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Deployment of an IT-based organizational change in a global organization

A study of employee perspective

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ABSTRACT

Nowadays, change is inevitable for organizations to maintain their survival and success. Organizational changes happen due to several reasons such as globalization and increasing technological developments. However, managing organizational change process is a challenge since it involves human resistance.

The purpose of this thesis was to investigate the reaction of employees in a global organization towards IT-enabled organizational change. A case study with abductive approach was performed at SKF Group that globally implemented new IT system in purchasing department. A total of 78 semi-structured interviews were carried out with top managers, line managers, and non-line managers. In the interview sample, top managers who started the change initiative were named as change initiators, and rest of the employees were named as change receivers. Interviewees were selected globally from seven main locations of SKF Group Purchasing. Interviews were analysed to find out what are the expectations of change initiators and change receivers from the system, what are the reasons for employees to accept or reject the system and how these reasons influence their reaction towards this change initiative.

As a result of the study, seven categories of expectations for change initiators and ten categories of expectations for change receivers were defined. The results showed that both change initiators and change receivers have similar expectations from this change initiative. Additionally, eight categories of reasons of change receivers to accept or reject the change were defined. Reasons of employees to accept the change mainly were because the potential of the system which would improve their efficiency and solve existing challenges. The reasons for rejections were mainly due to clash of priorities with daily business needs, lack of resources to drive the usage of the system and incomplete knowledge of other stakeholders about the system. The study also showed that due to abovementioned reasons individuals are in different stages of innovation-decision process such as knowledge stage, persuasion stage, decision stage, and implementation stage according to innovation-decision process model.

The authors concluded that acceptance of IT system by employees could be increased by addressing challenges of users more proactively, communicating line managers about the necessity of being more transformational managers and empowering change agents.

Keywords: change management, IT-based organizational change, user resistance, change initiator, change receiver, communication, change agent.

ACKNOWLEDGEMENTS

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1   INTRODUCTION

This chapter starts with the theoretical background of the thesis. Subsequently, problem in the chosen organization and following purpose and research questions of the thesis are presented. This is followed by delimitations of the thesis.

1.1   THEORETICAL BACKGROUND

In today's global business world, change has become inevitable for organizations to maintain their survival and success (Chen 2012). Globalization, technological developments, and ever-increasing competition are the main factors that force organizations to adapt their business operations to changing environment. To stay competitive, organizations make large-scale changes such as reorganization, acquisitions, mergers and strategic changes (Tichy 1983).

There are many different definitions of organizational change. Schein (1970, p.17) defines organizational change as "Induction of new patterns of action, belief, and attitudes among substantial segments of a population." According to Zorn et al. (1999, p.10), organizational change is "Any alteration or modification of organizational structures or processes."

As it is shown in the definitions, organizational change entails a shift in status quo. Tichy (1983) states that change alters behaviour of employees, organizational structures and relationship patterns in organizations. Since change entails uncertainty and complexity, people think of it as painful and frustrating. Therefore, for the success of a change initiative, it is important to consider human factors (Huczynski & Buchanan 2007). People can have different approaches to a change initiative. Employees can be classified into promoters, opponents, latent opponents and potential promotors depending on their approach to the organizational change. Promotors see the benefits of the change initiative and have a positive attitude towards it, whereas opponents have a negative attitude and actively resist to the change initiative. Latent opponents exhibit passive resistance to the change by pretending as supporters of change initiative. On the other hand, potential promoters support the change even though they have limited conviction about the benefits of the change (Cadle & Yeates 2004).

There are different reasons of resistance by people in a change initiative. People resist to change if the change initiative contradicts with their self-interest. Change can disturb people's social opportunities, values, beliefs and threat their gained power and prestige. Resistance also emerges when change initiators have lack of trust in their employees and therefore, they do not share information about change initiative. This situation increases misunderstanding about reasons of change and its likely consequences. Therefore, employees' defensiveness and resistance against change initiative increase. Resistance is also likely to emerge when there is lack of communication between change imitators and change receivers. Inadequate information leads to a contradictory assessment of costs and benefits of a change initiative which increase resistance to change (Bedeian 1980).

1.2 PROBLEM DESCRIPTION AND ANALYSIS

This study was commissioned by purchasing function within a global manufacturing company, SKF AB. SKF is Swedish global manufacturer of bearings, seals, mechatronics and lubrication systems for 40 different industries such as aerospace, construction, marine, railway, etc. It has manufacturing sites in more than 30 countries with 45000 workforces. SKF is headquartered in Gothenburg, Sweden (SKF 2017). Group purchasing organization (GPO) at SKF support the other functions with supply of products and services. GPO consists of five business areas. These are Bearing Operations and Commodities, Industrial Units and Commodities, Automotive & Aerospace and Commodities, Indirect Materials & Services and Capital Expenses (CAPEX), and China Purchasing. Additionally, at GPO, four functions are supporting the main business areas which are Strategy & Business Transformation, Integrated Cost Reduction (ICR), Supplier Development & Quality (SDQ), and Human Resources (HR).

Since 2014, GPO is in the process of organizational change. The organization historically operated in a decentralized way with local business functions in different countries which had different systems and routines. This led to high fragmentation and complexity of operations at GPO. According to GPO management, the organization faced several threats. Competitors had better profitability, the business was slower and the organization struggled because of high purchasing costs. This situation can be related to the sense of urgency stated by Kotter. If an organization fails to establish the necessity of urgency then achieving the desired state from change is difficult (Kotter 2007). To be able to address abovementioned challenges, GPO management decided to organize themselves into a centralized organization. As stated by GPO management, the main objectives of this transformation were to reduce complexity, to make and implement decisions faster and to achieve efficiency through cost savings. Centralization would also increase the leverage of the company by pooling the needs of purchasing units together to achieve advantages in negotiation with suppliers. With these objectives, GPO management decided to have an organization which would work in the same way in all locations of GPO. This decision aligns with the vision statement of SKF GPO to be so-called *One Purchasing*.

To achieve the vision of being One Purchasing, GPO management decided to evaluate their current state and design a future state of GPO. However, this was seen to be possible only with a well planned and executed transition state. This transition state includes the integration of local offices to talk in one voice and guide them to the desired future state by unlearning the old way of doing business. This scenario is line with the theory of *unfreezing*, *changing* and *freezing* mentioned by Lewin (in Schein 1996). GPO management mentioned that first stage of unfreezing was handled by evaluating their current state of performing and opportunities available within purchasing. Later GPO management focused on creating their *vision*, *strategy* and *expected future state* by evaluating activities to be performed by them. Then they framed new *processes* by evaluating the necessary processes required to performing the purchasing activities. This demanded a necessity for framing the *competencies* required at GPO to perform the activities designed. New *job roles* were also created to perform these processes. Having the new process, competences and roles framed, it demanded for a new *organization design* of doing things at GPO. All these decisions were in need of an efficient *operational set-up* and *responsibility model* to achieve the above-mentioned objectives of this transformation. After achieving the stage of unfreezing, the next step was to change the GPO according to the future state designed. One of the ways considered to manage this

change, was to take the support of an IT system. That resulted in the implementation of a trending digital platform for purchasing called SAP Ariba (2017). Common way of working with the support of new IT system would eliminate different existing systems used in purchasing sites. As a result, it would bring the speed of operations, efficiency and cost savings for purchasing. To take desired benefits from implementation of an IT system in an organization, the way of working should also be organized in a new way. Therefore, complementary changes together with IT implementation is essential to achieve a complete solution. Complementary changes include changes in business processes, new job designs, management changes, new skills training, new incentives etc. (Markus 2004). As mentioned above, these complementary changes were implemented by GPO management.

In this thesis, GPO management who started this change are referred as change initiators. The employees who are change targets are referred as change receivers. The main challenge mentioned by change initiators, was the acceptance of this IT system by change receivers at GPO. There was a need for a gap analysis to find opinion difference between change initiators and change receivers. Knowing opinions of change receivers would help change receivers to plan the next phases of implementation. This is in line with Markus' (2004) view of exported problems in an IT-enabled change. He explains that exported problems are issues arising in one phase of a change process which are not recognized or remedied. This type of problems appears again in the later phases of implementation when it can take more time and resource to solve. This was the main reason to call in for a master thesis project at GPO.

This change process at GPO is complex since there are many local purchasing units located globally using different systems and having different work routines. Different national and organizational cultures of change receivers further complicate the situation. As mentioned above, people resist to change for different reasons; it is also possible that resistance will also be in this change initiative since GPO is working in its current way for many years. According to literature, communication with change receivers in a change process is crucial. Through communication change agents explain reasons and benefits of change to change receivers to make it successful (Huczynski & Buchanan 2007). In a global project, communicating with employees is another challenge due to geographical dispersion of employees (Olsson & Pedersen 2006).

1.3 PURPOSE AND RESEARCH QUESTIONS

The purpose of this thesis is to investigate what are the reactions of employees in a global organization towards IT-enabled organizational change. Purpose can be broken into following research questions:

1. What are the expectations of employees from IT-enabled change initiative in a global organization? How do they communicate their expectations?

2. What are the reasons that influence acceptance or rejection of change initiative by employees?

3. How do these reasons influence the reactions of the employees towards the change initiative

1.4 DELIMITATIONS

As a part of the organizational change process at GPO, management implements SAP Ariba for both strategic and operational purchasing in the organization. Management started two different projects for implementation of SAP Ariba in strategic and operational purchasing respectively. These projects are named differently within the organization. This thesis is only limited to investigate employees' reactions towards change through SAP Ariba in strategic purchasing. This delimitation allowed us to have focused interviewees to conduct interviews for gathering qualitative data. Moreover, this delimitation enabled the interviewees to comment about uncertainties between two projects. Another delimitation of this thesis is that it does not focus if the implementation of SAP Ariba at GPO was a correct or wrong decision. The focus of the thesis is to investigate how SAP Ariba is implemented at GPO and reactions of employees towards this change.

2   EMPIRICAL CONTEXT

This chapter describes the empirical context of this thesis which is about the social setting, event and the individuals considered. The social setting refers to the environment in which research is conducted. Event is about the case of a research study which is the deployment of SAP Ariba in this thesis. Individuals are people who participate in a research study (Bryman & Bell 2015). In this thesis, individuals are the employees of GPO.

2.1   SOCIAL SETTING

There are two purchasing organizations of SKF which are China Purchasing (CP) and Group Purchasing Unit (GPU). GPU has six purchasing hubs and their local purchasing sites in different countries reporting to one these hubs. These hubs are in *France, Germany, India, Italy, Sweden,* and the *USA*. These hubs focus on purchasing needs of internal customers globally and locally depending on the responsibility of purchaser located in each purchasing site. GPO management refers CP organization as China hub. This hub is responsible for all the purchasing needs in China. In this thesis, two organizations mentioned above together are referred as Group Purchasing Organization (GPO). Change initiators plan to integrate seven purchasing hubs and local purchasing sites through SAP Ariba. The social setting considered in this thesis is GPO management, seven purchasing hubs and SAP Ariba deployment team in Sweden.

2.2   EVENT

The event of this thesis is the deployment of SAP Ariba at GPO. SAP Ariba is a cloud-based IT system. . According to the SAP Ariba company, this system brings in a new way of doing business by building a network within the value chain of an organization.. The company claim that this system improves the operational efficiency of an organization by avoiding the duplication of activities, creating a repository of activities and helping to share knowledge with colleagues in an organization. Being an IT system it can be accessed from anywhere in the world with a device connected to internet (SAP Ariba 2017).

2.3 INDIVIDUALS

This section describes two different group of employees who participated in this thesis. We refer to these two groups as *change initiators* and *change receivers*..

2.3.1 CHANGE INITIATORS

As stated above this IT implementation has been initiated by the management of GPO, who are referred as change initiators in this thesis along with project deployment team detailed below. The GPO management who are considered as change initiators in this thesis are the Chief Purchasing Officer (CPO), who was the project sponsor of this change initiative and whole GPO managers who are directly reporting to CPO. These mangers are Purchasing Directors (PDs) of business areas mentioned in the introduction that is BO&C, AA&C, IU&C, IDMS&CAPEX. The role of Purchasing Director for SBT is also considered in this thesis as this role is responsible for the project team to deploy SAP Ariba globally. The support functions which are ICR, SDQ and HR excluded from the context of this thesis as the latest global rollout of SAP Ariba will not immediately influence them. As mentioned above, along with CPO and PD's, there was a project deployment team responsible for driving the change initiative. This team includes a project manager (PM) who is in Gothenburg, Sweden, and four trainers. PM along with trainers are responsible for conducting trainings of the system globally in seven hubs of purchasing.

2.3.2 CHANGE RECEIVERS

In the context of this thesis, employees who are the change targets are referred as change receivers. They are employees from seven hubs of purchasing. Project deployment team has divided the employees into two groups which are *users* and *key users* of SAP Ariba. As of 16 March 2017, all interviewees selected for this thesis were trained in SAP Ariba. Here, key users are the change agents of this change initiative who were chosen from local purchasing sites. Key users were invited by the project team to the headquarters in Sweden. They were trained in the system and given information about the implementation plan. The primary responsibility of key users in the respective countries was to facilitate the trainings and support employees with any challenges. Users were the remaining population other than key users. The users in Europe (excluding Germany), India and China trained by PM and one of the trainers. The other trainers in the team of change initiators focused on training the users in Germany and USA. Users of the system consist of *line-managers* and *non-line managers* at the GPO. In this thesis, we focused on investigating reactions of change receivers towards this change which was brought by change initiators.

