enough embedded to be guidelines for the work and behaviour. The values consider people, teamwork and the customers, but instead of explaining what to consider, leaders need to incorporate learning and awareness of how to use them. The focus must move to use the values actively across the departmental borders and the internal/external bridge.

The analysis shows that the bank's values are not being applied correctly, or not well enough incorporated at a wide perspective. The reasons are, in the researcher's opinion, a leadership problem, wherein how to use values must be the organisational approach, not only what the values are. Literature supports this statement and points at important messages where a company's values must blend in with the staff in addition to being a factor for comparing customer values with those of the organisation. This requires much research and marketing approaches to gain good customer communication. Searching for information is a matter of finding information and using it correctly to be of any value. Such information should be one basis of the research scope for this thesis; how to increase customer security by organisational changes.

Searches for academic solutions or information for organisational changes returns many authors, books, articles and journals. Several theories are available within the banking industry, but adjusting and narrowing the search to e-banking, customer contact in a digital framework of modern banking together with customer security demonstrate that there are gaps in the literature and research for these combinations. Security definitions are not well covered, and not much material connects customer security, customer values and needs with e-banks' internal considerations for alignment.

During the problematizing process, the development of valid hypotheses is important, but equally important is it to transform any hypotheses to assumptions and areas of interest due to

the methodology selections. The pragmatic/objective viewpoint in a combination with a phenomenological/subjective perspective is challenging, but also a philosophical methodology that extends the research to investigate the past and present time with a focus on the future. The qualitative sociological approach therefore does not providing a result from hypothesis testing alone, but in combination with the subjective in-depth analysis of the interviews. The research hypotheses/assumptions (areas of interest), consider how the bank values affect security planning, and the search for concerns, which can affect re-organisational planning, information about changes for members of the AFAC team and security improvement for customers.

Within an organisation, there are many concerns, but the interviews reveal that the team members have several comments for evaluation. Possessing a genuine interest for security and the bank is an asset that the leaders should appreciate and, as a summary, the concern is that people might start leaving the bank. Solutions connect closely to specific people and it is necessary to increase focus on knowledge transferring/knowledge sharing. Having engaged persons also creates a risk to have over-engaged employees, and even if internal research by the bank demonstrates a high percentage of satisfied staff, there are signals from the interviews that influence and participation in changes are necessary to keep people. The thesis considers customer security, and the research clearly reveals the misalignment of what security is and how to overcome usability vs security. The organisation must listen to the customers and increase investment for the future. This brings cost into the situation as well and if the team members are to remain satisfied, they must have the opportunity to be part of the complete picture: to learn what the market wants what we have and how to improve it and to be responsible for the complete loop. Several staff recognise missing empowerment as a problem, meaning that if AFAC is the owner of the security, then AFAC should be completely in control, spanning from customer contact to deliveries of new products to the market.

One interesting fact is that the situation seems to change in Bank X and AFAC. From the interviews to the completion of the thesis is it a period of one year and the change was effective close to two years ago. This changing situation also demonstrate that learning about action research is also learning of continuous changes and that the future soon become the past. Ongoing reflection and the ability to change the research along with the situation is perhaps the most important learning. This learning generates the knowledge and a developing future in a changing world.

It is all about people.

15. References:

Adams, J. S., Tashchian, A. and Stone, T. H. (2001) 'Codes of Ethics as Signals for Ethical Behavior', *Journal of Business Ethics.* 29(3), 199–211.

Agarwal, R., Rastogi, S and Mehrortra, A. (2009). 'Customers' perspectives regarding e-banking in an emerging economy'. *Journal of Retailing and Consumer Services.* Volume 16, Issue 5, September 2009, Pages 340–351.

Ahenkora, K. (2012) 'Internet Banking Security Strategy: Securing Customer Trust'. *Twum, Frimpong. Journal of Management and Strategy* Volume: 3 Issue: 4

Ahmad, K.M.E.A. and Hasan. A.A (2011) 'E-banking Functionality and Outcomes of Customer Satisfaction - An Empirical Investigation'. *International Journal of Marketing Studies* Vol. 3, No. 1; February 2011.

Aikin, S.F (2006) 'Pragmatism, Naturalism, and Phenomenology'. *Human Studies Volume: 29 Issue: 3* (2006-09-01) ISSN: 0163-8548.

