



How Ericsson can overcome resistances to change when leading innovation

Exploratory Research

Telecommunication Industry

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Abstract

This exploratory research aims to highlight change resistance in a technological corporate environment by identifying main challenges in setting innovation as a driver for defining processes and methodologies which can lead to a continuous improvement. This in turn could generate business value and increase competitive market leadership. The study intends to review scientific literatures in the areas of creativity, innovation, strategic leadership, change management, and culture and to contrast them against semi-structure and unstructured interviews with company employees based on five research questions. These questions should identify the subjective views that could lead, by extrapolation, to propose recommendations to mitigate resistance to change while delivering innovation.

Keywords: Ericsson, innovation, change resistance, strategic leadership, progress principles, evidence-based management, appreciative inquiry, agile, devops

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*Thank you,
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1 Introduction

1.1 Background

Many researchers performed studies with the aim of finding a universal and common definition of innovation; some examples can be found in *Schumpeter (1982)* and *Johnson et al. (2017)*. Yet, at the time of writing, there is no agreed definition of innovation (*Kogabayev & Maziliauskas, 2017*).

On what there seems to be an agreement, is that innovation bring change, and humans react to change with opposition and resistance, according to *Balogun et al. (2016)*, *Armenakis et al. (1993)*, *Kotter (1996, 2012)*, *Ford & Ford (2009)* and several other authors. As most of the companies seems to incorporate innovation in their corporate missions, business strategies, and goals, it seems that the change resistance and the strategies to overcome it, are critical topics which apparently involve the majority of hierarchies and types of organizations; in short, it is something that could potentially impact most of the working population several times in the professional lives.

Change resistance and opposition, appears to intersect with several other areas, such as creativity, innovation, change management, strategy, leadership, and cultures. This is the main reason why in this exploratory research the literatures reviewed are related to these areas, with the perspective of change resistance. The study includes the elaborated content of several interviews conducted to Ericsson personnel, asking open ended questions regarding the company innovation process, the daily resistances encountered and what could be a possible learning journey for the employees to positively contribute to the company innovation process.

In the study the words models, and theories are often used interchangeably. The same applies to the words study and research.

A summary of the theories and models part of this study, are reported in the summary sub-chapter and grouped by research areas; the discussions related to the mentioned models are available in the chapters “Literature review”, “Analysis” and “Conclusions and recommendations”.

1.2 Research aims, questions, and objectives

The research primary goal is to identify effective change management practices applicable during the company context innovation process. This happens through the exploration and review of relevant data and literature, analysing data and factors, with the goal of presenting the outcomes with clarity of communication to the readers.

The research also includes gathered evidence, needed to support the analysis and the conclusions. The final goal would be to produce interesting content and innovative, that can help the readers on identifying some successful patterns that could hopefully be re used in similar professional contexts.

Through the interviews, the research aims to address the following questions:

Firstly) Considering the increasing competition of Asian companies like Huawei, ZTE and others, how we, as Ericsson can achieve financial turnaround, gaining leadership positions in the Telecommunication industry, and deliver innovative products, used to transform, and improve societies at massive scale?

Secondly) What are the struggles you face daily when proposing changes and innovations?

Thirdly) What management models, leadership practices or simple techniques you use, to overcome the several change resistances, when creating and delivering innovative solution or new ways of working?

Fourthly) What are the next steps you think you should take yourself to improve change management skills and deliver innovation faster?

Lastly) What are the next steps the company should take to improve the market leadership position and to deliver innovation faster?

The answers provided to these questions do not intent to be exhaustive; however, the answer material could be used as a base to start constructive conversations, and to begin critical thinking debates during team learning activities.

The objective of the research is to identify the resistances to change, and how to overcome them, by reviewing some innovation related theories and methodologies, and trying to map them to real world employees experience and impression, including trying to describe and analyse internal opposite forces, resistances from customers, business competition and common patterns that could lead to failure or success in the Ericsson lifecycle.

1.3 Justification for the research

The study identifies and challenges the practices of current innovation processes as experienced by the interviewed employees, with the aim of improvement. The goal is to provide to Ericsson leaders evidence-based analysis (*Pfeffer & Sutton, 2006*) from the participant's view and trying to identify some practices and models effectiveness in different scenarios, through high level data analysis.

The research context corresponds to business corporate environments in the technology and consultancy industry. This study does not contemplate other contexts like non-profit organizations, public sectors, or specific unrelated industries. This research aims to focus to rather tangible and non-abstract aspects of real industry scenarios.

1.4 Research outline

The following is a brief description of this study's chapters:

Chapter "Introduction" provides a brief description of the literature and why has been selected, describe the interview questions along with the research aims, objectives and justification.

Chapter "Methodology" explain the research philosophy, strategy, design, data collection details, ethics, and limitations.

Chapter "Literature review" discuss the possible relevant literature analysed during the research, where applicable, it is also included the selection criteria for certain models.

Chapter "Analysis" explores and discusses the content of the interviews.

Chapter "Findings" map the analysis content and the literatures.

Chapter "Conclusions and recommendations" exposes a final rationalization for the study and provide recommendation mainly to Ericsson leadership.

1.5 Summary

This chapter introduced the background of the research with the practical and theoretical context, including a quick view summary of all the literatures used for the discussion. The research questions, aims and objectives are also introduced, including the related literatures. The research justification provides an explanation of the reasons behind the evidence-based approach. The chapters high level description is also provided to provide to the reader a quick understanding of the chapter content.

2 Literature review

As innovation and change resistance seems affect horizontally several areas in the company context, such as creativity, culture, leadership, change and innovation, this chapter review the literatures related to this area from the perspective of the research context. The mentioned areas are discussed in a dedicated chapter, where one more definition of the area and discussions are provided, with the focus on keeping the content aligned with the research questions.

2.1 Creativity

Amabile et al (1996) provide a definition of creativity and innovation based on successful implementation of new and useful ideas within an organization. *Amabile* seems to focus on how important is for leaders to set the scene for creativity and innovative organizations.

From Neuroscience perspective, *Heilman et al. (2003)* consider creativity enabler stress-less environments, REM sleep, calming and relaxing the mind for a period. *Heilman et al. study* highlights that creativity increases when the right brain hemisphere becomes more specialized on spatial reasoning. From the study it seems that a possible way of increasing spatial reasoning in teams, could be having diverse, multicultural members, with a culture of inclusivity, as it seems to increase the spatial reasoning during teams' innovation process.

Bronowski (1972), define creativity as intuition that connect and unify points from different topics, mostly unrelated between them; *Heilman et al. (2003)* extend this concept, pointing that teams are required to be prepared and skilled to make the intuitions between unrelated topics happening. *Heilman et al. (2003)*, highlight the important of being open minded to understand the nature and outcome of the intuitions from intersecting areas. This is consistent with more recent theories and studies like "*The Medici Effect*" from *Johansson (2004)* regarding intersecting different disciplines as one of the foundations of the creativity process..

Amabile & Khairi (2008) provides insight to leaders on how to increase creativity, such as be mentally open to other ideas, enable collaboration, enhance diversity, accept the inevitability and utility of failure, and motivate with intellectual challenge. According to this study, leaders are required to increase the intrinsic and extrinsic motivation factors. *Amabile (2011)* extend previous studies by providing a method to support leaders boosting organizations creativity, such as building a culture of small wins, praises, and celebrations; the model is called "*Progress Principle*". By other side, it seems that Amabile's model require additional methodologies like Agile to effectively split tasks complexities and effectively implement the *Progress Principle*, while delivering meaningful goals for the employees and the companies.

Alternative methods to foster creativity seems to be also a growing trend across companies. At the time of writing, from Google Scholar, keywords search "meditation creativity" return more than 170.000 results. *Colzato et al. (2012)*, provide an interesting experiment by testing different types of meditations and how they affect cognitive skills; the study seems to be supporting evidence showing that meditation can help on being open to new ideas, increasing focus skill, increasing mind resiliency and improve active listening skills which seems to improve empathy (*Goleman et al. 2019*).

It appears that in the corporate environments, creativity tend to be identified as skills and capabilities belonging to individual people. However, from the reviewed literatures, creativity seems to be more a trait that should be part of group of people involved in the company innovation processes. Therefore, the key challenge for companies seems to be about how to build environments where not only individuals, but whole teams and organizations are actively involved and living parts of creative and innovative company dynamics.

Creativity seems to be recognized as the process where one or more people together use ideas to produce a meaningful outcome with the goal of solving an existing problem or improving an existing solution. From the analysed literatures, it seems that creativity and innovation are linked to motivation, cognitive and psychological aspects of people; leaders seem to be responsible regarding how to build creative and innovative teams and working environments. For the mentioned reasons and the important connection with innovation and oppositions, creativity seems to be relevant in the research context.

2.2 Innovation

Innovation has been studied by several theorists, and yet there is no common agreement on the description, probably due to the nature of changing scenarios and applicability of the innovation itself. The definition of innovation from *Johnson et al. (2017)* seems to be applicable to the research context, described as a conversion of new knowledge into a new product, service, or process, while making it usable from a commercial perspective. *Schumpeter (1982)* define innovation by identifying it in five types, such as a completely new product, an existing product in a new market, reorganization of a product not necessarily for a new market, discover new source of material or components for the new product and finally a new method of production not associated with a scientific discovery; *Schumpeter (1982)* is relevant to this research, as all innovation types seems to be applicable in technology companies. In modern times, companies, where technology is strictly related with the core-business, seems to follow more open innovation models; a supporting example appears to be the OpenSource model from *Coar (2006)*, which consist of releasing publicly, under several possible licenses and terms of use, the software source code, with the aim of being adopted by the widest possible number of people and entities, to facilitate innovation and technology development. The OpenSource model seem more in line with *Drucker (1992)* regarding the higher importance of innovation on social effects in respect of individuals, exact sciences, and technologies.

Models with strong links to technologies, such as OpenSource, seems to play a key role in the company's innovation journey. However, it is arguably not obvious, to determine which innovation provide value throughout the company's lifecycle. In the last 20 years, Digital Transformation (DT), in line with *Stolterman & Fors (2004)* view, has been a key driver to help companies understanding how technology and innovation could help and fit in their business. In this context, Digital Transformation (DT), seems to be of help on identifying and implementing the possible fitting innovation in organizations. *Stolterman & Fors (2004)* define the DT as a set of mainly social, cultural, technological, organizational, creative, and managerial changes, related digital technology applications. According to *Stolterman & Fors (2004)*, the goals of DT is to provide a better, faster, and stable user/customer experience, while reducing costs. One of the possible challenges could be how to translate these theories on companies' realities.

