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# Change Management Practices of Dynamic Supply Chains: The Case of Global Pharma Corp

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## Abstract

This study tries to assess to what extent change agents adapt change management best practices in a dynamic supply chain environment. We will study the case of Global Pharma Corp, a global health care company committed to preventing diseases and treating people across the world. In 2017, SC Project was launched, a five-years long supply chain transformation program which ambition is to transform capabilities and to deliver world class performance via improved processes and innovative solutions. Day after day, SC Program change agents work on securing the adoption of new processes and tools. The theoretical model of this thesis, the 'Change Agent Guide', lists 32 best practices in change management emerging from literature on the topic.

The empirical part gathers data from interviews of the central change team of SC Project, and secondary data from internal project documentation. Case study data analysis employs pattern-matching, which assessed whether change management on SC Project matches the theoretical model (e.g. the 'Change Agent Guide').

The case study analysis shows that standardized change management best practices are helpful, but that they need to be adapted to a given environment, considering environments change dynamically. Therefore, following a standardized framework is useful, and adapting it to the environment is critical. This empirical study about Global Pharma Corp shows that some best practices are observable, while others are not.

## Preface

I would like to thank some people who helped me complete this thesis. First, Dr. Maria Jell-Ojobor, who continuously provided me with brilliant and detailed feedback, even though our communication had to remain digital due to the distance separating us (Paris-Rome). More importantly, she never stopped trusting me and immediately understood how challenging it could be to write a thesis, study, and work on an international consulting project at the same time (I travelled from Paris to the Barcelona project hub three times per month for ten months).

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I would also like to thank the central change management team of SC Project, who provided me with the interview data indispensable for my case study. They all gently freed some time up in their very full agendas to answer my questions for one hour. Moreover, they kept encouraging me whenever I felt working, studying and living in two different countries was starting to be too challenging.

Finally, my unconditional gratefulness goes to my Manager on SC Project, Elisabeth Choiset (Consulting Corp), who taught me more than all I had learned during my previous work experiences, and who also provided me with brilliant feedback on my thesis. Her kindness and open-mindedness have been much precious to me, all along a year that has been extremely challenging, both physically and mentally. More importantly, she gave me the confidence I needed to take a fresh start after this year at Consulting Corp, and to go find my own way.

## 1. Introduction

According to Moran and Brightman (2001), change management is "the process of continually renewing an organization's direction, structure, and capabilities to serve the everchanging needs of external and internal customers". Change is a permanent aspect of an organization's life, from a strategic and from an operational standpoint. Therefore, it is crucial that a company can point out where it needs to position itself in the future, and how to deal with change (Burnes, 2004). Nowadays, change management is important and widely acknowledged. Many authors have tried to build change management models and formulate change management best practices, supposedly key to success for any change program.

Yet even though it is necessary for companies to successfully manage change, Balogun and Hope Hailey (2004) report that 70 per cent of change programs fail. This proves a lack of a relevant change management model as to how to launch and manage change in organizations. The literature about change management keeps growing and underlies the importance of change, but very little empirical evidence comes in support of those theories (Todnem By, 2005). Each transformation project is unique (mission, vision, size, scale, roadmap...), and no literature seems to address whether it is possible for change agents to apply preconceived change management models to any transformation project.

Therefore, this study tries to close that gap by answering the problematic: "To what extent do change agents adapt change management best practices in a dynamic supply chain environment?". The main topics from literature helped building a theoretical framework called the "Change Agent Guide", which lists all best practices (total of 32) emerging from literature around the three following topics:

- **Topic 1:** Change agents' skills and capabilities
- Topic 2: Change agent's communication and way of working
- Topic 3: Employees' role allocation and training

Consequently, three research questions were formulated, matching the three topics of the theoretical framework:

- **Question 1:** "To what extent do change agents on SC Project respect the main best practices in terms of capabilities and skills?"
- **Question 2:** "To what extent do change agents on SC Project respect the main best practices in communication and way of working?"
- **Question 3:** "To what extent do change agents on SC Project respect the main best practices in employees' role allocation and training?"

Finally, the case study was conducted by assessing the gap between the data collected on SC Project (via interviews of eight change agents on one hand, and internal project documentation on the other hand), and the best practices listed in the "Change Agent Guide". It was therefore possible to assess the extent to which change agents adapt change management best practices in a dynamic supply chain environment.

The study proceeds as follows: the next chapter will summarize relevant literature about change management (both in general and applied to supply chain). The third chapter will introduce the theoretical framework (the "Change Agent Guide"). The fourth chapter will present the methodology and the case study about change management at Global Pharma Corp. Finally, in the fifth chapter, conclusions will be drawn as to how to best adapt change management best practices in a dynamic business environment.