Albrechtsen, E. (2006) 'A qualitative study of users' view on information security'. *Department of Industrial Economics and Technology Management, Norwegian University of Science and Technology, N-7491 Trondheim, Norway.*

Albrechtsen, E., Hovden, J. (2009) 'The Information Security Divide Between Information Security Managers and Users'. *Computers &Amp; Security* Volume: 28 Issue: 6

Anawatti, D. and Craig, A. (2006) 'Behavioural Adaptation Within Cross-Cultural Virtual Teams'. *IEEE Transactions On Professional Communication Volume: 49 Issue: 1, Page(s): 44 - 56*

Anderson, E. and Weitz, B. (1989) 'The use of pledges to build and sustain commitment in distribution channels', *Journal of Marketing Research*, Vol. 29, February, pp. 18-34.

Argyris, C (1986), 'Skilled incompetence', *Harvard Business Review*, 64, 5, pp. 74-79, *Business Source Premier*, EBSCOhost

Argyris C. (1990) 'Overcoming Organizational Defences: Facilitating Organizational Learning'. Boston: Allyn & Bacon

Argyris, C. (1994) 'Good communication that blocks learning'. *Harvard Business Review*, 72 (4), pp.77-85

Avshalom, M. A. and Rachman-Moore, D. (2004) 'The Methods Used to Implement an Ethical Code of Conduct and Employee Attitudes'. *Journal of Business Ethics* 54: 225–244, 2004.

Björkman, H. and Sundgren, M. (2005),"Political entrepreneurship in action research: learning from two cases", *Journal of Organizational Change Management*, Vol. 18 Iss: 5 pp. 399 - 415

Black, N.J., Lockett, A., Ennew, C., Winklhofer, H., and S. McKechnie, (2002). 'Modelling customer choice of distribution channels: an illustration from financial services', *International Journal of Bank Marketing*, Vol. 20, No. 4: 161-173.

Bowman, E., H., and Singh, H. (1993) 'Corporate restructuring: Reconfiguring the firm'. *Strategic Management Journal* 14.S1 (1993): 5-14.

Brocki, J.M. and Wearden, A. (2006) 'A critical evaluation of the use of interpretative phenomenological analysis (IPA) in health psychology'. *Psychology and Health*, 21:1, 87-108.

Brown, I and Buys, M. (2005) 'A Cross-Cultural Investigation into Customer Satisfaction with Internet Banking Security'. *SAICSIT, Pages 200 – 207*.

Bryman, A. (1984). The debate about quantitative and qualitative re- search: A question of method or epistemology? British Journal of Sociology, 35, 78–92.

Calisir, F. and Gumussoy, C.A. (2008) 'Internet banking versus other banking channels: Young consumers' view'. *International Journal of Information Management,* 28 (2008) 215–221.

Calton, J.M. and Payne, S.L. (2003) 'Coping With Paradox, Multistakeholder Learning Dialogue as a Pluralist Sensemaking Process for Addressing Messy Problems'. *Business & Society,* Vol. 42 No. 1, March 2003 7-42

Carroll, B., Levy, L. and Richmond, D. (2008) 'Leadership as practice: Challenging the competency paradigm'. *Leadership* 4(4): 363–379.

Chau, P.Y.K., (1996) 'An empirical assessment of a modified technology acceptance model'. *Journal of Management Information Systems* 13 (2), 185–204

Chen YH, Barnes S (2007). Initial trust and online buyer behaviour. Ind. *Manage. Data Syst.* 107 (1), 21-36.

Choi, T.Y. Dooley, K.J and Rungtusanatham, M (2001)' Supply networks and complex adaptive systems: Control versus Emergence'. *Journal of Operations Management 19 (2001) 351–366*.

Coghlan, D. (2002) 'Interlevel Dynamics in Systemic Action Research'. *Systemic Practice and Action Research,* Vol. 15, No. 4, August 2002

Coghlan, D. and Brannick, T. (2010) 'Doing action research in your own organization'. 3rd ed. *London: Sage*.

Corbacioglu, S. and Kapucu, N. (2006)'Organisational Learning and Self adaptation in Dynamic Disaster Environments'. *Disasters*. Volume 30, Issue 2, pages 212–233, June 2006.

Corley, K. G., Harquail, C. V., Pratt, M. G., Glynn, M. A., Fiol, C. M., and Hatch, M. J. (2006). Guiding organizational identity through aged adolescence. *Journal of Management Inquiry,* 15(2), 85-99.