In the consultancy industry, innovation and DT seems to cover a key role as intrinsic part of business strategies to generate revenues. Several companies seem to execute

competitive strategy by selling automation solutions to customers. Automation is described as by *Lamb (2013)* as the use of mechanized equipment and logical programming commands to replace manual command-response and decision-making activities of humans. It appears that, one of the biggest at scale, first in kind, automation and apparently digital transformation, was done by *Henry Ford* in 1913 (*Ford & Crowther, 1922*) with the Ford's assembly line, long before Internet or modern computers. Companies seems to achieve strategic innovation goals at large scale through automation, making the best use of Information Technology, systems engineering, software engineering and modern DevOps disciplines (*Chapman & Gatti, 1993*). Companies rely on models and enablers like Continuous Integration (*Booch, 1998*), Continuous Delivery (*Farley & Humble, 2010*), Continuous Deployment (*Holmstrom Olsson et al. 2012*), Continuous Testing (*Saff & Ernst, 2003*), amongst others, to incorporate automation and innovations in their operations, product development, strategic thinking execution.

In corporate environments, the discussed innovation models seem to require the support of technology and innovation delivery tools. The Agile model, specifically SAFe seems to be a key delivery model for these cases. Companies such as Microsoft, Google, and Amazon, seems to be leading the examples of how Agile and Continuous Improvement led them to market leadership positions. Google published several studies on their strategies for large scale Continuous Testing and how it relates to Agile. *Krstic et al. (2018)*, shows the three key functions of Agile innovation such as firstly) achieving maximum speed in innovation; secondly) reducing risks by increasing the collaboration between all actors at early stages; lastly) engaging the widest number of people in the creating and development of new ideas in a design and continuous improvement processes. A relevant aspect from *Krstic et al. (2018)* is how Agile can support the management during the innovation process. On the same line, the paper highlights *Lokuge (2015)* regarding the positive impacts of Agile in enterprise companies operating in multiple market segments, demonstrating the applicability of Agile horizontally to multiple industries.

2.3 Change

As change seems to frequently generate oppositions, in the research context, seems to provide more value the review of literature that provide practical means to manage resistance. The *Forcefield analysis (Lewin, 1951)* identify the forces that influence a change resistance scenario. It helps to manage external, internal, individual and organizational resistances. Its purpose is to identify and map power interests with their relative strengths, to better plan negotiations with the stakeholders involved. *Forcefield analysis* assume that all the stakeholders work as a group, which is not always the case. It also assumes the availability of sizeable information, data, and collaborative behavior, which is uncommon in complex resistance scenarios. Additionally, it does not seem to be a feedback-oriented model, therefore the strategy from oppositions become evident during the interactions, which could make the negotiation phase less plannable.

A complementary model to *Forcefield analysis*, is introduced by *Armenakis et al. (1993)* to assess the “*readiness for change*”, by evaluating the urgency of change and readiness of the people in high/low ratings. This model can be helpful to shape the communication used to influence stakeholders and increase readiness, by showing the urgencies. It seems to be a predecessor of *Kotter (1996)* “*sense of urgency*” accelerator. Newer approaches to change resistance developed over time, such as *Ford & Ford (2009)*, regarding how to use resistance constructively, supporting early inclusions of the change-resistors, to collect the incorporate improvement feedback into an improved solution.

The described models approach resistance from an external or collective points of view, while a more internal and psychological perspective of change resistance is provided by *Piderit (2000)*, by decoupling it in three categories such as cognitive, behavioural and affective; this model notes about the importance of understanding the relation between how people feel about the change and the reasons behind of those feelings. *Verganti & Norman (2019)* support the importance of clashing and fusing different perspectives and discourage compromising and postponing the resolution of different perspectives and reducing risks of consensus traps. Expanding on consensus driven cultures, *Nemeth (2019)* highlights how consensus widely underperform versus dissent when delivering innovation and change. Expanding the psychological perspective, *Balogun et al. (2016)* identify the change opposition reasons such as self-interest, fear of unknown or failure, lack of energy or motivations, uncomfortable feelings due to lack of understanding, lack of skills, or cultural bias such as consensus, politics, or religion. *Elrod & Tippet (2002)* represent the reactions to change in a graphical curve, highlighting how the acceptance and level of self-esteem increases over time, while the changes is undergoing. On the same line *Oreg (2003)* extends on the reasons why people resist to change, such as reluctancy of losing controls, cognitive rigidity, and psychological lack of resilience.

A more solution-centred definition of change, came from *Paton & McCalman (2008)*, where leaders are seen as profiles capable to extrapolate organizational issues, examine, diagnose and overcome them; change leaders can support organizations looking for alternative solutions and transmit the learning process to customers and other stakeholders involved. This definition seems to highlights the importance of flexibility when implementing alternatives change management techniques, linking to adaptive and situational leadership styles (*Tannenbaum & Schmidt, 1973*), which seems to be more common in technology companies where the pace of innovation is faster.

Mullins (2013), *Drucker (1999)*, *Rajan & Wulf (2006)* propose to reduce change resistances by reducing operating costs, removing layers of management, implementing decentralized decision making, increase competition, and use digital transformation with methodologies relying on productivity tools. *Schein (2017)* provide a simplistic view on how to identify where change is needed, by looking at people pain as a useful metric. However, Schein’s view requires having tools to identify where are the pains, define the metrics and how to extrapolate them from the workforce.

According to the “*guiding coalitions*” concept from Kotter (1996), change management is intrinsically part of the implementation phase of innovation. The accelerators and the dual operating system from Kotter (2012) are also relevant and provide critical value in the change management research. Kotter remarks the need to have strategy and management working tightly together, calling it dual operating system. Kotter’s principles taken from Kotter (2012) highlights the importance of getting people involved from both their logic and their passion, having a plan to communicate vision, celebrate victories, institutionalize change and reasonable points. Kotter (2012) “*Dual Operating System*” seems to be imply several assumptions and conditions already present in the Company such as firstly) what to change is already identified, and the triggers are. There’s nothing in this model regarding triggers; secondly) the sense of urgency doesn’t work in all environments, especially in consensus driven cultures, the sense of urgency linked to certain emotions, seems to be itself the source of opposition; thirdly) there could be cases of cultures, companies, and countries, where people may not like the emotions related to the urgency generate or simply do not see them it as effective; fourthly) the change agent requires to have effective negotiations and communications skills already; lastly) how to measure and communicate success seems to be important to achieve change institutionalization in the company, but the model does not provide any guidance on this regard.

It seems that most of this study agrees that change resistance reasons are mostly driven by people emotional and psychological conditions and less related with tangible and rational facts. Also, it seems critical that leaders should identify and take actions on resistance when it becomes unconstructive or not supported by evidence.

2.4 Strategic Leadership

Strategic leadership and management seem to have a key role in delivering innovation and mitigating oppositions to change. Theorists like Boal & Hooijberg (2001) argue that new leaders are required to have skills such as charisma, flexibility, and the ability to deal with behavioural and cognitive complexities present in organizations. Boal & Hooijberg (2001) considers the essence of strategic leadership as combination of four set of skills such as absorptive capacity, adaptive capacity, and managerial wisdom. These sets of skills mainly focus on the ability to learn, be flexible, ability to change and to deal with complex emotional situations. A possible weak point of Boal & Hooijberg (2001) could be that only executives are considered strategic leaders, as in medium large corporations, where distributed and decentralized management models seem more common, also the middle management could have critical role in strategies definition and execution. Boal & Hooijberg (2001) have a view of strategic leadership mainly from large corporations’ perspectives, while a view of how leadership would change, in respect of the company size and leaders’ roles, is discussed by Jaques (1978), differentiating the complexities of leadership according to the management levels, where these levels require different set skills. Jaques also differentiate the leadership role according to the company size, as in small organizations or start-ups a more visionary leadership style could be needed, while in large corporations, leaders are required to balance internal versus external needs, in line with strategic leadership view from Ansoff (1987), supporting the needs of balance between stakeholder’s

satisfaction and the corresponding actions to reduce oppositions. Further challenges to traditional leadership-centric theories are provided by *Hitt & Ireland (2002)* and *Pentland (2012)*, where the focus of strategic leadership moves on the side of organization's human and social capital, therefore an employee-centric view, where building and managing great teams becomes high priority and a new required skill. This view seems to be adopted by companies where strong innovation and accelerated change are required to stay ahead of competition. It seems a reasonable assumption, that to build great teams, leaders need to have some degree of knowledge of what the teams are expected to produce. *Hitt & Ireland (2002)* perspective seems to place the leader as part of the operations. This view opposes theories where the leaders are more detached from operations, such as the visionary leader view from *Collins & Porras (1996)*, where there's a clear distinction between the vision and the execution. This is in line with *Jaques'* view that different leadership roles require different skills, however, it seems that the vision definition of *Collins & Porras (1996)* could exclude the inputs provided by middle management, whose inputs could be critical in cases of risks management, where a strategic vision adjustment is required.

Pfeffer & Sutton (2006) support the importance for leaders to adopt evidence-based management, while the study also stresses on how leaders could generate more damages than benefits by using benchmarks in a wrong way. *Pfeffer & Sutton (2006)* notes the inefficiency of re using a past working strategy, when the same strategy does not apply anymore in the current organization scenario. *Pfeffer & Sutton (2006)* provides consistent a view on continuous improvements, by considering the organization as an unfinished prototype; this seems to be in line with strong technology driven companies' management models, as they seem to tend to adopt Agile methodologies to deliver results, based on small incremental improvements and fast changes.

Extending on strategic management concepts, *Senge (1990)* introduces the idea of learning organization, by describing five disciplines and seven learning disabilities. He argues that effective strategic leadership can be achieved by continuously learning and improving the people self-discipline, by having a clear view of reality and objectives, while developing patience. *Senge* underlines the continuous dialog as a core aspect of teams' communication, with the aims of progressively building common vision, shared goals, where building knowledge is part of people and teams daily experience.

How people feel in the professional environment, seems to be a topic of intense study, where in the last decades the research related to the emotional side of strategic leadership appears to generate interest in different industries. The concept of *Emotional Intelligence (EI)*, initially proposed by *Goleman (1995)* and later extended by *Goleman et al. (2019)*, is described as an aggregate of mindfulness, resilience, authentic leadership, focus, self-awareness, confidence, listening and other emotions related disciplines. *EI* seems to focus on the dynamics of what happen to people within, and how leaders and people deal with those feelings. *EI* provide a framework to build skills and prepare people emotionally for challenges, as *Goleman et al. (2019)* note. *EI* seems to be a reasonable emotional approach for leaders during operational problem solving; *Yukl (2020)* summarize his owns and other research on this topic, arguing that a

common factor of effective leaders is that operational issues are approached timely and appropriately. Yukl notes that effective leaders are connected with how people feel in the organization, requiring to have a degree of understanding of the issues affecting people productivity on all aspects, including the emotions. A possible weak point of *EI*, could be that for leaders and teams, seems to be exhausting to keep enduring empathy, listening, emotional intelligence, continuously improving and so forth. Sustaining the pace of continuous changes and innovations, without being authentic as a person in the professional environment, seems to be unsustainable over time. The quest for authenticity and finding the way to be him/her-self seems to be a key factor to make *EI* effective and avoid risks of people burnout.