The role categorization of employees considered in this thesis is depicted in Fig 2.1.
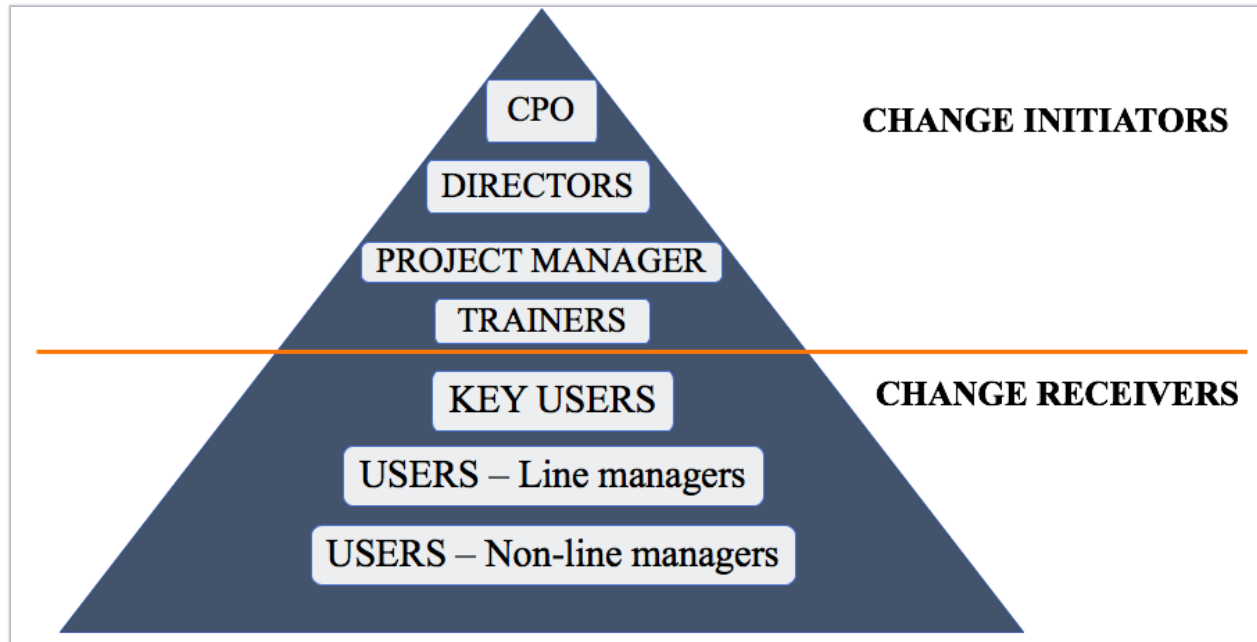
Figure 2.1: Role categorization for deployment of SAP Ariba

3 LITERATURE REVIEW

This chapter presents the theoretical framework to ease reader's understanding of concepts that are relevant to this thesis. The theories used were selected throughout thesis process according to information gathered from semi-structured interviews. The chapter starts with introducing the technochange concept which gives general understanding to the reader about IT-enabled change. After that, Kotter's change theory and best practice interventions provide general information about steps that should be followed to achieve successful change in an organization. Theories about principal-agent relationship and change anxieties describe the behaviour of employees in a change process. After that, theories of social power bases and leadership are provided. These theories describe how change initiators can influence change receivers and manage the change process. Innovation decision, innovation adoption, and star models were used to construct an analytical framework which will be presented in the next chapter.

3.1 TECHNOCHANGE

Technology enabled organizational change is referred as technochange by (Markus 2004). It is different from IT projects and conventional organizational change programs. Organizational change programs are concerned with people's motivation, readiness, and skills in using the new system. It deals with these issues by taking people and making conducive for exploitation of the new system. However, it does not consider the risk of technology takes precedence over human concerns. On the other hand, conventional IT projects focus on improvement of technical performance and cost of technical operations. They consider the quality of technology, budget and schedule issues. However, technochange focus on IT-enabled organizational change and transforms the behaviour of the whole organization (Markus 2004).

Successful technochanges have two main characteristics. These characteristics are completeness and alignment with an existing organization. Completeness refers to complementary changes in the organization to make IT more productive. These changes are transformation in work process, job roles, trainings and tasks alongside the change of IT. Installing new IT without complementary changes does not change organizational behaviour and performance. An incomplete solution can lead several situations such as technology is not adopted in the organization, technology is used in a way that brings old way of working, technology is used but does not bring desired benefits (Markus 2004).

Any successful technochange should align with existing organizational values, culture and work practices. Technochange in an organization, changes business processes, the way people are working and affect their values and shared beliefs. This involves human resistance due to misfit between change initiative and existing organizational setting regarding processes, culture and incentives. Process misfit occurs when the new system does not fit people's existing way of working. For example, system working well in one national context might not work in another one due to local business and legal requirements. Cultural misfits occur when there is a conflict between change initiative and existing organizational or national culture. Incentive misfit emerges when a system does not fit existing reward system of an organization. Providing incentives in a technochange solution can lead to destructive organizational politics. Therefore, incentive misfit is also called political misfit (Markus 2004).

3.2 KOTTER'S CHANGE THEORY

Kotter (2009) explains that any successful change process goes through following eight steps:

Establish a sense of urgency: Sense of urgency is created by communicating the messages regarding potential crises or opportunities to the whole organization. This can be in the form of emerging market, declining margin, technological trends, etc. Establishing a sense of urgency is difficult since people do not want to leave their comfort zone. Therefore, senior managers should have leadership skills to convince people for the change (ibid).

Form powerful guiding coalition: The senior manager who initiates the change needs a group of people to develop a shared commitment. The members of these group can be from any level of the hierarchy with expertise, reputation and relationships (ibid).

Develop a vision: Guiding coalition should develop a clear picture of future which is easy to communicate to all stakeholders. The directives, plans, and programs without a vision takes the organization in the wrong direction, and change efforts fail (ibid).

Communicate the vision: The vision needs to be communicated with every possible communication channel. Credible communication helps to change the mindset of people. The communication should be regular discussions and meetings by senior management about the benefits of the change, challenges of the business and how the change initiative fits the bigger picture (ibid).

Remove obstacles and empower action: There can be some obstacles preventing the implementation of change even though stakeholders might understand the vision. One of the obstacles can be the mindset of people hence they should be convinced that there are no real obstacles. Other obstacles can be organizational structure, managers who are unwilling to change, reward systems which lead people to choose either new initiatives or self-interest. Big obstacles like these must be removed to achieve a successful change (ibid).

Plan and create short-term wins: Long change process can fail unless short-term wins are appreciated and celebrated. People who do not see short-term wins will give up and resist the change. In the journey of moving to the long-term goals, senior managers should establish short-term targets and reward people with money, promotion, etc. (ibid).

Consolidate gains: Declaring victory after first performance improvement kill the momentum and cause the failure of the change. Change initiators might declare success after initial performance improvements due to their over-enthusiasm while the change resistors will join them with the aim of stopping the change at the first opportunity. Change initiators should understand that change process takes a long time and with the credibility of short-term wins they should continue to drive the change. This can be achieved by removing systems which are inconsistent with the change vision and introducing projects with bigger scope (ibid).

Anchor in the culture: The new change should be rooted in the culture of the organization and made a part of the norms and values. To do so, the first crucial step is to indicate the stakeholders how change improved the performance. People can make the wrong conclusion if they are left on their own by linking the causes of improvements to the wrong sources. Secondly, it needs to be made sure that next generation of top management understands and maintains the change. Therefore, the board of directors should be involved in the transformation initiative. If they do not understand the need for change, all the efforts made for change will be destroyed in very short time (ibid).

3.3   BEST PRACTICE INTERVENTIONS

Nowadays, many companies are exploiting a wide range of best practice interventions (BPIs) to develop new and best practices. BPIs are short focused activities to introduce and develop best practices in the companies (Done et al. 2010).

BPIs focus on performance improvement in two areas which are *short-term* and *long-term* performance improvement. They can be exploited to improve the operational performance regarding cost, quality, lead times, etc. which leads to the improvement in financial performance. However, after picking "low hanging fruits" impact on long-term performance should be made by sustaining the achieved results and spreading it to the whole company. These practices should be fully adopted by the company in order not to drop the practices after gaining short-term benefits. Therefore, it is crucial to integrate short-term success with long-term improvement objectives (Done et al. 2010).

Done et al. (2010) has concluded following success factors of implementing best practices in the companies after conducting eight cases about BPIs:

- One of the main success factors of implementing BPIs in the companies is the *clear strategy* emphasizing the role of best practices in the company and *clear communication* of it to the whole organization. It leads to short and long-term performance improvements (ibid).

- To implement the change programs more effectively *organizational readiness* for change is crucial. It means a coalition of stakeholders who are willing to change. It should be the leadership ability of senior managers to develop organizational readiness for change (ibid).

- Senior managers should also develop *key performance indicators (KPIs)* which are aligned with the long and short-term change objectives. It motivates individuals towards the improvements in short and long-term performances (ibid).

- The short-term results should be *recognized* and *rewarded* to make stakeholders more committed to the long-term performance improvements. It brings sustainability result in the long term (ibid).

- To achieve short and long-term performance improvements, enough amount of *resources* should be provided for developing the best practices. During the introduction and development of best practices in the companies, there can be other parallel projects for stakeholders which consumes resources. Management may send a clear message and make sure that the BPIs are given priority for allocation of resources. Unless the resources provided, the short and long-term success of best practices can suffer (ibid).

- Another success factor is *managing the implementation process* well. The process should be divided into small activities which are performed coherently and in right pace. The change initiative which is delayed or rushed does not deliver the expected short-term and long-term success (ibid).

- Best practices are designed according to a one-size-fits-all model. The implementation of best practices should be *planned and prepared to the context* of the company. Tailoring the format of best practices to the company context bring short-term and long-term performance improvements (ibid).

- To *meet the expectations of key stakeholders* such as top management, middle management and employees is a crucial factor. It is very important to get the commitment of top managers as well as the support of middle managers since they are playing an important role in communication vertically in the organization. Change agents, top managers, and middle managers should work together to deal with resistance to change, stakeholder uncertainty, etc. (ibid).

- A *charismatic leader* who can drive the change by spreading confidence and motivation is also critical for the success of BPIs (ibid).

- *The competence and knowledge of change agent* about the business of the company, project management, and cultural-political aspects should be at the high level. Also, the facilitating skills of change agents such as being able to listen to people and solving problems are important. Ability to understand political aspects in the organization is crucial. Especially, in an organizational change process, emerging of political activities is highly probable (Done et al. 2010). This is because, any change process creates uncertainty which can cause power shift among different interest groups or individuals in an organization. Employees engage in political games to keep their power and affect their position in the organization after the change (Nadler & Tushman 1997).

- The *planning of post-implementation phase* of the BPIs for follow-up activities and continuous support leads to the long-term success of the change initiative (Done et al. 2010).

3.4 LEARNING AND SURVIVAL ANXIETY

The whole journey of organizational change starts from a *current state* in an organization. This state describes the existing situation in the organization before changing in terms of strategy, organizational structure, tasks, individuals, etc. Change programs aim to transform the organization to a *future state*. The future state describes the desired situation of the organization after the change. The journey from current state to the future state is called as *transition state* where actual change process is happening (Nadler & Tushman 1997). To achieve the desired future, before accepting a new way of thinking and habits, people first need to unlearn the existing assumptions, beliefs, and attitudes. However, employees are resisting to this kind of change since it entails discomfort and anxiety. Therefore, the motivation for change should be created. Motivation can be created through creation of survival anxiety (Schein 1996). Survival anxiety is horrible realization that to survive you must change (Schein 1999). Creating survival anxiety can be triggered through disconfirmation of existing situation. There can be several ways of creating disconfirmation such as internal and external threats, educating employees, charismatic leadership, etc. (Schein 1999). Creating survival anxiety can be related to the first step in Kotter's (2009) change model which is about creating a sense of urgency by communicating potential threats, sense of failure or crisis to employees. When employees are exposed to disconfirmation, they feel guilt and realize the need for change.

However, learning anxiety also starts together with the realization of necessity for change. Learning anxiety stems from being afraid to try new things due to a different combination of fears: Firstly, during a change process, it is highly probable that temporarily employees do not feel competent since they have changed their usual way of working and still have not mastered the new way. Secondly, employees can feel the fear of punishment due to abovementioned fear of temporary incompetence. Since learning new things is time-consuming, employees fear that they will be less productive in the learning process and due to this reason, they can be punished. Thirdly, employees might be afraid of losing their identity. This especially happens when the existing way

of working is a source of identity for employees, and they fear to lose it by adopting a new way of working. Another concern is fear of losing group membership. A group of employees constitutes culture with their shared assumptions. A new way of thinking in the group can result in exclusion from that group since new way is not consistent with group thinking. Therefore, to maintain their group membership employees try to avoid from change (Schein 1999).

Change receivers exhibit different reactions to learning anxiety and try to find excuses to avoid from change. One of the reactions is *denial*. Employees deny the validity of threats related to the current situation or question permanency of these threats. Another possible reaction by employees is *scapegoating* or *dodging* by blaming others for causes of the problem and stating that change should first start by others. *Bargaining* is another reaction to learning anxiety. Employees need to be convinced that the change is beneficial for them and they want special rewards for their effort to change (Schein 1999).

Schein (1999) proposes two ways to realize a successful change: Either *survival anxiety should be bigger than learning anxiety* or managers should strive for *reducing learning anxiety* rather than increasing survival anxiety. Increasing survival anxiety might stimulate employees to further increase their defensiveness towards learning new things. Therefore, a more suitable way of dealing with resistance is reducing learning anxiety by increasing psychological safety of change receivers. This can be achieved through different ways: Senior managers should communicate vision which is compelling for employees. In this situation, employees try to achieve that vision. After that, formal trainings should be conducted to teach employees new skills and explain the new way of working. Since people have a different way of learning, it is necessary to involve learners in the design of trainings to have best possible learning process according to the need of employees. In addition to trainings, there should be the availability of time and resources such as practice fields and constructive feedback for effective learning. Another way of achieving psychological safety is having role models and support groups in the organizations. Employees need to be persuaded to adopt the new way of working and in this way, role models can be an example for new leaners with their attitudes and behaviours that others can identify. Employees also can discuss their discomfort with each-other who are experiencing similar things in support groups and jointly solve the issues. Finally, senior managers should establish organizational structures and incentives systems that support the new way of working.

