IMPROVEMENTS ON TRANSFORMATION INITIATIVE EVALUATION

Lappeenranta–Lahti University of Technology LUT

Master's thesis

2024

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ABSTRACT

Lappeenranta–Lahti University of Technology LUT
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Improvements on Transformation Initiative Evaluation

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103 pages, 19 figures, 6 tables and 11 appendices

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Keywords: Transformation, Evaluation, Selection, Transformation Initiative Evaluation

The main objective of this thesis is to improve the evaluation of transformation initiatives. Evaluating and selecting valuable transformation initiatives at an early stage, in a context of uncertainty, are challenging. Not all initiatives necessarily add value in the big picture. This thesis answers three research questions covering pain points, a literature review, and an empirical analysis with suggestions for improvement on transformation initiative evaluation.

The literature review and insights gathered from industry professionals during the interviews revealed that understanding and selecting transformation initiatives that bring value is challenging. Consequently, the scope of this study was steered towards aspects of tools, parameters, and data to better address the real challenges faced by the case organisation.

Best practices for evaluating transformation initiatives consist of wide range of different methods, including parameters, mathematical models, and various scoring systems and decision methods. The way in which the chosen parameters and methods are used, described, understood, and defined can be seen as a key factor in successful transformation initiative evaluation. However, it must be recognised that no single solution is appropriate for all situations, so company-specific approaches are needed.

The result of this thesis is an improvement proposal that utilize project management tool with improved parameters, descriptions, data quality and usability to achieve better evaluation of transformation initiatives. The improvement proposal of this thesis will enhance the evaluation and understanding of transformation initiatives. It will also increase work efficiency, decision making, business value and user-friendliness of the project management tool.

TIIVISTELMÄ

Lappeenrannan–Lahden teknillinen yliopisto LUT
LUT Teknis-luonnontieteellinen
Tuotantotalous

Bruno Pasanen

Transformaatiohankkeiden arvioinnin parantaminen

Tuotantotalouden diplomityö

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103 sivua, 19 kuvaa, 6 taulukkoa ja 11 liitettä

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Avainsanat: Transformaatiohanke, Arviointi, Valinta, Transformaatiohankkeiden arviointi

Tämän diplomityön päätavoitteena on parantaa transformaatiohankkeiden arviointia. Arvokkaiden transformaatiohankkeiden arviointi ja valinta varhaisessa vaiheessa, epävarmuuden vallitessa on haastavaa. Kaikki hankkeet eivät välttämättä tuota kokonaiskuvassa arvoa. Tässä diplomityössä vastataan kolmeen tutkimuskysymykseen, jotka kattavat kipupisteet, kirjallisuuskatsauksen ja empiirisen analyysin parannusehdotuksineen.

Kirjallisuuskatsauksen ja haastattelun aikana alan ammattilaisilta kerättyjen näkemysten perusteella huomattiin, että arvoa tuovien transformaatiohankkeiden ymmärtäminen ja valitseminen on haastavaa. Haastattelun pohjalta diplomityön soveltamisala ohjattiin työkalujen, parametrien ja tietojen näkökulmiin, jotta voitiin paremmin vastata tapausorganisaation kohtaamiin todellisiin haasteisiin.

Parhaat käytännöt transformaatiohankkeiden arvioimiseksi koostuvat laajasta valikoimista erilaisia menetelmiä, kuten parametrit, matemaattiset mallit sekä erilaiset pisteytys- ja päätöksentekomallit. Onnistuneen transformaatiohankkeen arvioinnin avaintekijänä voidaan pitää sitä, miten valittuja parametreja ja menetelmiä käytetään, kuvataan, ymmärretään ja määritellään. On kuitenkin myönnettävä, että yksi ainoa ratkaisu ei sovi kaikkiin tilanteisiin, joten tarvitaan yrityskohtaisia lähestymistapoja.

Tämän diplomityön tuloksena saadaan parannusehdotus, joka hyödyntää projektinhallintavälinettä, jossa on parannettu parametreja, kuvauksia, tietojen laatua ja käytettävyyttä paremman transformaatiohankkeiden arvioinnin saavuttamiseksi. Diplomityön parannusehdotus tehostaa transformaatiohankkeiden arviointia ja niihin liittyvää ymmärrystä. Se kasvattaa myös työn tehokkuutta, päätöksentekoa, liiketoiminta-arvoa ja projektinhallintavälineen käyttäjäystävällisyyttä.

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Looking forward to measuring the success of the proposed improvement of this thesis.

Bruno Pasanen

ABBREVIATIONS

R&D	Research and development
ROI	Return on investment
PPS	Project portfolio selection
PM	Portfolio Management
PPM	Project Portfolio Management
KPI	Key Performance Indicator
SMART	Specific, measurable, assignable, realistic, and time-related
DICE	Duration, integrity, commitment, effort
IT	Information Technology
DSS	Decision Support System
AI	Artificial Intelligence
IDSS	Intelligent Decision Support System
UAT	User Acceptance Testing

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1 Introduction

Fast development cycle, complexity of emerging technologies and uncertainty of early phase transformation initiatives adds a great challenge for technology firms to stay on competitive edge or ahead of it. Research and Development (R&D) activities require tremendous investments and focus on many aspects with profitability challenges at the same time. Organizational resources such as financial aspects, time and people allocations are usually under constant pressure in a large and innovative R&D organization.

Tremendous number of projects and programs do not deliver value to the organization as resources, risks, goals, estimates, and other components were not mature enough during the uncertain evaluation phase. Possibly some counterparts end up understanding the information differently. Neither a single engineer might not know, is the brilliant work delivering return on investment (ROI) to the company. Improvement ideas around the organization keep continuously raising, while the product development work tends to run over the improvement projects, with reasons of resources and priorities.

In the end decision making is commonly left to the management's problem to decide which project to take forward. Transformation initiative evaluation is a project portfolio selection (PPS) challenge. To be able to find out best possible selection of transformation programs and projects bringing best possible business value to the R&D organization. The key is to focus on decision making to be able to select, terminate, accelerate, or delay the project portfolio components leading to the best business value (Enoch 2015). But most importantly be able to understand what is being decided, where Transformation Managers play a key role as a high-level orchestrator, setting the tone and image of the transformation in the organization and steering the focus on the most valuable initiatives.

Project portfolio selection is widely studied field. Wide variety of methods are presented in the literature to tackle the challenge of being able to evaluate and select the most valuable projects and programs. (Abbassi 2014) The methods vary between complex mathematical calculations to simple weighted scoring systems, utilization of different factors and indicators, business specific frameworks and mixtures of these tailored for dedicated businesses. In the field of technology, R&D transformation is a complex task where

understanding on business, technology, and market are must, without forgetting continuously emerging soft skill needs.

It is not an easy task to evaluate and select the most valuable transformation initiatives for the large R&D organization to implement and use resources. The nature of projects differs dramatically between the industry but also within the organizations. Areas such as financial value, technological complexity, return on investment and connection the business objectives are not easy to evaluate, neither they stay constant in the era of uncertainty on field of technology.

The objective of this master's thesis is to improve transformation initiative evaluation. This study is done from the request of a large, software R&D unit at Nokia corporation.

1.1 Background

This thesis has been carried out by a request of a research and development (R&D) unit of Nokia Corporation, focusing mainly on software development. The unit has multiple thousands of employees and operates on many continents. Nokia is multinational B2B technology leader in networking of people, machines, devices, and businesses on every industry field. (Nokia 2023)

The importance and motivation of this thesis to the company is grounded on continuous improvement of R&D transformation. The interest of the R&D unit is to improve the evaluation of transformation initiatives, such as projects, programs, ideas, and innovations. In a large R&D organization, various improvement initiatives, from variety of topics are popping out here and there. All the transformation initiatives might not be relevant for all and one of the biggest challenges is how to identify the most important transformation initiatives right in the beginning. For example, impact, cost of implementation and size of the initiative might vary significantly. The fundamental challenge is to be able to evaluate a large group of transformation initiatives bringing the needed value, return on investment, and benefit in line with the organization strategy and in the end select the best portfolio of these initiatives.

This thesis is done on parallel with full time work in the R&D unit. The area is only partly known to the author, which makes this thesis a continuous learning path. From the

organization point of view having fresh vision over the topic was seen beneficial. The author of this thesis was not familiar with the processes and evaluation of transformation programs and projects. The author has previous experience on working with the data related to the transformation initiatives of the organization.

The initial idea for this study was to learn, be able to carry out scientific research on the challenge of transformation initiative evaluation in the R&D organization. In the end deliver comprehensive improvement proposal to the organization which can be implemented after this study. The ultimate prediction in the beginning was to be able to find truly valuable transformation initiatives during the evaluation phase, which would deliver the most value in the big picture.

As a clarification in this thesis, the word “transformation initiative” covers many kinds of improvement programs and projects in the case unit. The key differentiating factor compared to other R&D work is that these projects are not straight affecting development of hardware or software features or the products of the case company. As an example, transformation initiative can be a large-scale R&D tool deployment that touches the whole organization, advanced technology training, which is relevant for only certain group of people, innovation initiative that is scaled to the wider audience in the organization or even a small process enhancement leading to quality improvement.

1.2 Objective, Scope, and Limitations

The objective of this master’s thesis is to improve transformation initiative evaluation of the case R&D organization. The aim is to address real challenge on being able to evaluate transformation initiatives more effectively, find methods, and provide validated proposal to improve the current evaluation of transformation initiatives in the case organization. As the form of this study is clearly exploratory type the research questions were formulated beginning with ‘How’ and ‘What’ (Saunders et al 2016). The three research questions of this study are:

1. What are the pain points in transformation initiative evaluation?
2. What are the industry and scientific best practices to evaluate transformation initiatives?
3. How to improve the evaluation of transformation initiatives in the case organization?

The first research question is aiming to scope the study and build a foundation for the second research question aiming to literature review. The ultimate goal of this thesis is to affect positively on transformation initiative evaluation in the R&D unit, eventually improving execution of the transformation initiatives.

The first research question formulates the ultimate scope of this research by allowing to choose the most important area to focus on. This thesis also considers the time limitation of approximately six to nine months, keeping it realistic to carry out. However, this thesis also considered that possibly the interview results might provide large variance between different topics to focus on, considering the complexity of R&D transformation in the case organization. In this case the realistic scope will be chosen with the case organization manager's according to the interview results.

This study consists also confidentiality limitation which will be considered as the work is carried for the case organization. No confidential and sensitive information according to the guidelines of the case company will be published in this thesis. If the time limitation of this study allows, pilot implementation might be also included as part of this study.

1.3 Structure of the thesis

This thesis consists of 6 chapters in chronological order of the study. In the first chapter, the introduction, background, and the importance of this study to the case company have been introduced. Moreover, this chapter presents the objective, scope, and limitations of this thesis. The overall structure of this thesis is also discussed.

In chapter two, the research design, data collection and analysis methods will be reviewed. This thesis is exploratory study using qualitative research method. Data collection method covers the methods used to formulate, carry out and analyse the semi-structured interview

to find out the most important pain points in current evaluation of transformation initiatives. Then methods for systematic literature review of this study are explained.

The third chapter presents the pain points in transformation initiative evaluation as the interview results of this study which seeks the answer for the first research question. The outcome of third chapter is a clear focus on the most important pain points.

The fourth chapter presents the best practices for transformation initiative evaluation as a literature review of this study. The literature review is carried out based on the objective and outcome of the first research question. This chapter answers to the second research question as a presentation of best practices for transformation initiative evaluation.

The fifth chapter describes the improvement proposal creation for the transformation initiative evaluation at the case organization. This chapter formulates the main outcome of this study, including the validation part. Furthermore, the final proposal to improve the transformation initiative evaluation in the case organization as an answer for the third research question is delivered in this chapter.

In the final chapter, the findings of this thesis will be discussed, and the analysis of the achieved objectives will be reviewed. Specifically, the connection to wider scope as well as the connection to possible future research will be presented. Analysis of the credibility and reliability of this thesis are presented in this chapter. Following table present the structure of this thesis as a table.

Table 1. Structure of the Thesis

Input	Chapter Name	Output
Background and need at the case company	Introduction	Objective, scope, and research questions
Research methodology and research questions	Methodology	Research design and methods
Interview data collection from the case company	Pain Points in Transformation Initiative Evaluation	Response on first research question
Scientific literature and industry best practices	Best Practices to Evaluate Transformation Initiatives	Response on second research question
Scientific literature, empirical analysis, and practical knowledge	Improvement Proposal on Transformation Initiative Evaluation	Response on third research question
All the previous research phases	Conclusion	Summary, research validity and future objectives

2 Methodology

This chapter provides the description of research design and methods used in this study. First research design is explained, followed with the data collection and analysis descriptions.

2.1 Research Design

This thesis is looking for fresh insights to improve the transformation initiative evaluation. Qualitative research method focuses on collecting and analysing non numerical data. (Saunders et al 2016). To be able to formulate the improvement on the challenge provided by the case organization, flexibility might be needed. Exploratory research is a flexible option with the aim to discover ideas, data, and literature on the chosen topic with different aspects (Kothari 2004). This study will be exploratory research using qualitative research method because the transformation initiative evaluation consists lot of non-numerical data.

Initially the author of this study held and participated multiple exploratory discussions with the key Manager roles of the case organization. These discussions aimed to agree the scope of the research, formulate the objective to support the case organization and have open discussion and steering during the study. Additionally, the learning objectives of the author were considered. The analysis of this thesis focuses on organization level without analysing processes and projects.

The ultimate goal of this thesis is to affect positively on transformation initiative evaluation in the R&D unit, eventually improving execution of the transformation initiatives. This research includes three major phases. Each of the phases aim to find an answers for the chosen research questions. Following figure presents the three major phases aiming to answer the research questions of this study.

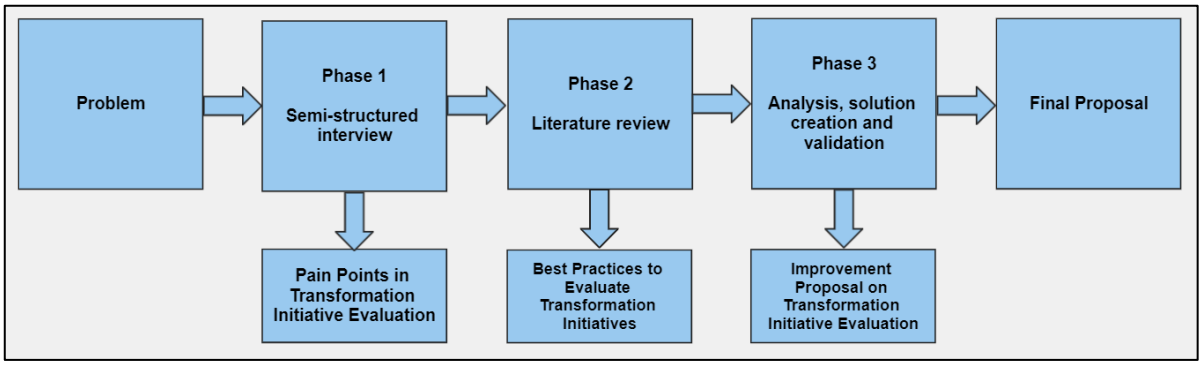

Figure 1. Research Design

First phase is the individual semi-structured interview. The interviews were held with a sample formulated from three different role levels and across the case organization. The qualitative data was collected and analysed. Results were presented to the interview participants. Discussions and feedback were collected and analysed to validate the results. The scope of this study will be steered according to the outcomes of the interview phase.

In the second phase, the literature was studied according to the most important findings from the interviews in order to find the industry best practices and methods which support the best possible way the evaluation of transformation initiatives in the case organization.

In the last phase, the findings were analysed, concrete proposal formulated and presented to the case organization to validate the results. This phase included the concrete next steps of how the chosen part of evaluation of transformation initiatives needs to be improved. Figure 1 presents the research design of this study.

2.2 Data Collection and Analysis

In this thesis, the data collection was done using two major methods, including interview, and literature review. Discussions were continuously used to collect data during this study. Discussions are great method to refine and clarify the research topic, as well as getting feedback and hearing opinions (Saunders et al 2016). Exploratory discussions were held throughout the research process of this thesis. Starting from the topic formulation, ideation, feedback, results discussions, weekly meetings, and validation. The author wrote notes continuously during the study. This can be called secondary data collection of this study on top of the two major data collection methods explained next.

2.2.1 Interview

First data collection method was an interview, and it was chosen to be semi-structured as the method supports the understanding certain phenomenon in exploratory manner. (Saunders et al 2016). This interview method was selected to find an answer to the first research question of this study. Semi-structured interview gives many possibilities to formulate the interview. It also allows to have a set of questions, additional questions, order of the questions and usage of questions depending on the interview flow and discussion with the interviewee. This allows to ask the most relevant questions on given moment and plan the interview to suit this study best possible way. (Krosnick & Presser 2010)

The aim of the interview in this study was to find the current and most important pain points in transformation initiative evaluation in the case organization. Detailing the scope of this thesis was seen as a realistic approach considering such a complex organization level objective and the limitations of this thesis.

The interview participants were chosen using the non-probability sampling method with the case organization Manager's. The criteria used was to have participants from three different and relevant roles from different parts of the organization to achieve a sample with different roles and different organizations. Due to the size of the organization and the current process of transformation initiative evaluation, it was decided to choose only experienced people to join the interview. In this thesis experienced people is defined as people who are aware of the case organization activities, processes, way of working, and have significant work experience around the topic of this thesis. The interview participants were from the Change Lead, Transformation Manager and Software Development Unit Head roles.

The interview data was planned to be collected in free text format. This method was seen the right as the statistical inference about the characteristics of the populations was not seen needed (Saunders et al 2016). The interview sample amount was also chosen keeping in mind the time limitation of this thesis in terms of analysis of free text. The initial hypothesis of the interview data was that people will have slightly different approaches on the questions as their own opinions will be asked. It was also estimated that the answers might cover some of the pre-planned questions on different time which might make the data analysis time consuming. The author of this thesis saw free text format as the best way to capture the main pain points and not focus on details.

Interviews were carried out as a one-hour individual Microsoft Teams meetings and 18 participants were invited and all of them participated the interview. It was known that the interview participants might see the transformation initiative evaluation on their personal perspective. This might create a phenomenon of recall error which might cause the participants to include aspects that are relevant to their daily work about the transformation initiatives but not specifically part of the evaluation (Krosnick & Presser 2010). It was decided to add funnel picture the interview invitation to highlight the focus on the evaluation of transformation initiatives. The picture can be seen in Appendix 2. The process picture of evaluating transformation initiatives were limited out from this study due to the sensitive material limitation which was mentioned in chapter 1.2.

The invitation was designed on a way that each interview participant will receive same invitation, without seeing the other recipients of the invitation. The interview invitation includes brief data about the current evaluation process, picture describing the transformation initiative funnel and evaluation part of it, reserved timeslot, ethical aspects of interview data collection and where the data will be used. It was decided not to use the individual interview participant's name as the role and organization were seen giving enough details and giving possibility for more detailed answers.

The ethical aspects of carrying out the interview were considered also on the interview intro. The interview introduction was read to the participants on the same way. This was done to avoid providing different initial information to the participants. Questions from the interview participant to the author of this study, it was planned to answer also similar manner using the material sent with the invitation. The aim of this was to achieve answers purely from the participant's point of view.

The set of interview questions were co-created with the Managers of the case organization. In the beginning, it was decided to use open questions and respondent debriefings. To achieve pleasant semi-structured interview, the first interview questions were tailored to be easy to answer for each of the participants. Towards the end of the interview question were focusing more into details. As the interview was semi-structured, some of the questions were grouped depending on the flow of the interview, as the open questions might lead the interview participant to already cover some of the further questions during discussion (Krosnick & Presser 2010).

One person from the interview participant list was chosen to carry out a pilot interview. Pilot interview testing is important phase to test the interview questions at the same time utilizing expert review, as well as with real data collection to validate whether some of the questions cause visible problems and not just predict it based on the expert feedback (Krosnick & Presser 2010). After the pilot interview slight modifications were done to the interview question order and the format of the questions. The interview invitation and introduction were remaining the same after getting feedback from the pilot interview. The final set of interview question set can be seen in Appendix 1. Additionally, the interview invitation can be seen on Appendix 2 and the interview into in appendix 3. All the document and interviews were held in English. Interviews went as planned. One interview which data was chosen not to be included due to the respondent's answers taken straight from the material during the interview. This was decided as respondent's own opinions were wanted, not what the documentation says.

Interview data were collected using Microsoft Teams recording, transcript and note taking. After each interview the notes were reviewed with the recorded material to ensure the validity. After the validity was ensured, the data was collected to one Microsoft Excel file for further analysis based on the validated notes. This way it was possible to compare the data based on the answers or answer group, organization, role and carry out thematic coding. The later summarization of the interview results was done in Microsoft Whiteboard which allowed the author to go through analysed data from Excel document using mid maps and root pictures presenting the codes.

Interview results were collected to Microsoft Power Point presentation and presented to the interview participants. The presentation was also shared with them. The interview presentation was planned to be the interview results validation at the same time to seek the acceptance of proceeding with the most important pain point area. The interview results and validation outcomes are presented in chapter 3 as the first phase of this study and answer to the first research question.

2.2.2 Literature review

According to Saunders et al (2016), one of the important aspects of literature review is to critically review the literature which provides the context and theoretical framework to

support the research. Amount of writing from the articles are reflecting the value towards the aim of the research. It is also important being able to plan the literature review to ensure the relevance of the results. (Saunders et al 2016) In this study, systematic literature review is carried out after the interview phase. Literature review of this study aims to answer the second research question using scientific databases and well-known open data sources from internet. Literature will be reviewed based on relevance. For the scientific literature, the focus will be on peer reviewed sources and on non-scientific sources the well-known organization or company web sites will be used.