Cornelissen, J. P. Haslam, S., Balmer, A and John M. T. (2007) 'Social Identity, Organizational Identity and Corporate Identity: Towards an Integrated Understanding of Processes, Patternings and Products'. *British Journal of Management*, Vol. 18, S1–S16 (2007)

Cosma, S. and Gualandri, E. (2012) The Italian Banking System - Impact of the crisis and future perspectives. Palgrave Macmillan, ISBN_ 978-0-230-34314-6 Resume'

Creswell, J. (2007) '*Qualitative inquiry and research design: choosing among five approaches'*. 2nd ed. London: Sage Davenport

Crevani, L., Lindgren, Mand Packendorff, J. (2010) 'Leadership, not leaders: On the study of leadership as practices and interactions'. *Scandinavian Journal of Management* 26: 77–86

Davis, F.D., (1989) 'Perceived usefulness, perceived ease of use and user acceptance of information technology'. *MIS Quarterly* 13 (3), 319–339.

DeLone, W.H. and, McLean, E.R., (2003) 'The DeLone and McLean model of information systems success: a ten-year update'. *Journal of Management Information* Systems 19 (4), 9–30.

DeRosa, D.M., Hantula, D. A., Kock, N. and D'Arcy, J. (2004). 'Trust and leadership in virtual teamwork: A media naturalness perspective'. *Human Resource Management*, 43(2-3), pp.219–232.

Dhillon, G., and Torkzadeh, G. (2006) 'Value-focused assessment of information system security in organizations'. *Information Systems Journal,* 16(3), 293-314

Dourish, P., and Redmiles, D. (2002) 'An approach to usable security based on event monitoring and visualization', in *Proceedings of the 2002 Workshop on New Security Paradigms, ACM Press*, New York, pp. 75-81.

Edie, J. M. (1962) 'What is phenomenology?' Chicago: *Quadrangle Books*, Inc.,

Enos, L. (2001) 'Report: Critical errors in online banking'. *e-Commerce Times*, April 11,

Erickson, F. (1986). Qualitative methods in research on teaching. In M. Wittrock (Ed.), *Handbook of research on teaching* (pp. 119–161). New York, NY: Macmillan

European Commission (2015) *"Directive on Payment Services, PSD2".*

Easterby-Smith, M. Thorpe, R. and Jackson, P.R (2008) 'Management Research' *Sage Publications.*

Ezafe, M., Willmott, H. and Worthington, F. (2001) 'Power, Control and Resistance I 'The Factory that Time Forgot'. *Journal of Management studies*. Vol. 38:8, December, 022-2380

Fatima, A (2011) 'E-Banking Security Issues – Is There A Solution in Biometrics?' *Journal of Internet Banking and Commerce*. August 2011, vol. 16, no.2.

Fereday, J. and Muir-Cochrane, E. (2006) 'Demonstrating Rigor Using Thematic Analysis: A Hybrid Approach of Inductive and Deductive Coding and Theme Development'. *International Journal of Qualitative Methods* 2006, 5(1)

Finance Norway (2015) Web page; https://www.fno.no/

Firth-Cozens, J and Mowbray, D (2001),'Leadership and the quality of care'. *Quality in Health Care* 2001; 10(Suppl II):ii3–ii7 ii3

Flavián, C., Guinalíu, M. and Torres, E. (2005) 'The influence of corporate image on consumer trust: A comparative analysis in traditional versus internet banking', *Internet Research*, Vol. 15, pp.447 - 470

Ford, J.D. and Ford, L.W. (2010) 'Stop blaming resistance to change and start using it', *Organizational Dynamics*, 39 (1), pp.24-36,

Gebert, H., Geib, M., Kolbe, L. and Brenner, W. (2003) 'Knowledge-enabled customer relationship management: integrating customer relationship management and knowledge management concepts', *Journal of Knowledge Management*, Vol. 7, No. 5: 107-123.

Gefen, D., Karahanna, E. and Straub, D. (2003) 'Trust and TAM in online shopping: an integrated model', *MIS Quarterly*, Vol. 27, No. 1, pp.51–90.

Gefen, D. and Straub, W. (2004) 'Consumer trust in B2C e-commerce and the importance of social presence: experiments in e-products and e-services', *Omega,* Vol. 32, No. 6, pp.407–424.

Gill, M (2014) 'The Possibilities of Phenomenology for Organizational Research' *Organizational Research Methods,* Volume: 17 Issue: 2 pp. 2-118

Glaser, B. G., Strauss A (1967) 'The Discovery of Grounded Theory: Strategies for Qualitative Research'. *Aldine, Chicago IL.*

Gonzales, M. E., Quesada, G., Picado, F. and Eckelman, C.A., (2004) 'Customer satisfaction using QFD: An e-banking case'. *Managing Service Quality*, Vol. 14 No. 4, 2004.