3.5 AGENCY THEORY

Agency theory exhibits a relationship between the person who is delegating the task and the person who is performing it. In this case, the delegator of the tasks is called a *principal*, whereas the performer of the tasks is referred as an *agent*. This type of relationship can evolve in every level of management in the organizations. This theory emphasizes the political side of organizations by indicating that organizations are a group of individuals with self-interests. They are behaving in a way that fits best with their own goal which leads to the conflicts. According to agency theory, conflicts are resolved by aligning the interests of employees using incentives (Eisenhardt 1989).

The core of agency theory is to govern the relationship between abovementioned two parties by using contracts. This contract can be either based on the *outcome of the task* performed by the agent or the *behaviour* of that person. The exploitation of either type of contract depends on the

availability of information that principal possesses about what the agent is exactly doing. The first situation is when the principal has enough information about what agent has done. In this case, the usage of behaviour based contracts is the most efficient alternative to avoid imposing an unnecessary risk on the agent by using outcome-based contracts. The second situation is when the principal does not have any information about how the agent is performing the delegated task. It means that the agent can avoid performing in agreed way exhibiting self-serving behaviour. The principal can deal with this issue in two possible ways. The first way is to invest in the information technology. It brings more transparency of activities performed by the agent. As a result, the principal can better control if the agent is behaving appropriately. The second option is to make the contract with the agent based on the outcome of the task performed. Outcome-based contract aligns the interests of two sides because both sides desire the accomplishment of the task in a best possible way. This is because the rewards for both sides depend on same actions. In this situation, the agent is behaving in the interest of principal even though his behaviour cannot be evaluated by the principal. The main disadvantage of the outcome-based contract is transferring risk to the agent which is undesirable since there might be other external factors affecting the outcome of the work performed. The choice of the contract type is reliant on the trade-off between the cost of implementing information systems and cost of passing on the risk to the agent (Eisenhardt 1989).

3.6 SOCIAL POWER BASES

The phenomenon of power is happening in the dyadic relationship between two parties. On one side, there is the person who is exerting power (O), whereas, on the other side, there is the person on whom power is being exerted (P). French et al. (1959) evaluated this phenomenon from P perspective and defined five common bases of power which are reward power, coercive power, legitimate power, referent power and expert power.

Reward power: This source of power is stemming from the perception of P that O can provide rewards for conforming to the expectations (French et al. 1959). The reward can be in the form of monetary and non-monetary compensation (Koslowsky & Stashevsky 2008). Successful usage of rewards increases the influence of reward power for following attempts to use it. On the other hand, intentions to use the rewards outside the boundaries of reward power will decrease the power. For example, to promise rewards for employees to accomplish an unachievable task will affect the perception of P negatively regarding the ability of O to reward employees. Hence, it will reduce the reward power of O over P (French et al. 1959).

Coercive power: This source of power is based on the perception of P that O will punish him for not conforming to the expectations (French et al. 1959).

Legitimate power: It refers to the internalized beliefs of P that O has the right legitimacy to exert power on him and he has a compulsion to accept this attempt. There are several bases of legitimate power. One of these bases is culture. The virtues of some cultures such as age, intelligence, and physical characteristics give O a right to influence the behaviour of P which is accepted by P. Social structure is another base of legitimate power which means that P sitting lower in the hierarchy of an organization will accept the legitimate authority of O sitting higher in the hierarchy. The third base of legitimate power is the availability of legitimizing agent who gives a right to O

to prescribe the behaviour of P (French et al. 1959). Raven (2008) divided legitimate power into four following categories: legitimacy of equity, legitimacy of reciprocity, legitimacy of position and legitimacy of dependence.

- *Legitimacy of equity* is based on compensation for the sufferance or hard work by P.

- *Legitimacy of reciprocity* appears when O does something positive for P.

- *Legitimacy of position appears when O exert power on P because of higher position or status.*
- *Legitimacy of dependence* is based on O's social responsibility to help when P is in need.

Referent power: This source of power stems from a feeling of P being oneness with O or wish to get that identity. The influence of this power is created and maintained if P believes and behaves as O does. It is a possibility that P does not have awareness about referent power exerted by O. This power can be either negative or positive. If O has charisma and prestige which is esteemed by P, then P will have the desire to assume the attitudes and beliefs possessed by O. On the other hand, a person might get a negative influence by a person or group who exert negative referent power on him (French et al. 1959).

Expert power: This source of power stems from the perception of P about the knowledge of O within a specific domain. P can evaluate this knowledge compared to his level of knowledge or a standard (French et al. 1959).

Another source of power defined by (Raven 1965) is *informational power* which posits that O has access to the important information about P. Raven (2008) divided bases of power into two groups of *harsh* and *soft* bases of power. Harsh power base restricts freedom of P to satisfy O's demands. This power base embraces legitimacy of equity, legitimacy of reciprocity, legitimacy of position, coercion, and reward. Conversely, soft power base provides more freedom to P to accept demands from O. This power base consists of expert power, referent power, informational power and legitimacy of dependence.

3.7   CHANGE LEADERSHIP

The two most important leadership theories are transactional and transformational leadership in leadership theories of organizational transformation (Eisenbach et al. 1999).

Transactional leadership is based on a reciprocal agreement between the leader and subordinate. In this relationship, leaders are bargaining with subordinates to motivate their behaviour. For that reason, leaders establish performance standards, guidelines, reward and punishment rules to motivate positive behaviour of employees and discourage negative behaviours. Transactional leaders are characterized with three perspectives: *contingent rewards, active management by exception* and *passive management by exception*. Under contingent rewards perspective, transactional leaders establish a reward system to stimulate employee to achieve higher performance. Active leaders control employee behaviour in an anticipated way. They make sure

that employees adhere to the predefined rules and procedures. On the other hand, passive leaders allow employees to perform their tasks and only intervene if there is any deviation from performance standards (Bass 1990). In general, transactional leadership allow leaders to achieve organizational performance objectives and defined goals but at the same time enable employees to fulfil their self-interest and reduce anxiety at work (McCleskey 2014).

On the other hand, transformational leaders increase awareness among subordinates about the common goal of the group and stimulate their subordinates to achieve that goal by exceeding their self-interest for the good of the group. Transformational leaders can achieve this through different ways: *idealized influence* or *charisma, inspiration, intellectual stimulation* and *individual consideration.* Charisma is the most important characteristic of a transformational leader. Charismatic leaders have strong influence and power. Subordinates want identification with this kind of leaders and have high confidence in them. Followers believe that this kind of leaders are ideal with their exclusive values and principles. Therefore, charismatic leaders can persuade their followers that they can achieve remarkable results with extra effort. Inspirational leaders have a great vision of future, and they can communicate, create and inspire this vision in employees. They inspire their followers to achieve the common goal of the group by instilling shared commitment, enthusiasm and optimism to them. Intellectually stimulating leaders are challenging existing old assumptions. They urge their employees to think out of the box and find logical solutions to problems. Leaders with individual consideration evaluate the differences between employees and provide specific support according to personal development need of each employee (Bass 1990).

Leaders can exhibit both transformational and transactional leadership to some extent. These two leadership styles are not mutually exclusive, and the combination of them create effective leadership (Aarons 2006).

Transformational leaders are considered more satisfying and their employees perform better compared to transactional leaders. Moreover, employees with transformational leaders are more inclined to like performance assessment system of the company. Communications with employees through mass media channels is more influential if it is supported with face to face discussion with transformational leaders (Bass 1990).

Transactional leadership is more suitable in situations when the desire is to maintain status-quo, achieving employee compliance and goals mainly through motivating employees with incentives. However, transformational leadership is closely associated with organizational change (Eisenbach et al. 1999). Organizations which emphasize on adaption rather than efficiency are more interested in transformational leadership. Transformational leaders have ability to recognize the need for change and create a vision which is appealing for employees. After that, with their characteristics such as intellectual stimulation, charisma and individual focus, they can change beliefs and attitudes of their subordinates (Bass 1990). Transformational leaders with their charismatic power can indicate the future state of the change as attractive to employees and motivate them towards to that vision (Eisenbach et al. 1999). Charismatic leaders can create the sense of burning platform, convince people to do things in a new way and in this way, survive. Since people believe to charismatic leaders, they do not approach the change with scepticism and believe that the organization is really in economic, technological or political trouble (Schein 1999). Also, through intellectual stimulation, transformational leaders urge their followers to change their old way of

thinking and move in new dimensions by giving them challenging tasks. In the change process, transformational leaders with their individual consideration trait can support and guide each change receiver to facilitate their acceptance of the change (Eisenbach et al. 1999). This is in line with Rogers (2003) who emphasize that interpersonal communication with change receivers is important than mass media communication channels in overcoming change resistance.

3.8   STAR MODEL

The Star model is a framework by (Kates & Galbraith 2007) for decision making about organization design. It shows that deployment of every strategy has a strong linkage between different elements adapted like *organization design criteria, structure, processes, rewards* and *people* (see fig 5.1). These elements should be aligned together to support the strategy. Better alignment of these elements reinforces the behaviors which help an organization to achieve its goal in a better way.

The strategy defines the direction of an organization to the success by embracing its vision and mission. Its main objective is to achieve competitive advantage through the help of external factors such as government regulations and internal organizational capabilities. *Organizational capabilities* are defined by the strategy of the organization and its requirements to deploy the strategy. They are series of processes, human skills and abilities which differentiate the organization from its competitors and help the organization to implement its strategy. The term of organizational capabilities is interchangeably used with organization design criteria. The structure of the organization sets the communication channels, reporting lines and formal distribution of power and authority within the organization. The hierarchical structure of the organization can be based on the functions, products, geographies or customers. The structure should be right to align other elements of the framework to support the strategy. The *processes* of an organization are a group of activities which transmit information vertically and horizontally within the organization. They can be work processes such as the development of new product, fulfillment of order as well as management processes such as standards development and conflict resolution. The design of the processes has a huge influence on how the units of the organization work together vertically and laterally. *Rewards* in an organization are used to align the interest of the individuals with the interest of the organization. It motivates the employees to perform value-adding activities for the company through recognition, promotions, benefits, bonuses, and salary. Reward systems should be aligned with processes and structure to be able to affect the strategy of the organization. *People* practices are policies for trainings, selection, staffing to develop the organizational capabilities to support the strategy. People in all levels of the organization should have enough competence to make decisions and participate in team works (Kates & Galbraith 2007).

Managers can influence employee *behavior* by controlling the elements of star model. Performance and culture in an organization can also be influenced through behavior (ibid).
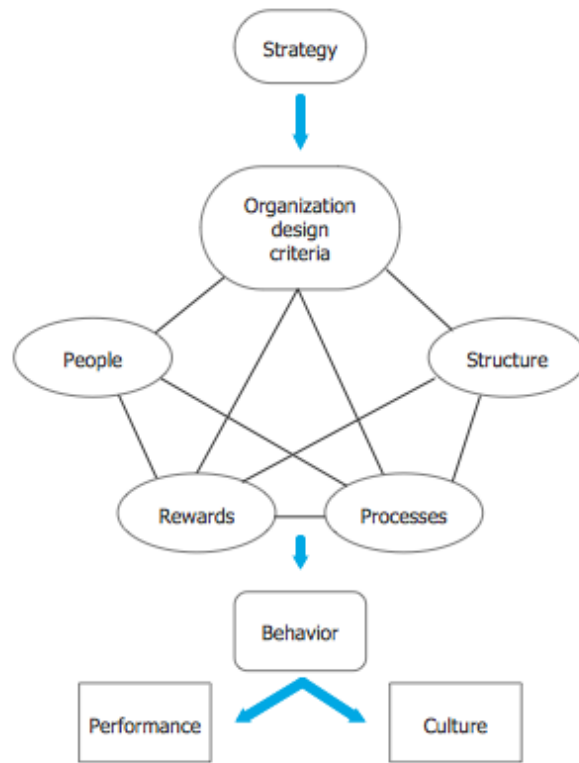
**Figure 3.1: Star model
(Kates & Galbraith 2007)**

3.9 INNOVATION DECISION PROCESS

The decision of accepting an innovation is not an instantaneous act. It rather involves a process which constitutes a series of actions over time. Individuals need to deal with uncertainties due to newness of innovation. Therefore, innovation decision process has stages such acquiring knowledge about innovation, making attitude towards innovation, making a decision of adoption or rejection, actual usage of the innovation and confirmation stage(Rogers 2003). (See figure 3.2). Each of these stages will be detailed below:

Knowledge stage: This is the stage which innovation decision process begins. This stage starts when an individual gets first information about the existence of an innovation and how it works. Early knowers of an innovation usually have more education, more social participation, more contact with change agent and more exposure to interpersonal and mass media channels. Individuals should have enough knowledge about innovation to be persuaded about it. Even though individuals might know about an innovation, they might not adopt it. The innovation has to be relevant to beliefs and attitudes of individuals to adopt it (Rogers 2003). There are three types of knowledge about innovation which are awareness-knowledge, how-to knowledge and principles-knowledge (ibid.):

- *Awareness knowledge* answers the question of "What is the innovation?". With this type of knowledge, individual acquire information about the existence of the innovation. It also brings motivation to search for other two types of knowledge which are mainly occurring at knowledge stage, even though it can happen in persuasion and decision stages.

- *How-to knowledge* is about "How does innovation work?" question and gives information about how to use an innovation correctly. Insufficient how-to knowledge in trial and adoption phases of innovation can lead to discontinuance after some time.

- *Principles-knowledge* is represented by "Why does innovation work?" question. It is about working principles of an innovation and having this type of knowledge helps individual to judge the effectiveness of that innovation.

Persuasion stage: In this stage, individual forms positive or negative attitude towards the innovation by actively seeking more information about what are the advantages and disadvantages of the innovation. This stage involves future thinking and individual evaluate what can happen if the innovation is adopted. Since innovations involve uncertainty the individual is usually not sure about the functioning of it. Therefore, they seek social support from their peers and innovation evaluation information to reduce uncertainty about the innovation. The outcome of the persuasion stage, which is a positive or negative attitude towards innovation, defines individual's decision to adopt or reject the innovation. However, not always attitudes and behaviors are alike. Thus, the formation of positive or negative attitude does not always result in adoption or rejection respectively (ibid).