#### 2. Literature Review

Through this literature review, the main theories about supply chain change management, change management in theory, and its main practical applications will be developed. This literature review will constitute the basis of our theoretical framework (the 'Change Agent Guide').

## 2.1 Change management in supply chain transformations

## 2.1.1 Supply chain management

Supply chain management refers to the multiple relationships across a supply chain, namely a network of several businesses and relationships. Managing this network involves managing those businesses and relationships with other members of the supply chain. The GSCF (Global Supply Chain Forum), a group of firms and researchers, gave the following definition of supply chain management: "Supply chain management is the integration of key business processes from end user through original suppliers that provides products, services, and information that add value for customers and other stakeholders". According to Lambert and Cooper (2000), the supply chain management framework is composed by three elements:

- **The network structure**, namely the firms composing the supply chain, and the members of those firms. To know how much of a supply chain needs to be managed depends on various factors among which the length of the supply chain and the number of suppliers and customers at each level. Change agents must have a deep knowledge of how the supply chain network structure is organized.
- The business processes: the activities taking place within the supply chain and adding value to the customer. Lambert and Cooper state that: "Successful supply chain management involves a change from individual functions to integrating activities into key

supply chain processes". Managing an integrated supply chain involves having a continuous flow of information.

The management components: the following management components are crucial for supply chain management to be a success: planning and control, work structure, organizational structure, management methods, power and leadership structure (in most supply chains, one or two leaders drive the direction) and culture and attitude (how workers are valued and incorporated into the management).

A successful supply chain management will happen by understanding each of those management components, and how they're all related. According to Jindal (2013), any unsuccessful change program on a supply chain can have terrible effects on the whole health of a company.

## 2.1.2 Change management and supply chain

#### Most common mistakes

Hughes, Ralif and Michels (1998) named two mistakes change agents must avoid during a supply chain transformation:

- The "leading supply chain practices" trap: even though some best practices of the supply chain leaders, they mustn't be applied to any supply chain transformation without being adapted to the company's strategy and challenges
- The "organizational cultural" trap: supply chain transformations aim to suppress functional silos. Yet internal politics and cultural barriers may remain after the transformation and may constitute obstacles to a successful transformation. It is therefore important for change agents to keep their eyes open on eventual difficulties in synchronizing activities across different units of the supply chain.

The volatility of the business environment combined with fast-changing technology are two catalysts of the supply chain change rate. Designing improved processes or buying advance software are an easy task compared to when it comes to changing the whole supply chain. Change management is therefore a particularly important challenge for supply chains. If not taken seriously, expected return on investment will never happen, and on the other hand, people will soon get back to executing their daily tasks the way they used to (Milliken, 2012). Jindal (2013), listed the main reasons why change management in a supply chain transformation is particularly challenging:

- **The complexity** of modern supply chains: it is therefore tricky for transformation's actors to identify and fix the right things. Also, supply chain transformations are often too big to be controlled if executives don't fully understand the processes.
- **Supply chains being the backbones** of product companies: any change to it can have terrible effects on the organization and carries huge risks.
- **The important disconnection** between theory and actual local experience (in plants, distribution centers...): even though change can be perfectly designed, any small group of local workers can undermine it all.
- **The absence of coordination** between all levels of the supply chain
- **The huge amount of work** of supply chain executives, and the routine aspect of the work: it leaves them with little time and attention for change management even though it is a big mistake
- **The absence of direct control** for supply chain executives: this leaves them with much freedom in their daily tasks, and constitutes another challenge for change agents

## 2.1.3 Keys to a successful supply chain transformation

Jindal (2013) also listed a series of guidelines to increase chances of change success:

- Feedback from all stakeholders should constitute a solid basis for change design
- **Adaptability from change agents**: they should never attempt to copy change programs implemented during other supply chain transformations
- **Clarity from change agents**: must be very clear on why the supply chain transformation constitutes an interest for both the firm and its workers
- A targeted communication varying from one level of the supply chain to another
- **Rewards and celebrations** will always have a positive impact on individuals' commitment and motivation
- Continuous market attention in order to potentially adjust the change actions is necessary, because supply chain management is always confronted to fast-changing external environment
- A vision for the supply chain transformation is needed: for instance, "Provide demand planning process excellence through implementation of best practices enabled by the latest planning software". Goals must be clear: decrease inventory and costs, increase livery performance, etc.