It seems the matching *EI* leadership style correspond to *Authentic Leadership* models (*AL*), as discussed by *Ilies et al. (2005)*, pointing out the efficacy of the absence of role's distinction between entrepreneur, manager, employee as everybody is considered leader. This is in line with *Wilding (1999)* argument that modern organizations seem to look for employees with entrepreneurship attitude, in favour of new set of skills that are not always limited or related to technical knowledge or intelligence. *AL* is described by *Senior & Swailes (2016)*, as leaders that are true to themselves, without imitating or emulating other people or models, and being fully conscient of their values and believes. *AL* encloses the concept of truthiness to our-self, as explained by *Ilies et al. (2005)*, providing better skills to resolve unforeseen challenges and deal with unexpected problems.

By other side, *Greenleaf (1970, 1977)* introduce the *Servant Leadership (SL)* model, which is more focused on facilitating and empowering people to reach their goals, rather having management involvement in operational challenges; *SL* seems to be effective in times where organizations are not affected by financials or in non-profit organizations, but it appears to be challenging to keep the balance of employee wellness and organizational financials during crisis or during difficult business times; this view, seems to promote situational leadership style, where leaders could rely on servant leadership during solid financial times, while relying on different models like situational and contingent leadership, when financial performances assume high priority during organizational lifecycles.

2.5 Culture

Organizational culture (*OC*) has been defined and described several times over the past decades. Originally, the word “culture” came from the Latin *cultus*, meaning *care*. From a corporate perspective, *Schein (1992)* describe *OC* as the level of beliefs shared by people part of an organization, which involves the unconscious act based on a “*taken for granted*” assumptions and views of the environment. From a society's perspective, *Hofstede (1993)* define culture as a collective was of how the mind act, which differentiate group or categories of people from others. The common word across the analyzed definitions seems to be humans, members, shared beliefs, tacit or granted assumptions, and understandings. There seems to be a connection between culture and the word “*identity*”, described in the Oxford University dictionary as “*the fact of being who or what a person or thing is*” or “*a close similarity or affinity*”. *OC* in

business contexts, seems to relate to what happens in organizations and teams and how it influences the environment. According to *Schein (1992)*, changing OC is one of the most challenging tasks in companies, as it consistently involves people psychology and anthropology. *Schein (2016)* argue that leaders need to follow certain dimensions to build successful learning culture. *Schein (2016)* argues that skills like proactivity, strong commitment to “*learning to learn*”, positive assumptions about human nature, positive thinking about the future, commitment to cultural diversity and strategic thinking, are critical for strategic leaders. *Schein’s* view is aligned to the concept of “*ambidextrous organizations*” from *O’Reilly & Tushman (2004)*, describing leaders capable of building cultures that keep balance between a classic way of doing things and innovations. It seems that *Schein’s* view does not take in consideration desirable leadership skills like, building great team view from *Hitt & Ireland (2002)* and *Pentland (2012)*, or anything related to the risks-taking skills. The concept of “*chemistry*”, a key factor to build outstanding cultures is discussed by *Coyle (2018)*, arguing that companies who build Teams with close physical proximity, eye contacts, energetic exchanges, few interruptions, humour, and active listening, are proven to deliver better performance. A possible weak point of *Coyle (2018)* is the requirement to have physical proximity to other Team members, this can be challenging in virtual and distributed Teams, in cases where people are forced to work remotely, or during COVID pandemic.

The “Iceberg” metaphor by *French & Bell (1999)*, illustrates the importance of formal and informal working culture, emphasizing that a maximum of 20% of the iceberg goes above the water level. That leave the 80+% of OC to the informal part. The informal side contains most of the information needed to analyse, comprehend, and improve OC. However, the model does not provide effective information on how to map and understand the informal part. Yet, unknown company culture could provide a significant financial risk, as *Heskett (2012)* sustain that what most successful companies have in common, are the strong focus and investments in building a successful organizational culture. *Coyle (2018)* sustain that a strong culture increases net income 756% over eleven years, according to a Harvard study of more than 200 Companies. For these reasons strategic leaders seem to have an increasing need of measuring culture improvements in organizations; on this regard, a study from MIT Human Dynamics Lab led by *Pentland (2012)*, provide 5 factors to measure team performance from a cultural perspective; the factors measure if the group members talk and listen equally, the length of interactions, eye contacts, direct one to one to point interactions, if external teams are explored. However, the framework would require that most of the team member are available on providing metrics on these factors, which could be challenging in large organizations. The framework requires data-analysis from managers, which would require time and common processes established. The model seems to be challenging to be implemented in distributed teams, where communication happens virtually, and potentially less scalable in large corporate environments. From a similar perspective *Williams & Shultz (2019)*, provide a framework to strategic leaders to identify organizational disfunctions from culture perspective, by identifying the level of people connection, self-interest, inability to prioritize, value placed on people, etc. It seems the framework can provide an

evaluation tool to organizations, where the culture mapping can be challenging, like virtual and distributed organizations, by their nature. Arguably, this framework requires significant alignment between managers, employees, and defined process to collect metrics and evaluate data, therefore the implementation and effectiveness could be challenging.

2.6 Summary

This chapter reviewed the literature related creativity, innovation, change, strategic leadership, and culture, with the objective of identifying how they can support innovation when facing oppositions to change. The discussion provided some critics to the models and, depending on the cases, how it would fit help on answering the research questions.

Regarding creativity, the models included in this chapter are *Amabile (1982, 2018, 2021)*, *Amabile et al. (2008, 1996, 2011)*, *Heilman et al. (2003)*, *Bronowski (1972)*, *Johansson (2004)*, *Colzato et al. (2012)*.

On innovation, this study includes the models from *Schumpeter (1982)*, *Johnson et al. (2017)*, *Coar (2006)*, *Stolterman & Fors (2004)*, *Sutherland et al. (2001)*, *Lamb (2013)*, *Chapman & Gatti (1993)*, *Booch (1998)*, *Farley & Humble (2010)*, *Holmstrom Olsson et al. (2012)*, *Saff & Ernst (2003)*, *Krstic et al. (2018)*, *Lokuge (2015)*.

Change management discussions in this research considers the theories from *Lewin (1951)*, *Armenakis et al. (1993)*, *Kotter (1996, 2012)*, *Ford & Ford (2009)*, *Piderit (2000)*, *Verganti & Norman (2019)*, *Nemeth (2019)*, *Balogun et al. (2016)*, *Elrod & Tippet (2002)*, *Oreg (2003)*, *Paton & McCalman (2008)*, *Schein (2017)*, *Mullins (2013)*, *Drucker (1999)*, *Rajan & Wulf (2006)*.

The leadership studies and research explored are *Boal & Hooijberg (2001)*, *Jaques (1978)*, *Ansoff (1987)*, *Hitt & Ireland (2002)*, *Collins & Porras (1996)*, *Collins (2001)*, *Pfeffer & Sutton (2006)*, *Senge (1990)*, *Goleman (1995, 2019)*, *Yukl (2020)*, *Ilies et al. (2005)*, *Wilding (1999)*, *Senior & Swailes (2016)*, *Greenleaf (1970, 1977)*, *Tannenbaum & Schmidt (1973)*, *Grant (2008)*, *Porter (1996, 1979)*.

Regarding organization culture, have been discussed the models from *Schein (1992, 2016)*, *Hofstede (1993)*, *Heskett (2012)*, *French & Bell (1999)*, *O'Reilly & Tushman (2004)*, *Hitt & Ireland (2002)*, *Coyle (2018)*, *Pentland (2012)*, *Williams & Shultz (2019)*.

3 Methodology

3.1 Research philosophy

The research philosophy describe how the development of knowledge in the research is affected by the researcher beliefs and assumptions, in line with the description

provided by *Saunders et al. (2019)*. The study uses a reflective approach, with the intent of review the participants' data. When reviewing the data, the researcher applies the same scrutiny as it would be for own beliefs and assumptions; this explorative reflective approach is defined by *Haynes (2012)*. Reflexivity is critical on this research, as it helps to be aware of the relationship between the data and the researcher philosophical position, as noted by *Alvesson & Skoldberg (2009)*.

It seems, that there is no agreement regarding what the best philosophy for business and management studies would be, as pointed by *Tsoukas & Knudsen (2003)*, therefore the research adopt a pluralist research approach, as multiple research philosophical views can positively contribute on improving business and management models and theories over time, as highlighted by *Knudsen (2003)*. Additionally, large corporations, such as Ericsson, comprehend several cultures, customers and scenarios where multiple perspective happens every day, therefore a pluralist view from *Morgan (2006)* seems to be reasonable fit for this study philosophy.

3.2 Research strategy

According to *Denzin & Lincoln (2018)*, the research strategy is the connection between the methods used to collect and analyse the data, and the research philosophy. The research tends to follow a deductive research strategy, by explaining the relationship between the literature and the participants interviews. As the narrative method is mainly adopted, the research could at traits provide some extended description of the contact, needed to describe the connection between literature and participant's content. As participants could provide a subjective perspective of their experiences, the research could provide details of different organizational realities, in line with *Gabriel & Griffiths (2004)*.

The research strategy is to review the literature mostly encountered during the MBA, collect data and questionnaires from the company employees, map the data from participants to the literature reviewed and provide conclusions and recommendation for improvements. Farther research ideas are also provided in the conclusions and recommendation chapter.

The study participants cover organizational roles such as delivery managers with leadership positions in direct contact with customers; distinguished technologists with leading roles in research and development organizations; radio network solution architects, field engineers, senior business strategists, customer project managers, deliver solution architects, senior software engineers in product and research and development organizations and external contractors, with principal architects' roles. The variety of the roles could help providing different angles and perspective in the company change resistances challenges. Most of the participants come originally from different countries and potentially with non-similar cultural foundations. This approach seems to be interesting from the perspective of receiving feedback from people coming from multiple cultural influences.

3.3 Research design

The design adopted is more aligned to exploratory research (*Stebbins, 2001*), due to the qualitative and deductive approach, the flexibility and adaptability to change during the data collection and interviews.

As the philosophy adopted tends to follow a pluralist view (*Morgan, 2006*), and the interviews and data seem to require a certain level of interpretation of the company business context, the qualitative approach seems a better fit for this exploratory research, in line with *Denzin & Lincoln (2018)*. Moreover, it appears an understanding of the behaviour and attitude of the people involved in the company innovation and change resistance process is needed in order to get the holistic approach.