There are mainly five attributes of innovation which are evaluated by individuals when they are exposed to innovation: relative advantage, compatibility, complexity, trialability, and observability (Rogers 2003).

- *Relative advantage* is the degree to which an individual perceives that the innovation is better than previous one. Individuals can perceive relative advantage in terms of satisfaction, convenience, economic advantage, social prestige etc.

- *Compatibility* is the degree to which the innovation fits beliefs, values, experience and felt needs of the individual. If the innovation is incompatible, there is a need for adoption of new value system before the adoption of the innovation.

- *Complexity* is the degree to which an individual perceives that understanding and using the innovation is difficult. Complex innovations require new understandings and improvement of existing skills.

- *Trialability* is the degree to which the innovation can be tried by an individual on a limited basis. For individuals, trialability of innovation is important to understand the innovation and check how it works.

- *Observability* is the degree to which the results of the innovation is evident to others. Visibility of the results reduce uncertainty about the innovation and stimulate idea exchange between peers.

Rogers (2003) cites one more attribute that is discussed by Tornatzky & Klein (1982) which is *image*. Image refers to the degree to which the adoption of innovation can increase the status of an individual in the social system.

Decision stage: This stage is about individual's decision to adopt or reject the innovation. As mentioned above, innovation is involving uncertainty. One way of dealing with that is to try innovation partially. Trialability of innovation allows individual to see the advantages of the innovation by practicing it. Innovations which are easy to try in partial bases are adopted more quickly. For some individuals, the trial of innovation by colleagues can replace the trial of innovation by themselves. In this sense, the trial of innovations by opinion leaders have more influence on individuals. Therefore, change agents strive for the demonstration of innovation by opinion leaders (Rogers 2003).

In the innovation decision process, each stage is potential rejection point. For example, an individual can reject innovation after gaining initial awareness knowledge. If an individual never considers using innovation, it is called passive rejection. In some cases, individual might reject innovation after initial decision of adoption and trial which is called active rejection. There is general assumption that the first three stages of the innovation decision process take place in sequence: knowledge, persuasion and decision. However, sometimes there can be swap between persuasion and decision phases (ibid).

There are three types of innovation decision which are optional innovation decision, collective innovation decision and authority innovation decision (ibid).

- *Optional innovation decision* refers to the individual's acceptance or rejection of an innovation independently without the influence of other members of the social system. Even though the decision is independent, it can still be affected by norms of the social system.

- *Collective innovation decision* refers to the acceptance or rejection of innovation decision in consensus by members of a social system. In this case, the decision of the group should be obeyed by everyone. To adopt an innovation due to group pressure is undesirable in individualistic cultures but more acceptable in collectivistic cultures where the goals of the group come before the individual goal. It shows that the sequence of stages in innovation decision process is culture related (ibid).

- *Authority innovation decision* refers to the acceptance or rejection of innovation decision by few members of the system who influence the group. This influence might be because of power, status or technical expertise. In comparison to the collective innovation decision, an individual in the system does not have a say in the decision.

Implementation stage: This stage directly follows decision stage once an individual starts to use the innovation. The individual continues to search for innovation also in this stage regarding issues such as how to obtain innovation, how to use it, what can be operational problems in the usage of the innovation. The role of the change agent is to provide technical support when individual start to use the innovation. This stage can continue a long period. It ends when the innovation turns to be a regular part of the individual's current operations. Previously it was assumed that adoption of innovation by adopter looks much like adoption by others. However, in many cases, innovation is changed or modified by individual during its innovation or adoption process. This phenomenon is called reinvention. A higher degree of reinvention increases the rate of adoption since it corresponds higher variety of adopter conditions. Reinvention makes innovation more sustainable. This is because reinvention enable the innovation to fit local or changing situations of different adopters better. So, it matches better for current needs of adopters and becomes more responsive to the future wants and needs (ibid).

Confirmation stage: For many individuals, the end of the implementation stage, when the separate identity of new idea disappears, is considered the termination of innovation decision process. However, for some individuals, there is confirmation stage. In this stage, individual either reinforce the decision made or reverse the decision if more conflicting information is acquired. In implementation stage, dissonance created by changing the prior decision can be dissolved by making later adoption or discontinuance. Later adoption is to adopt an innovation after having previously rejected it. On the other hand, discontinuance is to reject an innovation after adopting it some time ago. There are two types of discontinuance, namely replacement discontinuance and disenchantment discontinuance. Replacement discontinuance occurs when a new idea replaces the idea that had been adopted as innovation. The replacement of postal mails with e-mails is an example. Disenchantment discontinuance takes place when an individual becomes dissatisfied with the performance of innovation as it does not bring perceived relative advantage. Later adopters exhibit more disenchantment discontinuance compared to the earlier adopters due to several reasons such as less education, less change agent contact and lower socioeconomic status. In general, individuals discontinue innovation when it is not sufficiently compatible with beliefs and previous experience. It is usually difficult for an individual to change the original decision of adoption or rejection. Therefore, to avoid dissonance, individuals seek information which supports the original decision (ibid).

Rogers (2003) mentions that during the innovation decision process, change initiators can communicate with change receivers through mass media and interpersonal communication channels.

- *Mass media* communication channels are used to deliver messages from one or few individuals to a big group of people. Communication through mass media channels involves mass medium such as radio, TV, newspaper, etc. It is rapid and efficient means of communication which is especially beneficial to create awareness-knowledge for individuals. Mass media channels are also effective in changing weakly held attitudes.

- *Interpersonal* communication channels refer to means of face-to-face communication between two or more individuals. Through interpersonal communication channels, one

individual can more easily acquire knowledge from peers about the innovation. Therefore, interpersonal communication channels are effective in handling resistance to innovation by individuals with strongly held attitudes.

COMMUNICATION CHANNELS

1. Knowledge → 2. Persuasion → 3. Decision → 4. Implementation → 5. Confirmation
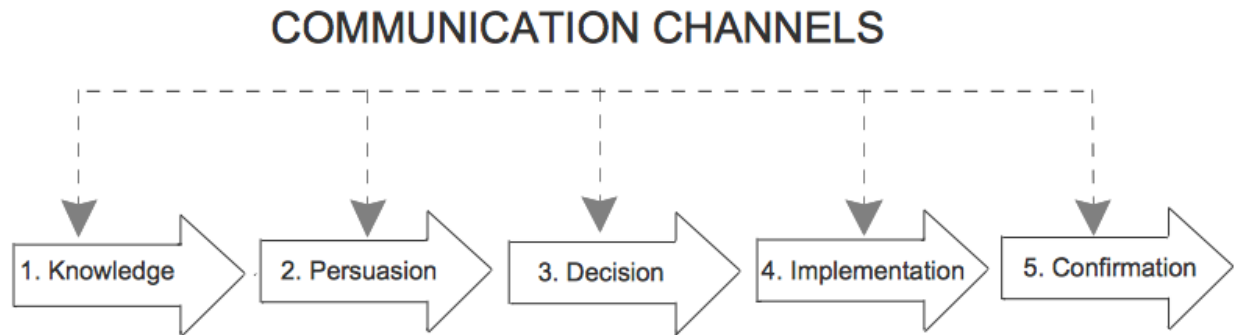
Figure 3.2: Innovation decision process
(Rogers 2003)

3.10 TECHNOLOGY ADOPTION CURVE

Rogers (2003) classifies individuals into five adopter categories of ideal types based on their innovativeness (see figure 3.3). These categories are *innovators, early adopters, early majority, late majority,* and *laggards.* Innovativeness is the degree to which an individual is earlier in adopting new ideas compared to others. Innovativeness is the main objective of any change agent. These five categories are detailed below:

Innovators: The main characteristic of innovators is being venturesome. This type of individuals is desirous for risky and daring things. They act as gatekeepers of a system and play an important role to bring innovation from outside to a system. One of the traits that should be possessed by innovators is the ability to control financial resources to help in absorbing losses from unsuccessful innovation. Another desired ability is to have technical knowledge to cope with the uncertainty of innovation. The desire of innovators for newness pushes them out of the local network of peers. However, regardless of geographic distance, innovators can establish a good friendship and common communication patterns with each other (Rogers 2003).

Early adopters: Early adopters are in more contact with the members of the social system compared to innovators. In this sense, they can be referred more as localities than cosmopolites. They mostly take opinion leadership role and are highly respected by their peers. Other members of the system come to them for advice and to get knowledge about innovation. Since early adopters are not much different from an average individual in a system, they are considered as a role model who reduces the uncertainty of new idea by adopting it. After that, they share their opinions about innovation with peers through interpersonal networks. In this way, early adopters stimulate majority of people to adopt the new idea. They are aware that to maintain their respect among

peers and continue to be central in communication, they need to make prudent innovation decision (ibid).

Early majority: Individuals in this category have good communication with other members of the system. However, they do not hold a leadership position. Their position between earlier adopters and later adopters makes them important link in the interpersonal network. They deliberately wait some time before adopting the new idea. Their time for adopting new idea is longer than innovators and early adopters. They hold the position of neither too early nor too late to adopt the innovation (ibid).

Late majority: Individuals in this category adopt innovation just after average person in the social system. Late majority individuals are sceptical and cautious about innovation. Therefore, they wait for most of the people to adopt the innovation before they adopt it. They need to be convinced to adopt after the uncertainty of innovation is removed. One of the main reasons to adopt innovation by late majority individuals is an economic necessity. Peer pressure is also very crucial to motivate them to adopt the new idea (ibid).

Laggards: Individuals in this group adopt the innovation last in a social system. They compare the innovation with the old system, and they are usually suspicious of the new idea and change agent. Laggards are isolated from other members of the social system and communicate mainly with each-other. Due to their limited resources, before they adopt an innovation, they want to be sure that the innovation will not fail. They resist to the new idea and stick to traditional values (ibid).
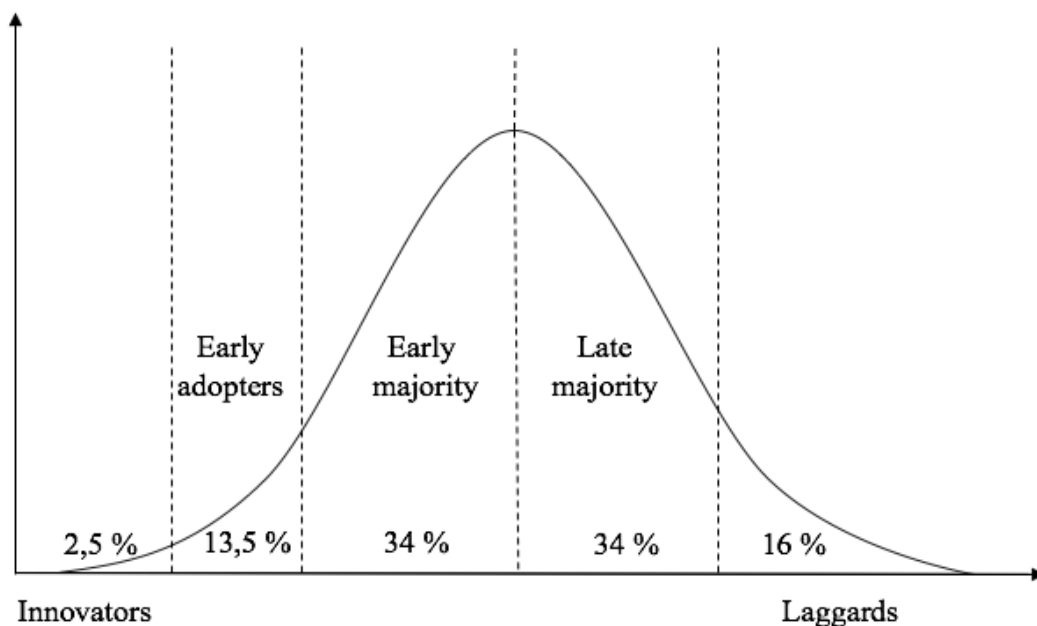
Figure 3.3: Innovation adoption curve
(Rogers 2003)

4 METHODOLOGY

This chapter presents the methodology of the thesis. It describes general research strategy and design, data collection and analysis approach. At the end of the chapter, quality and ethical considerations of the thesis are detailed.

4.1 RESEARCH DESIGN AND STRATEGY

Bryman & Bell (2015) emphasize that a case can be a single organization, a single location, a person or a single event. In our study, we are investigating a single organization which is group purchasing function of SKF with different locations named as seven hubs of GPO. Therefore, this study constitutes comparative design characteristics as well. Bryman & Bell (2015) explain that comparative research design entails logic of comparison between two or more situations. It is emphasized that a social phenomenon can be understood better if it is compared with other cases. This type of research can be in the form of cross-cultural and cross-national research. Bryman & Bell (2015) states that in comparative research, specific issue is investigated in two or more countries to compare different socio-cultural settings. The aim is to find out similarities and differences to understand reality in different national contexts better. Considering that this thesis investigates seven hubs of purchasing, by taking each hub as an individual case, we can conclude that this study also has comparative nature.

Case study research design is mainly associated with qualitative research strategy (Rudestam & Newton 2007). According to Bryman & Bell (2015), qualitative research offers rich and deep data compared to quantitative study which focuses on robust and unambiguous data. Qualitative research entails full of details which provide explanation about the setting in which people behave. This is important because investigating people's behaviour without their social context makes little sense. Qualitative methods such as participant observation, unstructured interviewing and semi-structured interviewing are often used in case studies since they allow detailed examination of a case. Bryman & Bell (2015) further emphasize that qualitative research is more suitable for social sciences which is about people and their social world compared to natural sciences. In natural science research, the object of analysis is not capable of attributing meaning to its environment. However, in social sciences, people who are research subjects can evaluate their environment. It means that qualitative study allows researchers to see the situation through the eyes of people being studied. This thesis aims to investigate the change initiative from people's perspective. Since the we investigated the expectation and reaction of employees at purchasing unit towards new change initiative, they needed comprehensive data to develop their understandings about employees' opinions. Consequently, qualitative approach was chosen as a research strategy to collect ideas and thoughts of employees which is difficult to capture through quantitative strategy.