Systematic literature review was started using the scientific databases provided by Lappeenranta-Lahti University of Technology. It was planned to use mostly peer reviewed articles as that is a great indicator for quality. Peer review search criteria also decreased the search results significantly. Some relevant chapters from books were also included to the literature review. Descriptions, titles, and key word lists were browsed through to choose the articles for this study from the search results.

The literature search was started with key word of “project portfolio selection”, “project portfolio management”. The results were filtered down using key words such as “evaluation”, “prioritization”, “understanding”, “R&D”, “parameter”, “continuous improvement”, “method”, “transformation” and some more. Full list of used key words and search results are shown in the table 1. Searches from open internet were also made with same key words with earlier described criteria to find references for this study. Some detailed searches were done to find more detailed information on relevant topics presented on main literature searches. Key words used for these searches were “questionnaire design” and “project requirements”. Well known corporate and organization names were also used while doing the searches in open internet. Using LUT Primo database the search results were presented in the following table. Furthermore, other databases were used, but LUT Primo provided the most comprehensive list of relevant articles.

Table 2. Key words and Search Results Using LUT Primo

Key word	Results
"project portfolio selection"	283
"project portfolio selection" AND "R&D",	43 (35 peer reviewed)
"project portfolio selection" AND "evaluation",	78 (67 peer reviewed)
"project portfolio selection" AND "prioritization",	15 (12 peer reviewed)
"project portfolio selection" AND "understanding",	**7 (6 peer reviewed)**
"project portfolio selection" AND "parameter",	38 (26 peer reviewed)
"project portfolio selection" AND "question",	**9 (7 peer reviewed)**
"project portfolio selection" AND "tool",	66 (31 peer reviewed)
"project portfolio selection" AND "tool" AND "R&D"	**7 (5 peer reviewed)**
"project portfolio selection" AND "group" AND "expert"	**13 (10 peer reviewed)**
"project portfolio selection" AND "improvement",	30 (15 peer reviewed)
"project portfolio selection" AND "continuous improvement",	**3 (2 peer reviewed)**
"project portfolio selection" AND "improvement" AND "operations",	(22 peer reviewed)
"project portfolio selection" AND "evaluation" AND "R&D"	20 (14 peer reviewed)
"project portfolio management"	782
"project portfolio management" AND "R&D"	45 (10 peer reviewed)
"project portfolio management" AND "R&D" AND "evaluation"	18 (10 peer reviewed)

Bolded key words on the table indicate the most relevant search results for this study and presents the number of discovered articles. The chosen articles can be found from the references of this study. The final criteria to choose the articles were aspects to support the discovered pain points. Besides, the articles were chosen to achieve the objectives of this study and be able to construct literature review of the best practices to evaluate transformation initiatives and create the improvement proposal of this study.

3 Pain Points in Transformation Initiative Evaluation

Semi-structured interview was one of the data collection methods of this thesis to identify the pain points in transformation initiative evaluation. Methods used in this interview were described in sub-chapter 2.2.1. Experienced people from different roles and parts of the organization from the case organization were chosen to participate the interview. In total, 20 interviews were carried out. The chosen roles, for the interview had partly different view to the transformation initiative evaluation based on their role and organization. The interview was carried out as individual semi-structured interviews, and 20 pre-planned questions were made starting from general questions and ending to more specific ones. Interview questions are visible on appendix 1. This chapter distinguish the results of the interview.

The topic of transformation initiative evaluation is relatively complex on its nature and there can be various initiatives depending on the size, value and impacting area. Therefore, the results were also multidimensional and had large number of dependencies between the pain point areas. Multiple pain point areas were brought up. Those can be seen in the figure 2. Some of them were more common than other based on the interview data. Besides, some of the pain points had a clear correlation between the roles and organizations. After analysing the data, the results of the interview results were concretized into three most common pain point areas according to the interview data. Those are presented in the following figure.

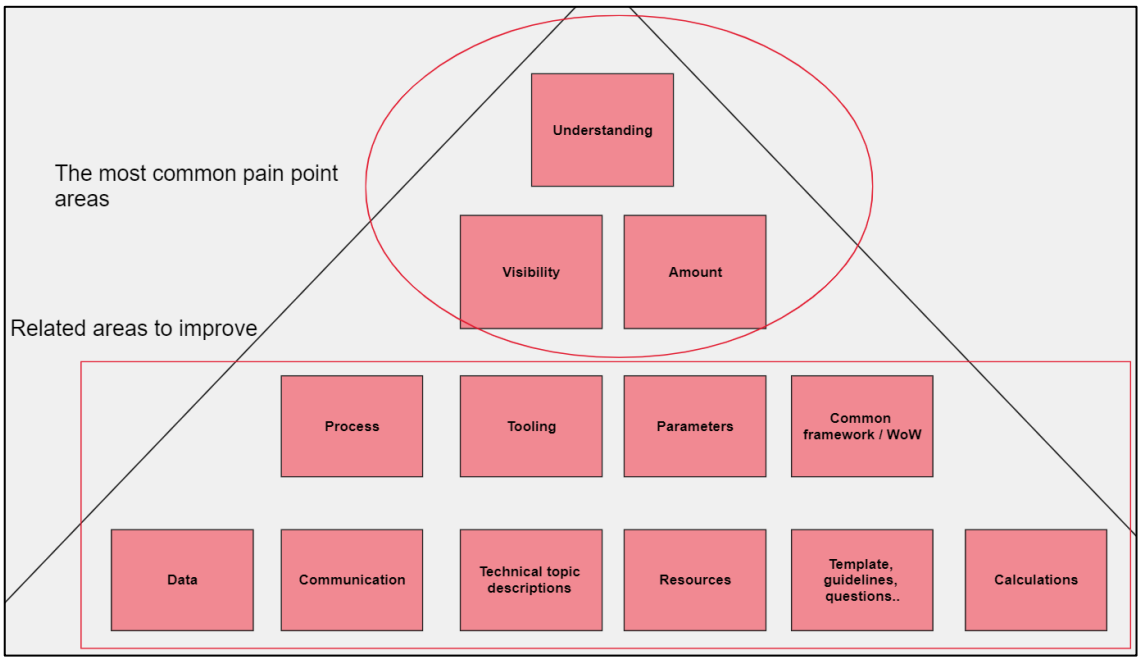

Figure 2. Pain Points in Transformation Initiative Evaluation

In the figure 2, the most common pain point areas are understanding, visibility and amount referring to the number of initiatives. Understanding was placed on top of the triangle, and it was acknowledged as the main cause of pain in transformation initiative evaluation. From the interview data, the understanding came out as being able to understand what the affected people or unit is, what is the importance of this initiative on a big picture, how much resources it requires to do and what is the return on investment. The participants were mostly non-technical senior managers, with significant knowledge on software development. The understanding was also heavily tied with the understanding of parameters and indicators used in the evaluation of the projects.

The visibility is the second most important pain point area. Being able to see the value, cost, and impact of certain initiative on evaluation phase was a clear challenge. It was highlighted that improving the visibility would help decrease the understanding pain point related to the evaluation. Both understanding and visibility pain points can be seen as factors causing number of initiatives to grow, which is indicated as amount pain point in the figure 2. Amount was visible in the interview results as the challenge of identifying overlapping initiatives. Having difficulty to identify overlapping activities, being able to group of initiatives, or identify initiatives aiming to same outcome in different parts of the case organization are a clear indicator of lack of visibility on the transformation initiatives. These clearly effects on the efficient evaluation of the initiatives.

Related areas to improve, presented in the figure 2 are the topics which were brought up by the interview participants. These topics are heavily dependent on the most common pain point areas according to the interview data. For example, being able to understand the parameters used in transformation initiative evaluation is strongly dependent on tooling where the parameters are used, and the data is stored. What was also pointed out, was the variance in initial initiative idea description using templates and sometimes the variance between the parameters. Lack of clarity on the process on storing the data, using the parameters for initiatives, and finding all this information were seen as a challenge. All these areas are tightly connected to the understanding and visibility of the initiatives, which is crucial for the evaluation phase.

The other important findings from the interview were that parameters such as return on investment, cost, schedules, business case, invested effort and definition of done and many other were listed extremely consistently between all the participants. However, the data revealed that there is challenge of being able to understand these parameters in the same way. Some of the reasons for this were the large variance between initiatives and clarity of the process of evaluating transformation initiatives and collecting the material on the same way. Visibility was seen as major challenge causing bias in decision making as well as which item goes into execution and preventing overlapping activities. Interview data indicates that, the evaluation phase is carried out by to the experience of people and different discussion forums.

Effort estimations were seen as one big individual challenge to determine in evaluation of the initiatives. Opinion between scientific and rough approaches varied between the participants. But it came clear that both approaches have its benefits. Scientific approach might provide possibility to compare initiative easier but at the same time take significant amount of effort to determine compared to rough estimate on evaluation phase.

The set of more detailed question asking about cost of implementation, impact on customer, competitiveness, quality, and efficiency provided also interesting views. Challenge was the weak visibility but also the lack of clear parameters determining these during evaluation phase. The information was part of the evaluation but not completely delivered to the tools used later the execution of transformation initiatives. This came up as some of the roles worked more closely with the evaluation and some with the execution. One finding was also that the main pain points were same between these roles, but some of the pain points were seen completely different between the roles. Such as being able to understand the technical descriptions of the initiatives was clearly high-level role challenge. Challenges on lower-level roles were for example about being able the understand why some change is or is not relevant to my team, especially the importance was not clear enough.

Lastly, it was asked to list the parameters, difficulties, and most important aspects in evaluation of transformation initiatives. In a big picture, being able to utilize the parameters on the same way between all the roles and tooling to support evaluation was seen most important aspect, which was not happening currently. Unclear parameters and the parameter usage in tools were also seen one of the widest areas to effect on visibility, amount and understanding of transformation initiative evaluation. Parameters were seen important but

tools to support the visibility, documentation of the transformation initiative was a clear challenge. During the analysis of interview results the author of this study also participated on multiple meetings and discussions to gain deeper understanding on different viewpoints of transformation initiative evaluation.

The following direct quotations presents some of the interview findings from various roles in the case organization:

> Transformation Manager: “We have sometimes challenges on understanding the magnitude of the proposed initiatives… variance on parameter usage makes us not be able to compare for example priorities against each other.”
>
> Transformation Manager: “Sometimes Transformation Jira is missing information because it is documented in different places, such as Power Points, Excels or someone forgot to update Jira… then we lose the visibility on where the initiatives are affecting.”
>
> Change Lead: “I do not always understand why my team needs to do this activity based on the documentation and the assigned priority is not comparable.”
>
> Unit Head: “We lose the visibility on some of the transformation initiatives as those do not end up documented…”
>
> Change Lead: “Labels and other tags are in place, but the real business value is not visible or why or where this initiative impacts.”
>
> Unit Head: “Data shows us only the tip of the iceberg… Evaluation is currently relying on experts.”
>
> Unit Head: “There are so many ideas raising from the organizations which makes our funnel flooded with the transformation initiatives. We cannot do everything which brings us to the challenge of evaluate and prioritize those. Currently it is so difficult to compare and tell on early phase what is the return on the initiatives in a big picture.”
>
> Transformation Manager: “One slider template is being used for the evaluation of the initiatives.”

> Change Lead: “Parameters where we use only date are clear, but if we are describing something then I lose the understanding.”
>
> Transformation Manager: “It is extremely difficult to count what is the added value if we do this activity.”
>
> Transformation Manager: “We need some mechanism to compare and document the transformation initiatives on the same way.”

The interview data was validated by organizing results presentation and discussion session with all the participants of the interview. During the presentation, recap of the thesis objectives, interview objective, questions, methods, and results were presented and discussed. Moreover, the data were shared with the participants and feedback were collected from each person to hear possibly objections and thought about the interview result. As a conclusion of the interview, the participants clearly agreed about the results.

As the interview data covers large number of possible areas to focus on, it was agreed with the case organization Managers to focus on improving the visibility and understanding pain point from the tool, parameter, and data aspects. This was seen as a clear area to scope this thesis for the further phases of this research. Figure 3 presents the focus area with the red boxes. Lighter colour boxes in the Figure 3 can be seen partly affected by this chosen area. For instance, tools might have certain workflows which can be seen as processes or parameters might require certain type of questions or templates to be filled accordingly the purpose. Amount of initiatives part was decided to be left out as the estimation of improving understanding and visibility of transformation initiative evaluation was seen to affect positively on the amount of the initiatives.

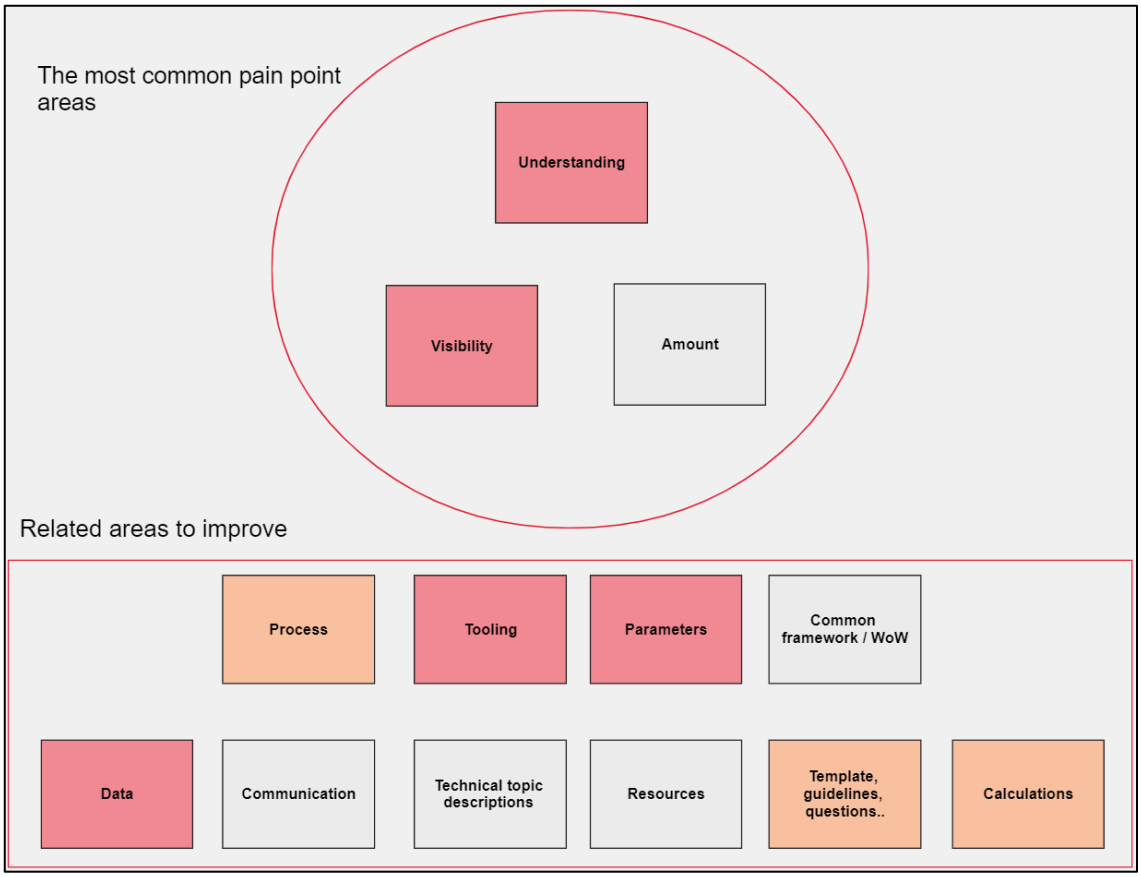

Figure 3. Chosen Pain Points in Transformation Initiative Evaluation for This Study

For the uncoloured boxes, it was agreed to start another project in parallel with this thesis. This decision was seen to have significant co-operation benefits working in parallel as well as providing learnings and value to both sides.

As a summary of the interview results chapter, the current and most important pain points in transformation initiative evaluation are understanding, visibility and amount. Considering the limitation of this study the most important pain points to focus on are understanding and visibility as the amount can be seen improving by these two earlier mentioned. Understanding and visibility pain points were related to large area of improvement topics. For this study, to improve the tooling, parameters and data parts related to the transformation initiative evaluation were chosen because this set contains realistic scope for this study to proceed further with the earlier defined limitations of this study. Complete lifecycle process of transformation initiatives is not part of the scope.

4 Best Practices to Evaluate Transformation Initiatives

This chapter presents the literature review phase of this study. The aim is to answer to the second research question on finding the best practices to evaluation of transformation initiatives. This literature review is scoped to find industry best practices to tooling, parameters, and data aspects of transformation initiative evaluation. Thus, it is possible after this phase to reach the second research question of this study, as a collection of industry best practices for transformation initiative evaluation. Methods used in this phase are explained in sub-chapter 2.2.2.

4.1 Portfolio Management

Portfolio management (PM) defines the mix and sequencing of proposed projects to support the organizational strategy and objectives. Portfolio consists of components including projects, programs as a larger set of projects and operational activities as portfolio components. (Enoch 2015) The motivation of project portfolio management can be defined with few why questions: Why should the organization develop projects? Why did the organization choose to run project A and B rather than project C? (Jian et al 2020) Furthermore, most importantly to be successful, companies should be able to manage their projects, which have been identified as the important ones for the specific company (Benaija & Kjiri 2014).

Portfolio management has a close relation with the project and program management. Project Management Institute (2017) claims that all the three should be well aligned and driven by common business drivers as well as organizational strategy. Portfolio management focuses on choosing the right projects, prioritizing, managing resources and overseeing the portfolio and its components. Portfolio components can be seen as a collection of entities or commonly said as basket of the overall portfolio. Program management focus on the components of portfolio and harmonized and drives the execution of the component. Project management is the detailed level from these three aspects, focusing on individual projects with specific scope. (Project Management Institute 2017)

Principles of portfolio management are presented as the fundamental core of portfolio management by the project management institute. The following list presents the principles:

1. Strive to achieve excellence in strategic execution
2. Enhance transparency, responsibility, accountability, sustainability, and fairness
3. Balance portfolio value against overall risks
4. Ensure that investments in portfolio components are aligned with the organization's strategy
5. Obtain and maintain the sponsorship and engagement of senior management and key stakeholders
6. Exercise active and decisive leadership for the optimization of resource utilization
7. Foster a culture that embraces change and risk
8. Navigate complexity to enable successful outcomes

(Project Management Institute 2017)

The project management principles support transformation initiative evaluation and the execution. The most important principles to keep in mind for the evaluation are second and fourth principles from the list above. Clear transparency, responsibility, accountability, and other factors ensure the understanding of the initiatives. Portfolio components and strategy on the other hand are crucial to draw the clarity for the stakeholders and indicate the importance of the transformation initiatives.

Portfolio management originates from financial industry. Main enablers of PM towards information technology (IT) industry were the need of justified and rational investment decisions that results the delivery of organizational benefits. Also, the need to efficiently use and optimize resources to ensure delivery of the benefits. This resulted the project portfolio management (PPM). (Benaija & Kjiri 2014)

Increasing complexity is creating challenge on portfolio management to understand the portfolio as a whole. Portfolios typically include multiple components but also many relations between the portfolio components. The challenge can be seen in a nutshell that everything is related to everything. Applying system thinking to portfolio management aims

to understand the functions of the portfolio, its interactions and environment. This is a large topic, which might have significant effect on improving the understanding of project portfolio. (Wu & Chatzipanos 2018)

Project portfolio management (PPM) can be shown as a four-step process, presented in the figure 4. The process starts with identification and categorization, followed by evaluation and prioritization, continues with authorization, and ends with report and revision part. PPM enables new projects to be evaluated, prioritized and existing project portfolio managed based on the process. This also includes management of resources between the active projects. (Benaija & Kjiri 2014) The following figure illustrates the process steps and then follows an explanation of the process.

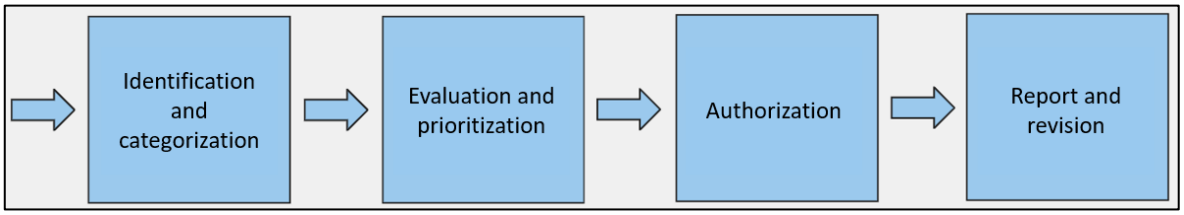

Figure 4. Continuous Process of Project Portfolio Management (Benaija & Kjiri 2014)

According to Benaija and Kjiri (2014), the first step as identification and categorization includes structured inventory of projects including proposed and ongoing ones. The inventory consists of structured template of each project and company specific classification of projects. (Benaija & Kjiri 2014) This categorisation seems to be the same things as the earlier mentioned portfolio components for the evaluation.

Evaluation and prioritization part was presented as the main and most important step where the projects are to be selected. This part requires a well-defined and analysed criteria. Evaluation of projects aims to create a systematic documentation of project proposals with the aim to be able to compare them. This should include the ultimate organization specific business case, for example, including costs, deadlines, advantages and disadvantages and risks. Prioritization is done to compare the projects to know the priorities. Usually there are multiple business specific criteria (Benaija & Kjiri 2014) This is a great finding and definitely a good source for formulating the answer on the third research question. It seems that evaluation part is not visible enough on the transformation initiative funnel.