Graen, G.B., and Uhl-Bien, M. (1995) 'Relationship-based approach to leadership: Project Management of leader-member exchange (LMX) theory of leadership over 25 years: applying a multi- level multi-domain perspective', *The Leadership Quarterly*, 6 (2), pp.219-247.

Gudmundsdottir, S. (1990) 'Den kvalitative forskningsprosessen' .The qualitative research Process. *Norsk Pedagogisk Tidsskrift, 5*, 266–277.

Haque, A., Tarofder, K.A., Rahman, S. and Raquib, A. (2009) 'Electronic Transaction of Internet Banking and its Perception of Malaysian online Customers', *African Journal of Business Management* Vol.3 (6), pp. 248-259, June 2009

Hanacek, P., Malinka, K. and Schafer, J. (2010) 'E-banking security - A comparative study'. *Aerospace and Electronic Systems Magazine*, IEEE, Jan. 2010. pp. 29-34.

Hartman, T. (2015) 'Strong multiplicity': an interpretive lens in the analysis of qualitative interview narratives', Qualitative Research, 15, 1, pp. 22-38, *Academic Search Complete,*

Haslam, S. A. (2001) 'Psychology in Organizations: The Social Identity Approach'. London: *Sage.*

Hassard, J. (1991) 'Multiple Paradigms and Organizational Analysis : A Case Study'. , *School of Management and Economics, University of Keele, U.K.Organization Studies* 1991, 12/2:275-299

Hay, T (2015)'PSD2 - The Payments World Turned Upside-Down?'. *'Finextra'*. 26 February 2015

Heifetz, R.A. (1998) 'Values in leadership, Leadership without easy answers'. *Cambridge, Massachusetts: Harvard University Press,* pp.13-27.

Hendry C. (1996) 'Understanding and creating whole organizational change through learning theory'. *Hum. Relat*. 49:621–41

Hernandez JMC, Mazzon JA (2007). Adoption of internet banking: proposition and implementation of an integrated methodology approach, *International J. Bank Mark.* 25 (2): 72-88

Hertzum, M., Jørgensen, N., Nørgaard, M. (2007) 'Usable Security and E-Banking: ease of use vis-a-vis security'. *Australasian Journal of Information Systems, North America, 11, May. 2007*.

Hilb, M. and Rolf, D. (2006) 'Organizational Change: Formulating, Implementing, and Sustaining a Fundamental Organizational Change in South American Central Banks' *Pilot Study Colombia*.

Hilbert, , M. (2012) 'Toward a Synthesis of Cognitive Biases: How Noisy Information Processing Can Bias Human Decision Making'. *Psycological Bulletin,* Vol. 138, NO 2, 211-237.

Hilsen, A.I. (2006) 'And they shall be known by their deeds: ethics and politics in action research', *Action Research*, 4 (1), March, pp.23-36.

Hofstede, G. (1991) 'Cultures and Organisations: Software of the Mind'. *McGraw-Hill*, London.

Hole, K. J., Moen, V., and Tjøstheim, T. (2006). 'Case study: Online banking security'. [Online] Available from: *http://scholar.google.co.uk.ezproxy.liv.ac.uk/scholar?&hl=en&btnG* (Accessed 15 June, 2014)

Howcroft, B., Hamilton R., Hewer, P (2002). Consumer attitude and the usage and adoption of home-based banking in the United Kingdom. *The Int. J. Bank Mark*. 20(3): 111-121

Hu, P.J., Chau, P.Y.K., Sheng, O.R.L., Tam, K.Y., (1999) 'Examining the technology acceptance model using physician acceptance of telemedicine technology'. *Journal of Management Information Systems* 16 (2), 91–112.

Intel Security (2015) 'Hacking the Human Operating System- The role of social engineering within cybersecurity'.

Jahangir, N. and Begum, N. (2008) 'The role of perceived usefulness, perceived ease of use, security and privacy, and customer attitude to engender customer adaptation in the context of electronic banking'. *African Journal of Business Management Vol.2* (1), pp. 032-040,

Jih, W.-J., Wong, S.-Y., and Chang, T.-B. (2005) 'Effects of perceived risks on adoption of Internet banking services: an empirical investigation in Taiwan', *International Journal of E-Business Research*, 1(1), 70-88.