The narrative enquiry is adopted due to the nature of the qualitative research, the participants adopt a storytelling approach, more in line with the narrative method described by *Chase (2011)*.

The semi-structured and unstructured interviews are conducted by the researcher, trying to extrapolate views of what seems to be effective, considering different roles and angles, following the qualitative analysis models based on *Gibbs (2007)*. The qualitative approach appears to be helpful when collecting data in order to cover a wider understanding of the outcomes, while, maintaining a flexible approach during the evidence collection and analysis.

3.4 Research administration

The population interviewed consisted of 71 Ericsson employees, with different roles, countries, and cultures. 12 people out of 71 have replied and provided meaningful answers to the research questions. Out of 12, only 8 are added to the APPENDIX B for regulatory and privacy reasons.

The research adopts semi-structured interviews to collect and analyse data, in line with *Cooper & Schindler (2008)*. Simplicity of the research methodologies is a core principle of the study, in line with *Mintzberg (1979)*, while the structured approach used for data analysis relies also on the newer research models from *Saunders et al. (2019)*

From qualitative perspective the research relies on the models from *Coffey & Atkinson (1996)*, as the data collected is organized and grouped by interview organizational role.

The answers to the research concerns are sought by mapping the models and theories reviewed during the MBA exposure against the pragmatic qualitative content provided by the participants during the interviews and questionnaires.

The information and sources used for this exploratory research, consist mainly of the past research modules of the MBA, along with academic journal articles and academic books. The participants to the interviews, mainly consists of people the researcher

have been in contact in the last seven years in the Ericsson environment. The participants based has been selected due to the connection with the researcher; this approach is supported by *Buchanan (2013)* as point out that people tend to be more easily involved when there is some form or relationship or link with the researcher. However, this can be a limitation and bias, influencing the interviews content. The participants responded voluntarily, providing written content to the interview questions, or deciding to be interviewed themselves, this approach is supported by *Saunders et al. (2017)*.

3.5 Research ethics

The company Ethics & Compliance resources are analysed to identify any possible action, data management and participants related activity that could place any risk on the involved parts. Part of the documents have been interpreted as some guidelines were too abstract to fit in the context, as *Bell & Bryman (2007)* point out. The participants receive an email describing that any content provided by them would be anonymized, including reference to specific products, teams' names or specific descriptions that could make a direct link with them. Care has been taken to not disclose information that could generate market competitive disadvantage to Ericsson.

The communication and data storages with the participants, are done using the company productivity tools, always using the encryption features when possible. The participation to the interview is voluntary and are informed about the nature of the research, the MBA involvement by the researched, and reasonable deadlines have been clearly communicated to provide content and for the interview's availability.

3.6 Summary

The research adopts a reflexive and pluralist method to process the data. The exploratory research adopts use a qualitative approach to collect and interpret data. The research design uses a deductive approach to review the literature mostly encountered during the MBA, collect data and questionnaires from the company employees, map the data from participants to the literature reviewed and provide conclusions and recommendation for improvements. The narrative approach is used to due to the nature of the data. The company code of conducts and ethics has been reviewed and respected, while the sensitive data is protected using enterprise grade technologies.

4 Findings

Using a narrative approach, this chapter provide the data from the interviews and questionnaires provided by the participants.

4.1 Software Engineers answers

Interviewed software engineers, sustain that Ericsson is on the right track in the technology competitiveness race, as a speak-up culture is promoted and all employees' voices, ideas and concerns are listened, therefore managers receive continuous feedback, helpful to define and rebalance strategies. On the same line, interviewed software developers seem to feel empowered to do better regarding the company innovation journey. Additionally, there seems to be a high opinion regarding the company values, integrity, transparency, and respect across the workforce; this seems to be a work experience improvement, in comparison with past companies working experiences. Software engineers highlight the importance of the creation of technology events such as Hackathons, hackers' challenges, or rapid prototyping technology festivals that Ericsson could organize to get the workforce more engaged with innovation. The participants point out that frequently teams working in silos (isolated manner); this is perceived as a limit to the reusability of content and technologies across organizations. Software engineers point out that allocating dedicated time for constructive change and creativity, could promote innovation, and potentially reducing creativity hindrance risks, by making room for specific innovation deliverables, part of the delivery methodology and productivity tools used. One of the concerns raised by the engineers is about the outcome of live demonstration or innovation discussions with customers, as there seems to be a tendency to receive significant resistances from the customer, especially when the discussion does not provide enough data and evidences; more resistances seem to be encountered when no change agents are supporting the innovation, amongst the customer counterparts or when the innovation proposed is not connected to the operational context of the customer. The interviewed engineers also remarked once more the importance for Ericsson to organize technical events like hacker parties, with innovation teams mixed between customer and Ericsson, helping building trust and reduce innovation and creativity resistances.

4.2 Strategists' answers

Interviewees holding innovation strategist roles and with broader and global company vision, consider that currently the executive's leadership have a correct approach to achieve Ericsson financial turnaround and maintain a highly competitive position versus other market contenders. Strategists argue that the company leadership is going in the right direction by increasing constantly year-over-year the investments in research and development, sales, and legal related activities; strategists also remark the importance of executing with a "lean" mindset, where the deliverables are organized incrementally with continuous small wins. Regarding Ericsson sales expansion, strategists argue that sales target markets should not be limited to a single industry, and to have a more horizontal sales strategy for middle, large, and mega capitalization enterprises, as it seems that all sectors could eventually become digitalized. From legal competitiveness perspective, strategic leaders sustain that Ericsson could benefit from a restructure of licensing models, by adopting a concept more in line with *Agile* and *Lean* approach, focusing on incremental and modular solution, and therefore achieving more flexibility in the overall products portfolio. Regarding technology leadership, strategic leaders note that Ericsson is on the right track, however they point out, that the company could benefit from being more active

in international standardization entities and largely increase the presence on open-source contributions. Strategists seems to agree with the Ericsson idea of green telco and to be at the forefront of environmental sustainability and corporate responsibility; on this regard, Ericsson is amongst the one hundred most sustainable companies in the world in *Corporate Knights* (2022) rating and achieving a rating of low-risk impact company in the *Standard & Poor Sustainability Index (SPSI 2021)*, indeed, an achievement to be proud of by the employees, and seemingly a value point to build trust with customers, possibly helping on getting through innovation resistances with trust and good will recognition. As daily struggles, strategists see resistances when any new technology is introduced, such as tools to execute radio networks field maintenance work. Even if a new tool is theoretically better than its predecessor, it seems that the old tried and proven tool is arguably preferred. Managing the resistance would requires additional efforts, as it must be demonstratively proven that there is an advantage for taking up the new tool, while ditching the old one. Strategists sustain that frequently the change resistance arguments range from proving that the economic win in changing a way of work recurrently is tangible, to demonstrate the capability of delivering an increased ROI (Return of Investment), while enhancing efficiency; this point also require additional efforts and time to build the arguments required to get through the resistances. Frequently, if the innovation proposal returns a long-term win, then it could be even more challenging to gain acceptance for the new way of working, even if the long-term benefits are great and evident. This seems to be due to existing Ericsson budgeting frameworks that are nearly always based on short-term scopes and strategies.

4.3 Sales and Business developers' answers

Employees involved with sales and business development process, provide a view more inclined towards the lack of management commitment and support regarding diversification of customer's base. The interviewee notes a management behaviour tendency in Ericsson to stay with the usual customers, where a long-term relationship is established since several years, and a certain reluctance on finding new business opportunities or exploring new market segments. Employees argue that the main reason could be the lack of risk-taking and flexibility from management, and a lack of mid-term strategy view on business development. Participants highlights that Ericsson seems to have a strong leadership position in the telecommunication industry, but the company is rather unknown in other industries, therefore the interviewed employees seem to highlight the limits of the company on building a diversified customer base in multiple industries, due to the lack of commitment from the management on building strategies, leading on applying core technologies and skills to different market segments. Interviewees argue that Ericsson seems to be known by the retail consumers, almost exclusively because of the first-generation mobile phones; this probably mean that branding and marketing activities were not performed strategically at society scale.

4.4 Solutions delivery architects' answers

Interviewee holding solutions delivery roles, with more direct exposure to customers and markets, highlighted the disconnection between market needs and R&D efforts, arguing that an open development model could certainly benefit the products and solutions quality. Reliable planning capabilities from R&D organizations seems also to be an issue, especially for end-to-end solutions where cross organizational efforts are required. An example of this point is the recurring delay on delivering innovative feature, which ultimately makes planning and execution more difficult for customers. On the same line, interviewees argue that a possible improvement would come from improving a continuously open and constructive debate between multiple organizations and build a fact-driven innovation strategy, to be used as motivation and supporting base for the decision process when prioritizing the delivery of new innovative solutions. Interviewee highlights that employee are looking for multiple ways to interact with each other in a less structured and more one-to-one informal and to the point debate; it seems that people are looking to have more frequent informal discussion about technology with colleagues from other organizations. Unfortunately, interviewees report that COVID worsened the conditions to create informal debates more easily. Employees also see building a rapid prototyping culture as key factor to improve Ericsson innovation and change resistance process, by collecting evidence, data, and facts to engage multiple debates with other employees involved in the innovation process, as fast feedback seems to be a key enabler to improve solution and smooth the resistances during the change process.

4.5 R&D Technologists' answers

From a technology perspective it seems that the participants are concerned with the effectiveness of the innovation process, as even when new technologies are introduced, the innovation goes towards the direction of tightly integrate the new technologies with the legacy solutions, which ultimately limits the effectiveness of the innovation itself and new technologies. Engineering driven people, argue that Ericsson innovation process can be challenging, as teams tend to work in isolated manner, with little shared technology enabler reusable across multiple innovation teams, therefore there is the tendency of frequently using resources to reinvent existing solutions.