The third part includes project authorization. This is the analysis part where the available resources (human resources and financial resources) and project managers are mapped to

each of the project. Report and revise step aims to report the progress to the management through different methods, for example data driven dashboards. It was highlighted that this step is important towards the continuation of project portfolio management. (Benaija & Kjiri 2014)

In the field of technology R&D, innovativeness is a crucial thing. Innovativeness depends on organization's R&D capabilities, resources, and the ability to change. Because the R&D on IT field is complex, so is the innovation management, where understanding the differences compared to competing innovations should be understood. Mikkola (2001) said innovation management encourages managers through the organization to carry out a subjective evaluation for R&D projects to each common understanding with wanted parameters. (Mikkola 2001) The strength of his approach is to bring visibility on the following topics:

- Strengths and weaknesses of each project
- Investments of resources, prioritization, and project selection
- Business indicator connection
- Systematic analysis of the projects
- Emphasized consensus
- Gaps and future development highlights

  (Mikkola 2001)

However, Mikkola (2001) also highlighted that good understanding of each individual R&D project is needed to carry out proper evaluation. As an advice, he mentioned visual positioning of projects helping non-technical managers to build understanding, but no universal indicators exist. (Mikkola 2001) Systematic approach, defined business indicators and utilizing visual positioning are a good foundation for improved transformation initiative evaluation. Even Mikkola (2001) mentioned that gaps and future aspects will be most likely missed if there are no understanding, systematic data collection or visual presentations of the documented initiatives. (Mikkola 2001)

4.2 Project Portfolio Selection

Project portfolio selection (PPS) is an iterative process aiming to provide answer for choosing the correct projects. According to Chaparro et al (2019), PPS is an extremely important for companies to maintain their competitive advantage. However, many companies and organizations are facing challenges on choosing the right projects to execute. One important aspect is the information to determine is the project going to be successful or not. Secondly, current era of uncertainty causes volatility on strategic goals which might change the importance of projects. (Chaparro et al 2019)

Limited resources competing on the same project proposals adds an extra challenge on top of earlier mentioned. When considering PPS, a pay back is also important aspect. Usually, the ultimate wish tends to be high and fast return on investment. (Etgar & Cohen 2022) Finding out best possible selection of projects, which bring the best possible business value to the organization is a challenging task. The key is to focus on right decision making to terminate, accelerate or delay the project portfolio components leading to the business value (Enoch 2015). Kornfeld & Kara (2011) stated the following which brings out the large corporation aspect on PPS:

> "Project or portfolio selection is a complex and multi-faceted decision-making activity that becomes increasingly complicated as organisational size, and the number of potential projects increase." (Kornfeld & Kara 2011)

On top of the complexity is that PPS is usually a group decision making process (Meier et al 2017).

Common challenges caused by the PPS are frustration on the selection process, lost opportunities, and inefficient allocation of available resources. With improvement project selection, the challenges are same. However, according to Kornfeld and Kara (2011) some of the failures stays unreported, outcomes not realised, but the most crucial is a failure to focus on important improvements due to over complicated techniques and missing holistic approach related to improvements. It was suggested in the literature to keep attention on how decisions are to be made instead of what are being decided. Transparent and structured method is easier to familiarize, understand and apply by the people. (Kornfeld & Kara 2011)

Statement to focus on how decisions are made instead of what are being decided is an interesting finding. This is indeed important aspect for the evaluation of transformation initiatives in a SW R&D organization. To relief the frustration on the evaluation, focus needs to be drawn on the how the decisions are made.

The project portfolio selection is based on former financial investment theory. (Abbassi 2014) The earlier PPS methods were mostly mathematical and providing answers to which projects is the most important based on the mathematical calculations. but as the business and technology field has become more complex, more sophisticated PPS methods have emerged.

Studied research presented that there are multiple methods used in PPS. These methods vary between complex mathematical models, multi-criterial decision, scoring and simulation methods. (Chaparro et al 2019 & Abbassi 2014) Simple decision-making processes based on intuition also exists (Schiffels et al 2018). One presented method by, Abbassi (2014) was a mathematical model to choose and balance the valuable projects. This model considered the nature of complicated R&D projects, including the following components in the formula:

- $X \subset \{1,2, \dots, n\}$: The project set
- i : Index of project
- $X_i \in \{0,1\}^n$: The decision variable, this makes some projects to be selected or abandoned.
- A_i : The overall score of projects i with respect to value measures
- C_i : The amount of budget required by project i
- B : Total budget
- J : The number of required resources
- ξ_i : Related coefficient of the category
- Z : Total portfolio probability of success

$$Z = \sum_i (1 - r_i) A_i (1 + \xi_i) X$$

(Abbassi 2014)

Earlier presented formula and its components indicate that it might not be easy to apply the formula on variety of transformation initiative during the evaluation phase. The difficulty

comes from the possibility to define the formula components and be able to define them systematically same way for all the initiatives on early and uncertain evaluation phase. For example, giving pure numerical data of required resources or budged might be just a best guess of an individual person. It seems that some form of text and numerical description is needed to indicate the value of transformation initiative.

Having clear business specific method available, was seen important aspect on R&D project portfolio selection, regardless was it mathematical or utilizing some other methods. Themes such as categorization, characteristics and tools in use should be carefully thought. For transformation initiative evaluation point of view tooling seems to be certainly crucial aspect. Abbassi (2014) also mentioned, that one of the key aspects of R&D project evaluation is that an evaluation tool must be suitable to apply the type of projects in it and be able to visualize the multi-stage decision making on the tooling. (Abbassi 2014) This is presented on the figure below. When comparing to the earlier presented mathematical formula this is better approach for transformation initiative evaluation.

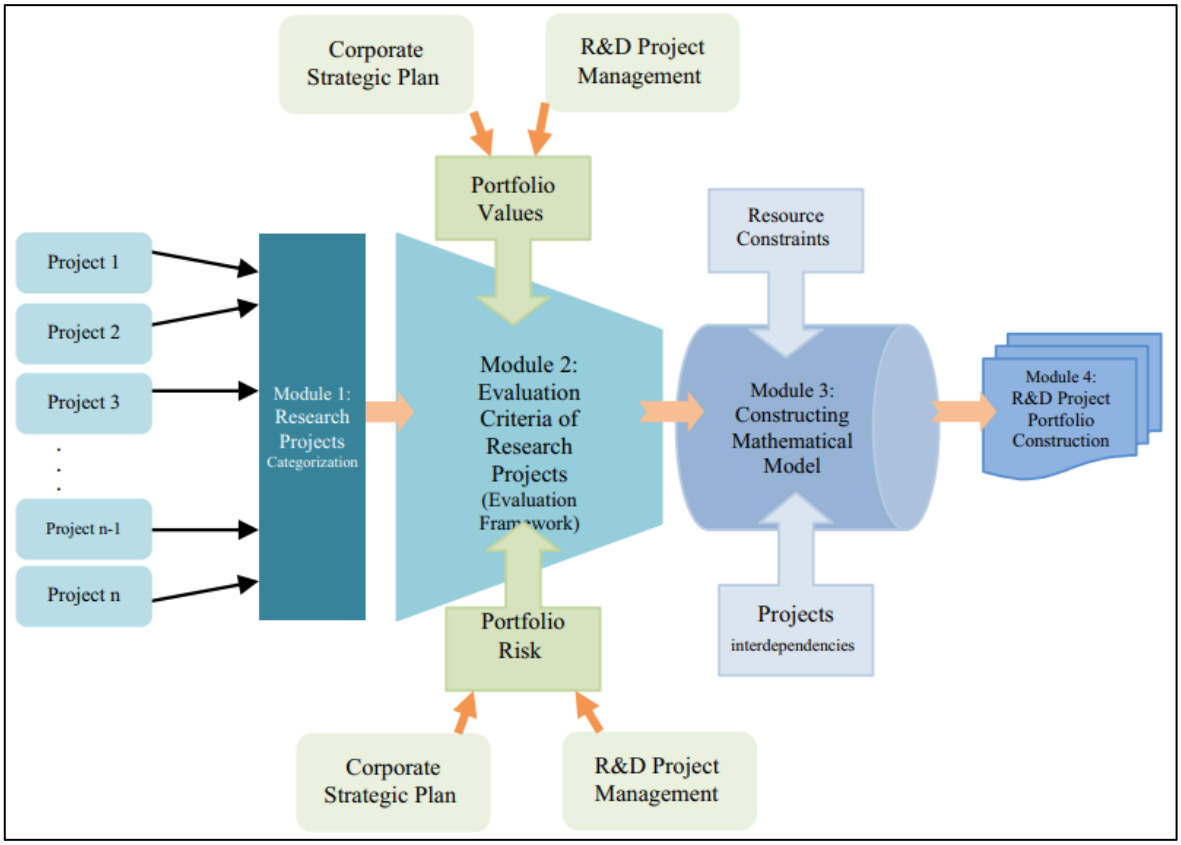

Figure 5. R&D Project Portfolio Selection Framework (Abbassi 2014)

Project selection methods such as financial methods, strategic methods and scoring methods are well known but partly different. All of these are relatively possible to apply but each of them requires company specific criteria such as which financial data to use and which indicators to use when comparing projects against each other. Also, strategic indicators, interdependencies between the R&D projects and project management practices are commonly included, these can be seen on the figure 5 on modules 2-3. (Abbassi 2014)

However, something important highlighted by Chaparro et al (2019) is that financial methods rely on data but scoring method on the other hand are arbitrary determined. Many of the methods required company or business critical criterion such as for certain financial metric to use. (Chaparro et al 2019) Pure mathematical methods seems not so attractive for the transformation initiative evaluation as the early phase numbers might not be comparable as they are more rough estimates than accurate calculations. On the other hands, Ma et al (2020) presented methodology which is using defined key performance indicators (KPI) to select the valuable projects. These indicators are defined to support the decision making towards the wanted goals, which in this example was the sustainability. Following figure presents the methodology and the KPIs in the middle of it. (Ma et al 2020)

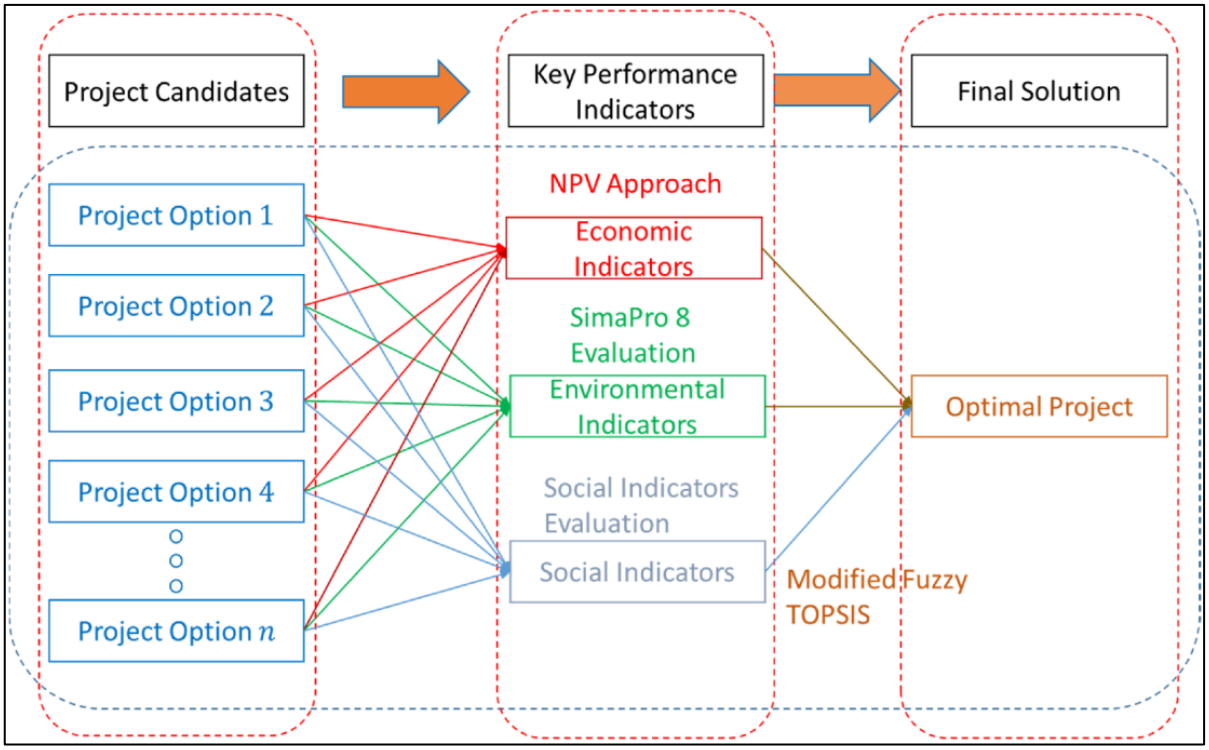

Figure 6. Project Portfolio Selection Methodology (Ma et al 2020)

The logic presented in the figure above can be good foundation for transformation initiative evaluation, with indicators defined for this case.

Some of the methods, such as mathematical methods required lot of data which made them challenging to use and rely on especially when considering the objectives of this study and uncertainty of early phase R&D transformation initiatives. But Chaparro et al (2019) presented methods that rely on assumptions enhanced mathematical formulas, called scenario-based approach. These approaches were tailored to situations with uncertainties and lack of details, especially for selecting projects in the early state. The interesting methods from this scenario-based category for this study were Boston Consulting Group's (BCG's) DICE framework, Go/No-go decision analysis, decision makers group. (Chaparro et al 2019).

Schiffels et al (2018) claimed that many companies did not utilize structured project portfolio selection. One highlighted reason was the trade-off between benefits from the structured selection and costly resources used to capture the needed information. Other reasons were sensitive mathematical models and uniqueness leading to measuring challenges. Earlier mentioned aspects drive the managers to rely on their expertise and assumptions. (Schiffels et al 2018) This indeed was proven on the interview phase of this study.

Being able to determine the required effort is a crucial indicator in project portfolio selection. Identification of proposed project resource interactions and the effort used to investigate the project proposals is a time-consuming topic. Meier et al (2017) well described that there was a great trade of between the effort used to investigate the resource interactions of proposed projects and understanding the real effort. The early uncertainty of project resources can be mitigated by comprehensive analysis. The study also revealed that resource related problems are commonly handled with experienced people and intuition. (Meier et al 2017)

Visualizing data to support the decision-making process using historical data from earlier analysed project candidates was seen important. Visualizing the projects with chosen parameters presenting the interactions between the project was seen easing the challenge of understanding the value of projects. For example, type of resource, man hours, needed skills, and product names were proposed as identifying parameters. Gathering all the information to one place as a Decision Support System (DSS) was seen helping to assess unstructured information with chosen parameters and inputs. Expert assessment was also one method,

where detailed descriptions were provided to group of experts to carry out a comparison between two projects by filling out a questionnaire. However, involving experts were seen costly option compared to visualizing the project interactions. (Meier et al 2017)

DSS might provide significant value on transformation initiative evaluation. As the process clearly require expert participation, DSS might be the key to put focus on defined parameters and focus on making the decisions and comparing the initiatives.

Kornfeld & Kara (2011) had a finding that "In what order should we implement?" question remained mainly unanswered, the answer might be the formulation of the question which does not specify where to compare the projects, and as there are not universal logic. (Kornfeld & Kara 2011) The interview of this study also asked the order to execute the projects and no common logic were used between the interview participants. PPS activities should be understood as a set of wider activity, not only containing the evaluation. It should also include monitoring and documentation of later phases to be able to use the data on later evaluation cycles. The selection techniques are usually company specific and requirements from those need to be aligned with specific context (Meier et al 2017). Korotkov & Wu. (2020) highlighted that evaluation of certain projects individually did not have as much importance as evaluation the projects against each other or as part and within the wider portfolio. Also, using mixture of different scoring and decision methods is a common practice in the industry (Hunt & Killen 2008).

4.3 Parameters and Descriptions

Projects tend not to reach the defined goal due to lack of common definitions of the objectives (Boogaard 2021). Quality in assessing the definitions of objectives and goals not only is a crucial step in process of creating business value, but also for the influential targets, achievements, goals, and vision (Selvik et al 2021). In 1980s, method to determine effective and management goals were defined as specific, measurable, assignable, realistic, and time-related (SMART). According to Bjerke & Renger (2017) this method is widely used in the industry, program planning and evaluation today, and is a standard for developing effective measurable goals and objectives. (Bjerke & Renger 2017)

Currently multiple versions of SMART criteria exist in the literature, main differences come from the use of different criteria. For example, the first letter S, depending on the case might mean short, sensible, simple, significant or something else. (Selvik et al 2021) Boogaard (2021) describes SMART criteria as parameters and goals that make sure the objectives are attainable with a certain time frame, eliminating generalities, wondering and brings together the important aspects to track the progress (Boogaard 2021).

According to the SMART literature, specific goal includes aspects like what needs to be done, who is responsible, and what are the steps to achieve the objective. Measurable aims to define the possibility to measure goals and their progress, such as the number of new users after the improvement. Achievable in the other hand aims to bring the objectives on the reality. Question in this case can be to evaluate is the topic realistically and reasonably possible to accomplish. Also, communication aspect is crucial in achievable point as the executing part of the organization tend to be different than the one who defines the goals. Relevancy part draws the focus on the big picture and the connection on it, such as the corporate strategy or vision objectives. Time aspect is dedicated for tailoring suitable timeframe for creating and implementing the topic. (Boogaard 2021).

In this thesis, the relevancy criteria of SMART is most likely the most crucial example in formulation the improvement proposal to the case organization. Attention is required on the relevance, because it asks not only about the big picture, but also has strong link on the specific “S” criteria where question, why is this important on the big picture comes out. Assessing two of these criteria affectively can bring significant value in terms of having data driven decision which can be compared towards the portfolio of ideas. (Selvik et al 2021)

Literature highlights some drawbacks on using industry wide practice in evaluation and determining the goals, such as SMART. Without proper guidance and common understanding, the criteria might lead to unwanted results, and utilization of same terms in different ways. (Bjerke & Renger 2017) This is something that needs to be considered critically for the transformation initiative evaluation, as all the stakeholders should have the same understanding.

Besides, follow up of a dedicated criteria requested by the upper management might become a mandatory task without added value. Bjerke & Renger (2017) claimed that mainstream guidance usually did not work as wanted, and business specific tailoring was needed. For instance, having unclarities on certain criteria meaning might end up ruining the possibility to evaluate and compare the objectives. (Bjerke & Renger 2017) Earlier on this chapter descriptions of SMART criteria by Boogaard (2021) were presented. An example of the variance on descriptions can be also seen on figure 7 where Sekvik et al (2021) described the criteria on slightly different way. This is an excellent example of the importance on describing the criteria for the specific business or company needs.

Criterion	Description
Specificity	Precision; the indicator should be sufficiently precise. It should be clear what the indicator expresses (measures); the parameters of the measure should be unambiguous; and the numbers should not depend on who is producing them and who is interpreting them (i.e. consistent interpretation).
Measurability	Comparability; it should be possible to quantify and compare to other data, e.g. progress towards the attainment of the objectives, where it should reflect the level of general development in a certain aspect. The data on the parameters defining the indicator measure should be collectable and available in sufficiently high quality.
Achievability	Attainability; it should be possible (realistic) to achieve the objectives on which the indicator is based. The indicator should provide adequate information, with respect to confirming attainment of the objective.
Relevancy	The indicator should provide essential information for business management and improvement (i.e. aligned with business objectives). The indicator should thus be important for business performance.
Time-based	The indicator value should cover an appropriate period (a predefined and relevant time-frame period). Too short a period provides limited knowledge about the aspects studied.

Figure 7. SMART criteria (Sekvik et al 2021)

Change projects follows project management principles aiming to deliver, improve or create something useful and valuable. It is essential to understand what is needed from the project, how to divide the project, who to include in it and how to make sure the project is delivered. Project requirements defines the expectations of the project and how those are planned to be

met, considering the risks and changes on the way. Wells & Kloppenbord (2015) states the following:

> "Without a clear, universal understanding of what the project hopes to accomplish your team will be in trouble. Your role as the project manager here is to understand the problem to be solved and/or opportunity to be capitalized upon; to set up a method for verifying with your stakeholders that they also understand and agree; and to translate that into quantifiable and provable requirements." (Wells & Kloppenborg 2015)

Project requirements include aspects, for instance, what needs to be done, what is included and what is excluded. Furthermore, risks, response plans, change control, impacts are needed to be acknowledged. Most importantly, the project requirements aim to understanding whether the project can be driven forward. Common way to gather project requirements are different tools, where fields and questions are being answered. Also, brainstorming and meetings with relevant stakeholders, prototyping and focus groups are common methods for gathering requirements for projects. (Wells & Kloppenborg 2015)

Krosnick & Presser (2010) provided a great description of conventional knowledge summary to consider in questionnaires in general:

1. Simplicity and avoiding technical terms.
2. Aim towards wording that all respondents will interpret them in the same way.
3. Being concrete and specific about the wording.
4. Asking about one thing at the same time.
5. Avoiding pushing the respondent towards an answer.
6. Making response options exclusive from other options.

   (Krosnick & Presser 2010)

Moreover, it was recommended to keep focus on the question order from general to specific. If possible, questions related to same topic could be grouped together but keeping in mind not including them in the same question. Also, filtering the questions possibly based on the respondents if the questions are not applying them or they are unable to answer them. (Krosnick & Presser 2010).

Goal or parameter definitions in transformation initiative evaluation are basically questions and answers. Krosnick & Presser (2010) question summary above provides a great foundation for defining the right descriptions for the parameters used in the evaluation.