Johnson, P. and Duberly, J. (2000), 'Understanding Management Research'. *Sage Publications.*

Johnson, E. and Goetz, E. (2007) 'Embedding Information Security into the Organization, Managing Organizational Security'. *IEEE COMPUTER SOCIETY 1540-7993/07*

Kaye, B. N. (1992) 'Codes of Ethics in Australian Business Corporations', *Journal Of Business Ethics*. 11, 857–862.

Keil, M, Depledge, G, and Rai, A (2007) 'Escalation: The Role of Problem Recognition and Cognitive Bias', *Decision Sciences*, 38, 3, pp. 391-421, *Business Source Premier*.

Kilduff, M. and Dougherty, D. (2000) 'Change and development in a pluralistic world: the view from the classics', *Academy of Management Review*, 25 (4), pp.777–782.

Kilduff, M. and Mehra, A. (1997) 'Postmodernism and organizational research', *Academy of Management Review*, 22 (2), pp.453-481,

Kirkman, B, Gibson, C, and Shapiro, D (2001), '"Exporting" Teams: Enhancing the Implementation and Effectiveness of Work Teams in Global Affiliates', *Organizational Dynamics, 30, 1, pp. 12-29, Business Source Premier*

Koskosas, I.V. (2012) 'Cultural and Organisational Commitment in the Context of e-Banking'. *Int. Internet Technology and Secured Transactions*, Vol. 4, No 1

Laszlo, E. (1973) 'A Systems Philosophy of Human Values'. *Behavioural Science*, Vol 18, pp. 250-259

Lee, K.C. and Chung, N., (2009) 'Understanding factors affecting trust in and satisfaction with mobile banking in Korea: A modified DeLone and McLean's model perspective'. *Interacting with Computers,* 21(5-6), p.385-392.

Lewin K. (1951) 'Field Theory in Social Science'. New York: Harper & Row

Li, S.,Shah, A.H. M. Khan, A.U., Khayam, S.A., Sadeghi, A.R. and Schmitz, R. (2010) 'Breaking e-banking CAPTCHAs'. *In Proceedings of the 26th Annual Computer Security Applications Conference* (ACSAC '10). ACM, New York, NY, USA, 171-180.

Lichstenstein, S and Williamson, K. (2006) 'Understanding Consumer Adoption of Internet Banking: An Interpretive Study in the Australian Banking Context'. *Journal of Electronic Commerce Research, VOL 7, NO.2, 2006*

Liza, A. (2014) 'The Impact of Internet Banking on Service Quality Provided by Commercial Banks. Lecture Notes Of The Institute for Computer Sciences', *Social Informatics and Telecommunications Engineering* Volume: 135 (2014-01-01) p. 248-259. ISSN: 1867-8211

Mäenpää, K. (2006) 'Clustering the consumers on the basis of their perceptions of the internet banking services'. *Internet Res.* 16(3), 304–322

Marquardt, M. and Waddill, D. (2004) 'The power of learning in action learning: a conceptual analysis of how the five schools of adult learning theories are incorporated within the practice of action learning', *Action Learning: Research and Practice*, 1: 2, 185 — 202

Marcelle, D. (2010) 'Aron Gurwitsch's Incipient Phenomenological Reduction: Another Way into Phenomenological Transcendental Philosophy from Psychology', *Studia Phenomenological: Romanian Journal Of Phenomenology,* 10, pp. 119-134, Philosopher's Index

Maslow, A.H. (1963) 'Fusion of the Facts and Values'. *The American Journal of Psychoanalysis,* Vol. 23. Pp117-131

Mayoh, J. and Onwuegbuzie, A. (2014) 'Surveying the landscape of mixed methods phenomenological research', *International Journal Of Multiple Research Approaches,* 8, 1, pp. 2-14, Education Research Complete

Mays, N. and Pope, C. (1995) 'Qualitative Research: Rigour and qualitative research'. *BMJ* 1995; 311 :109

McCoy, S., D. F. Galletta and W. R. King (2005) 'Integrating national culture into IS research: The need for current individual-level measures'. *Communications of the Association for Information Systems* 15, 211–224.

McKnight, D.H., Cummings, L.L. and Chervany, N.L. (2002) 'Developing and validating trust measures for e-commerce: an integrative typology', *Information Systems Research*, Vol. 13, No. 3, pp.334–359.

Millikin, J.P., Hom, P.W. and Manz, C.C., (2010) 'Self-management competencies in self-managing teams: Their impact on multi-team system productivity'. *The Leadership Quarterly*, 21(5), pp.687–702.