Another characteristic of qualitative research is that, it emphasizes on the understanding of events or activities related to research over time. Langley (2009) refers it as process theory. This can be realized by engaging in a social setting for a long time to observe how events develop over time. However, it can also be achieved through unstructured or semi-structured interviewing by asking interviewees to talk about the process leading to the situation which is currently investigated. In this thesis, to understand the reaction of employees to new change initiative better, we asked many questions about the change process such us when and how did employees first heard about the new

system, if the training sessions were sufficient for them, etc. In this regard, qualitative methods helped us to acquire detailed answers to this type of questions.

The selection of qualitative research strategy for a case study predominantly emphasizes on inductive approach. In inductive approach, the relationship between research and theory is based on the generation of theory rather than testing it (Bryman & Bell 2015). This thesis has characteristics of inductive approach since conclusions are made from the collected data and based on that the theory was generated. In addition to that, this thesis also has deductive approach to test the theory which was constructed using inductive approach through analysis framework detailed in chapter 4, Analytical framework. Therefore, this thesis satisfies abductive approach of conducting research that is an iterative validation of theories through different sources (ibid).

4.2 RESEARCH PROCEDURE

General discussion with SKF GPO was the starting point of this thesis to understand what is the current situation and what are the expectations of management. In this phase, we learned about SAP Ariba, organization structure and organizational change process at GPO. This resulted in the formulation of scope, problem analysis, aim, research area, research aspect and research questions of the thesis. After that, the data collection methods were identified. These were literature review and organizational documents as secondary data and qualitative interviews as primary data (Bryman & Bell 2015). The literature review has been conducted throughout the whole research process. Selection of semi-structured interviews as empirical data collection method led us to learn to conduct interviews in best possible way, including anonymity issues, to get the desired information. After that, empirical data collection was conducted through semi-structured interviews with employees of GPO from seven hubs of purchasing. Subsequently, interviews were coded and analysed based on analysis framework which we made with the help of literature. The theoretical framework of the thesis was mainly generated after empirical data collection. Following that, interesting points from data was discussed in consideration with literature. The methodology of conducting interviews and analysis is further detailed in subsequent sections.

4.3 INTERVIEWS

Empirical data was collected through semi-structured interviews with employees of GPO. The interview process involved two phases. In the first phase, we conducted pilot interviews with seven employees. As a result, we could improve the interview guide based on feedback by interviewees. Moreover, we gained experience in conducting interviews. Semi-structured interviews were chosen as empirical data collection method since the main purpose was to get comprehensive information about opinions of employees about new change initiative. According to Adams (2016), semi-structured interview technique allows interviewees to talk about the interesting points and expand their answers. It also allows the interviewer guiding the participant to answer the questions of interest.

To get opinions of change initiators and change receivers, interviews were conducted with both group members. All the change initiators were interviewed, whereas sampling was used for interviewing change receivers due to the large size of this employee group. Sampling was made based on choosing employees from all the seven hubs to investigate the differences between them

regarding their reaction to the change initiative. Stratified sampling technique was used to make sample where the target population was divided into different categories of interest, and the potential interviewees were selected from each category (Bryman & Bell 2015). Initially, the sample was chosen by taking into consideration eight different functional job roles, five business areas, and seven purchasing hubs. It was made sure that there is at least one employee from abovementioned categories. Another selection criterion was project role meaning that managers, non-line managers, and key users should be selected from each hub. One of the preconditions for selecting interviewees was that they should be trained in SAP Ariba. We got the list of all employees who had been trained in SAP Ariba. In Microsoft excel, after filtering all sections based on each hub, business area, functional role and project role, interviewees were chosen from available employees. As a result, 78 interviews were performed with employees of GPO. Since one of us is an SKF employee, we knew most of the employees at GPO. Therefore, the sample was chosen including employees whom we thought that would likely accept the interview invitation.

Selected employees were invited to individual interviews through e-mail. The preferred interview technique was face-to-face interview because it provides possibility to observe feelings and attentiveness of interviewees (Bryman & Bell 2015). Interviews lasted approximately 60 minutes. Most of interviews were conducted with participation of both researchers. The role of the one interviewer was asking questions, whereas the other one took notes. Interviews were recorded with the permission of interviewees. All interviews were conducted in English.

The interviews produced a substantial amount of data. Due to time constraints, 26 interviews were transcripted for deeper analysis and remaining interviews were kept as reference data which affect the analysis, discussion, and conclusion of the thesis. The inclusion criteria to select change receivers out of all interviews was to include one user line manager, one user non-line manager and one key user from each purchasing hub. This made number of interviews 21. We selected the interviewees whom we thought that provided open and honest answers. Other 5 interviewees were selected from change initiators. The inclusion criteria for the change initiators was their strategic importance for the project. In this way, CPO, the director of support function of GPO, project manager of deployment team, and two business area directors with highest number of team members were selected. Bryman & Bell (2015) emphasize that sampling bias arise when some members of the population have less chance of selection for the sample due to reasons such as personal judgements, prospective participants' availability or other implicit selection criteria. Since the selection of participants was affected by our personal judgements regarding how cooperative prospective participants will be and to what extent they were open to answering the questions, this sampling can be seemed as biased.

4.4 METHOD OF ANALYSIS

The analysis was conducted based on the data collected from organizational documents and semi-structured interviews. Semi-structured interviews produced a large amount of qualitative data in the form of opinions of employees about the IT system. Therefore, there was a need for a structured way to manage these opinions. An analytical framework was created based on innovation decision, innovation adoption, and star models. Firstly, the empirical context of GPO detailed in the chapter of empirical context was analysed in relation to the elements of star model which are organization design criteria, structure, processes, people and rewards. As mentioned above, star

model has implications for behaviour and performance. Having all elements of star model in place at GPO, we focused on analysing the transition stage of the change from people's perspective to see employees' performance and behaviour at GPO towards the change. The results of the analysis based on technology adoption curve was considered as the behaviour of employees (Rogers 2003). Similarly, the results of the analysis based on innovation decision process was considered as the performance of the employees (ibid).

Responses to interviews questions were analysed, and individuals were fit to one of the following innovation decision categories mentioned above: laggards, late majority, early majority, early adopters and innovators. After that, individuals were fit to one of the following stages of the innovation decision process: knowledge stage, persuasion stage, decision stage, implementation stage and confirmations stage.

The evaluation of individuals in relation to which stage of the innovation decision process they belong was made based on following factors: *types of innovation knowledge* possessed by individuals which are awareness knowledge, how-to knowledge and principals knowledge; *perceived attributes of innovation which are* relative advantage, compatibility, complexity, observability and trialability*; types of innovation decision* which are optional, collective and authority; and *nature of communication channels* used in different stages of innovation decision process which are mass media and interpersonal communication channels.

All above-mentioned factors were rated as *low, moderate* and *high* according to each interviewee's level of exposure to these factors. This evaluation was made based on our observation regarding interviewee's reaction like facial expressions, gestures, seriousness and power in the argument which is in line with Bryman & Bell (2015).

4.5 VALIDITY AND RELIABILITY

Validity and reliability are the most prominent criteria for evaluating the quality of research. Validity indicates if the research is observing, identifying and measuring as it supposed to do so. Reliability shows whether the research is repeatable, thus able to show consistent results (Bryman & Bell 2015). LeCompte & Goetz (1982) categorize each of reliability and validity into two different groups which respectively are internal reliability, external reliability, internal validity and external validity.

External reliability is concerned if the research can be replicated. Achieving external reliability is very difficult in qualitative research since it is complex to preserve the social setting within which the original research has been conducted to make it replicable (LeCompte & Goetz 1982). Another factor is that, in qualitative research, it is difficult to replicate since the results are dependent very much on the interpretations of researchers (Bryman & Bell 2015). This thesis focused on current implementation of a change initiative, and interviewees were asked to reflect on current situation rather than future. After some time, even if the research is conducted with the same interviewees, the findings might not be replicable since there is a possibility that social context will change and people will have different reactions towards this change initiative. Furthermore, in future studies, researchers might make different interpretations even if they obtain similar data. *Internal reliabilty* refers if there is the availabilty of more than one researcher so that they can agree about what they

observe. As mentioned above, data collection was conducted with more than one person. The recordings were transcripted and mattched with notes to identify the unclear parts. Moreover, after each interview, we made a short discussion to evaluate key findings and share our reflections. The interpretation and analysis of data were performed by two persons to make sure the high quality of the thesis.

Internal validity imply if the observations of the researchers matches the theory they have developed and to what extent the the findings are believeable. According to LeCompte & Goetz (1982), internal validity should be one of the strengths of qualitative research. To improve the validity of this thesis triangulation was performed with more than one source of data which were interviews and literature review. Triangulation increase the accuracy of judgement and bring about confidence in findings (Bryman & Bell 2015). The literature review was conducted continuously to ensure the match between theory development and findings from data. Moreover, we often met and made discussions with our supervisors at SKF and Chalmers University of Technology to get their suggestions and opinions to make sure that the research is going in right direction. *External validity* refers to the generalizability of the research. It means that if the research can be generalized across other social settings. LeCompte & Goetz (2015) argues that external validity is difficult to achieve for qualitative researches since this type of research tends to entail case studies as research design. Bryman & Bell (2015) explain that case studies are difficult to generalize to other cases since case study research design aims detailed investigation of one specific case. In this sense, external validity can be problematic for this thesis. However, even though case studies focus on the uniqueness of a situation they can entail some degree of theoretical generalizability. Like so, this thesis can be theoretically generalizable to other cases.

4.6 ETHICAL CONSIDERATIONS

Bryman & Bell (2015) cite 4 categories of ethical principles by Diener & Crandall (1978): *harm to participants, lack of informed consent, invasion of privacy* and *involvement of deception.* This thesis ensured its focus on these principles of ethical consideration.

Harm can be in the form of emotional harm, physical harm, harm to career prospects of individuals, harm to development and self-esteem of individuals (Bryman & Bell, 2015). During the thesis process, it was ensured that neither individuals nor organization participating in the research are harmed by any means. Especially in qualitative research there can be difficulties regarding confidentiality and anonymity. Therefore, researchers should be careful regarding not to reveal sensitive information about individuals and organization (ibid). In this thesis, identities of interviewees were kept anonymous. Accordingly, we sent anonymity agreement to interviewees, signed by top management, showing that anonymity will be secured throughout the research process. Moreover, we made sure that the interview data is not published with any information that can violate anonymity. The interviews were recorded after getting permission from the interviewees. Before the start of the research project, we signed a confidentiality agreement with the organization. In view of that, we assured that we did not disclose any sensitive information about the organization.

Informed consent implies that prospective participant of a research should be given enough information about the research to let them decide if they want to participate. It also involves the

provision of sufficient information about research process to the participants (Bryman & Bell 2015). In this thesis, all the interviewees were given clear and elaborated detailing about the research objectives and outcomes to avoid the consensus due to lack of informed consent. When employees were invited to the interview with e-mail, we also attached a file mentioning about the research objectives, which research techniques are used and detailed information about research procedure. Besides, these details were further explained at the beginning of each interview.

Another ethical concern that should be dealt with is invasion of privacy which is closely related to informed consent. The reason of this closeness is that informed consent provides understanding that privacy of research participants can be surrendered to some extent (Bryman & Bell 2015). We ensured not get into private or personal areas of interviewees. At the beginning of each interview, interviewees were informed that they could ignore answering any questions which were uncomfortable for them. Interviewees might want to avoid questions which they think transgress their privacy or they find sensitive regardless of the anonymity agreement.

Deception occurs when researchers provide incorrect or misleading information to make participants behave more naturally and acquire desired data (Bryman & Bell 2015). No activities in the thesis were carried in deception, and all the interviewees were given an idea about the real needs and outcomes of this thesis.

5   ANALYSIS

In this chapter, we present the analysis of our data. As mentioned in the previous chapter, we designed analytical framework using star model by Kates & Galbraith (2007), innovation-decision process and technology adoption curve by Rogers (2003). First, we analysed the elements of star model in relation to GPO. Later, we analysed the transition state of the change using the attributes identified in the innovation-decision process and technology adoption curve. In addition to the data collected from interviews, our critical reading about this change process and its milestones from internal documents of GPO supported the information used to construct this section. These articles were designed by GPO to communicate with employees. They contain organization vision & mission statements, information about change process & milestones, training material to deploy SAP Ariba, and continuous improvement plan of GPO for the next three years. To respect the sensitivity of these documents, we decided to present our understanding using the designed analytical framework.

5.1   ORGANIZATION DESIGN CRITERIA

From the document about change process & milestones of GPO, it was evident that GPO was established less than three years ago. GPO being a support organization of SKF, it has been designed in alignment with its internal customers which are manufacturing locations and traded products of SKF. These internal customers are located globally. Such alignment can be viewed as aligning a part of the organization with the strategy of the whole organization and communication of this strategy across all layers. This is an important factor in any organizational change process (Done et al. 2010). To achieve this strategic alignment with internal customers, all local purchasing offices were organised as a centralised organization in the recent change process. However, the

purchase responsible at the local sites has a dotted line, that is with a limited power of authority, to the organization of the respective local sites. Such dotted line reporting was organized to perform the activities of local purchasing with support and commitment of internal customers in those locations.

5.2 STRUCTURE

GPO consists of two functional areas which are operational and strategic. Operational purchasing focuses on supporting day to day business needs of internal customers. On the other hand, strategic purchasing focuses on supporting long-term business needs of internal customers. These two functional areas share information about the needs of their internal customers. To check the awareness level of employees regarding their functional areas, we framed a closed question to ask functional area of employees. There was a great difference between responses of employees and their actual functional areas (see table 5.1). Such lack of clarity regarding functional area can lead to the *problem of power* across the organization (Nadler & Tushman 1997). The middle managers responsible for the respective functional areas are reporting directly to the same director of each business area at GPO. These middle managers are expected to resolve the challenges arising due to the difference of opinion at respective lateral levels of the functional areas. Though these managers were interviewed, authors did not consider them for the detailed analysis of this research.