Commonly different approaches are used to handle change in large organizations. Asking management to define the most important factor for transformation initiatives, the answer will be spread and be based on the individual view and experience. However, soft skills such as motivation, communication and leadership are important together with other more direct factors. Keenan et al (2005) mentioned that transformation initiatives might not succeed as the companies failed to look after the most crucial factors first. The factors are:

- Time needed to complete the initiative
- Amount of people to drive the initiative forward
- Expected financial results of the initiative

  (Keenan et al 2005)

Keenan at al (2005) also mentioned that these factors might vary between the topics. However, the factors had common characteristics, and are directly or indirectly measurable. The importance of these factors should be understandable from the communication, inside and outside of the organization. The business importance and the influence should be similarly visible. (Keenan et al 2005)

According to Content Engine LLC (2022) study, the key measurements of transformation activities were changing from hard factors towards soft, non-financial factors, when looking towards 2025. The study said that today the top three factors to measure successfulness of transformation activities are revenue, productivity, and cost reduction. The study revealed that after the few years, the success factors were completely different and included, for example, customer experience, environment, team diversity and inclusive structure. Hard focus on only financial factors might not drive the long-term business value from transformation activities. (Content Engine LLC 2022) Soft indicators are useful for transformation initiative evaluation because soft indicators can be understood easier compared to hard metrics.

Jones (2022) mentioned that transformation teams tended to spend 80% of their effort to project identification of projects and ideas and the rest was used on implementation. He

claimed that it should be contrariwise as the purpose was to spend most of the time on getting things done. This is where the power of saying no becomes important in transformation. However, focusing on identifying the valuable initiatives, on the right time, bringing the business value and taking the organization to the right direction, was mentioned as key to success. (Jones 2022)

The communication of a change is usually underestimated by the company's senior management. This topic was discussed by Keenan et al (2005) as follows:

> "Senior executives end up alienating the people who are most affected by the changes. It's surprising how often something senior executives believe is a good thing is seen by staff as a bad thing, or a message that senior executives think is perfectly clear is misunderstood.". (Keenan et al 2005)

Communication comes crucial especially when building the understanding on factors used to determine the importance of transformation initiatives. On evaluation of the initiatives, it is important that understanding is aligned between management and engineering levels and in between them. Similar aspects were noticed when the SMART criteria was discussed earlier in this chapter.

BCG's patented mathematical tool called DICE originates from four factors including duration, integrity, commitment, and effort. The tool aims to ease predicting project outcomes and helps management choosing the important projects. (BCG 2023b) On the DICE tool, effort parameter is described as the work amount that employees need to carry out for the transformation initiative on top of their other already existing workload. In this kind of conflict easy topic as effort, there might be resistance from employee side, which makes the unified understanding of parameters important. Depending on the case, careful analysis on how the current effort and effort for the initiative should be allocated. For example, it should be clear for management and engineering levels, how the existing work efforts and the new effort of the transformation initiative will be aligned. (Keenan et al 2005)

Commitment includes not only from the employee level but also from the senior management level. This is crucial part in terms of clear understanding between both levels. If the senior management do not understand the challenges on the employee level or wise versa, it would cause a great danger for the whole initiative. On the other way, the traditional

high-level commitment reduces the employee level resistance on change and might secure the financial background for the initiative. (Keenan et al 2005)

Integrity factor refers to the competencies of the person or team to drive the initiative forward. This factor is a skill selection part where leadership as well as subject matter expert skills needs to be considered. Duration factor is not just the time frame of the project. It must include the formal review span and straightforward tracking on a form of milestones depending on the initiative topic. (Keenan et al 2005)

The DICE tool is certainly not for one time analysis and supposed to be used during the project execution on frequent basis. DICE factors used in the formula are significantly simplified from the wide descriptions above which steers the focus on the format of how the four factor measures are defined with a simple description where answer is requested on question focused selection criteria. The criteria will place the project on one out of tree zones of project outcome. (Keenan et al 2015) What makes the DICE framework interesting is the way they use factors and definitions. Factor Effort is presented shortly as it is, and definition is provided to ensure that users will have unified understanding. BCG DICE framework is presented next.

- Duration: The length of time until the change program is completed or (for longer programs) the amount of time between milestone reviews. Contrary to popular perception, studies show that a long project that's reviewed frequently is more likely to succeed than a short project that isn't reviewed frequently.

- Integrity: The project team's ability, measured by the skills and traits of people on the team, and how it's configured. Since the success of change programs depends significantly on the quality of teams, companies often succeed by assigning their best people to the effort.

- Commitment: The degree to which top management shows visible support for the effort, and how well employees embrace it.

- Effort: The additional requirements that the change initiative demands of employees. Project teams must calculate how much work employees will have to do beyond their existing responsibilities to change over to new processes. Ideally, no one's workload should increase more than 10%.

(BCG 2023a)

Rigor test is BCG's other tool which utilizes a questionnaire set aiming to have a group discussion and common agreement, critical priorities, and risks that the assessed initiative has. Logic is to provide standardized template to go through for each of the initiatives to assess them structured way, enhance communication and raise possible flags. According to BCG (2023a), Rigor test is typically 30-60 min discussion with the key stakeholders regarding the organization and the initiative. Question set might vary depending on the organization needs. However, the questions are clustered into three groups considering roadmap, targets, indicators, schedule, critical interdependencies, and risks. (BCG 2023a) The data and logic used in this Rigor test is similar compared to the transformation initiative evaluation in this thesis, without considering the process more deeply.

4.4 Easing the Evaluation

This sub-chapter consists of wide selection of methods that will ease the evaluation of transformation initiatives. The tooling in use should support the decision making, key roles to orchestrate the tooling, process and the documented initiatives must be in place. Eventually the tool to document the initiatives should be easy to use and intuitive to interact with regardless of the role.

Decision can be defined as a resolution, judgement or determination which has been reached after consideration of a certain topic. Decision making to is a process, usually carried out by one or multiple humans or sometimes even machines or algorithms. The outcome of a decision-making process is a selected alternative from group of alternatives. Usually knowledge, beliefs, tools are being used during decision making. Decisions can be classified and categorized so many ways. (Sànchez-Marrè 2022) Transformation initiative evaluation is a decision-making process, where valuable initiatives are being selected from group of alternatives.

Modern decision theory presents three step decision process model used in cross discipline decision making. As follows:

1. Individual analysis
2. Find different opinions

3. Reach the decision

(Sànchez-Marrè 2022)

To discuss this more in detail the first step covers individual analysis of the principles covering the objective of a decision and have a discussion on a general level. Second step aims to find different opinions and trying to reach consensus about those. Third step is to reach the choice. However, the process is not always simple as this as there might be single or multiple attributes that can be counted on numerous way and uncertainties or priorities to take into account. (Sànchez-Marrè 2022) The quality of the data used on the first step is important on transformation initiative evaluation, because without quality data the results on the further steps will be poor. The first step is also interesting in the process wise, to ensure really the individual analysis instead of being influenced by some other person opinion but this is not part of this thesis.

Decision support systems (DSS) are created to support decision makers identifying optimal decisions faster or most suitable alternatives to go forward. DSS do not aim to replace humans in decision making rather just enhance humans doing right decisions with scientific approach. However common problem with the DSS is that decision topics are not similar. Within a single organization, a variety of decisions are continuously being made. DSS are commonly some kind of software that utilizes IT capabilities such as databases to provide alternatives based on the decision criteria. (Kamissoko et al 2022) DSS are either data driven, model driven or mix between these two. Data driven DSS simply eases extracting relevant data to support decision maker. Model driven DSS is based on model used for specific purposes such as simulation or decision analysis. (Sànchez-Marrè 2022)

DSS system have one major problem that they might work in one case, but not so well with the other. According to the studied theory, artificial intelligence (AI) enhances DSS, called intelligent decision support systems (IDSS), and are the technological answer to this challenge. This means large amount of data available from the decisions, multidisciplinary methods, or integration between systems where more data is made available to support decision making process with learning capabilities from the previous decisions. (Kamissoko et al 2022) I see the hype around large language models and AI tools and this is creating many possibilities towards more effective transformation initiative evaluation.

According to Boston Consulting Group the transformation has become a continuous (Rachidi 2022). Many companies are adding transformation organizations and roles due to the big amount of failing transformation projects. Teams for transformation are seen more effective driving and orchestrating transformation activities than occasionally formed teams. (Content Engine LLC 2022) McKinsey study mentioned that many Chief Transformation Officer roles have been established after 2020 (Bhatia et al 2022).

Gorter et al (2016) described the transformation role as not an easy one, which is opposing the expert role focusing on one vertical. They described that cross-functional experience and soft skills are key in this role. (Gorter et al 2016). Study carried out by Content Engine LLC (2022) presented the Transformation Manager role as a cross functional senior management role with extensive experience in technology, business, strategy, and management fields. Content Engine LLC (2022)

Gorter et al (2016) highlighted the ability to find the right balance between different initiatives. For example, time frame, value, resources, business objectives and ensuring delivery in the organization. Transformation Manager role is clearly a high-level orchestrator role which requires setting the tone and image of the transformation in the organization and pushing the right amount of challenge against the existing wisdom. Keeping in mind the importance of being able to understand the frustration in the front line. Requesting facts and analysis were also mentioned in the article. (Gorter et al 2016) In practice, the role in Transformation has a high responsibility in terms of bringing the factors visible, structure and clarity about the initiatives to the organization. The key questions to the transformation Manager role are presented in the following picture, by well-known consultancy company.

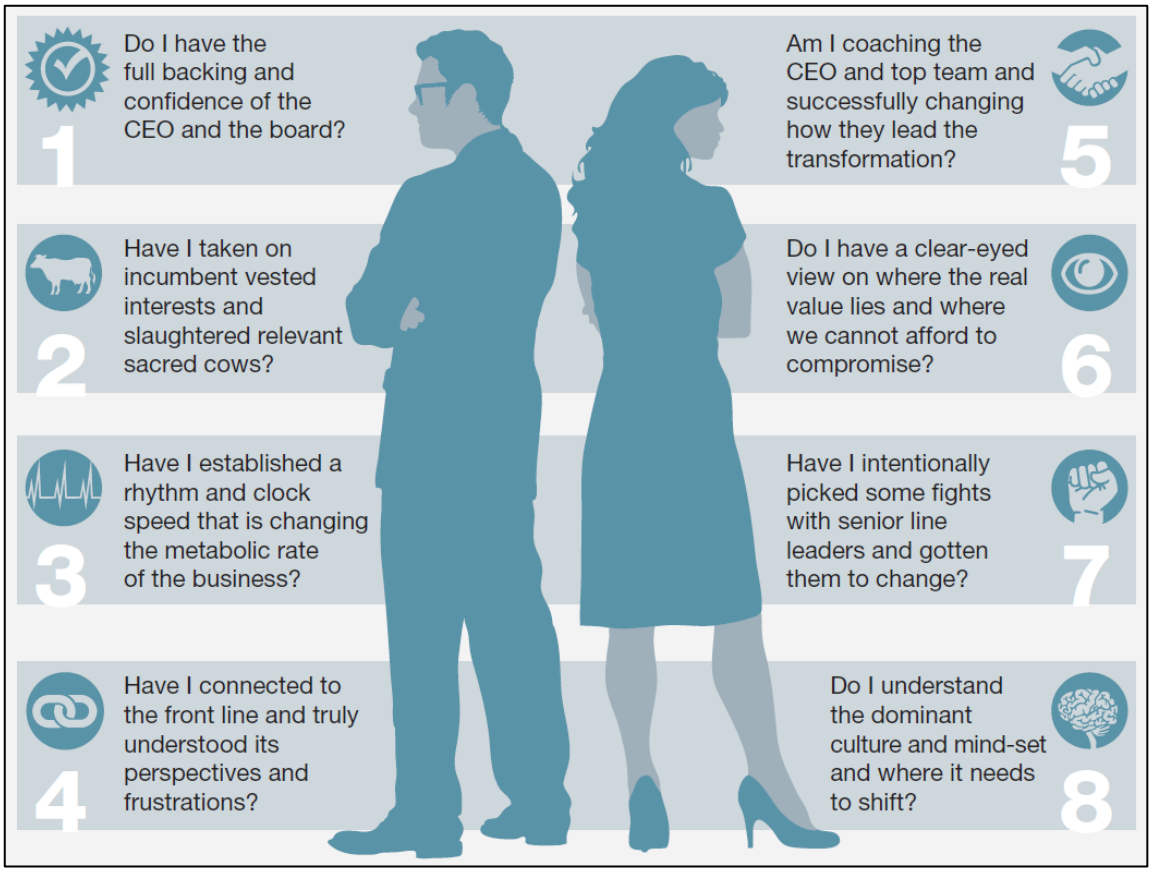

Figure 8 Key questions for Transformation Manager (Gorter et al 2016)

In this thesis the point four and six, in figure 8 are important ones, as we are considering the data aspects of transformation initiative evaluation and the main challenges discovered in the interview of this study were about the understanding and visibility of the initiatives.

Bhatia et al (2022) article said the common challenges in the transformation role are competing business priorities, lack of authority to execute changes, lack of possibility to motivate teams. Solution on these challenges were seen to increased authority in the role. Skills to succeed in the transformation role are seen as business understanding, cross functional understanding, having a wide background without forgetting extensive people skills, such as being a great listener, challenging the status quo, being operator between the business functions and making people confident about their skills and relief the resistance. (Bhatia et al 2022).

To increase positive return from transformation activities London et al (2021) presented key skills for the transformation role. Regardless of the aim of the transformation project sharing the responsibility increase the percentage of getting things done, however keeping the

ultimate accountability of results in transformation officer's hands. Close to the shared responsibility is the making transformation initiatives everyone's work. This means especially the front row engineers and specialist working with various areas. (London et al 2021)

When these two aspects are effectively utilized teams working with the transformation activities become diverse and deep, and at the same time everyone's personal work. Diverse teams become significantly effective in terms of ideation and innovation as the article claimed that most value come from the smaller transformation initiatives with direct employee linkage. (London et al 2021) Management commitment and integrity factors mentioned in the sub-chapter 4.3 improve the understanding and organization commitment to the transformation initiatives. On time of evaluation transformation manager has the key role to ensure the message from the organization is understood in the evaluation board and discussions have been held to achieve consensus between the evaluation board members.

Design of a tool must always keep its users informed about the current status of the work and be to deliver clear enough understanding about the topic in reasonable time. Nielsen (2020) presented 10 usability heuristics for user interface design, which are important for tool development to create trust between the tool and the system as well as the brand. (Nielsen 2020) In this case the brand can be referred to the transformation organization at the case company.

The first is visibility of system status, which means that the tool design enables users to understand the data and acknowledge the status of the initiatives (Nielsen, J 2020). For example, more understandable information translates to better decision making. For example the tool must keep the users informed about the status to allow them to select and decide the directions of the initiatives. (Harley 2018) The second heuristic is about the common language. All the users should be able to understand the information the tool provides. For instance, users should not need to assume, need to go look definitions or tool developers should not assume that everything is understood on the same way. (Kaley 2018) Kaley (2018) stated the following in her article:

> "Experiences we've had, items we're familiar with, our beliefs, ideas, and values all contribute to how we infer meaning, and nuances in interpretation will often vary from individual to individual" (Kaley 2018)

To ensure the end user satisfaction with the tool used in transformation initiative evaluation, it should be considered that experiences vary, viewpoints might be different, and the language must be commonly understandable.

The third is about user control and freedom in the usage of the tool. The tool should be designed on a way that the end users feel safe, for example re-editing fields and exiting the system is possible without having the feeling of getting stuck in the middle of filling a form. (Nielsen 2020) The fourth heuristic mentions about consistency. The consistency means for example the order of the fields to fill the data, present the certain information on the consistent manner and use same patterns throughout the tool. Consistency is also important aspect for end users to learn to use the tool. (Krause 2021)

Fifth heuristic is about presenting errors clearly, with design which is tailored to avoid errors occurring. According to Laubheimer (2015) there are two types of errors, unintentionally made errors as slips and intentionally made errors as mistakes. Good ways to prevent errors and slips are to offer suggestions, choosing default values and using data formats that forgive little differences in format. (Laubheimer 2015) The sixth heuristic highlights the tool need to promote the recognition and reduce the amount of information that the user needs to remember as the research pointed out the limited human short-term memory capacity. For example, tutorials and guides should be precise and clear. (Budiu 2014 & Nielsen 2020)

The seventh pointed out the possibility for shortcuts and flexibility to allow the users to choose their way of interacting the tool. For example, by providing short cuts to close the initiatives instead of walking through the complete list of statuses. Eighth heuristic presented the importance of minimalist design, with the focus on essential and removing all the unnecessary details. (Nielsen 2020) In this case this would mean removing the aspects from the tool used on transformation initiative evaluation which do not deliver value.

The ninth heuristic presented the possibility to allow user to recognize and recover from errors. For example, by providing indicators of incorrect actions or system generated error messages. It is good to ensure the error messages are good quality and fit to purpose. Next figure presents example of a good error message. (Neusesser & Sunwall 2023)

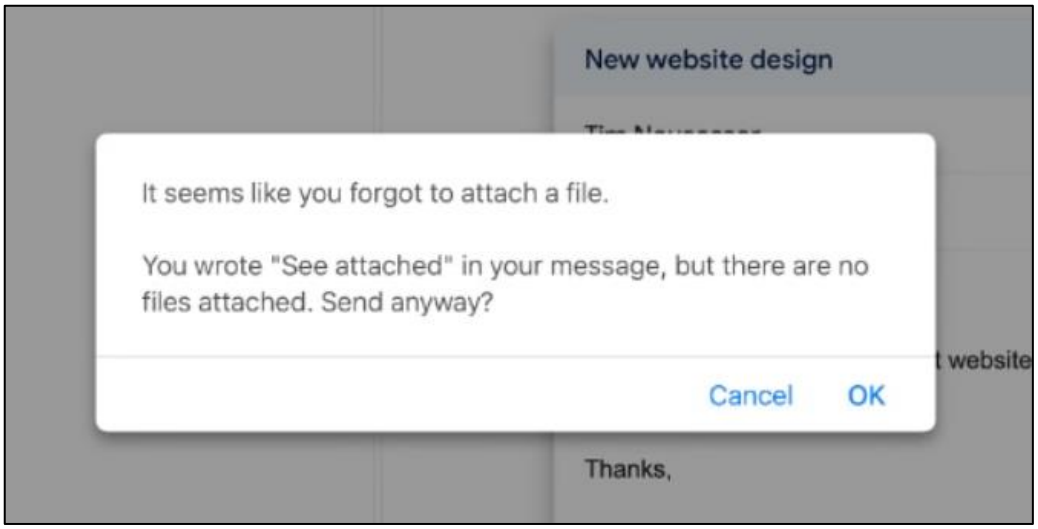

Figure 9 Good Quality Error Message (Neusesser & Sunwall 2023)

In this example the error message is clear. It tells the user that the attachment is missing and asks to cancel before sending the mail.

The last usability heuristic for user interface design presented the available help for users and available documentation. Topics which were identified important for this thesis were contextual tips and descriptions, clarity on guideline and proactive help for end users. For example, in this case descriptions of certain actions or data fields. (Nielsen 2020)

Answer to the second research question about the best practices to evaluate transformation initiatives can be formulated from the earlier studied literature. First, project portfolio management and project portfolio selection lay wide foundation on what is being decided and how to select the most valuable initiatives during the evaluation. The best fit from different methods, parameters and indicators needs to be chosen. Second, clarity must be considered by using common language and ensuring well defined descriptions. Descriptions should guide the users so well that parameters are commonly understood. Third, all the users must be considered especially when talking about the common tooling. Easing the use of tools and data quality will directly impact on the evaluation performance but also for all the other parts of the transformation initiative funnel. Mathematical methods seem not the best with the evaluation of transformation initiatives due to the early uncertainty and difficulty to define the parameters systematically same way for all the initiatives. The best practices to evaluate transformation initiatives will be used to tailor the improvement proposal on following chapter.

5 Improvement Proposal on Transformation Initiative Evaluation

The following chapters utilize the data collected from discussions with the case organization managers, the interview results and literature which was described in chapter 4. The purpose is to identify the best possible way to enhance the transformation initiative evaluation. The studied literature will be used to align the proposal with the industry best practices. The focus of this chapter will be on formulating the proposal, what the case organization need to do to enhance transformation initiative evaluation and ultimately to answer the third research question of this study.

To summarize, the main challenge of this study is to be able to evaluate and select the most valuable transformation initiatives, be able to understand and have visibility over the transformation initiatives to do the evaluation effectively. The focus of this thesis was steered on tools and data aspects after the pain points were discovered on chapter 3.

The case organization uses Atlassian Jira project management tool to record all the transformation initiatives. According to Atlassian (2023) Jira can be used with any kind of projects but is mainly used to track different kind of initiatives, on software development (Atlassian 2023). On this thesis, it makes sense that the large software R&D organization utilizes the Jira tools for the transformation activities as well. The recording of the initiatives in the case organization is being done on multiple organization levels for dedicated issue types in Jira. All the transformation initiatives are recorded under defined issue types. Relevant issue types are named as large, medium, and small in this thesis, to clarify the approach. Large initiative can be stand alone. Medium is always part of the large initiative. Small initiative can be part of large or small initiative. Following figure illustrates the transformation initiative structure:

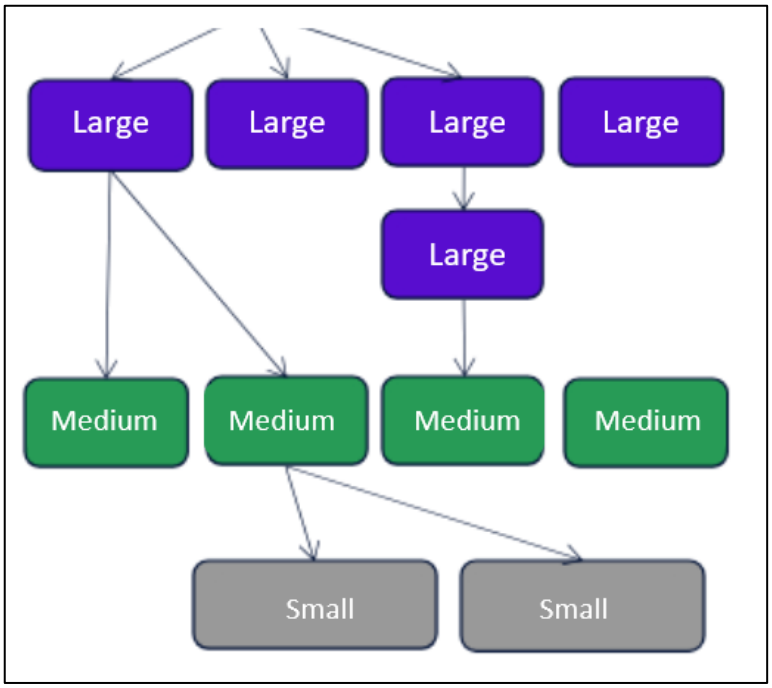

Figure 10. Transformation Initiative Structure

Arrows in the figure above pointing to large initiatives indicate that there is higher issue type level, which is not part of this thesis. Large initiatives are the most important for this thesis as they are the core of the transformation initiatives. Medium and small initiatives with arrows indicating the relation are smaller pieces of the higher-level large transformation initiatives. Relation from large initiative to another large initiative presents cascading of similar initiatives for different parts of the organization.