Molyneux, P. and Omarini, A. (2005) 'PRIVATE BANKING IN EUROPE – Getting Clients & Keeping Them!' *Mimeo*

Mols, N. P. (1998) 'The behavioural consequences of PC banking'. *International Journal of Bank Marketing*, 16(5), 195–201

Morse, J.M, Richards, L. (2002) '*Read Me First- For A User's Guide to Qualitative Methods'*. First edition. *Sage Publications, London.*

Moustakas, C. (1994) '*Phenomenological Research Methods'*. Thousand Oaks, CA, Sage.

Murphy, P. E. (1988) 'Implementing Business Ethics'. *Journal of Business Ethics.* 7, 907–915.

Mäkilouko, M. (2004), 'Coping with multicultural projects: the leadership styles of Finnish Project Managers', *International Journal Of Project Management*, 22, pp. 387-396

O'Loughlin, D., Szmigin, I. and P. Turnbull, (2004) 'From relationships to experiences in retail financial services', *International Journal of Bank Marketing*, Vol. 22, No. 7: 522-539.

Omariba, Z.B, Masese, N.B. and Wanyembi, G (2012) 'Security And Privacy Of Electronic Banking'. *IJCSI International Journal of Computer Science Issues,* Vol. 9, Issue 4, No 3, July 2012

O'Neil, J.(1999) 'Facilitating Action Learning The Role of the Learning Coach'. *Advances in Developing Human Resources.* 1999 1: 39-55

Orlikowski W.J. (1996) 'Improvising organizational transformation overtime: a situated change perspective'. *Inf. Syst. Res*. 7(1): 63–92

Paine, L. S. (1996) 'Moral Thinking in Management: an Essential Capability'. *Business Ethics Quarterly*. 6(4), 477–493.

Patton, M.Q. (2002) Qualitative Research and Evaluation Methods. Third edition. *Sage Publications, Thousand Oaks CA.*

Pedler, M. (1997) 'Action learning in practice. *Aldershot, Gower*

Peirce, C. S. (1960) 'Collected papers' (2nd ed.). Cambridge, MA: *Harvard University Press*.

Piderit, S.K. (2000) 'Rethinking resistance and recognizing ambivalence: A multi-dimensional view of attitudes toward an organizational change', *Academy of Management Review*, 25 (4), pp.783–794.

Polkinghorne, D.E. (1989) 'Phenomenological Research Methods'. In R.S Valle and S. Halling (Eds.), *Existential-Phenomenological perspectives in psychology* (pp.41), New York: Plenum Press.

Polatoglu VN, Ekin S (2001). An empirical investigation of the Turkish consumers' acceptance of internet banking services. *International J. Bank Mark*. 19(4): 156-165.

Porter, M.E. (1996) 'What is strategy'. *Harward Business Review*. Nov-Dec 1996.

Proenca, T (2010) 'Self-managed work teams: an enabling or coercive nature'. *International Journal Of Human Resource Management,* 21, 3, pp. 337-354, *Business Source Premier,*

Quintero, J.,S. (2003) 'Organizational Change: Formulating, Implementing, and Sustaining a Fundamental Organizational Change in South American Central Banks Pilot Study Colombia' *DISSERTATION, der Universität St.Gallen, Hochschule für Wirtschafts-, Rechts- und Sozialwissenschaften (HSG) zur Erlangung der Würde eines Doktors der Wirtschaftswissenschaften.*

Raelin, J.A. (2003) 'Creating leaderful organizations: how to bring out leadership in everyone'. *San Francisco, California: Berrett-Koehler.*

Raelin, J.A. (2010) 'The leaderful fieldbook: strategies and activities for developing leadership in everyone'. *London: Nicholas Brealey*

Raelin, J. (2012) 'From leadership-as-practice to leaderful practice'. *Leadership* 2011 7: 195

Regan, K., and Macaluso, N. (2000) 'Report: Consumers cool to net banking'. *e-Commerce Times*, October 3, 2000.

Revans, R. W. (1988) 'The golden jubilee of action learning: a collection of papers written during 1988'. *Manchester, Manchester Action learning Exchange.*

Reynolds, M. A. (2000) 'Professional Ethical Codes and the Internal Auditor: A Moral Argument'. *Journal of Business Ethics.* 24, 115–124.

Ridings, C., Gefen, D. and Arinze, B. (2002) 'Some antecedents and effects of trust in virtual communities', *Journal of Strategic Information Systems*, Vol. 11, Nos. 3/4, pp.271–295.

Ritchie, J., Lewis, J. (Eds) (2003) Qualitative Research Practice: A Guide for Social Science Students and Researchers. *Sage Publications, London.*

Roboff G, Charles C (1998). Privacy of financial information in cyberspace: banks addressing what consumers want. *J. Retail Bank. Service. XX* (3): 51-56.