Interviewees holding long-standing senior technologist roles in R&D, argue that a possible approach to keep Ericsson competitive and maintain technology leadership, could be to make a better use of the company global presence, by involving in the innovation process the local workforce of every country, with the aim of delivering solutions taking into consideration a clear understanding of local context and needs. Technologists sustain that building competitiveness and innovation should start from the perspective of solving massive societies challenges, taking as original point what good Ericsson as a company can do for the societies around the world, and elaborate the connection with what can create value for the customers, aligned also with the company core believes. The participants also note that this approach would require a large amount of patience from multiple stakeholders, which is also one of the five disciplines that Senge strongly advocate for. It also seems a recurring thought amongst multiple interviewees, that small frequent deliveries to customers can increase efficiency, reducing resistances and rebalance strategies, in line with modern delivery

methodologies such as Agile. Seasoned technologists, also seems to be more in favour of situational leadership theories, specifically mentioning during the interview the *Hersey-Blanchard* models, however these are not discussed on this study. Regarding the innovation resistances that technologists face daily, senior technologists point out a predominant lack of understanding of where and how the changes and innovation fits into the company high-level strategy and vision. Even when, from a higher organizational level the communication it is perceived clearly, when those same changes and innovations are executed in the delivery and pushed to the market and to internal stakeholders, these same strategies and visions feel counter intuitive to many and not largely applicable. This often led to lower levels of the organization trying to bridge the gap by creating own goals and plans which feels more achievable and overfitting to specific contexts. One of the described scenario's negative outcomes, would be the missing opportunity to let the "*creative tension*" develop between the strategy and the vision, and fostering true innovation in the actual work. To improve these issues, a possible recommendation could be that leaders would manage the change in a way that the creative tension, strategy and vision between realities and hierarchies, becomes just "creative" and not just "tension". Technologists argue that curiosity, listening, and empathy are core skills to successfully drive changes, when interacting with other people. On the same line, the interviewees suggest a shift of focus from "internal customers" to "external customers" perspective, especially in R&D and organization with less direct customer exposure, with the goal of building solutions that start from customers and societies challenges. This approach seems to help on delivering faster innovation to customers. Research participants remarks that the company should invest in the individual to a greater extent. Regardless of title or education, all co-workers have something of interest and value to offer. The company is responsible for creating a work environment of inclusiveness and appreciation. Idea boxes hanging on the wall (or existing at the end of an email address) are of no real use. It is human interest and interaction that sparks ideas. Managers need to farm their relationships with everyone; openness needs to be universal within the organisation; from the janitor to the CEO. It is only then that people feel free to step forward and present their ideas with passion. Once that environment exists, market leadership and speedier innovation will happen as biproducts of the open environment that is based on mutual trust.

4.6 Customer delivery managers' answers

Interviewees holding customer delivery manager roles, argue that Ericsson comparison with competitors like Huawei is somewhat out of context, as Ericsson is a public company quoted in several stock markets, in compliance with multiple tight regulations, continuously scrutinized and audited by the public and institutions, whereas Huawei is a "private" company, fully subsidised by the Chinese government, without having all the institutional requirements and intrinsic costs, as other competitors. Delivery managers, suggest that Ericsson competitive strategy, should be focusing on delivering "premium" quality products and state-of-the-art technology, while strategically requesting to customers to prioritize businesses with companies in compliance with international regulations. Delivery managers argue that Ericsson could benefit from a more innovative customer management strategies, such as

emphasizing on building culture with highest level of integrity, transparency, and employees' well-being, additionally to the technology leadership. While driving innovation, delivery managers highlights that the main daily challenges are mostly related to a lack of strong competences amongst the workforce; this seems to be more visible especially when middle and high hierarchies' management are required to have a solid understanding of the Ericsson core technologies. The lack of technology background amongst middle and high management, seems to be perceived as a limiting factor towards successful innovation and fast execution. Regarding methodology adoption, delivery managers seem to use *Agile* to organize the delivery milestones, while for consultancy practices the *Pareto* and *SIGMA6* models seems to be more adopted, however these management models are not being discussed on this paper. Interviewees argue that current times require leaders to build skills balancing between technical, team motivation and leadership methodologies, however this approach require people having self-driven motivation on building continuous learning plans that are suitable to the changing customer realities. According to delivery management roles, innovation would be more effective if Ericsson would be significantly improving the new personnel selection and interview process.

4.7 Radio and field engineers' answers

Radio engineers considers that to increase competitiveness, it is paramount that Ericsson continuously expand investments in R&D. Interviewees points out the important of not limiting the customer base only to Telcos, and to make third party companies acquisitions that could help diversifying the core competencies and target market segments. Internal communication limitations and finding the right people that can provide support, seems to be a change resistance limiting factor for Radio engineers, as it becomes increasingly hard to manage product dependencies during operational activities. Interviewees notes that a possible way to overcome the resistance in operations consists of being perseverant and resilient during the daily professional life; this way of thinking seems to be reasonable in amongst operational roles in the needs of finding tangible solutions to move forward, when solving complex immediate challenges. Radio and field engineers sustain that a possible step to deliver innovation faster, could be to invest more in young people and frequently refreshing workforce and skills.

5 Analysis

This chapter provide an analysis with a mapping between the interviewes participants content from the Findings chapter and the models discussed in the literature review.

5.1 Software engineers

From software engineers inputs, a possible methodology to improve the cross-team's engagement and collaboration, could be the usage of the "*Community of Practices*" (CoP) concept introduced initially by *Wenger (1999)* and later expanded by *Nickols (2003)*. The bottom line would be to set up *CoP* working groups on innovative topics

with members coming from different teams and backgrounds. This approach seems to be proven and aligned with the “*The Medici Effect*” exposed by Johansson (2004). It seems that the *Scaled Agile Framework* could be a supportive methodology to this point, as it comprehends CoP from different groups and the possibility to allocate efforts to, investigations, studies and innovative topics.

Engineers notes that a possible way to reduce customers resistances could be to organize CoP with focused technical groups together with the customer, therefore having a more inclusive approach in the initial creative and innovation phase. The rationale behind this proposal, it could be that customers seems to know better how their operational environments works and what could be the right innovation for the company they work for. It seems the dual operator system and the accelerators from Kotter (2012), could help on having supporting change agents amongst customer employees, which could provide great help on smoothing change resistances. A possible strategy to identify which customer’s employees would be more open to the proposed innovation, could be to relying on the *Appreciative Inquires (AI)* techniques from Cooperrider & Whitney (2005), as it approaches the communication by starting from what is already good in the organizations or what has been successful during past interactions with the customer, and moving onto how the proposed innovation could help solving new problems and challenges. AI seems to be a good strategic management tool, but it requires to have already a good starting baseline of achievements made by the group.

5.2 Strategists

Strategists points out on the effectiveness of continuous increments and small wins, in line with Agile from Sutherland et. al (2001) and the *Progress Principle* from Amabile & Kramer (2011). Specifically, strategists highlights that R&D investments should be allocated to areas where the company predict there will be a long-term growing need for the society and large customers bases; it seems that Kotter’s *Accelerators* on building a long term sense of urgency could help smoothing the change resistances related to this point, as it seems that when societies and customers identify the need for a solution to a certain problem, the resistance to change could be reduced.

Regarding the identification for long-term R&D investments, it appears that a helpful tool could be the “*5 Forces*” model, firstly introduced by Porter (1979) and later revisited by Porter (1996) and Grant (2008), seemingly a fitting model in the technology innovation industry, as newly disruptive market entrants seem to be a high-risk force to large and established corporations.

It seems that core competencies model from Prahalad & Hamel (1990) could help on this point, as the Ericsson core skills and technologies probably would need to be applicable to different market segments, and to smooth change resistances from customers when proposing innovations, as the products and solution could be more applicable to their business context.

The Ericsson exposure to OpenSource projects, is perceived as a critical change resistance mitigator, as customers seems to have the tendencies to accept more

solution from companies who contribute publicly to open-source projects. A reference of this successful approach is discussed in “*Open Organization*” from Whitehurst (2015), past CEO of RedHat Inc. The “*Open Organization*” follow a flatten model to structure companies, with a bottom-up “enough” approach, where being inclusive with different stakeholder is a core value for strategic leaders.

It appears that change resistance could be smoothed by having Ericsson investing in learning organizations model, focusing on adoption of innovative technologies and way of work during the employees learning path. Building employees competences of models as “*Appreciative Inquiry*” (Cooperrider & Whitney, 2005) and increasing the number of change-agents amongst all workforce hierarchies could be beneficial to reduce the internal resistances to innovation (Kotter, 2012). Regarding adoptions of models and techniques to overcome change resistances, strategic leaders seem to be more inclined on engaging stakeholders with a value-based summary, followed by an engaged discussion with an evidence-based study supporting the innovation, in line with Pfeffer & Sutton (2006), as the study argues the importance for leaders to adopt evidence-based management, and also stressing on how leaders could generate additional damages, by using benchmarks in an ineffective or manipulative way.

5.3 Customer’s sales and business developers

From issues pointed out by participants working in the sales and business development areas, it seems that the mentioned core competencies model from Prahalad & Hamel (1990) could provide critical help to improve on this area. Their study points out that companies like Yamaha appears to have successfully applied this principle, by using, core competencies in high precision electronics and mechanisms, to build bikes, cards, music instruments and in several other areas.

5.4 Customer solution delivery architects

Intrinsically, it appears that the employees are looking for quick interaction, incremental small delivery and progresses; this seems to have a positive effect on how employees can get through change resistances, as also pointed out in the “*Progress Principle*” (Amabile & Kramer, 2011) regarding how to achieve professional happiness through small wins.

5.5 R&D Technologists

According to R&D Technologists, it appears that innovation slowdown or ineffectiveness is due to the consensus driven culture, which leads to consensus traps scenarios related to the “*disagree and commit*” principle initially introduced by McNealy (1983) and later extended by Southwick (1999). Regarding pointed issues of having teams “reinventing the wheel” and the inefficiencies teams’ isolation, it appears that improving on strategic management methodologies could provide benefits and mitigate these inefficiencies. In this context, Prahalad & Hamel (1990) provided a perspective on organizations core competence identification, as the main asset (roots)

to generate internal competitive advantage. The study describes core competences as “*the collective learning in the organizations, especially how to coordinate diverse production, skills and integrate multiple streams of technologies*”. Prahalad & Hamel provides several examples regarding how organizations reinvented themselves and disrupted new markets by repurposing their core competencies. The model, points to a common baseline of core competences model in Japanese companies, such as NEC, Canon, and Mitsubishi, while highlighting a lack of similar strategic view in most of the western companies, even in recent times. This is an example of how national cultures can deeply influence companies’ strategy and competitiveness. The core competences mapping start from organizations competences and then applying them to different industries and business opportunities, with output products applicable to different market segments. The leadership and technology strategic thinking behind the mapping of the core competences, seems to be fundamental phase of this framework adoption. As a weak point, the model does not provide a tool to map organization core competences, therefore additional tools are needed for this purpose. Another weak spot seems to be that by overly focusing on core competencies, an organization could reduce the level of innovation and be too resistant to changes needed due to market fast evolving conditions and due to the dependencies and impacts generated by the innovation to the products developed using core assets.

Technologists’ roles from R&D, seems to have a view in line with “*The Fifth Discipline*” theories from Senge (2006), as the model points out that recurrent usage of incumbent traditional mental, cultural models, are strong limiting factors to empowering organizations to grow, therefore it seems that establishing a culture based on empowering and building a common force across organizations is a key factor for companies’ solid and consistent growth. When Technologists expand on the “creative tension” concepts, they seem to refer once more to the models explored in depth by Senge (2006) and Senge et al. (2008), as the interviewees were specifically referring to Peter Senge also as possible models to improve the described challenges. Participants seems inclined towards the management styles more aligned to *Situational Leadership* (Tannenbaum & Schmidt, 1973). R&D Technologists also highlights the need of building empathy and other seemingly concepts in line with Goleman et al. (2019) and *Emotional Intelligence* related studies.