Based on the studied literature about the best practices to evaluate transformation initiatives on large R&D organization is challenging topic. Clear focus on structure of the criteria, process and business specific approach are needed based on the literature. It was learned during the literature study that focusing purely on hard metrics or mathematical models on selecting the most valuable transformation initiatives might not be wise choice especially due to the early and uncertain phase of the evaluation. Factors used in selecting the initiatives must be understandable throughout the organization and tailored for the needs. The literature clearly indicated that the decisions might not be easy. Tools and expertise are key parts in evaluation of transformation initiatives which are certainly needed.

5.1 Creating the Improvement Proposal

The creation of the improvement proposal on improving transformation initiative evaluation with the focus on tool and data aspects was started with project management practices. First the core team was formed with the case organization managers to co-create the improvement proposal of this study. Six people were chosen to participate the core team as this number were seen to cover the most important parts of the organization, the author acted as a project lead. The chosen managers were experienced managers as well as having comprehensive understanding covering each function in the case organization. The core team was seen effective way to co-create and be able to formulate fit to needs proposal. This structure allowed straight forward organization wide communication channel, which can be used for example collect feedback and distribute information. Most importantly, the core team was seen great way to cover each topic at the time and find agreement that considered each part of the organization.

Agile project management methods were put in place since the beginning as it was assumed that the project requirements and objectives might slightly evolve during the improvement proposal creation and customer as the case organization must be kept continuously in the loop. Other important stakeholder to this project was internal IT tool management organization, responsible of the project management tool used by the organization.

The author of this study prepared a project plan to start the proposal co-creation to enhance the transformation initiative evaluation focusing on the tool and data aspects. The interview of this study concluded the understanding and visibility over the transformation initiatives being the biggest challenge in the case organization. Similar challenges in the industry were validated during the literature review phase of this study. Scope of the study was steered after the interview phase to focus on data, tooling, and parameter aspects of transformation initiative evaluation. Together with the managers of the case organization the chosen scope of this study was seen the most effective way to proceed in terms of value creation to the case organization and time constrains of the thesis work.

Decision was made to carry out initial discussions already in the beginning with the internal Jira team to ensure open communication with the tool development team. The aim of these discussions was to open the initial needs and identified challenges. During the discussions, one key contact was agreed to ensure frequent communication. The author wanted to ensure

not to plan something that might not be technically possible, as it was known that Jira is not simple tool to configure. It was also clarified to the case organization managers how the process of changing something in Jira goes, which would be relevant if the proposals are deployed.

During the project planning the initial improvement proposal building were slit to milestones on a proposal building roadmap. The focus was kept on the data and tool aspects related to the transformation initiative evaluation. Next figure presents the proposal building roadmap:

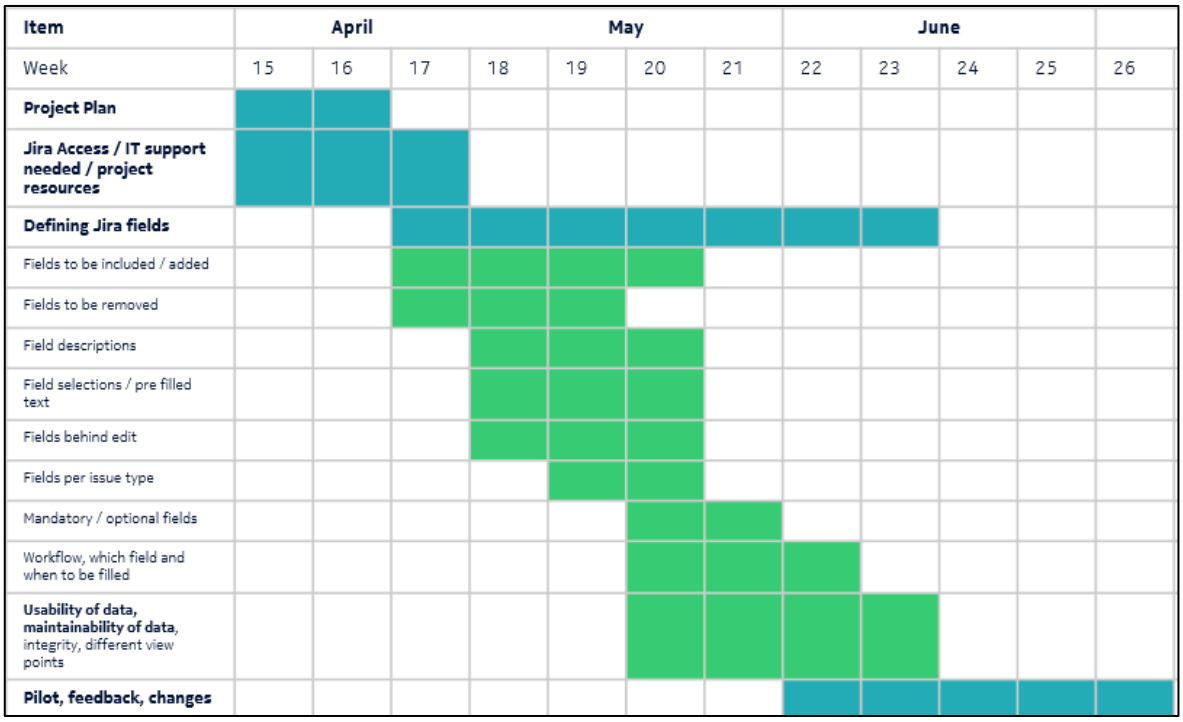

Figure 11. Improvement Proposal Building Roadmap

The roadmap above was roughly planned to be continue also to the deployment phase but it is not included to this study as it is not part of the scope.

The core team booked reoccurring work meetings once every two week and initially the additional meetings were planned to be held on need basis. However, it was decided to hold the work meetings with the core team once a week to boost the efficiency, ensure the team stays on the roadmap and have frequent communication channel open continuously. Teams chat and additional discussions were also held. The author of this study organized the agenda and prepared the proposals for each of the meeting. The aim was to go through prepared parts of the complete proposal in small focus areas and have agreements on small areas at the time. This was seen excellent way to proceed as the author was the main person creating

the proposals. The steering, changes and common agreement were done during the work meetings.

Topics found on literature study phase of this study were brought to the discussion with the core team and case organization managers. Author of the study saw this effective way to hear comments and opinions about the studied literature best practices. Sometimes the ideas got green light and acceptance from the managers right away and sometimes more resistance and discussions were held as the ideas challenged the existing status quo. But the fruitful discussions about the studied literature were seen the most beneficial on the way towards the outcome of this study of improving the transformation initiative evaluation.

Interview of this study revelated multiple pain areas where the data and tool aspects were seen the major ones. Studied literature proposed many excellent methods to enhance evaluation of transformation initiatives. For this study the principles of portfolio management, defined components and visible process utilizing the principles and components can be clearly utilized.

Studied theory of project portfolio selection highlighted the complexity of multifaced decision making process of identifying the most valuable transformation initiatives as a part of the portfolio. Multiple methods with wide variance were presented. However, it was clear that not all of them fit to the transformation initiative evaluation. SMART and DICE presented a clear foundation of asking right, fit to the business questions, and having clearly defined fields to avoid people understanding the factors based on their individual points of view.

Decision analysis approaches provided a great inspiration of formulating the Jira tool to ultimately support the transformation initiative evaluation with the connection of transformation role as the orchestrator of the evaluation, without forgetting the connection and understanding to the front row engineer work in the case organization. This study did not take the process of evaluation transformation initiatives into account.

On this part it seemed clear that while focusing the data and tool aspect of the transformation initiative evaluation, the data in Jira tool will also impact the other phases of the transformation initiative lifecycle and all the users of the tool. That is why it is important to keep the execution and end user point of view in mind of top of the evaluation. It is certainly

most valuable to create a concrete and realistic proposals which can be deployed to the case organisation.

5.1.1 Data Quality and Usability Improvements

Data quality and usability improvements were seen as a core to improve the transformation initiative evaluation data and Jira tool aspects. This sub-chapter provides description of the improvement proposal formulation on data quality and usability as a part of the final improvement proposal.

First all the currently used data fields of transformation initiatives in the Jira tool were listed, analysed, and observed the usage of them. Most used values were counted, and similarities highlighted. The most common use cases were used as an example while studying the usage of the fields. Specific examples were also analysed with chosen end users from the case organization.

The complete list of data fields used with transformation initiatives currently can be seen in the appendix 6. Some of the fields were identified as barely used ones. Few fields were auto filled, and the rest were seen important fields for transformation initiatives. Some of the fields were in rich format included text, colours, tables, and fonts. Some of the fields were lists of different values to select and some date fields, really few purely numerical fields existed, and they seemed not to be used in the most common use cases.

The text fields had certainly large variance in usage, some of the fields were used in most of the initiatives and some in specific cases. Widely used text field had poor data quality, especially in terms of data structure and what was described in the field. For example, similar topics were described using different terms and logic.

Due to the nature of transformation initiatives, it is understandable that the data is documented in the text format. But based on the recorded pain points and studied best practices, it is extremely important to achieve clear data structure and unified understanding what needs to be documented and in which format. Focus on order of the questions and relevance were also key topics mentioned in the literature. Without clear image of what certain field mean, all the users will fill it from their individual perspective. When we are focusing on the evaluating and selecting the most valuable transformation initiatives, we

must be able to compare the initiatives and only structured data allows the users to do the comparison.

The date fields were the most accurately used and there was no need to improve the dedicated fields for dates (target end, target start). List fields were also partly accurate but available pre-configured options to select were seen a source for bad quality data. As an example, Priority field had multiple values. Even the guidelines existed, the available fields cause bad quality data. The following figure presents the analysis of initial state of the priority field values.

priority	Count of priority
Blocker	122
Critical	2102
Low	73
Major	12402
Minor	3229
NA	16063
Normal	4320
Total	**38311**

Figure 12. Analysis of Initial Priority Field Values

Figure above presents the Priority field values and its many practices in use, which indeed increased the challenges in understanding the initiatives on evaluation of the initiatives. According to figure 12, there is significant number of initiatives with NA priority. On the same way Minor priority without description gives feeling that the initiatives marked with minor are not important. In a big picture the large amount of priority values and lack of descriptions just increased the challenge on understanding the real priority and value of the initiatives. Priority fields are proposed to be decreased. The available priority values should contain only the ones which are being used and can be reasonably described for all the initiatives. Next figure presents the idea of simplifying the priority values.

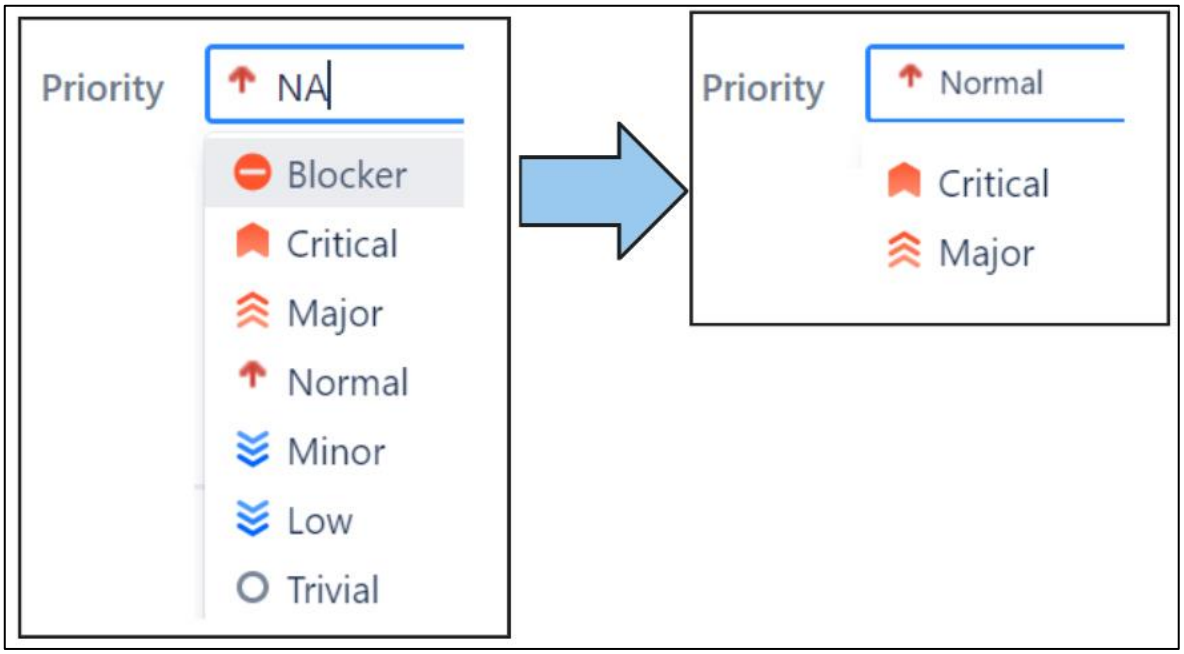

Figure 13. Idea of Decreased Priority Field Values

Simplified priority values, on the right on figure 13 ensure the understanding of transformation initiatives and make the utilization of priority possible on time of evaluation.

Issue link field contained similar long list of values to choose from. Based on the investigated data indicated, the links used from the list were the first ones from the list. The list was in the alphabetical order. There was guidance for the link utilization, but the issue is clearly on the Jira tool side. It is recommended that the available issue links will be decreased only the needed ones which can be described for certain use cases.

In the Jira tool some visible data fields had significantly low usage, no use case existed, or the field were used in the past. Some of the fields were also configured on the way that they are not visible in the places where it would have been logical. All the data fields which are not used, or do not have real use case are recommended to be removed. The order of presented fields should be logical, starting from general towards more specific, considering that the end users interact with the fields while creating the initiatives, editing, and reading. Overall, the consistency should be in place as the studied usability heuristic presented. Similar fields could be grouped and questions which the end users are not unable to ask should not be presented or at least not required to fill.

However, many use cases exists in the large organization and there are certainly needs for optional fields. It should be carefully considered whether the fields come later in the list or

be completely behind other tab or menu. In this study, the initially proposed improvements can be seen on the table 3. Order makes the transformation initiative evaluation data more consistent as the initiators will find only the needed fields and nothing else on the time of documenting the initiative.

Fields for specific use cases are proposed to be added on the separate tab in the Jira tool. This tab could be only accessible behind the edit button of the initiative. This is the solution recommended in the theory and seems to be working best when the field for special use cases can be still accessed when needed. Additional field proposed later for dedicated use cases could be added on this tab. All the field on other tab should be also optional to fill and not visible on the transformation initiative if they are not filled.

On the other hand, the fields which are proposed to be removed are Epic name, Fix Version/s, Fusion Components/s, StartFB, EndFB, Other, Resolution, Affects versions and Frequency of Occurrence. Minor use was identified for the following fields Root Cause Analysis, Impact, Original Estimate, Solution Description, and Team. Fields with minor use should not be visible for all the users and it is proposed to make these not visible as a pre-set on create, edit, and view screens of the transformation initiatives in Jira tool. These fields can be placed on the other tab, which was described earlier.

Interview results revealed that there have been challenges with the data related to the initiatives being distributed in multiple locations. It is understandable that transformation initiatives are having multiple related documents through their lifetime. That is why it is proposed to add documentation field on top of the existing Attachment field. The additional information field could contain for example the documentation links or some other relevant information. Currently, Reference URL field supports this use case. However, the field requires configuration, because it is not always visible, neither named nor described to support the use case. Data field called “Documentation” would allow users to have easy access to the documents on any time since the initiative has been documented. However, documentation and guidance are required here to ensure the proper folder structure, documentation tool related storage aspects, security, and access control aspects, these are not part of this study.

Literature also guided to focus on the sharpens of project objectives, aims, and scopes. That is why focus should be put on the field definitions, optional and mandatory fields. Initially

only transformation initiative title and Reporter fields were marked as mandatory to fill since the item creation and no proper field description existed. Field descriptions are proposed to be added at the same time with improved mandatory fields since the beginning. Star (*) indicates that the field is mandatory to be filled during initiative creation on the table below. The table also present the initial improvements on the transformation field including the field descriptions.

Table 3. Initial Improvements on Transformation Initiative Fields

Field Name	Data type	Field Description
*Project **	List	The project to which the initiative belongs
*Issue Type **	List	Link to issue type descriptions
Status	List	The stage the initiative is currently at in its lifecycle
Created	Filled automatically	The time and date on which this initiative was entered into Jira.
Updated	Filled automatically	The time and date on which this initiative was last edited.
Resolved	Filled automatically	The time and date on which this initiative was resolved.
*Summary **	Text	A brief title phrase to give you an idea of what the initiative is about
Description	Text	Description template (Example in appendix 5)
*Reporter**	List	The person who entered the initiative into the system, supports the Assignee, sponsor or initiator and is ultimately accountable of the results.
*Assignee**	List	The person to whom the initiative is currently assigned, responsible of the execution and results.
Component/s	List	Pre-defined scope tags which this initiative relates
Label	List & user fill	User defined tags which classify the initiative
Priority	List	The importance of the initiative in relation to other initiatives.
Documentation	Text	Link/s to the document folder related to the initiative and other information
Status Lights	List	Initiative health status indicator
Linked Issues	List	The linked initiatives
Target start	Date	The time and date on which this initiative is planned to be started
Target end	Date	The time and date on which this initiative is planned to be completed

Sharpening the field meanings ensure the universal understanding about the project objectives can be achieved, as the literature suggested. For example, the assignee and reporter field descriptions differentiate the fields and by making them mandatory since the beginning ensure that the assigned people are aware of the initiative and its details.

Something to consider with the initial field improvements are that multiple fields contain lists of values to select. Initial priority values were presented on figure 12. Important for the transformation initiative evaluation is that the values are well defined in the lists also, not just the field itself, as the theory also stated that it is important to understand what is being decided. The field called description is the largest field in rich text format where the most important data of transformation initiatives are described. This is perhaps something to be considered later in this study.

For the priority field values the following table presents the proposed priority field descriptions, including the colour codes. For the evaluation the priority values are more like baskets of defining the importance of the item rather than calculating some value. Three values can easily be seen as 70/20/10, where critical priority initiatives should contain 10% of the total amount. This will clearly ease the evaluation. By describing the priority values, unified understanding between the users can be achieved.

Table 4. Proposed Priority Values and Priority Values Descriptions

Priority value	Priority value description
Critical	Critical blocking issues High impact on quality or efficiency Customer related Escalations KPI are Red / Yellow Unit leadership commitment
Major	Unit mandatory items with high visibility (e.g. with the chosen tags (components and labels). Unit level initiatives, Significant impact on quality or efficiency. Unit level items/KPI with normal priority or smaller impact.
Normal	Default value (all issue types)

Component and Label fields presented in the table 3 are having list as data type. The studied theory mentioned the importance of being distinguish the portfolio components. For example, it is certainly important that pre-defined list of Component values contain clear larger sets of transformation portfolio categories as the theory suggested. But important is that these categories are defined based on the business needs and maintained. When the initiator documents the transformation initiative, it must be understood which component it belongs to. Impacted organization aspect might be good component field for this case on top of the other already existing ones. It will support the evaluation and there will be no challenges on using it regardless of the end user role.

The Jira tool has also other tags available, called Labels. Labels are user defined compared to the Components. However, for the evaluation some guidance will be needed to avoid unstructured data due to multiple ways of describing same thing, especially the users have the freedom to define the Labels. That is why the use of Component field on time of the evaluation is enough. However, for the later phases of the transformation initiative execution the labels are needed for example in data visualization or certain project and program management activities.

5.1.2 The Most Crucial Data of Transformation Initiatives

The field called description is currently containing the most important data of transformation initiative regardless of the status of the initiative. The description field was presented on the table 3 and its original templates on appendix 5. To clarify the topic more, the description field included multiple business critical information, such as description of the initiative, user stories, scope, aim, definition of done. This field was filled manually, commonly using templates including titles and information under those in the description field. Internal guidance documentation related transformation initiative way of working, especially the field called description was reviewed and variance in the usage and guidance was noted down. The field was filled usually using templates (appendix 5.). The use of template itself was seen not an issue, but it allowed poor data quality. Sometimes the description field was filled freely or left empty, and everything in between existed. The field was not mandatory field in the Jira tool, and this was identified as an issue after the initially proposed

improvements of this study, because it was still possible to document transformation initiative which would lack information, needed on the time of evaluation.

The author of this study also conducted a brief study to understand the differences between the description field templates used in the organization and about 20 different places were found. The difference was the way the important information was named and described. Appendix 5 presents the example of the variance on description templates. Basically, all the templates aimed to collect the same information, in different ways. This seems to be as the studied literature mentioned. People sees the topics differently, which results differently defined factors which aim the same outcome. Having unclarities of how the crucial information transformation initiatives are documented is a clear result of proven by the interview also. By improving this, the understanding and visibility would certainly be on better level, which directly impact on the quality of evaluation. On evaluation point of view, this seems to be good way to make the Jira tool as a decision support system, the tool to provide the needed data for the people making decisions. Studied theory also highlighted the importance of knowledge and information visibility on a way that terms and their definitions are clear on multiple different ways.