Saaty, T.L. (1990) 'The Analytic Hierarchy Process', *RWS Publications, Pittsburgh, PA.*

Sanders, P. (1982). 'Phenomenology: A New Way of Viewing Organizational Research.' *Academy Of Management Review*, 7(3), 353-360

Sarker, S., Valacich, S.J. and Sarker, S. (2003) 'Virtual team trust: instrument development and validation in an IS educational environment', *Information Resources Management Journal,* Vol. 16, No. 2, pp.35–55

Savin, A. (2009) 'Epoché and Transcendental Reduction in Husserl's Course of Lectures 'First Philosophy' (in Russian)', *Topos: Journal For Philosophical And Cultural Studies*, 2-3, 22, pp. 7-32, Philosopher's Index,

Sathye M (1999). Adoption of Internet banking by Australian consumers: an empirical investigation*, Int. J. Bank Mark.* 17(7): 324-334.

Shah, M. H. and Siddiqui, F. A. (2006) 'Organisational critical success factors in adoption of e-banking at the Woolwich bank'. *International Journal of Information Management*. vol.26 (6) p. 442-456

Shipper, F. and Manz, C.C. (1992) 'Employee Self-Management without Formally Designed Teams: An Alternative Road To Empowerment'. *Organizational Dynamics*, Volume 20, Issue 3, winter 1992, Pages 48-61.

Singh, J. (1990) 'Voice, Exit and Negative Word of Mouth Behaviours: An Investigation Across Three Service Categories'. *Journal of the Academy of Marketing Science*, 18, 1-15.

Smith, J, Bekker, H, and Cheater, F (2011), 'Theoretical versus pragmatic design in qualitative research', *Nurse Researcher*, 18, 2, pp. 39-51, *Academic Search Complete,*

Sosik, J.J., Jung, D. and Dinger, S.L. (2009) 'Values in authentic action: examining the roots and rewards of altruistic leadership', *Group and Organization Management*, 34 (4), pp.395-431

Stacey, R.D. (2011) *Strategic management and organisational dynamics: the challenge of complexity*. 6th ed. Harlow: Pearson.

Sull, D.N. (2007) 'Closing the Gap Between Strategy and Execution'. *MIT Sloan Management Review*. Summer 2007 vol.48 no.4. Re print number 48412.

Syamsuddin, I. and Junseok, H. (2009) 'The Application of AHP Model to Guide Decision Makers: A Case Study of E-banking Security'. *Computer Sciences and Convergence Information Technology, 2009. ICCIT '09*. Fourth International Conference on pp. 1469 - 1473.

Tan M, Teo TSH (2000). Factors influencing the adoption of internet banking. *J. Assoc. Info. Syst.* 1(5): 22-38.

Thomas, K. W. (1977) 'Toward Multi-Dimensional Values in Teaching: The Example of Conflict Behaviours'. *Academy of Management Review*. Volume: 2, Issue: 3, Pages: 484-490

Tjøstheim, T. (2007) 'Security Analysis of Electronic Voting and Online Banking Systems'. *Doctoral Thesis, University of Bergen, Norway*.

Trevino, L.K. (1986) 'Ethical decision making in organizations: a person-situation interactionist model', *The Academy of Management Review*, 11 (3), pp.601-617

Tsoukas, H. and Chia, R., (2002) 'On Organizational Becoming : Rethinking Organizational Change'. . *Organization Science*/ Vol. 13, No. 5, pp.567–582. September–October 2002

Tuckman, B. W. (1965) 'Developmental sequence in Bulletin', 65, 384-399 small groups.

Turban, E., Lee, J., King, D., and Shung, H. M. (2000) 'Electronic commerce, a managerial perspective'. *London, UK: Prentice Hall*

Van Manen, M (1990) '*Researching Lived Experience: Human Science for An Action Sensitive Pedagogy'*. Albany; State University of New York Press.

Velmurugan, M.S. (2009) 'Security And Trust In E-Business: Problems And Prospects'. *International Journal of Electronic Business Management, Vol. 7, No. 3, pp. 151-158 (2009).*

Venkatesh, V., Morris, M.G., Davis, G.B. and Davis, F.D., (2003) 'User acceptance of information technology: toward a unified view'. *MIS Quarterly* 27, 425–478.

Vygotksy, L. S. (1978). Mind in society. The development of higher psychological processes. Cambridge, MA: *Harvard University Press*.