It appears constructive that amongst the people involved in the research, most of them owned as seemingly solid background on MBA related studies, which in traditional companies is more pertinent to management roles; this is a rather positive trait that shows the importance of building leadership and management skills in Ericsson, not necessarily related to specific organizational hierarchies.

5.6 Customer delivers managers

Delivery managers seems to take more into consideration Ericsson competitiveness from a strategic leadership point of view. Participants seems to be building strategies by using models like “*Five Forces*” initially introduced by Porter (1979) and subsequently extended by the same Porter (1996) and Grant (2008).

One of the key points emerged during the interviews is that management with improved technical insights would greatly help filling the communication gap with engineering driven profiles and building a thought leadership connection between business and technology. The learning organization concepts from *Senge (1990)* seems to be also applicable to this context, as it sustains that effective leadership can be achieved by continuously learning and improving on self-discipline, by having a clear view of reality and company objectives, while developing patience.

Senge refer to teams' communication from a perspective of continuous dialogs, which ultimately generate a shared vision, common goals, in an environment where learning and building knowledge are part of the team's normal lifecycle. On a similar view, *Yukl (2020)* argue that leadership development is dependent on how much a leader is ready and open to skills improvement, therefore specific trainings on leadership self-awareness could have the outcome of setting the scene for better working conditions, where people can thrive. Senge and Yukl views, seems to be consistent with *Emotional Intelligence* concepts from *Goleman (1995, 2019)* theories of people development, placing importance on personal growths programs, where the growth is somewhat related to improving people life.

Delivery managers also highlights poor interview and mostly unstructured new employee's selection process; seemingly a model from *Hitt & Ireland (2002)* and *Pentland (2012)* on building great teams, are linked to the analysis and improvement of hiring processes.

5.7 Radio and field engineers

From competitive perspective, radio and field engineers seems to refer to the lack of customer diversification for Ericsson, related to the effective use of core competencies model from *Prahalad & Hamel (1990)*, and reuse of the company core assets and skills to multiple market segments. The points regarding the young talent hiring and workforce turnover, and skills improvements, there seems to be a link with learning organization model from *Senge (1990)* and the theories of building great teams from *Hitt & Ireland (2002)* and *Pentland (2012)*. Radio and field engineers remark the importance of perseverance and resilience as skills needed in their professional life; these skills seem to be related to the *Emotional Intelligence* disciplines lately revised by *Goleman (2019)*, therefore improving the workforce skills on how to approach emotional challenges during daily resistances, could possibly impact people positively.

6 Conclusions and recommendations

This chapter provides a conclusion, where all the findings are summarized with the aim of providing an end-to-end view of the data, finding and considerations. It also provides recommendation on what would be improved in Ericsson with the related models as a starting point. Some ideas for further research are also provided, along with the study limitations.

The study provided the answers to the research questions from the Introduction chapter, as expanded in the next chapters.

6.1 Conclusions

The exploratory research infers that to achieve and maintain financial leadership, Ericsson must increase the investment year over year on research and development activities. The investments should produce innovation usable across multiple market segments and industries, and not limited only to telecommunications; this would need to design and implement strategies that allows to reuse core competences, adopting models such as *Prahalad & Hamel (1990)* and *Porter's 5 Forces (1979, 1996)* and extension of the model from other researchers (*Grant, 2008*).

In order to reduce internal and external change opposition and actively support innovation, the research highlights the need for an improvement of the workforce skills and a hiring process, as it seems that the internal learning activities are self-driven and not actively managed; these topics are discussed in Senge's learning organizations (1990, 2006), *Pentland (2012)* and *Hitt & Ireland (2002)* on making great hiring decisions and building strong teams. According to data, the learning organization should provide to the workforce trainings regarding, Emotional Intelligence (*Goleman, 1995, 1977, 2919*), Agile methodologies (*Sutherland et al., 2001*), *Appreciative Inquiry (Cooperrider & Whitney, 2005)*, technical trainings for managers and, innovation practices and models such as *Kotter (1996) Accelerators* and *Dual Operating System (Kotter, 2014)*.

Regarding the models and practices used by the participants to overcome change resistance in daily challenges, it seems that *Pareto* and *SIGMA6* methodologies are used, however, unfortunately these theories are not explored in this study. The data shows that people rely on resilience and empathy to face oppositions, while more senior profile adopt *Situational Leadership (Tannenbaum & Schmidt, 1973)* and *Senge's Fifth Disciplines (2006)* strategies to foster creativity and innovation.

Data infers that Ericsson should accelerate on involvements on OpenSource projects and other important projects where there is a strong community collaborating to solve technical challenges. The "*Open Organization*" model (*Whitehurst, 2015*) seems a good starting point to build decentralized innovation model where any employee with skills can contribute to core internal products or to public projects. This approach would generate trust with the customers and Ericsson would improve the perception of being a technology leader when proposing innovation and reducing oppositions.

Several elements appear to go in the direction that the overall workforce skillset is not always perceived as a strong company point. Most of the interviewed people seems to be concerned that the company is not investing enough on strengthening the workforce skills-set, or the way of how the learning structure is organized does not seems to be effective. These considerations shows that people do not feel a common force amongst the employee where any challenge could be solved or there is an effective support to drive any problem to the resolution; it seems that, if not

addressed, these internal challenges could lead to a deterioration of motivation and the employees could feel overwhelmed as they might feel the pressure of solving challenges all by themselves. These points could become dysfunctional and have negative impacts on the organizational culture, where later, could be painful and costly to improve.

Participants pointed out that Ericsson competitiveness seems to be hindered by heavy internal processes, difficulty to innovate due to too many unneeded dependencies to legacy applications. It seems there is a common feeling that the predominant working culture in Ericsson is consensus driven, and this is a limiting factor to rapid prototyping and creating innovations due to consensus traps risks. Employees seems also to be concerned with the quality of the products in terms of stability, software engineering practices and scalability factors. It seems the participants have a positive feeling about the creativity process, but the execution is where most of the concerns lies, especially in cases when the solution is developed internally, with an outstanding initial idea and great concept, but the outcome turns to become a solution which underperform similar third-party external solutions. Over time Ericsson developed technologies which depended on these low quality internally developed products, where the outcome has frequently been an overall slow-down of innovation and constructive changes.

As a general note, the data shows a positive feeling and sense of belonging to Ericsson. Most of participants seem to agree with the leadership strategy and overall company direction. Employees who worked in the past for competitors, showed a tendency of comparing Ericsson with those competitors past experiences, such as Nokia or Huawei. It appears that participants feel working in Ericsson as a better professional experience; this is relevant as feeling positive increase creativity and innovation, as demonstrated by *Amabile et al (1996)* and *Amabile & Khairi (2008)*.

Interviewed people seems to be proud of Ericsson, regarding the sustainability and positive impacts on societies, the company focus on global emergency relief to catastrophe sites when disasters have occurred; speedily setting up field communication hubs is key for facilitating aid and rescue operations. This seems to save lives at scale. Participants remark that Ericsson technology support drone delivery of medical supplies and other necessities to remote areas. Plus, we even support remote medical execution during patient operations (due to 5G products with low latencies), and laboratory analyses remotely performed in nearly real-time. These new applications of the telecom network seem to be help on saving lives massively.

6.2 Recommendations

The recommendations discussed, are based on the analysis and findings discussed in previous chapters.:

Firstly) Ericsson would benefit from being more involved in OpenSource contributions to upstream projects; the reference model is “*Open Organization*” from *Whitehurst*

(2015) and build a decentralized Innovation model where any employee with skills can contribute.

Secondly) Use core competencies to sell existing technologies and products to market segments other than Telcos; this would help on minimizing risks by diversifying the customer base; the reference model is from *Prahalad & Hamel (1990)*.

Thirdly) Provide an internal framework method to the employees to propose innovative ideas in a structured way, with aim of reducing unconstructive and opinion-based resistances. Reference model in this case seems to be Agile methodologies from *Sutherland et. al (2001)*.

Fourthly) Increasing investments to improving stability through testing and automation, using internal Continuous Integration and Continuous Delivery infrastructures and practices. In line with DevOps models from *Chapman & Gatti (1993)* and Continuous Integration (*Booch, 1998*), Continuous Delivery (*Farley & Humble, 2010*), Continuous Deployment (*Holmstrom Olsson et al. 2012*), Continuous Testing (*Saff & Ernst, 2003*).

Fifthly) Improve the licensing models by re using successful past experiences, more in line with Agile models, as it would be consistent with the delivery methodology.

Sixthly) Build a learning organization by improving change management skills and improving the speed of innovation adoption and delivery. It seems that the current internal competence learning offer is competitive, but the workforce skills improvement is not actively managed by leaders, as being mostly voluntary, the risk seems to be that many employees does not commit to any training for years; the reference models are from *Senge (1990, 2006, 2008)*.

Seventhly) Actively train the workforce on disciplines such as Emotional Intelligence (*Goleman et al., 2019*), Appreciative Inquiry (*Cooperrider & Whitney, 2005*), Kotter's Accelerators (*Kotter, 2014*), and specifically the competences and framework helpful when facing change resistances.

Eighthly) Organize technology festivals such as Hackathons and Hackers parties where the challenges are solved by teams composed with Ericsson and customers participants.

Ninthly) Organize technology driven Community of Practices with participants from customers, delivery units and R&D, with the goal of facilitating challenging and continuous improvements across multiple organizations. Reference models are *Wenger (1999)*, *Nickols (2003)* and *Scale Agile Framework (SAFe)*.

Lastly) Build processes to hire-the-best with structured and throughout hiring processes. Simplify the process to hire new talents. Establish minimum skills bar for the different profiles (Managers, consultants, architects, etc), assess and build competence improvement plans. Reference models on this point are *Senge's learning*

organizations, *Pentland (2012)* on building great teams, in line with *Hitt & Ireland (2002)* model regarding making great hiring decisions.

6.3 Limitations of the study

This paragraph discusses the research limitations identified, as potentially affecting the research outcome. Personal bias could affect the impartiality of the analysis, as the researcher is an Ericsson employee, directly involved in the leadership of the product development process and knows the respondents. The interviewees might not have an academic background; therefore, inputs are provided according to their own professional experiences, which might not be related to any models or theories. However, people experience seems to be critical on defining, revisiting, and challenging models and theories. The interviews do not include customer profiles nor leadership executives with direct reports to the CEO. These are not limitations per se, however it would have been more comprehensive for the research's sake, to have customer perspective and executive leadership participating. Due to the qualitative approach, only a limited number of people can be interviewed, and the information extracted can be affected by people mood and motivation at a certain point in time.