With these aspects and investigations in mind it was proposed to split the current description field. This is simple and valuable improvement when taking the data quality aspect into account. This was seen the only way of enabling the tool to provide more information, transparency, and visibility by tailoring the information format to achieve better decision making and selection on time of the evaluation. Next figure illustrates the improvement idea.

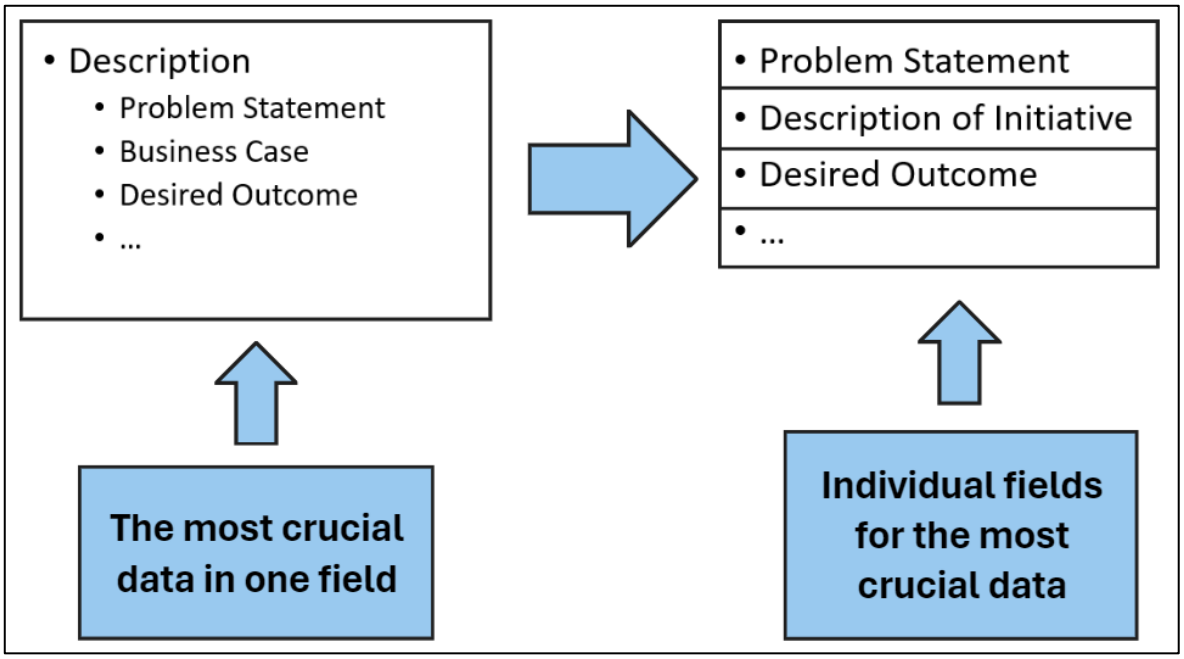

Figure 14. Idea of Splitting the Existing Description Field.

The idea of splitting the description field was brought to the core team. The main improvements were splitting the business-critical information of transformation initiatives into individual fields, with commonly agreed field names and one to two sentence descriptions. This description field split improvement makes it possible to describe each field directly in the Jira tool, configure them mandatory on item creation if needed and get rid of differently defined terms as there would be no templates. This is the only way to achieve unified understanding between the management and engineer levels. Additionally, this guides the end users in filling the data, which was also presented in the literature.

This description field split improvement would also make it possible to use the fields more effectively through different tools such as Jira visuals and Power BI. For example, comparisons between the initiatives would be effective in the evaluation and selection phase. Individual fields for the most crucial data would also allow search functions to work more effectively when data is filled similar way in dedicated fields. Besides, individual fields would allow to build automated presentation reports based on the transformation initiative data documented in the Jira.

The studied theory highlighted that there are no industry wide data factors or terms that are the best for all. The best way according to the theory is to define the factors with the group of experts with deep business specific understanding. Moreover, this was decided to be done

on this case. The author prepared a proposal of the description field names, descriptions and presented the findings from the theory. The names and descriptions of the fields were co-created with the core team and multiple changes were done during the meetings. The aim was to formulate the field descriptions on a way that all the roles in the organization understand them, using real world definitions and familiar language and abbreviations. The author presented the initial field names and descriptions to the organization to collect feedback. The documentation was shared at the same time with feedback with the organization to gain comments. The following table presents the list of co-created field names and field descriptions where the soft and hard factors can be seen which were proposed in the literature. Star (*) indicates the fields which should be in place when the initiative is created, as all the fields are most likely not known on the time of initiative creation.

Table 5. The Most Crucial Data of Transformation Initiatives

	Field Name	**Data Type**	**Field Description**
1	*Problem Statement* *	Text	Describe WHY this initiative is needed focusing on the problem (current state / gap / issue) you are trying to solve.
2	*Description of Initiative* *	Text	Describe WHAT we plan to do for fixing the problem and HOW that can be achieved.
3	*Desired Outcome & Benefits*	Text	Describe the added value and quantify the impact of the proposed change to people, customer, KPI, effort, money savings, etc.
4	*Scope (roles/org)*	Text	List the impacted organization units and roles that are impacted by the change.
5	*Definition of Done*	Text	List of actions, key deliverables, evidence, decisions and/or measures to be met for closure.
6	*Desired Schedule*	Text	Present the desired timeline, start & end dates, milestones for implementing the change.
7	*Effort Estimate*	Text	Estimate the effort (in hours) needed for planning and implementing the change.
8	*Additional Information*	Text	Provide any other information relevant for the implemented initiative.

New fields containing the most crucial data of transformation initiatives presented in table above should be always visible when the user is interacting with the Jira tool to ensure engineering and management levels have unified understanding, as proposed in the literature. The old data would remain as is, because the data migration would not be ideal as the data is unstructured and would require significant effort on creating scripts to be migrated. The old description field would be visible for the old items but not with the newly created ones. Two of the fields in table 2 marked with start are to be mandatory since the initiative is created. In case the old description field cannot be removed or hidden with the new fields, it can be also used as a description of the initiative field with the description visible on the table 5.

The fields presented in the table 5 are defined on the way that all large transformation initiatives should have those defined after the evaluation. For the medium and small size initiatives the fields can be decreased as it is not needed to duplicate the data in the system. It is recommended to use the most crucial data field defined on table 5 for the large transformation initiatives as they are presented on appendix 6. Decreased version is presented on appendix 7, which is mainly for medium size initiatives. Mediums size initiatives are always a part of large initiative. For the small initiatives the fields are presented on appendix 8, with no major changes as the type of small initiatives is action type as part of large or medium initiative.

It was noticed that the most crucial data of transformation initiatives are documented mainly in text format, which might not be the most optimal way in terms of visualizing the data in bars and charts. But the data is visualized as a presentation template, for example during the evaluation. Having the most crucial data documented on individual fields will allow for example automated presentation slides directly from Jira. This would ensure also data being stored only in Jira. Following figure will present the idea of automated and standardized power point slide, which can be done by utilizing Microsoft Power Point and Power BI.

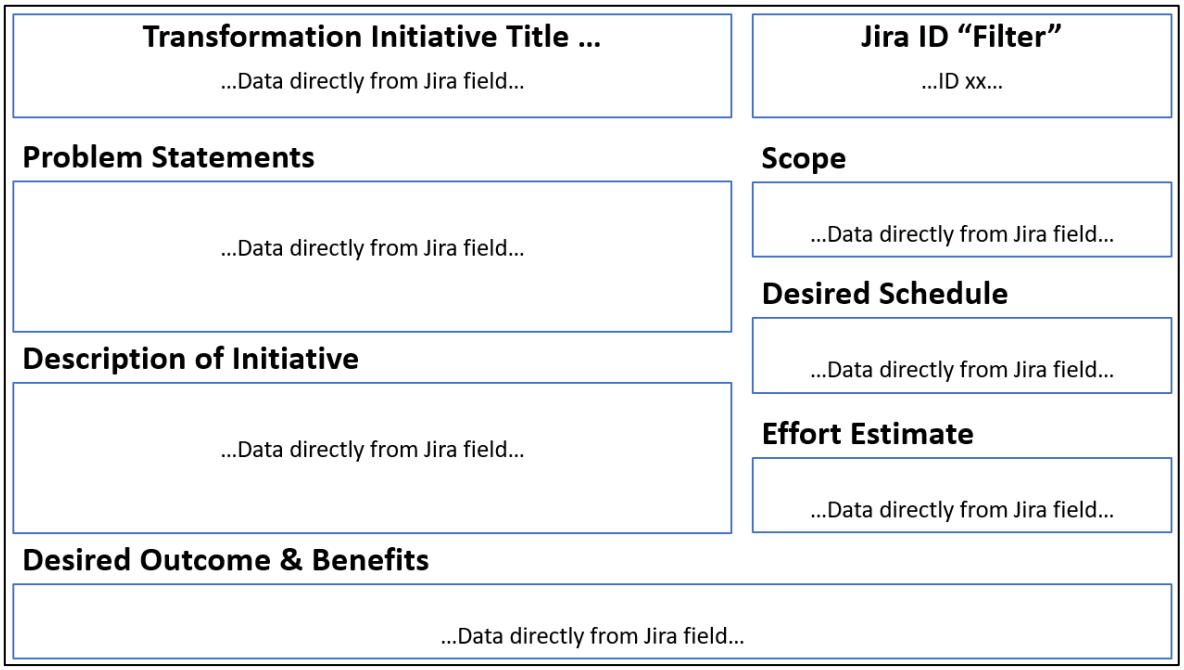

Figure 15. Idea to Automate the Presentation of Most Crucial Data for Evaluation

The logic of figure 15 will also work as a meeting or workshop template to draft the content of the transformation initiative which will be then documented to Jira. It is also similar as the one slider template which was raised during the interview, just possible to get the data directly from Jira tool if the proposals are deployed. Using same fields are the key to ensure the understanding. Corporate template is also recommended to be used for nice look and feel.

Even the most crucial data is documented in the early phase on the transformation initiative, there is a great possibility that the data evolves during the lifecycle of the initiative. This means that the data which is used during the evaluation might not be in place anymore. Taking the history data including the evaluation time details from Jira history log is not optimal. Important aspect anyway is that the fields are same and described as presented earlier in this chapter.

One option would be to store the pure evaluation data on different fields. This was discussed with the IT team, and it would not be optimal solution as the number of fields in the system would increase and the naming would become complicated. Also, more detailed guidance would be needed.

It is proposed that the data on evaluation will be presented using the template idea in figure 15 when the data is taken directly from Jira fields, which is filled by the initiator. Then this

slide can be stored as a power point template, perhaps even including the comments of the evaluation board. Link can be then included on the additional information field. This ensures the data is in place and easily accessible on later phases if there comes need to access the data.

As the evaluation of the initiatives is a group decision making, these improvements seem to allow Jira to be used as a decision support system. It is recommended that Jira will be utilized for each phase of the transformation initiative lifecycle to document all the details, on the other hands all the data is recommended to be accessible through Jira tool. For the evaluation, this makes significant improvement as initiators, and evaluation board are looking for the similar fields with unified understanding of each factor. Without forgetting the evaluation data, which is initially documented to the Jira tools and later stored on agreed manner in Jira tool as a link.

This proposal requires also changes in the current process description, which is not part of this thesis. This thesis is not considering, should the evaluation be placed for all the initiatives or only for large ones for example as this is process question. With this improvement proposal focuses on data aspect for transformation initiative evaluation. Appendices 6-8 presents the improved list of transformation initiative, which are used on the evaluation phase and through the transformation initiative execution. The appendices also include the descriptions of the fields and mandatory fields on item creation.

Studied literature also highlighted the role of transformation manager, which is the key role in transformation initiative evaluation. Especially on the way of being able to bring the view from front row engineer to the evaluation board and achieve consensus between the members. But also, what comes from the transformation role is the true understanding between the engineer and management level. Good example is the common understanding of the messages, strategy, commitments and many more.

As this is considered on transformation initiative evaluation, the results should be seen on improved clarity between the roles, why some of the evaluated initiatives have been marked as more important than others. It should be also possible for different roles to compare the initiatives on the same manner as the evaluation board. On data aspects the earlier mentioned description field split and the role of transformation manager in evaluation of transformation

initiative proposals play the key role not accidentally alienate the data and message to the evaluation board.

5.1.3 Guiding Users

To take the data quality even one step higher level the end users need to be guided, allow user to recognize errors and fix them as the studied theory presented. Fields and descriptions on them might not be enough in the case of text data is forgotten to be filled. This sub-chapter describes the proposed recommendations to add conditions to ensure data quality instead of having data monitoring needs. This sub-chapter takes also into account the transformation initiative workflow, as the evaluation is a crucial step in it.

Majority of the transformation initiatives are being added to the Jira tool by the end users manually. During this study, it has become clear that there are sometimes pure human errors occur which makes the data unusable. For example, some fields are either misused, used for some specific purposes which do not support most of the users, or just accidentally not filled or forgotten.

During the creation of the transformation initiative, not all the details might be known, which leaves some of the fields empty. This was considered on the earlier proposed improvement steps when mandatory fields on item creation were presented, also visible on appendices 6-8. However, as the initiative proceeds forward in the transformation initiative funnel, it is extremely important to have all the needed information in place. That is why the Jira tool should guide the end users to fill the needed data on required time, if not already in place. For example, the initiative must have all the most crucial fields defined during the evaluation, which were presented on table 5.

In this case the transformation initiatives are having three different categories indicating their size. The conditions should not be too complex that they make the usability difficult, just work as a checker that the data is in place on correct moment. On top of the proposed mandatory fields on item creation which can be seen on the appendix 6-8 the most crucial data and few other fields are seen as important that conditions are needed for evaluation and further steps. The following table presents the proposed conditions with corresponding

fields. Without these fields in place, it would not be possible to visualize the initiatives with good quality of data the evaluation board, present or compare the initiatives.

Table 6. Proposed Conditions with Corresponding Fields

	Field Name	**Condition Description**	**Initiative Size Category**
1	*Desired outcome & Benefits*	Field to be filled in order to move status forward from "Open"	Large
2	*Scope (roles/org)*	Field to be filled in order to move status forward from "Open"	Large
3	*Definition of Done*	Field to be filled in order to move status forward from "Open"	Large
4	*Desired schedule*	Field to be filled in order to move status forward from "Open"	Large
5	*Effort estimate*	Field to be filled in order to move status forward from "Open"	Large
6	*Target Start*	Field to be filled in order to move status forward from "Open"	All
7	*Target End*	Field to be filled in order to move status forward from "Open"	All
8	*Component*	Field to be filled in order to move status forward from "Open"	Large
9	*Closing Comment*	Comment to describe the closure, when item marked as "Done" or "Obsolete"	All

On table above the most crucial data is proposed to be ensured to be in place using conditions (1-5). It is good to notice that problem statement and description of initiative fields were already marked mandatory since the initiative creation. Fields 6-8 on the table 5 are extremely important to identify the initiative, group, and categorize as was proposed also in the theory. Field number 9 on the table 5 represents closing comment, which should ensure why some item was closed or marked obsolete. This is also important for the evaluation if something initiative is decided to be obsoleted during the evaluation. Closing comment ensures the user describes the closure. Table 5 also describes the differences between the initiative size categories.

As this study will eventually support the transformation initiative execution, another big quality benefit is to have the closure data always in place. Closure might happen on any stages on the transformation initiative funnel and might have multiple reasons. Documenting justification of closure, for example, during the evaluation is important for possibly similar cases in the future or need to re-evaluate the initiative later. That is why it is proposed to have closing comment for all the initiatives.

When setting the conditions, the workflow of the transformation initiatives in the Jira tool requires closer inspection. As this study aims to improve the evaluation, is the transformation initiative workflow proposed to be tailored to support evaluation also. Initial workflow included statuses such as open, scheduled, in progress, done and obsolete. To ensure workflow to support the evaluation of the transformation initiatives, it is recommended to add the evaluation status on the workflow. The following figure presents the example workflow which considers the transformation initiative evaluation phase, which is important especially for the large initiatives.

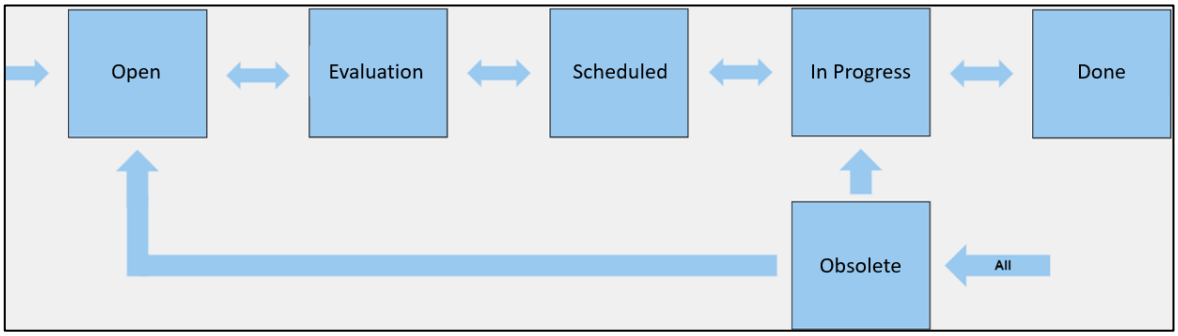

Figure 16. Workflow to Support Transformation Initiative Evaluation

Having the evaluation status added on the workflow at least for the large initiative categories improves the visibility of the status on the crucial evaluation step. This evaluation status also indicates that the result of the evaluation is in place, and the initiative has passed the evaluation successfully. In the figure 16 Open status marks the documented transformation initiatives. These initiatives have been documented, for example, by the team who initiated the idea, steering team, or transformation manager. Furthermore, the initiative is not taken under work or not brought to evaluation board. For other than large initiative categories the workflow would be same as in figure 16, without evaluation.

As described earlier, the workflow conditions would guide the users to fill all the necessary fields on the right moment. The required fields (1-8), which are required after open status

are presented on table 6. After evaluation phase, the status would set as scheduled as the initiative has been evaluated, and all the required information in place. However, the initiative is not yet being worked. This evaluation status allows the evaluation board also to know the number of items waiting the evaluation, being ready for evaluation, or evaluation completed when the status is scheduled.

In progress indicates the initiative is being worked. Done and Obsolete statuses indicate either implemented initiatives or obsolete initiatives which were found not needed for certain reason. The reasons of successful, unsuccessful or justifications for obsolete status are documented on the closing comment field defined earlier in this chapter.

As recommended in the theory for improved clarity between the roles, clearly presented field and descriptions, Appendix 11. Presents the high-level structure for the R&D Transformation Jira End User Guidance for the case organization. This high-level structure indicates the topics which should be covered to support end users in using and finding the information about the transformation initiative data and using the tool for evaluation and execution. For instance, the priority value descriptions presented on table 4 and improved transformation initiative parameters are recommended to be added directly as part of the guidance.

5.2 Validating the Proposed Improvements

The earlier built improvement proposal on transformation initiative evaluation were validated by utilizing two different methods. The methods were wide communication about the proposed improvements, management approvals, presentations, training sessions about the proposed improvements and user acceptance testing (UAT). Both earlier mentioned methods were done during this thesis. It is recommended by the author that the business impact will be measure using soft and hard metrics after this thesis and the guidance material to be updated.

During the improvement proposal creation, the core team participants kept the assigned parts of the case organization informed about the progress. The author presented the progress of the improvement creation few times to the organization aiming to get acceptance, feedback, and questions. Over hundred people from the case organization participated on these

meetings. These presentation meetings were also used to communicate the planned UAT, where the end users will get chance to interact with sandbox environment of Jira tool with the proposed improvements configured in place. The sandbox environment is isolated test environment where the end users can interact with data taken from the past. Edits in the sandbox environment did not have any impacts on the live Jira tool.

Before starting the UAT, the author prepared requirements documentation of the proposed improvements. It was agreed that the internal IT Jira administrator team will enable the Jira test environment where all the end users of transformation Jira tool can access to interact with the proposed changes and do the UAT. The core team agreed that the IT team will document the Jira tool configuration after it is set up to the test environment and do possible changes during the testing. This will significantly ease the deployment of the changes after this study.

Test plan was created for the UAT during this thesis. It consistent all the material prepared for starting the testing, including guidance, UAT kick-off meeting invitation, info share communication including material to access the test environment, presentation about the improvement proposals focusing on the changes and excel to gather findings and questions. The objectives of the UAT were not only to validate the improvement proposals of this study and ensure the improvement proposal delivers value to the end users, but also to discover possible issues on the proposed improvement.

On the UAT communication material, the testers were guided to do the testing based on the realistic use case of the tester. It was highlighted to test all the required functionalities and to try all the proposed improvements. The testing was distributed to the wide audience in the organization, all the end users had possibility to do the testing. The UAT was open for three-week time and many users did the testing.

During the UAT, the core team focused on reporting the found issues to the internal Jira administrator team and ensuring that the Jira tool configuration is as the improvement proposal requirements stated. Some minor changes to the requirements were done based on the UAT findings. The changes on the requirements were mainly additional details on the proposed conditions to ensure they work as the core team and end user wanted. Proposed conditions were presented on table 6. The core team held multiple meetings with the internal IT team administrating the Jira tool to align the UAT findings.

During the UAT, it was discovered with the internal IT team administrating the Jira that Jira tool has two options for the conditions, transition screen and error screen. The transition screen was agreed to be used with the large size transformation initiatives with the improved parameters visible in appendix 6. The transition screen provided possibility to update the fields each time when the status is changed, for instance then the evaluation board could add additional details straight to the Jira tool after the evaluation is completed. For medium and small size transformation initiatives the error screen was chosen. The reason behind the transition screen decision was about the data quality and to avoid duplication. Large size initiative is usually the main layer and parts of it are documented as medium or small size initiatives. It is not needed to document the data multiple times on the smaller and related initiatives. The available transition and error screens fulfilled the studied quality error message guidelines and enhanced the user experience.