Weick, K.E. (2002) 'Real time reflexivity: prods to reflection', *Organization Studies*, 23(6), pp.893-898, Sage Journals

Weick, K.E. and Bougon, M.G. (2001) Organizations as cognitive maps: charting ways of success and failure. In: *Making Sense of the Organization*, Weick, K.E. (ed.), pp. 308–329. Blackwell Publishers, Malden, MA, USA

Weick, K. E. and Quinn, R. E. (1999) 'Organizational Change and Development'. *Annu. Rev. Psychol.* 1999. 50; 361-386

Weiss, N.A (2008)' *Elementary Statistics'*. Eight ed. International ed. Pearson, Addison-Wesley

Whitten, A., and Tygar, J.D. (1999) 'Why Johnny can't encrypt: a usability evaluation of PGP 5.0' in *Proceedings of the 8th USENIX Security Symposium*, USENIX, Berkeley, CA.

Zahedi, F. (1986) 'The analytic hierarchy process—a survey of the method and its applications', *Interfaces*; vol.16, no. 4, 1986, pp. 96–108.

Zeithaml, V.A., Parasuraman, A., and Malhotra, A. (2000) 'A conceptual framework for understanding e-service quality: implications for future research and managerial practice'. *Marketing Science Institute and Dell star*, working paper

Zuber-Serrate, O. and Perry, C. (2002) 'Action research within organisations and university thesis writing,' *The Learning Organization*, 9(4), 171-179, Emerald

Zuboff, S. and Maxmin, J. (2003) 'The Support Economy', *Viking*, 2003.

Åsvoll, H (2013) 'Abduction, deduction and induction: can these concepts be used for an Understanding of methodological processes in interpretative case studies?' *International Journal of Qualitative Studies in Education, 27:3, 289-307*

16. Appendices:

Appendix 1. Interview questions.

The following questions form the interviews:

1. <u>Initial questions:</u>

   - How has your role and focus area changed since August 2013? Brief explanation.
   - Do you have a different security focus, seen from the 'customer perspective' now, than before August 2013?
   - Employees did not receive any information prior to the latest re-organisation- Can you tell something about the reason for this? - Leaders
   - Employees did not receive any information prior to the latest re-organisation- was this a good approach?- Team members

2. <u>Background of the re-organisation:</u>

   - Can you describe the background and purpose of the latest re-organisation? Leader
     - On a scale from 1-5, where 5 is the best, how will you rate the success of the latest re-organisation
     - On a scale from 1-5, where five is the best, how will you rate the way the latest re-organisation was communicated to the employees?
     - On a scale from 1-5, where 5 is equal to more included, would it be better to include the employees in the re-organisation development
     - On a scale from 1-5, where five is most different, will future changes be incorporated differently?

   - Can you describe what your impression of the reason for the latest re-organisation is? Team members
     - On a scale from 1-5, where 5 is the best, how will you rate the success of the latest re-organisation
     - On a scale from 1-5, where five is the best, how will you rate the way the latest re-organisation was communicated to the employees?
     - On a scale from 1-5, where 5 is equal to more included, are you satisfied with the way the employees' were included in the re-organisation development?
     - On a scale from 1-5, where five is most different, is it necessary to incorporate future changes differently?

3. <u>Potential mistakes:</u>

- Do you recognise any elements, which should have been planned differently from your knowledge today?

- Do you have any concerns about the latest re-organisation efficiency today? – On a scale from 1-5 where 5 is many concerns

- Can you describe what your impression is of the efficiency of the AFAC team before and after the re-organisation due to: (on a scale from 1-5 where 5 is the best)
    - Great Customer Experience - Before/after
    - It is all about people - Before/after
    - One Bank X Team - Before/after

4. <u>Potential Improvements:</u>

- Can you give examples where customer security has improved because of this re-organisation?

- Are there any examples of organisational improvements which can have positive or negative impacts on customers' impression of Bank X's e-banking solutions? Security, user friendliness, market (word of mouth), etc.

- What is the most important element you would suggest that AFAC can contribute which can benefit Bank X's customers and Bank X's e-banking solutions?

- What is the most important single factor to accomplish this?
    - Organisational changes
    - Communication
    - Team Management
    - Tools or equipment/solutions
    - Changes in focus

- Can you describe a brief picture of Bank X's biggest business threats on a short and long-term basis?

- Do you recognise any trends or changes in the market or customer trends, which we should have attention to, on a short and long term basis? Reasons?

- Is Bank X capable of following up new trends in the market and how?