Functional Area	Responses of interviewees (%)	Actual (%)
Strategic Purchasing	26,8	52
Operational Purchasing	28,6	48
Both	44,6	

Table 5.1: Responses of interviewees about their functional area

In addition to the business areas mentioned above, there is a support function within GPO. The prime responsibility of this organization is to frame the work procedures, improve employee competency and transform GPO to suit SKF needs. At GPO, this function has a responsibility towards all business areas. Director of this support organization reports to the CPO to whom all other business area directors report. Such reporting structure between the director of the support function and CPO highlights the importance of transformation at GPO. Therefore, GPO at SKF is structured as a matrix organization to serve the local manufacturing sites of SKF.

5.3 PROCESSES

One of the initiative by support function of GPO is to create purchasing processes in the new organizational structure. They have created two main purchasing processes named *sourcing* and *strategic sourcing*. The former process focuses on utilizing the existing suppliers of GPO to meet the business needs. The latter focuses on bringing new suppliers who are capable to meet the business needs. The objective of *sourcing* is to meet the short-term and the objective of *strategic sourcing* is to meet the long-term business needs of internal customers. This scenario can be

exemplified as short-term goals and long-term goals of a change (Done et al. 2010). These processes integrate above-mentioned two functional areas of GPO. IT system SAP Ariba is mainly designed to perform purchasing activities using these two purchasing processes. To know the view of employees about the same, we asked an open question, *what do you use SAP Ariba for?* for which employees mentioned about activities performed using these processes.

5.4   PEOPLE & REWARDS

Support function of GPO had performed a competency mapping of employees at GPO before the implementation of the change. This is the evaluation of the current state of a change process which has an impact on the whole change process (Nadler & Tushman 1997). In addition, the support function also evaluated the job roles in the organization before the change initiative and evaluated them with the external market. These are viewed as rewards for employees who are exposed to a change to make them dislike the current state of the organization (Schein 1999). Also, evaluation of employee competencies and job roles create the *sense of urgency* to get aligned with the market (Kotter 2007). We confirm this from the comments of interviewees such as "*we are not updated when compared to the other companies, we need to change our work practices*" and so forth.

After understanding the linkage between above-mentioned elements of star model at GPO, we analysed the transition state of the change at GPO from the perspective of *people.* Additionally, the element of *reward w*as considered as a factor which influences employees while making their choices in the change processes (Schein 1999).

5.5   TRANSITION STATE OF CHANGE

We observed that the responses of interviewees could be analyzed in relation to the attributes *relative advantage, compatibility, complexity, trialability* and *observability* of *innovation decision process* by Rogers (2003). Interviewees' comments were like *old way to new way, helicopter view, no challenges but, currently not using the system, system is very good, need more time to practice, not possible to measure the success, provide clear directives, no one has told me, I hope, clash of priorities, need clarity, key user support, will discuss, support myself* and so forth. In addition to these attributes the influencers on interviewees like *optional, collective* and *authority* to decide about change are used. Moreover, the interviewees mentioned the importance of *mass media* and *communication channels* to understand the change process at GPO. We observed comments like *training were focused on sharing the importance of platform, it was clarified during the physical training, frequent mentioning about the SAP Ariba in CPO management meeting* and so forth. We referred to these comments to understand the *adoption behavior* of employees in this change processes such as *innovators, early adopters, early majority, later majority* and *laggards*. All these comments were made by the interviewees shown in Table 5.2.

Country	Project Role	Functional Role	Biological Age	Role Age	Functional Age	Organizational Age
China	User	Non-Line Manager	43-48	0-3	0-3	13-16
	Key User	Non-Line manager	33-38	0-3	N/A	7-10
	User	Line Manager	38-43	3-7	3-7	10-13
France	User	Non-Line Manager	43-48	0-3	0-3	0-3
	Key User	Non-Line manager	38-43	10-13	10-13	13-16
	User	Line Manager	53-58	3-7	7-10	28-31
Germany	User	Non-Line Manager	48-53	0-3	13-16	28-31
	Key User	Non-Line manager	23-28	0-3	3-7	3-7
	User	Line Manager	48-53	0-3	3-7	22-25
India	User	Non-Line Manager	28-33	7-10	7-10	7-10
	Key User	Non-Line manager	33-38	0-3	7-10	7-10
	User	Line Manager	33-38	3-7	3-7	3-7
Italy	User	Non-Line Manager	48-53	7-10	3-7	22-25
	Key User	Non-Line manager	43-48	0-3	3-7	25-28
	User	Line Manager	53-58	0-3	3-7	25-28
Sweden	User	Non-Line Manager	53-58	0-3	0-3	7-10
	Key User	Non-Line manager	28-33	0-3	0-3	13-16
	User	Line Manager	38-43	0-3	0-3	0-3
USA	User	Non-Line Manager	28-33	0-3	0-3	0-3
	Key User	Non-Line manager	48-53	0-3	N/A	3-7
	User	Line Manager	28-33	0-3	3-7	3-7

Table 5.2: Details about interviewees

Based on attributes mentioned above and other influencers on the reaction of employees towards the change, their position in the innovation decision process was analysed. See table 5.3 for analysis of one employee as an example. The position of employees in one of the stages of *knowledge, persuasion, decision, implementation,* and *confirmation* is referred as the performance of employees.

	Knowledge Stage	Persuasion Stage	Decision Stage	Implementation Stage	Confirmation Stage
Awareness Knowledge	High	High			
How-to Knowledge	High	High			
Principle Knowledge	High	High			
Relative Advantage	High	High			
Compatibility	Low	Moderate			
Complexity	Moderate	Moderate			
Trialability	Moderate				
Observability					
Self-Image	Low				
Optional	High	Very High			
Collective		Low			
Authority	Moderate	Moderate			
Mass Media channels	High	High			
Interpersonal channels	High				

Table 5.3: Framework to evaluate performance of interviewees in using SAP Ariba

The matrix exhibited in Table 5.3 was analysed for all interviewees using their transcripts. Accordingly, the roles of interviewees, their *performance*, and *behaviour* towards the implementation of SAP Ariba is shown below in Table 5.4.

Country	Project Role	Functional Role	Performance of employee	Behaviour of employee
China	User	Non-Line Manager	Knowledge stage	Late majority
	Key User	Non-Line manager	Persuasion stage	Early majority
	User	Line Manager	Knowledge stage	Early adopter
France	User	Non-Line Manager	Decision stage	Early majority
	Key User	Non-Line manager	Persuasion stage	Innovator
	User	Line Manager	Persuasion stage	Early adopter
Germany	User	Non-Line Manager	Persuasion stage	Late majority
	Key User	Non-Line manager	Implementation stage	Early majority
	User	Line Manager	Decision stage	Early adopter
India	User	Non-Line Manager	Persuasion stage	Late majority
	Key User	Non-Line manager	Persuasion stage	Innovator
	User	Line Manager	Decision stage	Early majority
Italy	User	Non-Line Manager	Knowledge stage	Early majority
	Key User	Non-Line manager	Implementation stage	Early majority
	User	Line Manager	Persuasion stage	Early adopter
Sweden	User	Non-Line Manager	Knowledge stage	Early majority
	Key User	Non-Line manager	Decision stage	Early majority
	User	Line Manager	Decision stage	Late majority
USA	User	Non-Line Manager	Knowledge stage	Late majority
	Key User	Non-Line manager	Persuasion stage	Late majority
	User	Line Manager	Persuasion stage	Early adopter

Table 5.4: Performance and behaviour of interviewees towards SAP Ariba

6 RESULTS

In this chapter, authors answer first research question about key expectations of change initiators and change receivers participated in this change. Also, the second research question about reasons for employees to accept or reject the change is answered.

6.1 KEY EXPECTATIONS OF EMPLOYEES FROM CHANGE

Key expectations of change initiators and change receivers were deduced using the responses of interviewees to the interview questions about their definition of SAP Ariba. These responses were supported with the responses to the questions like what are the benefits of this IT system and what are the reasons to start this change program in the organization.

6.1.1 CHANGE INITIATORS

Expectation 1: Compliance to the processes
Control the activities which are noncompliance to the purchasing processes defined. This will stop the fragmented way of managing data. Avoid making mistakes and any risks due to business

decisions made by employees while performing purchasing activities. Ensure the compliance to the purchasing rules and policies.

E1: The new system is expected to enable achieving compliance to process at GPO.

Expectation 2: Visibility
Able to see the purchasing activities performed in different sites within GPO. Use the information from visible purchasing activities to make better decisions to meet the needs of SKF. Ability to see the activities done or in progress at different sites to avoid any duplication of activities in GPO. Ability to see the history of purchasing activities performed by an employee himself and the organization, GPO. Possibility to see the needs of internal customers.

E2: The new system is expected to provide visibility of activities performed at GPO.

Expectation 3: Transparency
Perform purchasing activities including external stakeholders like suppliers and internal stakeholders like factories of SKF. This will bring more confidence to stakeholders about GPO and help to perform the purchasing activities in GPO at expected speed. Instant overview of purchasing activities performed globally within the organization. View the capability of meeting the purchasing needs of internal customers of GPO.

E3: The new system is expected to provide transparency of activities performed at GPO.

Expectation 4: Data management
Consolidating the information or data created due to the purchasing activities performed at different local sites of GPO. This will structure the data which can be shared among the local sites. One location to store all data or information about purchasing. Ease of accessing the data or information required for colleagues. Improve the quality of data or information required by different stakeholders of GPO.

E4: The new system is expected to support data management generated at GPO.

Expectation 5: Standardization
One way to do purchasing activities in all sites of GPO. A system which can facilitate compliance to purchasing processes by all employees of the organization. This can be done by using standard work templates and success stories of colleagues. Also, create a common language to communicate with stakeholders like suppliers for all employees in GPO.

E5: The new system is expected to standardize the way of working at GPO.

Expectation 6: Collaboration
One place to bring all stakeholders required to do a purchasing activity, irrespective of their geographical location. Easy coordination with colleagues to perform purchasing activities. The system integrates purchasing activities in units located globally. Integration of all stakeholders within the organization to access the required information for performing purchasing activities.

E6: The new system is expected to collaborate all employees at GPO.

Expectation 7: Knowledge sharing
One place to create a repository of purchasing activities done or in progress at different sites, which are accessible to all employees of GPO to learn. Also, to store the best practices in GPO. To access the information about purchasing activities performed by different job roles in GPO. This will help to learn about purchasing from colleagues within the organization. Learn from the activities performed by colleagues within the organization. Adapting the best practices in doing purchasing activities. One place to access organization processes and concepts.

E7: The new system is expected to enable knowledge sharing across GPO.

Expectation 8: Decision making and approvals
The system supports managing the activities which are involving internal and external stakeholders within the system. To control and monitor the status quo of purchasing activities performed by employees. To support managers to manage the employee resource occupancy to the activities. To support fast decision making and speeding up the purchasing activities. To support assigning the right responsible for a purchasing activity to avoid any challenges in performing them.

E8: The new system is expected to improve decision making and approvals required in GPO.

Expectation 9: Improve speed and efficiency
To receive quick feedbacks from external stakeholders. Avoid the duplication of activities to increase efficiency and speed of doing purchasing activities. To be able to measure the time taken for performing purchasing activities.

E9: The new system is expected to improve speed and efficiency in GPO.

Expectation 10: Information Sharing
Access to the information about activities performed by colleagues within the organization, activities performed an employee to their line managers and the job role requirements. Communication of requirements with external stakeholders (suppliers). Remove the geographical boundaries of an employee to access and share information. Ease the process of handing over information during change of responsibility.

E10: The new system is expected to share information in GPO.

All these expectations from this change with the support of an IT system are expected to improve the speed and efficiency of doing purchasing activities at GPO. In general, this system will be better than existing system in the organization and will create value addition to do things at GPO. Employees see that system getting linked to ERP system will be beneficial.

6.2 COMMUNICATION OF EXPECTATIONS

In the interview questionnaire, there were questions about reasons for this change journey, raining sessions, challenges with system and competence required by the employees while using the system. The results deduced from the responses shows that the change initiators have used all the possible communication channels defined in academics and are possible at SKF GPO. However, for the questions about challenges in communication, the responses were mixed but only identifiable number of respondents have commented that these channels can be improved. Whereas, most of the respondents were quick enough to say that their major understanding about this change journey was through the face to face training sessions in a classroom. Here, we can say that these training sessions reached the major population of GPO and made its best effort to share the information with the employees. Tables 6.1 and 6.2 present different communication channels and media used during this change process.

Communication Channels
Information meeting about the project from Purchasing Management
Training by Project Team about the system
Information from Project team
Information from line/immediate manager
Discussions with colleagues
Discussions with Key Users
Information through newsletters
Information through portals

Table 6.1: Communication channels between change initiators and change receivers

Communication Media
Face 2 Face
E - Mails
Phone Calls
Classroom Training
Intranet
Meetings

Table 6.2: Communication media between change initiators and change receivers

6.3 REASONS TO ACCEPT AND REJECT THE CHANGE

To answer the second research question, there were interview questions about the reasons of change process, training sessions, interviewees' definition for the system, challenges with system, inspirations from the system and competence observed by interviewees while using the system. The results deduced from the responses are shown below.

Reason 1 (R1): Communication

Communicating information by project team to all employees in GPO. This information is about the need for this system in purchasing organization.

Reason 2 (R2): Training
Participating in the training session organized by project team. Training sessions are focused on the highlights of change process and also system used to implement this change.

Reason 3 (R3): Monitoring
Being able to see the usage of system by colleagues hence getting motivated and start to use the system.

Reason 4 (R4): Resources and Support
Availability of resources like key users to support and solve the challenges due to difference in knowledge level of employees. Also, the time committed by key users to solve challenges is important.