The core team invited some of the testers to discuss the findings more in details and understand their point of views and align the steps forward. During the validation and this study, it was noted that not all the request from the large organization can be considered. However, many discussions were held with the core team and people who proposed different ideas or changes on the proposals. This was seen helpful for example especially on studying some parts of the theory more in detail and improving the proposals even further. The UAT to validate the improvement proposals of this thesis was carried out successfully, with good feedback from the organization.

One excellent proof of the successfulness was captured during the improvement proposal presentation to the end users, which was held after the UAT. On this session about hundred people were invited and about 60 participants were present. Following figure presents the simple question, that was tailored to seek the audience’s opinion and the results.

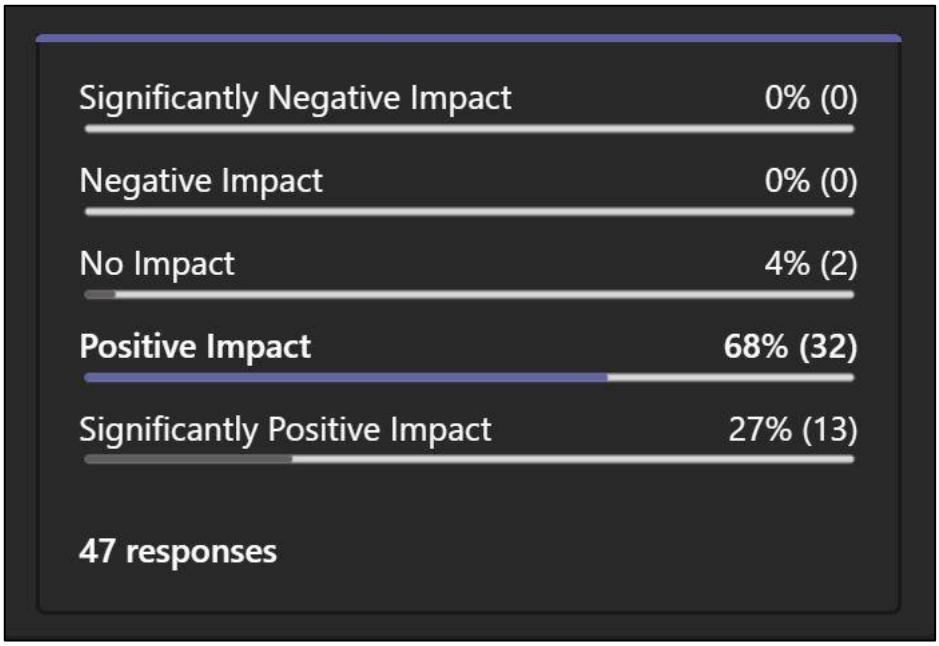

Figure 17. End User Opinion on Validated Improvement Proposals

The author held feedback discussions with Transformation Managers and Unit Head of the case organization. Feedback about the proposed improvements of this thesis were seen excellent. The feedback discussion participants saw the improvement on the most crucial data fields one of the most valuable gains from this study. One interesting feedback was about the importance of transformation roles in the evaluation as a high-level orchestrator, who really needs to ensure the organization is able to select the valuable initiatives and understand them on unified way.

Later, outside the scope of this thesis, it is proposed that the successfulness of these proposed improvements will be measured by soft and hard metrics. This part is relatively low effort compared to the work of this thesis. Recommendations for the metrics are end user satisfaction considering all the end user groups (engineer and manager). The satisfaction should especially focus on the understanding on the transformation initiatives on the evaluation phase. Business impacts can be measured by improved lead times of the transformation initiatives using the data from the Jira tool and the visible outcomes of those activities in a quarter. Further improvements are recommended to be planned iteratively.

5.3 The Improvement Proposal on Transformation Initiative Evaluation

This sub-chapter gathers the answer to the third research question of this study as a comprehensive summary. The third research question was defined in the beginning of this study as, how to improve the evaluation of transformation initiatives in the case organization? The improvement proposal has been approached during this study by interview to focus on the most influential pain point and studying industry best practices from the literature. Based on the interview results of this study the scope was steered to focus on data and tool aspects of the transformation initiative evaluation. Earlier in this chapter the creation of the improvement proposal and validation of it has been explained.

The improvement proposal of this study includes tremendous amount of data quality and usability improvements on the Jira tool, which is used in transformation initiative evaluation. The data fields were aligned with the current use cases and all the fields without added value are removed. Order of the data fields and clear universally understandable descriptions are added. The created improvement proposal also considers the data types, field values and the useability of those in transformation initiative evaluation.

The most crucial data of transformation initiatives were proposed to be split into individual data fields following the studied best practices and aligning those based on this business case and the needs of the case organization. The following figure presents how the most crucial data was seen in the test environment during the UAT of this study.

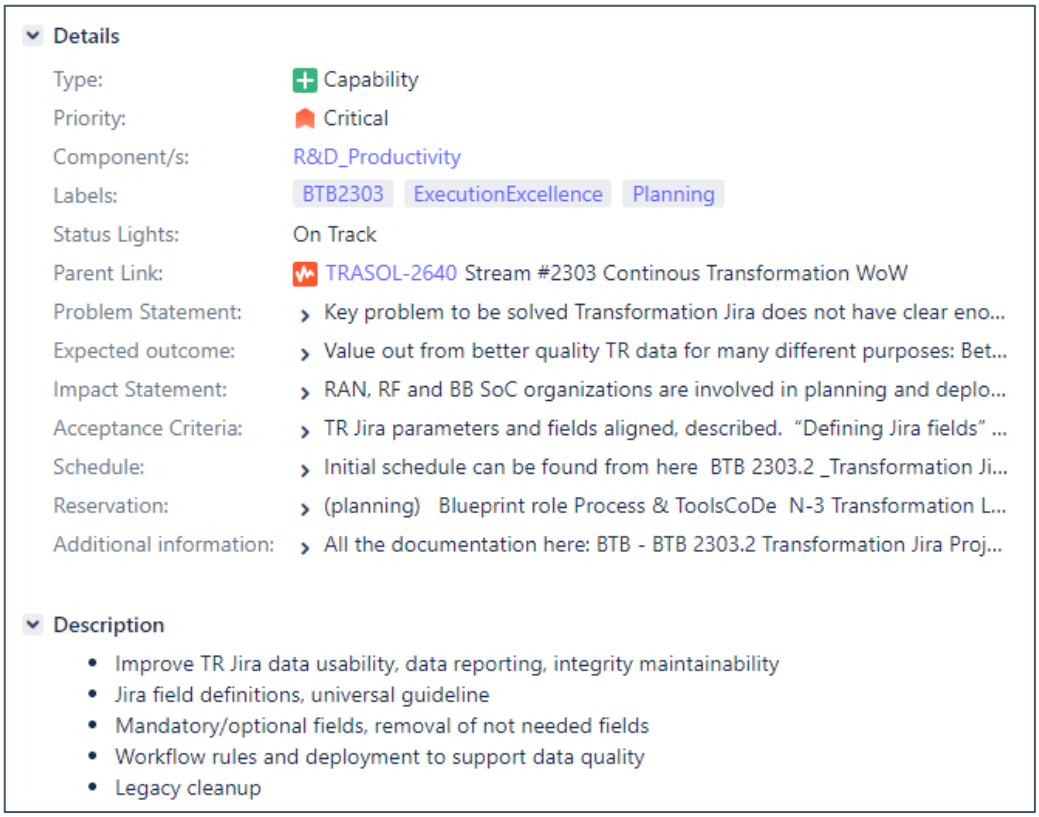

Figure 18. Improvements on Transformation Initiative in Jira Tool

Figure 18 demonstrates the improved data quality, integrity, usability, and maintainability for transformation initiatives and most importantly all the users interact with the same described fields with unified understanding. Some of the content on figure 18 have been hidden from the case organization request. It is good to note that some of the data fields in figure 18 contain different field names than proposed in this study, as those were draft proposal names on the test environment.

Other important proposal of this study was the end user guidance package to use and utilize the transformation Jira data on unified way. This will increase the quality of execution on all the states of transformation initiatives, but most importantly impact positively on evaluation. The workflow improvement was proposed on the Jira tool to ensure the data quality and visibility on evaluation state. Conditions were proposed to ensure the data is in place on the right time and to guide users fill it when needed. This was seen important on top of the improved mandatory fields on item creation. All the details cannot be expected to be known in time of transformation initiative documentation, but no initiatives without understandable content or ownership should exists. The proposed improvement of this study takes this into

account. Following figure explains the improved data on the Jira tool of transformation initiatives on context of each step of the transformation initiative funnel.

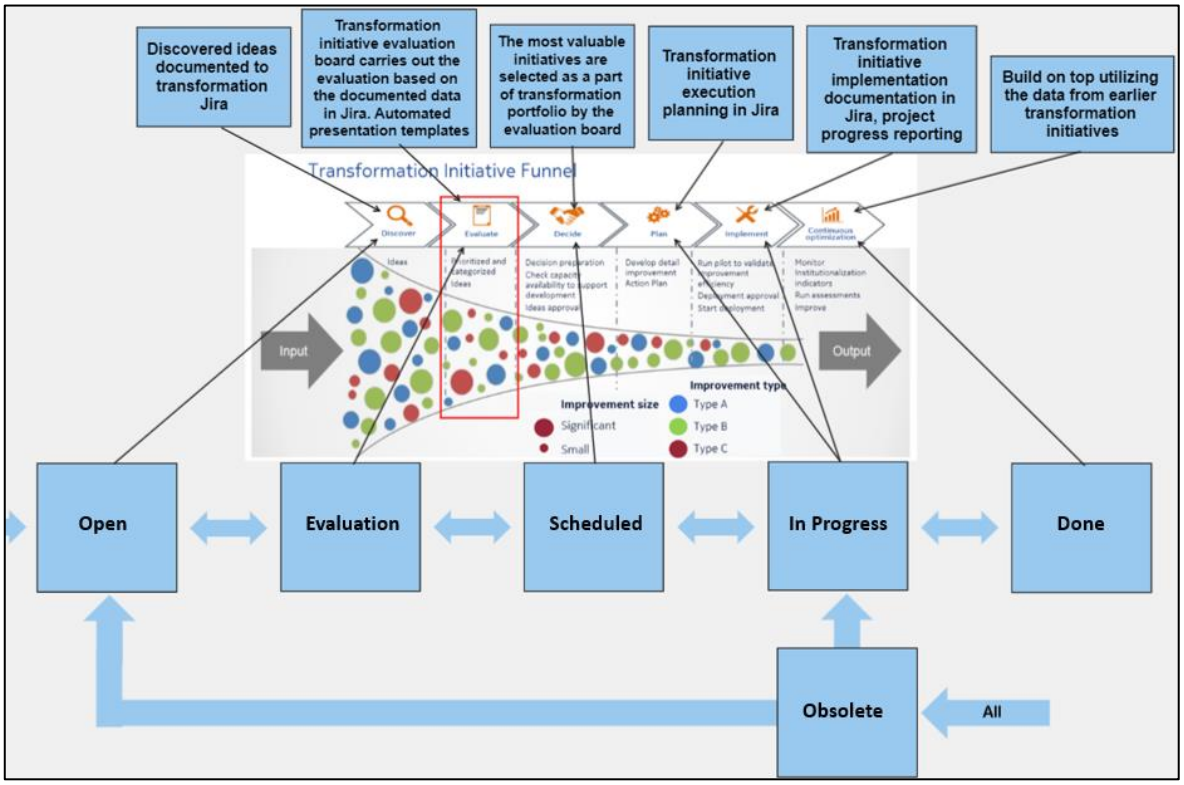

Figure 19 Description of the Improvements on Transformation Initiative Funnel

This study highlights the role of Transformation Manager especially in the evaluation of the transformation initiatives. Transformation managers are having the accountability on the return on investment from the transformation initiatives. Without understandable initiatives the evaluation will not be successful which makes the selection of most valuable initiatives difficult. This study improves this dramatically.

It is good to remember that Transformation Manager has important role ensuring the evaluation is carried out successfully. The cross functional view over the R&D organization is big benefit. Without good quality data it is significantly difficult to orchestrate the variety of initiatives approaching the transformation initiative funnel, and especially the evaluation phase. Transformation Manager is the role ensuring the message from the front-line engineer is heard on the management discussions and wise versa. The decision making on evaluation phase is a great example where the decision support systems, the Jira tool in this case is needed, with the quality data is in place.

The improvement proposals of this study are recommended to be deployed on the order they are documented in this thesis, in sub-chapter 5.1, if an order needs to be in place. However, the author recommends that all the improvements will be deployed at the same time as they were also validated all at once. The comprehensive improvements can be viewed in detail on appendix 6-7 where all the fields, mandatory fields to be filled on item creation and field descriptions can be seen. The proposed conditions can be inspected in detail on the table 6. It is proposed that the priority field value descriptions will be deployed as explained on the table 4. The proposed changes on the workflow of transformation initiatives can be seen on figure 16. Structure of the proposed end user guidance can be seen on the appendix 11. The comparison between the current and improved view of the transformation initiatives can be seen on the appendix 9 and 10.

By implementing the improvement actions of this study, the author sees not only significant improvements on the transformation initiative evaluation, but also on the overall execution of the initiatives. The improvements are seen to become visible via better data quality and data structure, having understanding and visibility over the transformation initiatives documented on the Jira tool. By containing good quality data, the Jira tool can be used as an ultimate transformation decision support system and project management tool which support the execution of transformation initiatives.

The improvements make the data utilization through different tools much effective than earlier as the most crucial data of transformation initiatives are split on individual fields. For example, it is recommended to consider using automated presentation templates on evaluation phase after deploying these improvements. This way evaluation board can view unified presentations with data straight from transformation Jira tool. The initiative creator does not need to create the presentation, just keep the data updated in the Jira. The improvement proposals of this study tailor the Jira tool of the case organization as the ultimate decision support system for transformation initiative evaluation.

6 Conclusion

This thesis formulated improvement proposal to engage project management tool Jira with improved parameters, descriptions, data quality and usability as a tool for enhancing transformation initiative evaluation at the case organization. The studied literature about the best practices for evaluating transformation initiatives consists of wide range of different methods, including parameters, and various business specifically tailored methods. In this thesis, the projects were transformation initiatives at the case organization. The way in which the chosen parameters and methods are used, described, understood, and defined can be seen as a key factor in successful transformation initiative evaluation. However, there are no such universal method exists that fits all, company-specific approaches are needed and so was done in this thesis.

This study was carried out for large software R&D organization focusing on the evaluation of transformation initiatives, which covers all the other significant projects other than software development. Three research question were defined in the beginning of this study and chapters 3-5 provides answers on the questions. The analysis of this study was carried out on organization level with the data on tool scope on the transformation initiative evaluation which was defined based on the interview results of this study.

To be able to choose the most valuable transformation initiatives is not an easy task. In this case the large variance in size, cost, effort, impact, and many other aspects, makes comparing the projects between each other challenging. Thus, without quality data and tool to support the decision making, significant expertise is required to catch the core value of the proposed transformation initiatives on early phase. One identified challenge was that literature provided significant number of mathematical approaches to indicate the valuable projects. This approach would not really bring a real benefit in transformation initiative evaluation due to the uncertainty of early phase projects and programs. It is more valuable to be able to understand the content, why, what, and how the transformation initiative impacts the organization and be able to catch the rough estimates of effort, impact, competences, and financial return.

This thesis achieved its objectives by providing comprehensive solution for each research questions. The UAT and collected feedback also demonstrates the value this study delivers

to the case organization. The conclusion of the validation was that the proposed improvements are being seen delivering positive impacts to the case organization. The organization is certainly willing to see the proposal to be deployed into daily work.

The core team who was involved in the proposal creation of this thesis also collected feedback from different parts of the organization. The feedback was analysed within the core team to be only positive. Especially being able to catch the core information of the transformation initiative due to the new most crucial data fields, simplified approach, and unified understanding of each field with its definition was raised from the organization.

The progress of this study and eventually the final proposal were presented to Manager audience in the case organization. Good feedback and support towards the deployment was received from the audience. Some high-level managers also indicated the aspect of taking the Transformation Manager role into account as an excellent finding which is worth of even studying more and certainly important for the case organization in a big picture.

Ensuring unified understanding of most crucial data of any topic and structured way of documentation are key principles that will ease the selection of most valuable projects, the transformation initiatives in this case. Based on the studied literature, being able to understand the value and importance of the projects on their early phase is universal challenge regardless of the industry and discovered on the interview phase of this study. The improvement proposal and findings of this study are excellent foundation on further study and implementations on different fields, companies and use cases.

As a comparison to the previous study, there are large number of studies done covering methods and best practices of choosing the most valuable projects as a part of portfolio or listing the most influential methods to determine the value of the project. However, there is certainly a shortage on studies which comprehensively proposes how these practices can solve real life challenges on a large-scale R&D transformation with big variety between the initiatives. Perhaps this is the reason why mathematical approaches seems to dominate the literature, which are complicated to implement in real use cases. For example, mathematical approaches to select the most valuable projects seem bullet proof on the paper. However, on reality there are significant amount of uncertainty and variance with the early phase of transformation initiatives.

During this study four further research and improvement areas were discovered. Author of this study finds detailed analysis on role-based view of transformation initiative evaluation an interesting topic. This further study could be aiming to define the key roles and responsibilities on transformation initiative evaluation. One further study could also be investigation of the specific role needs to understand or document the initiatives in chosen organization.

Another further study objective could be to measure the effectiveness of the improved transformation initiative evaluation in the case organization and formulating further improvements on it. Especially considering the growing existing good quality data about the initiatives due to the proposed improvements in this study. However, the earlier mentioned further research topics are most likely limited to a single company due to the required knowledge of a specific case company.

Fourth interesting further study aspect could be how large language models could be utilized with the evaluation of the transformation initiatives. The limitations for this topic can be defined widely. There is lot of potential to create understandable documentation of initiatives and presentations and possibilities to free up resources when using AI driven decision support systems. As decision support systems are certainly needed in transformation initiative evaluation, This future research objective valuable on wider societal importance, not just on field of technology. However, this further research objective should consider some critical validation of the proposed results by the AI driven tool.

To conclude this thesis, the formulated improvement proposal on transformation initiative evaluation will have wide impacts on the case organization way of working around the transformation initiatives. When the proposed improvements are implemented positive impacts on documentation, information understanding, evaluating and ultimately execution of transformation initiatives will materialize. Improved transformation initiative data quality will lead to improved efficiency which has direct impact on financial resource savings. Most importantly due to the improved data quality and understanding it will be possible to do better decision on time of the evaluation leading to more valuable transformation project portfolio. It will also increase work efficiency decision making, business value and user-friendliness of the project management tool used by the case organization.

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Appendix 1. Interview questions

1. How do you currently see transformation initiative evaluation being managed?
2. How do you make sure that the transformation initiative evaluation is understood as it should be?
3. Can you shortly describe the transformation initiative evaluation steps?
4. How do you see the parameters being used for the transformation initiative evaluation?
5. How do you decide which transformation initiative to execute first?
6. How do you see the effectiveness of the parameters?
7. How do we understand effort of transformation initaitve?
8. What is your opinion on using work effort estimation?
9. What is your experience on effectiveness of priority parameter?
10. How do you handle bias on transformation initiative evaluation?
11. How do you understand cost of implementation?
12. How do you understand cost transformation initiative impact on customers?
13. How do you understand cost transformation initiative impact on competitiveness?
14. How do you understand cost transformation initiative impact on quality?
15. How do you understand cost transformation initiative impact on efficiency?
16. How do we avoid overlapping activities?
17. What are the top three things to improve in transformation initiative evaluation?
18. What are the most important parameters of transformation initiative evaluation?
19. What are the top three difficulties in transformation initiative evaluation?
20. Is there anything you would like to add?

.

Appendix 2. Interview Invitation

Title: Interview - Transformation Initiative Evaluation

_____

The interview is focusing on transformation initiative evaluation in.

You have been chosen to participate this interview among group of Transformation Managers, Change Leaders, Unit Heads.

In total similar interview will be arranged with 15-20 people.

This interview is part of my master's thesis work.
The main objective of my thesis is to enhance transformation initiative execution by improving the evaluation part (in the picture with red).
Aim of this study is to find methods and frameworks for better transformation initiative evaluation, leading to improved execution of transformation initiatives.

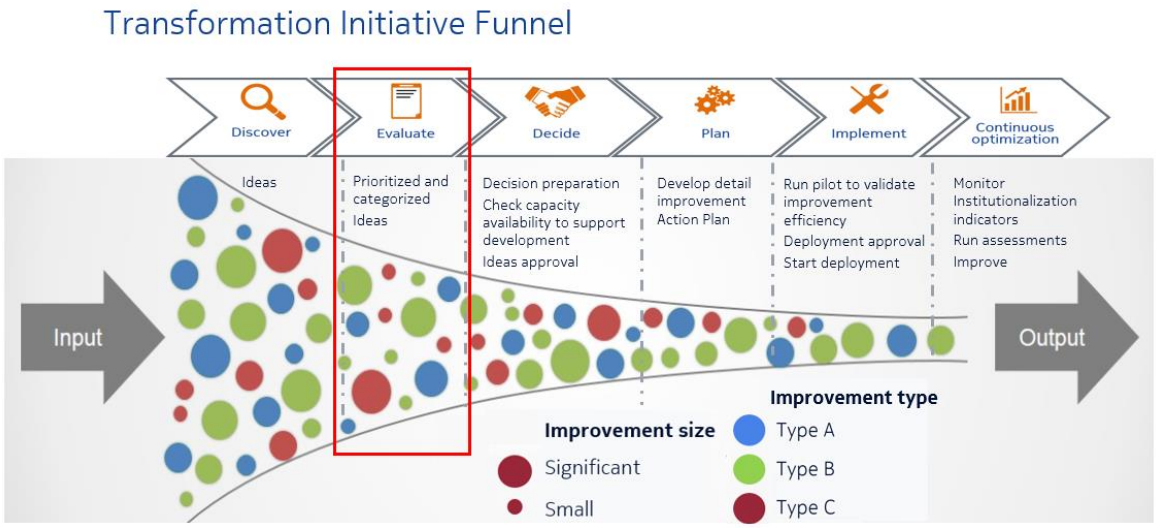
This interview aims to collect data on current methods, pain points, hear your experience and ideas related to the topic.
The ultimate goal of this interview is to be able to scope the study to focus on real pain points in evaluation of transformation initiatives.