6.4 Opportunities for further research

From the analysis, findings and recommendations, the following research topics could expand the current exploratory research:

Firstly) An exploratory study on organizational culture, answering the following research question: Why companies hire people with different cultural background, while having the tendency to take decisions and innovation path mostly according to a single or predominant company culture?

Secondly) A business strategy research answering the following research question: How can Ericsson reduce risks by diversifying the customer base and approach multiple market segment. The research would be related to core-competences models analysis and market competitiveness, such as *Prahalad & Hamel (1990)* and *Porter (1996)* Five Forces and latest evolutions.

Thirdly) Study on how to improve the Ericsson hiring process and building great teams. Related to models from *Pentland (2012)* and *Hitt & Ireland (2002)*.

Lastly) Study on how Ericsson workforce skills can be improvements through a restructured learning organizations program. Related to models from Senge's Learning Organizations.

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APPENDIX A

This happening report the interview questions sent to the interviewees. Please consider that some participants provided the response by email, and other by life interviewes.

Hello Everyone 😊

currently I'm working on the final research of an MBA. The title of the MBA is the following:
"A research on how Ericsson overcome resistances to change, when leading innovation."

As part of the research evidences collection phase, there are few questions that in the best case should be answered by people identified with leadership, management and influential roles, and this is the reasons I'm asking you the following questions:

- Considering the increasing competition of Asian companies like Huawei, ZTE and others, how we, as Ericsson can achieve financial turnaround, gaining leadership positions in the Telecommunication industry, and deliver innovative products, used to transform and improve societies at massive scale?
- What are the struggles you face daily when proposing changes and innovations?
- What management models, leadership practices or simple techniques you use, to overcome the several change resistances, when creating and delivering innovative solution work new ways of working?
- What are the next steps you think you should take yourself to improve change management skills and deliver innovation faster?
- What are the next steps the company should take internally to improve the market leadership position and to deliver innovation faster?

By all means the exercise is completely voluntary, best effort and no formal commitment is expected. Even answering to a subset of the questions would be more than enough and greatly appreciated.

As outcome, your inputs will be processed and the overall results will be listed as summary outcomes in the research. By all means, your feedback will be kept anonymous in the paper and the information directly provided by you, will be destroyed by end of 2022, in order to keep the inputs fully anonymous. These requirements are requested by the MBA Entity itself.

The end time to provide your contributions is the **6th of March 2022**.

Many thanks and drinks on me when we'll meet again 😊
Fausto

APPENDIX B

Some content might be sanitized or altered in compliance with privacy and compliances regulations

Participant 1

Here are my thoughts, I hope they are useful for your paper 😊

- *Considering the increasing competition of Asian companies like Huawei, ZTE and others, how we, as Ericsson can achieve financial turnaround, gaining leadership positions in the Telecommunication industry, and deliver innovative products, used to transform and improve societies at massive scale?*
 - tbh. in my opinion Ericsson is on the right track:
 - we promote a speak-up environment, so all employees can voice ideas and concerns --> Ericsson Leadership Team can pick up those items that see relevant for achieving our wanted position
 - empowerment: by empowering us, the Ericsson workforce, accountability and passion to "do well" is supported, as well as paving the road for innovation from amongst the teams
 - our core values and principles: they set us apart from concurring companies, and lay the foundation for a respectful and collaborative workplace
 - Hackathons etc., promoting innovation and innovative behavior
 - Improvements could be made by trying to break down silo behavior, so promoting inter-department/-unit collaborations. In my opinion this could boost the way to the wanted future, by utilizing synergies between different areas and competences
- *What are the struggles you face daily when proposing changes and innovations?*
 - getting allocated time to implement changes and/or innovations
 - if the change/innovation results in a bigger change to the current status quo, also reluctance due to being unsure of outcomes or leaving the comfort zone have been experienced
- *What management models, leadership practices or simple techniques you use, to overcome the several change resistances, when creating and delivering innovative solution work new ways of working?*
 - Timeboxed trials/prototypes and retrospective of the same: if it doesn't work/has no value afterall, we can drop it, otherwise we can see how to continue with the ideas
 - "Everything is a lesson" mindset: if nothing else, we gain further knowledge and experiences with trying things out
- *What are the next steps you think you should take yourself to improve change management skills and deliver innovation faster?*
 - Reserve and dedicate some time to this and plan it into daily/weekly work as part of competence build-up and learning
 - encourage colleagues to do the same
- *What are the next steps the company should take internally to improve the market leadership position and to deliver innovation faster?*
 - "Friendly users" to demo the continuous deployment of our products in a customer environment (lab to begin with) to show that we can reduce TTM with this

- As well as hackathons, maybe keep a continuous "idea collection", where ideas for marketable feature can be left and MUs/Leadership/R&D teams can go to view ideas and see if any are worth taking further in accordance with current market research results.

Participant 2

- Considering the increasing competition of Asian companies like Huawei, ZTE and others, how we, as Ericsson can

- (1) achieve financial turnaround,

I believe that the company strategy is correct to address the following 3 points for achieving financial turnaround.

- A. heavy investment in R&D,
- B. Sales,
- C. and Legal.

Each of these 3 areas needs to be executed with a "lean" mindset. And underlying this, is to be remembered that customer centricity is key for all 3 areas.

- (A) Invest in those R&D areas that we predict will be necessary or useful for our targeted customer base (i.e. use a ML/AI approach to help identify those areas),
- (B) Target sales towards middle to large enterprises regardless of the vertical sector – all sectors will eventually become digitalized.
- (C) Restructure our contract and licensing models to become more aligned with an agile, flexible product portfolio. XXXXXXXX which is being used in the XXXX sector is a good step in the right direction.
- (2) gaining leadership positions in the Telecommunication industry,
 - Again, our company is following a positive and rewarding strategy. Continued and constant advertising and publicising our achievements and awards via all communication channels, especially on social media platforms. Extensive partaking, cooperation, and coordination with international standardization bodies such as XXXXXXXXXXXXXXXXXXXX, etc. Strong and successful Branding is also a priceless tool for securing industry leadership.
- (3) and deliver innovative products,
 - Once again, our company has chosen a path forward that facilitates the delivery of innovative products. We have decided to breakdown our traditional SW products into functional modules. Those functional modules can be re-composed according to need (business opportunity) into innovative newly branded "product-features" driving added income. This new WoW for our company will become more evident in the latter half of 2022 and forward into 2023.

- (4) used to transform and improve societies at massive scale?
 - We are pushing together with the other leading Telcos the idea of a “Green Telco”, a policy whereby we’ve adopted an environmentally friendly profile. This includes not only HW material analysis/replacement to more environmentally friendly materials, when possible, but also to providing modern Site Solutions that include alternative friendly energy sources, and battery backup choices.
 - Besides this we focus on global emergency relief to catastrophe sites when disasters have occurred; speedily setting up field communication hubs is key for facilitating aid and rescue operations. This saves lives.
 - And finally, we make use of our cutting-edge technology to support drone delivery of medical supplies and other necessities to remote areas. Plus, we even support remote medical execution during patient operations (due to our low latencies with 5G), and laboratory analyses remotely performed in nearly real-time. These new applications of the telecom network will save lives.
- What are the struggles you face daily when proposing changes and innovations?
 - Change always comes with difficulty. People are most comfortable with what they know, what they are used to. So, introducing change will always meet resistance. One of the struggles I face is introduction of new tools, i.e. tools for executing field maintenance work. Even if a new tool is theoretically better than its predecessor, it is always the old tried and proven tool that is preferred. It has to be demonstratively proven that there is an advantage for taking up the new tool and ditching the old one.
 - The economic win in changing a WoW must be proven to deliver an increased ROI and increase efficiency if it is to be adopted. If it returns a long-term win, then it will be more difficult to gain acceptance of the new WoW, even if the long-term benefits are great. This is due to existing budgeting frameworks that are nearly always based on short-term scopes.
- What management models, leadership practices or simple techniques you use, to overcome the several change resistances, when creating and delivering innovative solution work new ways of working?
 - Usually, comparison with a competitor goes a long way to reduce opposition when presenting a new idea. If a top competitor has already adopted something and proved it to work, then it is easier to get funding for a PoC. The true difficulty comes when you are presenting an entirely new concept, then you need to sell your idea to those people who have influence. This begins with the traditional, “elevator pitch”, an established way to use as an easy icebreaker. The underlying causes as to why an innovation is needed or

beneficial must be clearly thought out and documented. An elevator pitch needs to be quickly followed up by a “deep dive” documented study or pre-study, in order to make sure that initial interest doesn’t wane.

- What are the next steps you think you should take yourself to improve change management skills and deliver innovation faster?
 - Improving change management skills and improving the speed of innovation adoption and delivery does not require genius. In today’s information society all information is freely available. Attending numerous free Online discussion platforms offered by many industries and organisations goes a long way to widening my horizons. But to act upon the often interesting information requires motivation, and motivation is built upon appreciation.
- What are the next steps the company should take internally to improve the market leadership position and to deliver innovation faster?
 - The company should invest in the individual to a greater extent. Regardless of title or education, all co-workers have something of interest and value to offer. The company is responsible for creating a work environment of inclusiveness and appreciation. Idea boxes hanging on the wall (or existing at the end of an email address) are of no real use. It is human interest and interaction that sparks ideas. Managers need to farm their relationships with everyone; openness needs to be universal within the organisation; from the janitor to the CEO. It is only then that people feel free to step forward and present their ideas with passion. Once that environment exists, market leadership and speedier innovation will happen as biproducts of the open environment that is based on mutual trust.

Participant 3

- Considering the increasing competition of Asian companies like Huawei, ZTE and others, how we, as Ericsson can achieve financial turnaround, gaining leadership positions in the Telecommunication industry, and deliver innovative products, used to transform and improve societies at massive scale?

In my opinion, using just financial figures as benchmark to assess performance against Huawei should not be the strategy. From financial perspective we are competing on two different turfs. We are built as a public (stock quoted) company whereas Huawei is a “private” company fully subsidised by the Chinese government. So, the strategy on our side should be focus rather in “premium” quality on products and state-of-the-art technology. We should focus to bring to the market the most innovative idea, but not only on the R&D side, a swift, faultless delivery and integration should be our focus.

- What are the struggles you face daily when proposing changes and innovations?

Lack of strong competence. A holistic view towards technology not only from the technical team but even more from middle/high management. This slows completely the quest towards success.

- What management models, leadership practices or simple techniques you use, to overcome the several change resistances, when creating and delivering innovative solution work new ways of working?

Resistance has to be seen at different level and layers, each of them enforces some power. So, at technical level, I use knowledge sharing sessions and workshops to discuss not only particular solutions but try to seek an overall (helicopter) view across functional solution. For managerial layer, I use SIGMA6 or Pareto, I also use LEAN/AGILE and try to measure results by using some performance metrics. I use introductory workshops to brief groups in certain areas.