Reason 5 (R5): Awareness
Awareness and understanding about the necessity of bringing this change through the new system.

Reason 6 (R6): Rewards
Aligning the usage of the system with annual key performance indicators of all employees. Then rewarding the employees for their performance.

Reason 7 (R7): Learning
Knowing and understanding the benefits of the system and realizing that this system is better and easier to use than current system.

Reason 8 (R8): Dependency
Disturbing factors like lack of competence by supporting functions of the organization, lack of required information in the system to perform activities, clash of priorities between daily business needs and usage of the system, lack of knowledge about the new procedures, lack of capability in the system to meet local or site-specific requirements and feeling of inconvenience about launch period due to the conflict of priority with parallel deployment of other systems at SKF.

7 DISCUSSIONS

In this chapter, answers to the second and third research questions are presented. We answer these research questions by discussing interesting points in the thesis such as the importance of change agent, different social powers and leadership styles implemented in this change process.

7.1 ALIGNMENT AND MISALIGNMENT

One of the aspects of this thesis is to understand the alignment and misalignment of employees' expectations from the change. Here, we discuss our opinions about the alignment between expectations of change initiators and change receivers mentioned in the results chapter. Alignment

or misalignment provide information about the reactions of employees towards this change that is *acceptance* or *rejection.* The expectations of change initiators and change receivers were arranged into seven categories which are *compliance to process, visibility, transparency, data management, standardization, collaboration* and *knowledge sharing.* In addition, change receivers exhibited three more categories of expectations which are *improve speed & efficiency, information sharing* and *decision making & approvals.* These three extra categories can also be considered as results of the above mentioned seven categories. As mentioned in the previous chapters, initiators of this change are top management of GPO. This is *commitment of top management,* which is one of the most required criteria for success of any change initiative (Done et al. 2010). However, both *change initiators* and *change receivers* expressed their dislike with existing way of working at GPO. This is evident from their frequently used phrases *one place, one database, one location* and so forth used to define the categories of expectations. Such dislike with the current way of working is *understanding challenges regarding the current state* of the change process, which is also crucial for the success of a change initiative (Schein 1999). This situation shows alignment between change initiators and change receivers regarding their *principal knowledge* (Rogers 2003).

Even though there was an alignment between change initiators and change receivers, we also observed a misalignment between them regarding their *how-to knowledge* that is how SAP Ariba will help them to achieve the expected future state of this change process (Rogers 2003).Though three types of *knowledge (awareness, how-to,* and *principle)* about change are preliminary to influence the decision of employees towards the change, there are other attributes which also influence the decision of employees to use the system. They are *relative advantage* and *compatibility* of using SAP Ariba in their daily work, *complexity* to understand SAP Ariba, *trialability* of SAP Ariba as per employee requirements and *observability* of deploying SAP Ariba in GPO by an employee. As mentioned above, employees of GPO received the required information through different *channels* and *media* of communication like trainings, management meetings and so forth. Also, the credibility of these communication channels, *mass media* and *interpersonal,* support employees to decide using SAP Ariba. In addition to these, the personal attributes of employees such as *self-image* during the deployment of the system, *optional* choice by self-motivation, *collective* choice due to the inspiration by colleagues and direction of *authority* from the line managers or top management, support employees to decide to accept or reject the system. So, the decision with the support of these attributes influences employees' behaviour and performance during the change process.

7.2 REACTIONS OF EMPLOYEES TOWARDS CHANGE

7.2.1 BEHAVIOR

The *behaviour* of employees participating in a change process is dependent on the information received by them against the attributes mentioned in section 7.1 (Rogers 2003). Depending on the behaviour exhibited by employees they can be categorized as who is eager, who supports change and learn directly from initiators; who gets convinced by the former category and follow them; who seek repeated clarification about reasons of change and gets convinced after evaluating threats of not changing; and who has the highest affinity to the current state of change and fail to clarify their attributes of *knowledge (awareness, how-to,* and *principle)* about deployment of SAP Ariba. These categories are defined as *innovators, early adopters, early majority, late majority* and

laggards (Rogers 2003). Here, innovators were mainly the employees who have *key user* role in deploying SAP Ariba. They were the ones who had most updated information about the deployment, even yet times before their line managers. This behaviour of key users is due to their high or very high personal attribute *optional*. The reasons for key users being innovators are the high influence of *awareness knowledge, how-to knowledge, principle knowledge* and *relative advantage* of using SAP Ariba for them.

However, it is not easy to identify which of these attributes have influenced first. Even interviewees themselves cannot recollect it instantly when they are asked when they started liking the idea of using SAP Ariba. This is related to the theory of change anxieties which describes that any participants in a change will have two major anxieties of change which are *learning* and *survival* (Schein, 1996). As mentioned in the literature review chapter, learning anxiety is fear of trying new things and being judged due to lack of competency in the future state of change. On the other hand, survival anxiety is to do or die situation during a change (Schein 1999). For GPO employees to create or change their behaviour to use SAP Ariba, they need to prevail or increase their survival anxiety over learning anxiety (Schein 1999). This can be through continues improvement on their ratings against the attributes influencing the decision of employees. To improve in this regard, they would need support from change agents and social bodies with power within GPO.

7.2.2   CHANGE AGENTS

In the case of deploying SAP Ariba at GPO, there are different layers of change agents established. This is in line with principal-agent theory (Eisenhardt 1989). Referring to the role categorization for the deployment of SAP Ariba in figure 2.1, the project manager of SAP Ariba deployment team is principal to the key users and users. These key users and users can be a line manager or non-line manager at GPO. From the perspective of the project manager, the key user of each purchasing hub is the principal to the users of their respective hub. Most of these key users are non-line managers at GPO. This creates an organization of light-weight project at each purchasing hub where the leader (key user) of project (deployment of SAP Ariba at that hub) has limited or no power to decide priorities of the users and always need to seek support of the line managers to influence the users to use SAP Ariba (Wheelwright & Clark 1992). However, the ability of key users to influence the users in their hub depends on their charisma (French et al. 1959; Bass 1990). Users have different opinions about key users. An interviewee from one of the hubs appreciated the contribution of the key user to deploy SAP Ariba. Similarly, another interviewee from one of the hubs was even unclear about the role of the key users and mentioned that the project manager (principal of key user) is the immediate contact for any support. However, these kinds of lateral jumps are witnessed in a matrix structured organization like GPO. Even project manager of SAP Ariba has power distance with the key users and yet times users. This is because the project manager is also operating in light-weight structure (Wheelwright & Clark 1992). If this power distance is big then it could minimize the benefits of principal-agent relationship. The arrangement of principal-agent in deploying SAP Ariba has the advantage to resolve the core cultural challenges of diffusing the information (Flores & Moghaddas 1998). However, principal-agent relationship has a disadvantage if there is cultural challenge of understanding between principal (project manager) and agent (key user).

7.2.3 SOCIAL POWER

After discussing the power distance, structure of change agents and responsibility of line manager in the above section, here we will discuss social bodies in the organization with different power positions. In the case of GPO, the social bodies with power are the project manager, key users, and line managers. As mentioned in the literature review chapter, the bases of power of any social system can be divided into *harsh* and *soft* power (Raven 2008). According to their definitions, harsh power is mainly used to execute a *transactional leadership* and soft power is mainly used to execute *transformational leadership* (Bass 1990). As mentioned above the key roles which are project manager, key user, and line manager must execute their style of leadership to deploy SAP Ariba. They exhibited different leadership styles with the support of power categories such as *coercive, reward, legitimate reciprocity, legitimate equity, legitimate dependence, legitimate position, expert, referent* and *information*. The leadership style and power choice of each role are shown in Table 7.1.

Power bases	Power categories	Project manager	Key user	Line manager
Harsh	Coercive	Yes	No	Yes
	Reward	Yes	No	Yes
	Legitimate reciprocity	Yes	No	Yes
	Legitimate equity	No	No	Yes
	Legitimate position	Yes	Yes	No
Soft	Legitimate dependence	Yes	Yes	Yes
	Expert	Yes	No	Yes
	Referent	Yes	Yes	Yes
	Information	Yes	No	No
Dominant Leadership Style		**Both**	**Transformational**	**Transactional**

Table 7.1: Leadership styles and power choices of key roles

As shown in Table 7.1, project manager executed a combination of transformational and transactional leadership which is challenging but not impossible. This is in line with Aarons (2006) who argues that combination of these two leadership styles enable more effective leadership. Key users are non-line managers and have limited authority over employees in the organization. Therefore, they chose to be more transformational leaders. On the other hand, most of the line managers exhibited harsh power to influence the employees to use SAP Ariba. This set-up of leadership, project manager (both), key users (transformational) and line managers (transactional), create a power disturbance to achieve the objectives of the new way of working with support of IT system which is a change in organizational work culture (Nadler & Tushman 1997). Execution of transformational leadership style by the line managers will allow the users to absorb and find solutions to their challenges such as *necessity of extra time to learn and practice system,*

complexities due to the new nomenclature inbuilt in an external best practice, ambiguities due to other parallel changes at SKF. This will help to avoid the situations mentioned by interviewees such as waiting for *project deployment team to create standard templates* and *afraid of committing mistakes in the system.* When the line managers exhibit dominant transformational leadership, the project manager and the key users should exhibit dominant transactional leadership to provide technical support of system to the users and line managers This is important to improve the acceptance rate by solving technical challenges of the system and prevent shifting in users' behaviour towards SAP Ariba.

7.2.4   PERFORMANCE

Here, we discuss the performance of employees in the deployment of SAP Ariba. As mentioned in the chapters of methodology and analysis, to analyse the performance of employees, we used the innovation decision model and the attributes influencing the decision of employees. According to the comments of interviewees, some of them already persuaded to use SAP Ariba. Interviewees were persuaded to use the system due to relative advantage of the system for them, their principle knowledge, optional decision and so forth. However, interviewees who pursued the usage of SAP Ariba had a low rating on their principle knowledge or how-to knowledge. Conversely, a few interviewees had high knowledge though they did not pursue the usage of SAP due to their low rating for complexity of SAP Ariba or the compatibility of using SAP Ariba to their job role. These details are validated by mapping the ratings of interviewees against the attributes affecting their decision (Rogers 2003).

As mentioned in the behaviour section of this chapter, it is hard to confirm the beginning point of when individuals start to like a change (Rogers 2003). That is also same in innovation decision process which means that it is difficult to identify from which stage would an employee start their decision of using SAP Ariba. However, in this case, we identify the current stage of the employees in the innovation decision process by validating their comments with information from change initiators as the source. This is because once an employee realizes that their perception of using SAP Ariba is an assumption and not same as of the change initiators, then they might be forced to restart their decision process. As shown in Table 5.4, key users from the purchasing hubs *Germany* and *Italy* are in *implementation stage* which means that they started using SAP Ariba in their daily work. The level of usage is not in the scope of this thesis. On the other hand, key users from *China, France, India, and the USA* are in the persuasion stage of the decision process, which means that they still have low ratings on the attributes used in the analytical framework. Similarly, current stage of interviewees from all purchasing hubs is exhibited in Table 5.4. Current stage of an employee in the innovation decision process is referred as the performance of that employee in using SAP Ariba in their functional role.

8 CONCLUSIONS

Based on the *analysis, results,* and *discussion chapters,* our observations are concluded by answering the following three research questions:

1. *What are the expectations of employees from IT-enabled change initiative in a global organization? How do they communicate their expectations*?

The key expectations of employees, both change initiators and change receivers, are compliance to processes, communication, visibility, transparency, data management, standardization, collaboration. It is interesting to note that change receivers have three more categories of expectation compared to change initiators. These additional categories are decision making and approvals, improve in speed and efficiency and information sharing.

The employees use different communication channels and media to communicate their expectations. The most influenced communication media that used in this change process is classroom trainings and face-to-face interactions. The communication channels that supported above-mentioned media is the interaction of project deployment team with employees.

2. *What are the reasons that influence acceptance or rejection of change initiative by employees*?

Acceptance:

o Both change initiators and receivers communicating about same challenges about the current situation of the organization.
o Visibility of management's commitment for the change by providing dedicated face-to-face trainings even though they were expensive to conduct.
o Belief about the credibility of SAP Ariba to solve their most awaited challenge of capability to share information between colleagues located globally.
o Feeling of being visible to everyone in the organization though employees are not physically closer.
o Aligning the usage of the system with incentives.

Rejection:

o Lack of resources to proactively drive the usage of SAP Ariba in different purchasing hubs.
o Clash of priorities with day-to-day business activities in the job role.
o Lack of compatibility to perform the expectations from SAP Ariba.
o Complexity with the new nomenclature in the system which was partially due to delays in learning about other change initiatives implemented at the same time and partially due to the design of the system.
o Basic assumptions about lack of competency of suppliers and people in other departments of SKF.

3. How these reasons influence the reactions of the employees towards the change initiative?

From responses of 26 interviewees including change initiators and receivers, it is clear that each individual has their own definitions for the same category of expectations. This could be because of everyone has their own set of underlying assumptions, beliefs and behaviours (Flores & Moghaddas 1998). As an answer to this research question, we investigated the behaviours that employees can exhibit towards the change initiative. The behaviours of employees were defined based on categories of innovation adoption curve (Rogers 2003). In addition to the behaviours, authors evaluated the performance of employees during the change. The outcome of this evaluation for each interviewee was identified by the stages of innovation decision process (ibid).

Information flow through different communication channels and media can influence the acceptance of a change initiative. Communication in global organizations can be a major challenge when the communication channels are newsletters, emails and online information sessions addressed to a group of employees. Because all these communication channels support one way communication, collecting feedback will be challenging. Project deployment team addressed these challenges by conducting face to face classroom training sessions in all seven hubs of GPO to deploy SAP Ariba. This could be one of the best ways of communicating the change initiative to employees.

To summarize, this thesis inspires authors to reflect upon the following key points to handle a change in a global organization:

- Self-driven change agent at local sites.
- Line Manager with dominance of transformational leadership
    - To clarify the assumptions of change receivers
    - Communicate openly with change initiators about the course corrections required to prepare the change receivers to adopt the change.