I will be asking questions related to the following:

- Your experiences of transformation initiatives on evaluation part
- Current pain points of the evaluation part
- Your ideas, opinions and have a discussion of the topic related

The interview will be semi-structured, and timeslot reserved for it is 1h, but we might finish earlier.

The data collected from this interview will be used without interview participant's name in _____ organization as well as towards the completion of my master’s thesis.



_____

Appendix 3. Interview Intro

_____

This interview is part of my master's thesis work.
The main objective of my thesis is to enhance transformation initiative execution by improving the evaluation part (Send the picture to the meeting chat).
Aim of this study is to find methods and frameworks for better transformation initiative evaluation, leading to improved execution of transformation initiatives.

This interview aims to collect data on current methods, pain points, hear your experience and ideas related to the topic.
The ultimate goal of this interview is to be able to scope the study to focus on real pain points in evaluation of transformation initiatives.

The interview is semi-structured, so I have set of questions for you, and you can choose the way how you want to answer them, I will also ask additional questions during our discussion.

Here is no right or wrong answer in this interview.

The data collected from this interview will be used without interview participant's name in _____ organization as well as towards the completion of my master's thesis.

Is it okay to record this session for my own note taking purposes?
The recording will be deleted after notes are finalized.

Do you have any questions or comments before we begin with the questions?

Appendix 4. Initial List of Transformation Initiative Parameters

1. Project	List	
2. Issue Type	List	
3. Created	Auto filled date	
4. Updated	Auto filled date	
5. Resolved	Auto filled date	
6. Status	List	

Field Tab

7. Epic Name	List	
8. Summary	Text	
9. Reporter	List	
10. Assignee	List	
11. Component/s	List	
12. Label	List	
13. Fix Version/s	List	
14. Priority	List	
15. Description	Text	(field containing lot of data)
16. Parent Link	List	
17. Attachment	Document	
18. Fusion Component/s	List	
19. Status Lights	List	
20. Epic Link	List	
21. Linked Issues	List	
22. Team	List	
23. Original Estimate	Value	
24. Target start	Date	
25. Target end	Date	
26. Reference URL	Link	

Schedule tab

27. Start FB	Value
28. End FB	Value

Analysis tab

29. Frequency of Occurrence	Text
30. Impact	Text
31. Root Cause Analysis	Text
32. Expected outcome	Text
33. Solution Description	Text
34. Root Cause Category	Text
35. Escape Cause Category	Text
36. Other	Text
37. Impact Statements	Text
38. Affects version	Text

Appendix 5. Used Description Field Templates

1. Description template 1
    - Business case
    - User stories
    - Effort
    - Benefit
    - Urgency
    - Scope
    - Size of impact
    - Priority
    - ROI
    - Target
    - Recommended implementation steps
    - DoD
    - Risks if not implemented

2. Description template 2
    - Problem statement
    - Description of initiative
    - Desired outcome
    - Scope
    - DoD
    - Acceptance criteria
    - Priority
    - Effort
    - Desired schedule
    - Guideline

Other templates were similar as template 1 and 2 but used different field names and order of the fields.

Appendix 6. Improved List of Transformation Initiative Parameters on Large Initiatives

1. Project
2. Issue type
3. Status

Field tab

4. Summary*
    a. A brief title phrase to give you an idea of what the initiative is about
5. Reporter*
    a. The person who entered the initiative into the system, supports the Assignee, sponsor or initiator and is ultimately accountable of the results.
6. Assignee**
    a. The person to whom the initiative is currently assigned, responsible of the execution and results.
7. Component/s
    a. Components to which this initiative relates
8. Label
    a. Label to which this initiative relates
9. Priority*
    a. The importance of the initiative in relation to other initiatives.
10. Problem statement*
    a. Describe WHY this initiative is needed focusing on the problem (current state / gap / issue) you are trying to solve.
11. Description of Initiative*
    a. Describe WHAT we plan to do for fixing the problem and HOW that can be achieved.
12. Desired outcome & Benefits**
    a. Describe the added value and quantify the impact of the proposed change to people, customer, KPI, effort, money savings, etc.
13. Scope (roles/org)**
    a. List the impacted organization units and roles that are impacted by the change.
14. Definition of done**
    a. List of actions, key deliverables, evidence, decisions and/or measures to be met for closure (Acceptance criteria).
15. Desired schedule**
    a. Present the desired timeline, start & end dates, milestones for implementing the change.
16. Effort estimate**
    a. Estimate the effort (in hours) needed for planning and implementing the change.
17. Additional information
    a. Provide any other information relevant for the implemented initiative.

18. Target Start
    a. The time and date on which this initiative is planned to be started
19. Target End
    a. The time and date on which this initiative is planned to be completed
20. Status lights
    a. Initiative health status indicator
21. Linked Issues
    a. The linked initiatives
22. Documents
    a. Link to the document folder related to the initiative

Fields which are auto filled

23. Created
24. Updated
25. Resolved

Other fields tab (Fields for specific use cases)

26. Impact
27. Root Cause Analysis
28. Solution Description
29. Original Estimate
30. Frequency of Occurrence

Appendix 7. Improved List of Transformation Initiative Parameters on Medium Initiatives

Field descriptions are visible on the Appendix 6.

1. Project
2. Issue type
3. Status

Field tab

4. Summary*
5. Reporter*
6. Assignee**
7. Component/s
8. Label
9. Priority*
10. Problem statement*
11. Description of Initiative*
12. Desired outcome & Benefits**
13. Effort estimate**
14. Target Start
15. Target End
16. Linked Issues
17. Documents

Fields which are auto filled

18. Created
19. Updated
20. Resolved

Other fields tab (Fields for specific use cases)

21. Impact
22. Root Cause Analysis
23. Solution Description
24. Original Estimate
25. Frequency of Occurrence

Appendix 8. Improved List of Transformation Initiative Parameters on Small Initiatives

Field descriptions are visible on the Appendix 6.

1. Project
2. Issue type
3. Status

Field tab

4. Summary*
5. Reporter*
6. Assignee**
7. Component/s
8. Label
9. Priority*
10. Description of Initiative*
11. Target Start
12. Target End
13. Linked Issues
14. Documents

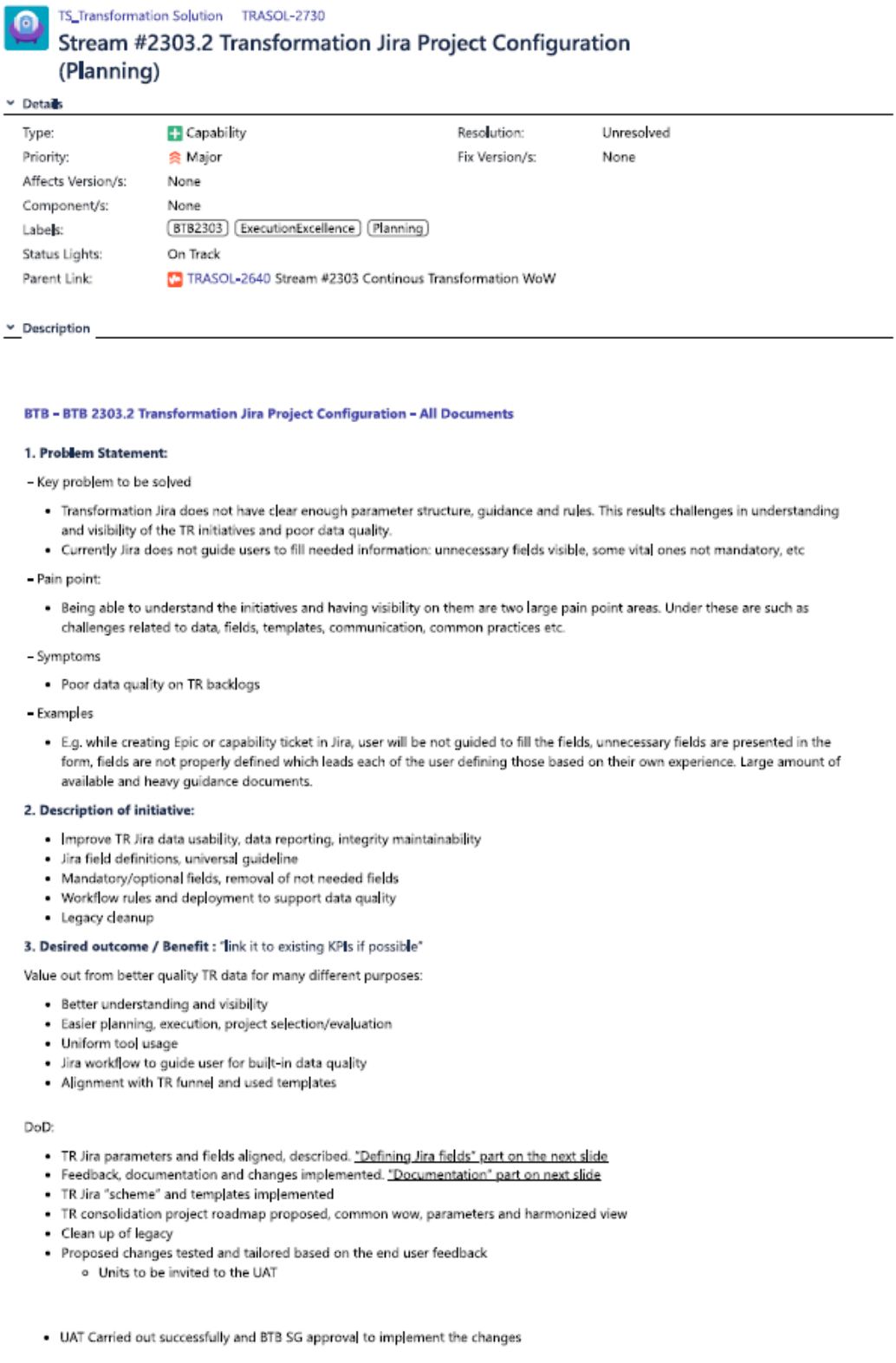
Automated fields and workflow condition fields

15. Created
16. Updated
17. Resolved

Other fields tab (Fields for specific use cases)

18. Impact
19. Root Cause Analysis
20. Solution Description
21. Original Estimate
22. Frequency of Occurrence

Appendix 9. Original Look of The Transformation Initiative in Jira Tool



TS_Transformation Solution TRASOL-2730

Stream #2303.2 Transformation Jira Project Configuration (Planning)

Details

Type:	Capability	Resolution:	Unresolved
Priority:	Major	Fix Version/s:	None
Affects Version/s:	None		
Component/s:	None		
Labels:	BTB2303 ExecutionExcellence Planning		
Status Lights:	On Track		
Parent Link:	TRASOL-2640 Stream #2303 Continous Transformation WoW		

Description

BTB – BTB 2303.2 Transformation Jira Project Configuration – All Documents

1. Problem Statement:

– Key problem to be solved

- Transformation Jira does not have clear enough parameter structure, guidance and rules. This results challenges in understanding and visibility of the TR initiatives and poor data quality.
- Currently Jira does not guide users to fill needed information: unnecessary fields visible, some vital ones not mandatory, etc

– Pain point:

- Being able to understand the initiatives and having visibility on them are two large pain point areas. Under these are such as challenges related to data, fields, templates, communication, common practices etc.

– Symptoms

- Poor data quality on TR backlogs

– Examples

- E.g. while creating Epic or capability ticket in Jira, user will be not guided to fill the fields, unnecessary fields are presented in the form, fields are not properly defined which leads each of the user defining those based on their own experience. Large amount of available and heavy guidance documents.

2. Description of initiative:

- Improve TR Jira data usability, data reporting, integrity maintainability
- Jira field definitions, universal guideline
- Mandatory/optional fields, removal of not needed fields
- Workflow rules and deployment to support data quality
- Legacy cleanup

3. Desired outcome / Benefit : "link it to existing KPIs if possible"

Value out from better quality TR data for many different purposes:

- Better understanding and visibility
- Easier planning, execution, project selection/evaluation
- Uniform tool usage
- Jira workflow to guide user for built-in data quality
- Alignment with TR funnel and used templates

DoD:

- TR Jira parameters and fields aligned, described. "Defining Jira fields" part on the next slide
- Feedback, documentation and changes implemented. "Documentation" part on next slide
- TR Jira "scheme" and templates implemented
- TR consolidation project roadmap proposed, common wow, parameters and harmonized view
- Clean up of legacy
- Proposed changes tested and tailored based on the end user feedback
  - Units to be invited to the UAT

- UAT Carried out successfully and BTB SG approval to implement the changes

4. Scope: **

** For this purpose scope is defined as Units / teams that would be required to participate in planning/deployment or both phases

- RAN, RF and BB SoC organizations are involved in planning and deployment.
- More detailed scope will be defined later in deployment phase when the outcome materializes.

4.1 Roles in scope & Efforts (planning): (hours) -> rough estimates provide estimates

- roles identified to participate and contribute in the planning phase of the initiative
- For any new Blueprint role impacted a new row in the table is expected

	Blueprint role	Process & Tools	CoDe
	N=3 Transformation Leads and project owners	200h	
	Assignee	100h	

-How much effort is needed for creation of the solution (including processes and WoW updates)

4.2 Roles in scope & Efforts (deployment): (hours-->estimate as accurate as possible is expected)

- roles identified that will need to take into effect and deploy the proposed change
- For any new Blueprint role impacted a new row in the table is expected

	Blueprint role	Process & Tools	CoDe
	TR Leads	about 5h per person	
	Change Leads	about 1-2h per person	
	Tribe Quality Managers	about 1-2h per person	

-How much effort is needed from the organizations to deploy the change :

- Effort is mostly done centrally, individual effort can be e.g. info calls.

4.3 Impacted Units:

•List of Impacted units/products/processes

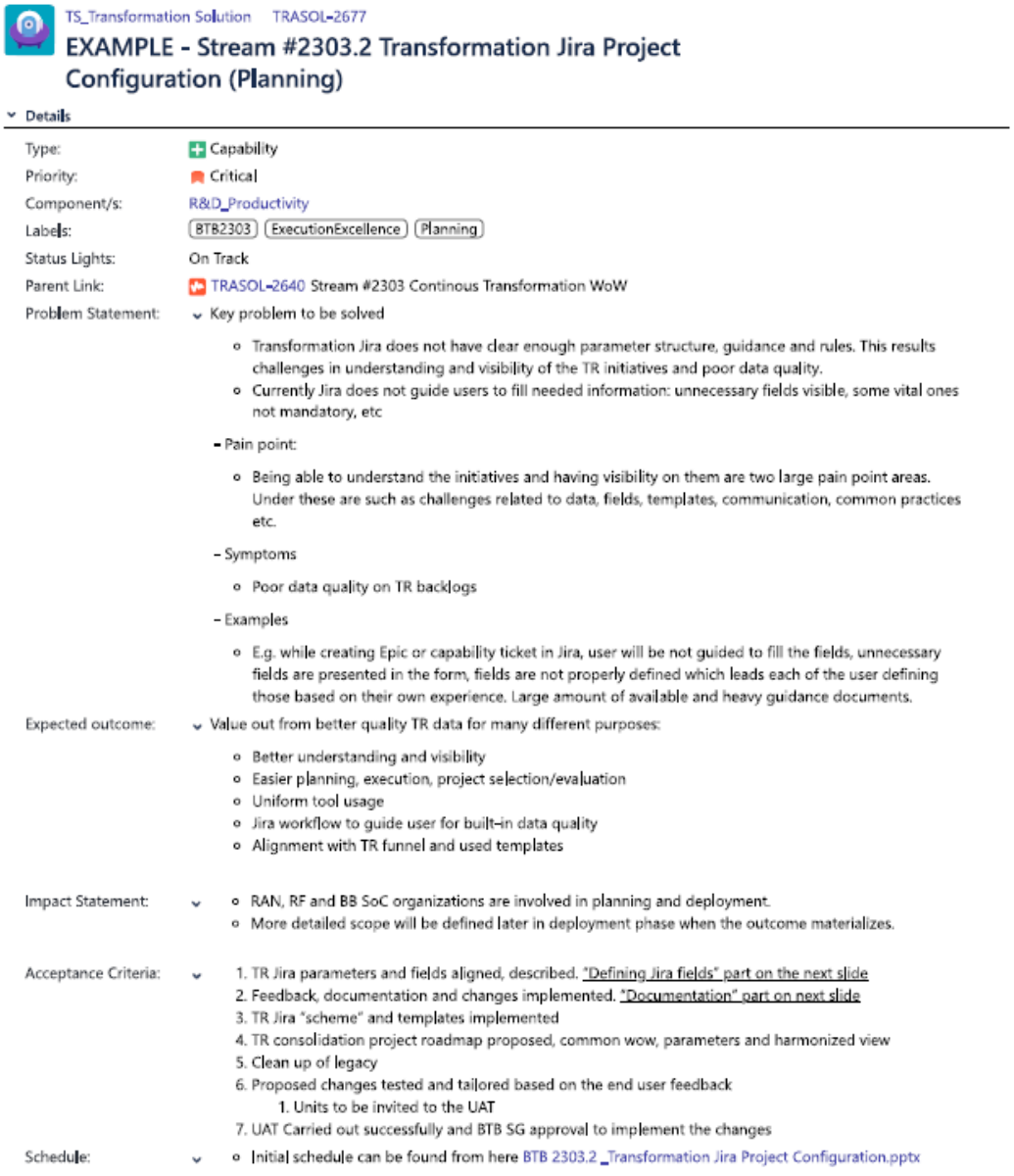
5. Desired schedule:

- Initial schedule can be found from here BTB 2303.2 _Transformation Jira Project Configuration.pptx
- Planning phase schedule
  - Target Start Date:
  - Target End Date:
- Deployment phase schedule
  - Target Start Date:
  - Target End Date:

Attachments

Drop files to attach, or browse.

Appendix 10. Current Look of The Transformation Initiative in Jira Tool



TS_Transformation Solution TRASOL-2677

EXAMPLE - Stream #2303.2 Transformation Jira Project Configuration (Planning)

Details

Type:	Capability
Priority:	Critical
Component/s:	R&D_Productivity
Labels:	BTB2303 ExecutionExcellence Planning
Status Lights:	On Track
Parent Link:	TRASOL-2640 Stream #2303 Continous Transformation WoW

Problem Statement:

Key problem to be solved

- Transformation Jira does not have clear enough parameter structure, guidance and rules. This results challenges in understanding and visibility of the TR initiatives and poor data quality.
- Currently Jira does not guide users to fill needed information: unnecessary fields visible, some vital ones not mandatory, etc

– Pain point:

- Being able to understand the initiatives and having visibility on them are two large pain point areas. Under these are such as challenges related to data, fields, templates, communication, common practices etc.

– Symptoms

- Poor data quality on TR backlogs

– Examples

- E.g. while creating Epic or capability ticket in Jira, user will be not guided to fill the fields, unnecessary fields are presented in the form, fields are not properly defined which leads each of the user defining those based on their own experience. Large amount of available and heavy guidance documents.

Expected outcome:

Value out from better quality TR data for many different purposes:

- Better understanding and visibility
- Easier planning, execution, project selection/evaluation
- Uniform tool usage
- Jira workflow to guide user for built-in data quality
- Alignment with TR funnel and used templates

Impact Statement:

- RAN, RF and BB SoC organizations are involved in planning and deployment.
- More detailed scope will be defined later in deployment phase when the outcome materializes.

Acceptance Criteria:

1. TR Jira parameters and fields aligned, described. "Defining Jira fields" part on the next slide
2. Feedback, documentation and changes implemented. "Documentation" part on next slide
3. TR Jira "scheme" and templates implemented
4. TR consolidation project roadmap proposed, common wow, parameters and harmonized view
5. Clean up of legacy
6. Proposed changes tested and tailored based on the end user feedback
    1. Units to be invited to the UAT
7. UAT Carried out successfully and BTB SG approval to implement the changes

Schedule:

- Initial schedule can be found from here BTB 2303.2 _Transformation Jira Project Configuration.pptx

Reservation:

(planning)

	Blueprint role	Process & Tools	CoDe
	N-3 Transformation Leads and project owners	200h	
	Assignee	100h	

(deployment)

	Blueprint role	Process & Tools	CoDe
	TR Leads	about 5h per person	
	Change Leads	about 1-2h per person	
	Tribe Quality Managers	about 1-2h per person	

- Effort is mostly done centrally, individual effort can be e.g. info calls.

Additional information:

All the documentation here: BTB - BTB 2303.2 Transformation Jira Project Configuration - All Documents (sharepoint.com)

Description

- Improve TR Jira data usability, data reporting, integrity maintainability
- Jira field definitions, universal guideline
- Mandatory/optional fields, removal of not needed fields
- Workflow rules and deployment to support data quality
- Legacy cleanup

Appendix 11. High-level Structure of R&D Transformation Jira End User Guide

- Jira Tool Management
- R&D Transformation Initiative WoW
    - Getting Started & Training
    - Workflow
    - Conditions
    - Transformation Initiative Types
    - Fields and Field Definitions
        - Component Field
        - Label Field
        - Priority Field
        - Status Lights Field
        - Issue Link Field
- Reports for End Users
- Revision History