- What are the next steps you think you should take yourself to improve change management skills and deliver innovation faster?

The current times require a self-learning adoption discipline regardless of the industry but especially in the technology sector and this applies at all levels. No manager can pretend to conduct a team or project with a minimum of understanding in the area. In my personal case I want to undertake some course on awaking motivational spirit in groups, and also gaining deeper knowledge in cloud environment, quantum computing, AI, etc.

- What are the next steps the company should take internally to improve the market leadership position and to deliver innovation faster?

The company should draft a conscious plan of the technologies and real competence need in order to succeed. Once those are identified, search for those profiles or even build them according to the needs. The company must search people with proven technological career, some with specific certification in the different areas. Also very important is to find self-motivating people. People with high level of conflict represent a challenge towards the goal.

Participant 4

- Considering the increasing competition of Asian companies like Huawei, ZTE and others, how we, as Ericsson can achieve financial turnaround, gaining leadership positions in the Telecommunication industry, and deliver innovative products, used to transform and improve societies at massive scale?
 - To use our global presence and the local workforce in every country to innovate with clear understanding of local context.
 - To take origin in what good we as a company can contribute with to the societies around the world, and secure that we create customer value in line with this.
 - Focus on fast flow of small batches of customer value and make sure to get cost efficiency and quality as a by-product.

- Make sure to expect and empower each individual to use their full potential in the Hersey-Blanchard model of situational leadership.

What are the struggles you face daily when proposing changes and innovations?

- Lack of understanding of the strategy and vision these changes and innovations fit into. From a higher organizational level communication this is clear, but in the realities pushed from the market and internal stakeholders these strategies and visions feel counter intuitive to many. This often lead to lower levels of the organization trying to bridge the gap by creating own “SMART Goals” and “plans” which feels achievable in the context. Thus missing the opportunity to let the “creative tension” between the strategy and vision foster true innovation in the actual work. In my opinion the top priority of leaders should be to close this gap in a way so that the creative tension between realities and strategy and vision becomes just “creative” and not just “tension” (reference “creative tension”: Senge, The Fifth Discipline).
 - The natural gravitation to handle a complex situation as if it were complicated or even simple (reference Snowden; Cynefin framework), leading to over-emphasis on upfront detailed planning.
- What management models, leadership practices or simple techniques you use, to overcome the several change resistances, when creating and delivering innovative solution work new ways of working?
 - Lean, Vision and strategy driven, Inspired by
 - John Kotter; leading change (Strategy, Vision, Guiding Coalition, put realities in context of strategy every day. Even when we are forced by the realities to go backwards.)
 - Senge; The Fifth Discipline (Shared mental picture, systems thinking, purpose driven)
 - Goldratt; The Goal (Lean, coaching leadership style, relating to higher goal/strategy/effect)
 - Jan Bosch; Speed, data and software ecosystems
 - Snowden; Cynefin Framework
 - Hersey-Blanchard Model of Situational leadership
 - What are the next steps you think you should take yourself to improve change management skills and deliver innovation faster?
 - Be curious. Listen. Put in context of what I already know.
 - What are the next steps the company should take internally to improve the market leadership position and to deliver innovation faster?
 - Stop talking about internal customers. We all in the company should collaborate to please our external customers. Our internal organization is just about finding the optimal way for us to do this. Not about faking customers for the teams in effect shielding them from the voice of the external real customer. So, instead put together teams, statically or dynamically case by

case, to take as much of the real customers perspective as possible and with a mandate and composition which makes it possible for the team to be responsible and accountable for what they deliver to this customer.

Participant 5

- Considering the increasing competition of Asian companies like Huawei, ZTE and others, how we, as Ericsson can achieve financial turnaround, gaining leadership positions in the Telecommunication industry, and deliver innovative products, used to transform and improve societies at massive scale?
 - ⇒ Regardless of market or industry, the competition can be fair and one can play role by means of quality, innovation and delivery precision. Quality and delivery precision is built on top of solution plans and very well planned and designed solutions. Innovation is more intangible parameter but certainly influenced by how much R&D investment is done (mainly research), how cooperative and open development teams are open to take new debates and ideas into consideration and how connected is the discussion are connected with market needs.
- What are the struggles you face daily when proposing changes and innovations
 - ⇒ Main struggles are: confusion around today's problem with business long terms perspectives and difficulties to plan around the e2e solution perspective (all domains and all development/delivery phases).
- What management models, leadership practices or simple techniques you use, to overcome the several change resistances, when creating and delivering innovative solution work new ways of working?
 - ⇒ A few simple examples: exploring the usage of hard facts via demos, projects and proof of concepts. Consolidate the open debate and brainstorm with multi-cultural teams and trying to create a open environment for debates.
 - ⇒ Note: Unfortunately, I do not see that we are doing well once it comes to open debate forums recently. At least, after COVID pandemic, the fruitful coffee corner discussions ended and consequently one interesting brainstorm informal forum has been closed.
- What are the next steps you think you should take yourself to improve change management skills and deliver innovation faster?
 - ⇒ Invest more on bringing prototypes into picture, bring new partnerships internally and externally and I also explore the early results and cases that might came from research and standardization teams.
At the end, communicate more and better if the point is to change and also focus on the final goals and benefits.
- What are the next steps the company should take internally to improve the market leadership position and to deliver innovation faster?
 - ⇒ I think first we need to secure that plans and commitments are kept. Then, on top, start to deliver small, constant and quality level features.

Participant 6

Ericsson situation is very difficult today in my opinion.

I worked for Nokia years ago and I think that Nokia (a smaller company now) will be stronger in 5G comparing to Ericsson.

Ericsson heavy processes, legacy applications are today balls and chains.

YYY services

The idea is great, but YYY products are very, very low quality.

Projects like XXX could win if they abandon YYY and their processes.

Ericsson invested a lot in YYY but it's much worse than using 3PP.

YYY documentation is so poor, there are no links to original projects.

YYY services are tightly coupled together which is against today modern architecture based on microservices.

YYY has completely wrong policy in licensing.

YYY teams tries to take, but not to contribute which can work an instant in time only.

Observability

YYY delivers theoretically partially observability, but it's not used in practice.

Ericsson project quality will be always low when they don't invest in this area.

Actively used - central logging, monitoring, and tracing is a must in today modern projects

Infrastructure

AAAA KKK and ZZZ was a good strategic choice in my opinion.

AAAA BBBB and CCCC could be productized if we invest more in automation.

New practices in telecommunication and cloud

Ericsson is not on top of today world innovators, so we need at first follow leaders.

I presented a year ago my presentation: Building cloud-native application to team.

If we want to join to leaders in telecommunication market, we must follow these rules, otherwise we will be looser for ever.

One more observation

Ericsson should invest to a reliable DB service running in cloud.

Ericsson DB service should include HA and run perfectly in Ericsson cloud.

New Ericsson products can utilize Ericsson DB easy.

New Ericsson product do not deploy any DB statefulsets, because they could rely on perfectly maintained Ericsson DB as a service.

New Ericsson products works mainly or only on stateless microservices thanks to DB as a service.

Ericsson innovation

I think that Ericsson needs some disruption and change in long term strategy.

It requires a big courage and hard decisions.

I know there are smart guys in Ericsson, but they usually follow well known Ericsson processes.

A kind of NextGen successful project could prove that we can join leaders in Ericsson.

A successful NextGen project based on cloud-native principles could open eyes to other Ericsson project owners.
But it can't be done by developers and team leaders only.

Participant 7

- Considering the increasing competition of Asian companies like Huawei, ZTE and others, how we, as Ericsson can achieve financial turnaround, gaining leadership positions in the Telecommunication industry, and deliver innovative products, used to transform and improve societies at massive scale?
➔ *First, I think Ericsson is one of the worldwide leader for the 5G Core. We gain this position by our quality of product, our work and respect we have for our customer. And this since years. We already have the ability to propose and sell innovative products. What we maybe miss, is more mass communication over the people and countries.*
- What are the struggles you face daily when proposing changes and innovations?
➔ *Some years ago, some people from YYY (I was part of them) were really enthusiastic and we wanted to push for more IoT product and services in XX. We did courses, we set-up a small internal team and started to find new customer, outside of Telco world for small project. To make us known to a bigger community than only Telco. At the beginning the management followed with some budget resources, we were able to find few small company where some offers where sent about different implementation of IoT. Of course, this was done in parallel or on top of our daily work. After less than 1 year, as the result where not satisfactory for the management, they dismantled all and no budget was allowed to continue. This small history just to highlight the main struggle on my point of view is management view. There are no long term innovation ideas in there, but only short term. If something doesn't function in 6 months, for them is just a lost of money. Sometimes, you need time and investment to prove at the customer and at the community that the innovation you are building, creating, changing, reshuffling will be a major change on their daily work and will provide a new light on Ericsson. We are well known from Telco company, but we need to open our doors to others company and prove to them we are even good in others sector! Even if the local management seems to say "you are right", until now there are not putting any effort on it.*
- What management models, leadership practices or simple techniques you use, to overcome the several change resistances, when creating and delivering innovative solution work new ways of working?
➔ *I cannot answer to this*
- What are the next steps you think you should take yourself to improve change management skills and deliver innovation faster?
➔ *Good question, I'm still thinking what could be the best way forward to improve myself*

- What are the next steps the company should take internally to improve the market leadership position and to deliver innovation faster?
- ➔ *Take some risk! Engage new Account with good links, go to new customer and try to sell our services and more important, not be afraid to take new people onboard. Furthermore, don't be afraid to lose money at the beginning!*

Participant 8

- Considering the increasing competition of Asian companies like Huawei, ZTE and others, how we, as Ericsson can achieve financial turnaround, gaining leadership positions in the Telecommunication industry, and deliver innovative products, used to transform and improve societies at massive scale?
Ericsson has to invest more in R&D, diversify business direction and embrace more IT&Cloud world and buy not only big companies like Kathrein, Cradlepoint and Vonage, but as well different startups which could bring new breakthrough products.
- What are the struggles you face daily when proposing changes and innovations?
To find the right people to who to address the topic (there is no internal good database or ticketing system for that), networking events are missing and could happen there are not enough resources
- What management models, leadership practices or simple techniques you use, to overcome the several change resistances, when creating and delivering innovative solution work new ways of working?
Don't give up before you tried, never give up and be perseverant
- What are the next steps you think you should take yourself to improve change management skills and deliver innovation faster?
Get professional training for this topic even externally and get a ticketing system where specialised team could pick up the request
- What are the next steps the company should take internally to improve the market leadership position and to deliver innovation faster?
Never stop, explore new markets, invest in young people and in smart people, invest in R&D and new technologies