Besides, this change at GPO will influence *communication, knowledge sharing, documentation, performance monitoring* and *resource allocation* to perform purchasing activities in all local sites of GPO. The success of any change initiative is highly dependent on the attitude of each individual involved in that change. In the case of GPO, we see that there is difference in reaction of every individual towards the change initiative.

To conclude, in any social system, GPO in this case, individual's decision gets influenced by the attributes that individual is exposed. So, it can be said that the evaluations done by different individuals during their decision-making process vary.

REFERENCES

Aarons, G.A., 2006. Transformational and transactional leadership: association with attitudes toward evidence-based practice. *Psychiatric services*, 57(8), pp.1162–9.

Adams, E., 2016. The joys and challenges of semi-structured interviewing. *Community Practitioner*, 83(7), pp.18–21.

Bass, B.M., 1990. From transactional to transformational leadership: Learning to share the vision. *Organizational dynamics*, 18(3), pp.19–31.

Bedeian, A.., 1980. *Organizations: Theory and Analysis*, Illinois: The Dreyden Press.

Bryman, A. & Bell, E., 2015. *Business research methods* 4th ed., Oxford: Oxfors Univ. Press.

Cadle, J. & Yeates, D., 2004. *Project managent for information systems* 4th ed., Harlow: Financial Times Prentice Hall.

Chen, J.L., 2012. The synergistic effects of IT-enabled resources on organizational capabilities and firm performance. *Information and Management*, 49(3–4), pp.142–150.

Diener, E. & Crandall, R., 1978. *Ethics in social and behavioral research*, Chicago: University of Chicago Press.

Done, A., Voss, C. & Gorm, N., 2010. Best practice interventions : Short-term impact and long-term outcomes. *Journal of Operations Management*, 29(5), pp.500–513.

Eisenbach, R. et al., 1999. Transformational leadership in the context of organizational change. *Journal of organizational change management*, 12(2), pp.80–89.

Eisenhardt, K.M., 1989. Agency Theory: An assessment and review. *Academy of management review*, 14(1), pp.57–74.

Flores, R. & Moghaddas, A.M., 1998. *Global diffusion of best practices: Managing change in processes*. Chalmers University of Technology.

French, J.R., Raven, B. & Cartwright, D., 1959. The bases of social power. In J. M. Shafritz, J. S. Ott, & Y. S. Jang, eds. *Classics of organization theory*. Boston: Cengage Learning, pp. 251–260.

Huczynski, A. & Buchanan, D., 2007. *Organizational behaviour: An introductory text*, London: Prentice-Hall International UK. Ltd.

Kates, A. & Galbraith, J.R., 2007. *Designing your organization: Using the star model to solve 5 critical design challenges* 1st ed., Los Angeles: Jossey-Bass.

Koslowsky, M. & Stashevsky, S., 2008. Organizational values and social power. *International Journal of Manpower*, 26(1), p.23–34.

Kotter, J.P., 2007. Leading change: Why transformation efforts fail. *Harvard Business Review*, 85(1), pp.96–103.

Langley, A., 2009. Studying processes in and around organizations. In D. A. Buchanan & A. Bryman, eds. *The Sage handbook of organizational research methods*. London: Sage Publications, pp. 357–365.

LeCompte, M.D. & Goetz, J.P., 1982. Problems of Reliability and Validity in Ethnographic Research. *Review of Educational Research*, 52(1), pp.31–60.

Markus, M.L., 2004. Technochange management: Using IT to drive organizational change. *Journal of Information Technology*, 19(1), pp.4–20.

McCleskey, J.A., 2014. Situational , Transformational , and Transactional Leadership and

Leadership Development. *Journal of Business Studies Quarterly*, 5(4), pp.117–131.

Nadler, D.A. & Tushman, M.L., 1997. Implementing new designs: Managing organizational change. In M. Tushman & P. Anderson, eds. *Managing strategic innovation and change: A collection of readings*. Oxford: Oxford University Press, pp. 595–606.

Olsson, K. & Pedersen, C., 2006. *Is it all about culture?: A study on frustration with respect to the work situation in dispersed global IT projects at AstraZeneca*. Chalmers University of Technology.

Raven, B.H., 1965. Social influence and power. In I. D. Steiner & M. Fishbein, eds. *Current studies in social psychology*. Los Angeles: Society for the Psychological Study of Social Issues.

Raven, B.H., 2008. The bases of power and the power/interaction model of interpersonal influence. *Analyses of social issues and public policy*, 8(1), pp.1–22.

Rogers, E.M., 2003. *Diffusion of innovations* 5th ed., New York: Free Press.

Rudestam, K.E. & Newton, R.R., 2007. *Surviving your dissertation: A comprehensive guide to content and process* 3rd ed. L. C. Shaw, K. M. Greene, & C. Duksta, eds., Los Angeles: Sage Publications.

SAP Ariba, 2017. About SAP Ariba. Available at: https://www.ariba.com/about [Accessed March 15, 2017].

Schein, E.H., 1996. Kurt Lewin's Change Theory in the Field and in the Classroom: Notes Toward a Model of Managed Learning. *Reflections: The SoL Journal*, 1(1), pp.59–74.

Schein, E.H., 1970. *Organizational psychology* 2nd ed., Englewood Cliffs: Prentice-Hall.

Schein, E.H., 1999. *The corporate culture survival guide: Sense and nonsense about culture change*, San Francisco: Jossey-Bass.

SKF, 2017. About SKF Group. Available at: http://www.skf.com/group/our-company/index.html [Accessed February 15, 2017].

Tichy, N.M., 1983. *Managing strategic change: Technical, political, and cultural dynamics* E. E. Lawler & S. E. Seashore, eds., New York: John Wiley & Sons.

Tornatzky, L.G. & Klein, K.J., 1982. Innovation characteristics and innovation adoption-implementation: A meta-analysis of findings. *IEEE transactions on engineering management*, 29(1), pp.28–43.

Wheelwright, S.C. & Clark, K.B., 1992. *Revolutionizing product development: Quantum leaps in speed, efficiency and quality*, New York: Free Press.

Zorn, T., Christensen, L.T. & Cheney, G., 1999. *Do We Really Want Constant Change?*, San Francisco: Berrett-Koehler.

APPENDIX A - Interview questionnaire for change receivers

1. In which of these business locations of SKF GPO are you currently working?
   ☐ China
   ☐ India
   ☐ Italy
   ☐ France
   ☐ Germany
   ☐ Sweden
   ☐ USA

2. Gender:
   ☐ Male
   ☐ Female
   ☐ No comment

3. What is your current role at SKF GPO?

4. How long have you been in your current role?
   ☐ 0-3
   ☐ 3-7
   ☐ 7-10
   ☐ 10-13
   ☐ 13-16
   ☐ 16-19
   ☐ 19-22
   ☐ 22-25
   ☐ 25-28
   ☐ 28-31
   ☐ Above 31

5. Which of these purchasing processes do you perform in your current role?
   ☐ Strategic purchasing
   ☐ Operational purchasing
   ☐ Both

6. What is your business area at SKF GPO?
   ☐ Bearing Operations and Commodities
   ☐ Industrial Units and Commodities
   ☐ Automotive & Aerospace and Commodities
   ☐ Strategy & Business Transformation
   ☐ Indirect Materials & Services and CAPEX

7. How old are you?
   - ☐ 18-23
   - ☐ 23-28
   - ☐ 28-33
   - ☐ 33-38
   - ☐ 38-43
   - ☐ 43-48
   - ☐ 48-53
   - ☐ 53-58
   - ☐ 58-63
   - ☐ 63-68
   - ☐ 68-73

8. How long have you been working at SKF GPO?
   - ☐ 0-3
   - ☐ 3-7
   - ☐ 7-10
   - ☐ 10-13
   - ☐ 13-16
   - ☐ 16-19
   - ☐ 19-22
   - ☐ 22-25
   - ☐ 25-28
   - ☐ 28-31
   - ☐ Above 31

9. How long have you been associated with SKF?
   - ☐ 0-3
   - ☐ 3-7
   - ☐ 7-10
   - ☐ 10-13
   - ☐ 13-16
   - ☐ 16-19
   - ☐ 19-22
   - ☐ 22-25
   - ☐ 25-28
   - ☐ 28-31
   - ☐ Above 31

10. What is your total working experience?
  ☐ 0-3
  ☐ 3-7
  ☐ 7-10
  ☐ 10-13
  ☐ 13-16
  ☐ 16-19
  ☐ 19-22
  ☐ 22-25
  ☐ 25-28
  ☐ 28-31
  ☐ Above 31

11. What is SAP Ariba for SKF GPO?

12. How did you hear about SAP ARIBA?

13. Were there any training sessions conducted about SAP ARIBA?
    a. When did you get training in SAP ARIBA?
    b. What type of training sessions did you attend?
    c. What was your role in these training sessions?
    d. What were the objectives focused in these training sessions?

14. Have you conducted any training sessions to users?
    a. What type of trainings have you conducted?
    b. When did you conduct these trainings?
    c. What were the objectives focused on the trainings that you have conducted?

15. What were the reasons to implement SAP ARIBA at SKF GPO?

16. How did you learn about reasons to implement SAP Ariba?

17. What is your current role in the implementation of SAP ARIBA at GPO?
  ☐ Advisor – Guiding about SAP Ariba
  ☐ Leader – Driving the usage of SAP Ariba
  ☐ Technical support – Solving any technical issues to use SAP Ariba
  ☐ User – Using SAP Ariba
  ☐ Key user – Support and driving the usage of SAP ARIBA for other employees
  ☐ Pilot user – Participated in the first training to understand SAP Ariba

18. What do you use SAP ARIBA for?

19. In specific to your functional role at GPO, what are benefits of using SAP ARIBA for you?

20. How did you learn about benefits of using SAP Ariba for you?
21. What kind of results make you feel that implementation of SAP ARIBA was successful?

22. How do you measure the success of implementing SAP ARIBA?

23. How will SKF GPO achieve the success of implementing SAP ARIBA?

24. In specific to your functional role at GPO, are there any challenges while using SAP ARIBA for your current role?
    a. Who supports you in case of any challenges?
    b. How do you communicate these challenges?
    c. Are there any challenges of communication?

25. What are the reasons that inspire you to use SAP ARIBA, for your role at GPO?

26. In your current role at GPO, what are the activities changing by implementation of SAP ARIBA?

27. What are the competencies do you apply while using SAP ARIBA?

28. Are there any areas for yourself, which you would like to improve, to use SAP ARIBA?
    a. Whom do you communicate with for needs in improvement to use SAP ARIBA?
    b. How do you communicate these needs?
    c. Do you get required support to address these needs of improvement?

29. How do you perceive the current situation of implementing SAP ARIBA at GPO?
    ☐ Push by top management
    ☐ Realization of benefits by employees
    ☐ Other

30. If you were Project Manager of SAP ARIBA, what are the areas you would focus for your current role to improve the implementation of SAP ARIBA?

31. Are there any intentions of using more internet/computer based things in working at SKF GPO?
    a. Is SAP ARIBA part of these intentions?

APPENDIX B - Interview questionnaire for change initiators

1. In which of these business locations of SKF GPO are you currently working?
   - ☐ China
   - ☐ India
   - ☐ Italy
   - ☐ France
   - ☐ Germany
   - ☐ Sweden
   - ☐ USA

2. Gender:
   - ☐ Male
   - ☐ Female
   - ☐ No comment

3. What is your current role at SKF GPO?

4. What is your business area at SKF GPU?
   - ☐ Bearing Operations and Commodities
   - ☐ Industrial Units and Commodities
   - ☐ Automotive & Aerospace and Commodities
   - ☐ Strategy & Business Transformation
   - ☐ Indirect Materials & Services and CAPEX

5. What is SAP Ariba for SKF GPO?

6. How did you communicate about SAP ARIBA to your employees?

7. Were there any training sessions conducted about SAP ARIBA?
   a. What type of training sessions did you attend?
   b. What was your role in these training sessions?
   c. What were the objectives focused in these training sessions?

8. What were the reasons to implement SAP ARIBA at SKF GPO?

9. How were these reasons communicated to your team members?

10. How was SAP Ariba implemented at SKF GPO?

11. What is your current role in the implementation of SAP ARIBA at GPU?
    - ☐ Advisor – Guiding about SAP Ariba
    - ☐ Leader – Driving the usage of SAP Ariba
    - ☐ Technical support – Solving any technical issues to use SAP Ariba
    - ☐ User – Using SAP Ariba
    - ☐ Key user – Support and driving the usage of SAP ARIBA for other employees
    - ☐ Pilot user – Participated in the first training to understand SAP Ariba

12. What are the benefits to SKF GPO by using SAP ARIBA?

13. How were benefits communicated to your team members?

14. In specific to your functional role at SKF, are there any benefits of using SAP Ariba for you?

15. What kind of results make you feel that implementation of SAP ARIBA was successful?

16. How do you measure the success of implementing SAP ARIBA?

17. What are your plans to succeed with implementation of SAP Ariba?

18. Are there any challenges to succeed with implementation of SAP ARIBA?
    a. How do you hear about these challenges?
    b. Is it possible to address to all these challenges?

19. What are your expectations from your team members to succeed with implementation of SAP Ariba?
    a. How were these expectations communicated to your team members?
    b. How do you measure their compliance to your expectations?

20. What kind of support do you extend to your team members to achieve the expectation from SAP Ariba?

21. How do you perceive the current situation of implementing SAP ARIBA at GPO?
    - ☐ Push by top management
    - ☐ Realization of benefits by employees
    - ☐ Other

22. How do you monitor the implementation status of SAP Ariba?

23. Being a global team, are there are any challenges due to cultural diversity for the implementation of SAP Ariba?

24. If you had a chance to restart this project, what areas would you focus to achieve its objectives?

25. Are there any intentions of using more internet/computer based things in working at SKF GPU?
    a. Is SAP ARIBA part of these intentions?