It is particularly important that change agents and leaders communicate to the workers what the change benefits are. In the case of the improvement of the demand planning business for instance, they must point out the expected increases of revenues entailed by the better accuracy of demand forecast (Milliken, 2012). He also listed a series of steps which must be followed in order for change programs to be successful during supply chain transformations:

- **Perform an as-is analysis** to estimate the actual need for change
- **List the goals** (decrease production and distribution costs for instance), the supply chain transformation scope (people-process-technology), and the process(es) to be change (example: demand planning)

- Focus much attention of communications informing stakeholders of the reasons,
   benefits and steps of the change program
- **Create a trainin**g program that will counter employee resistance
- **Establish counter metrics** for supply chain change success

## 2.2 Change management in theory

## 2.2.1 Importance of change management for companies

The apparition of change management

Only a few decades ago, change management didn't exist. No structured methodology was used by organizations to deal with change. Even though they handled it, they didn't really take into considerations the fears and interrogations of the employees most impacted by change. Yet over the past 30 years, change management has emerged and evolved from theoretical models to a well acknowledged discipline.

The Second World War marked the apparition of a structured organizational control notably in order to answer to the huge needs for equipment to be transferred to Europe and Asia (Lamarsh, 1995). The war resulted in the creation of new tools and processes, as well as in the development of new business areas such as enterprise resource planning (ERP for instance). If the employees were often satisfied with the new technologies implemented in their companies, change programs always failed on the long term. Employees understood new concepts, and learned how to use new tools, but the new learning was almost never sustained. This is when change management appeared.

Prosci's research (2015) states three eras mark the history of change management:

- **Pre-1990s**: foundations academics start investigating on human reactions to change
- **1990s:** "on the radar" change management enters the business environment
- **2000s:** formalization change management becomes a discipline

Before 1990, the main issue was about understanding human reaction to change. A non-exhaustive list of contributors to this research can be composed by:

- **Lewin** (1948), a social psychologist who created a model in three steps (unfreezing, change, and refreezing)
- Beckhard (1969), who defined change management as "effort-planned, organization-wide, managed from the top, to increase organization effectiveness and health through planned interventions in the organization's processes, using behavioral-science knowledge"
- **Bridges** (2000), an author and consultant who defined the three steps of a transition as the ending, the neutral zone and the new beginning

During the 1990s, change management topic moved from academic space to the business environment. Leaders started to acknowledge that individual change can be supported thanks to a series of well-thought steps. The following companies and individuals helped marking change management a respected discipline:

- **General Electric** (early 1990s): the company implemented the *Change Acceleration*Process (see Appendix 1) as part of a bigger improvement program
- **Lamarsh** (1995): her work *Changing the way we change* exposed theories about ability to change, resistance, and change support
- **Kotter** (1996): he first wrote an article in the *Harvard Business Review,* and then a book, *Leading Change*, where he sets an eight-steps change management model

After the pre-1990s phase where people started to understand concepts, and the 1990s one where they were confronted to concepts and models, the 2000s were the years when change management became a formal discipline in business environment, and fully part of companies' DNAs. Since then, change management is usually articulated around those three axes:

- **Processes and tools**: change agents created methodologies to support their actions
- **Jobs and roles**: companies created specific positions for change agents
- **Organizational functions:** companies created structures to support change management (change management offices for instance).

#### Change management importance for companies

In recent years, companies have understood the importance of change management particularly during the implementation of a new technology. Employees are scared that their workplace is going to be taken over by new technologies, which usually creates resistance. Therefore, change management:

- **Allows leaders to create a workplace** that is open to change thanks to well-thought methodologies
- **Is a way of creating an innovative and agile workplace**: if employees are open to change, they will be more engage in making it happen and last. Considering what people fear most is the unknown, change management is a perfect way of increasing employees' trust and engagement in their daily tasks.
- Is a catalyst for digital transformations: digital technologies do provide possibilities for more efficiency, yet if employees lack the right mindset to change, digital transformation won't work. Leaders must understand the employees' fear of being replaced, and their reluctancy towards digital transformation. Change management will allow leaders to emphasize that the digital transformation is positive for both the company and employees, to increase their expertise to fit better to the marketplace of the future (Tabrizi, Lam, Girard and Irvin, 2019).

#### Change management and leadership

According to an American Management Association survey (American Management Association, 1994) leadership is the first key to a successful change (see Appendix 2). Change being a process of taking an organization from its current state to a desired future state, then it is all about leadership using power to win the trust of people to work together in order to reach a common goal (Gill, 2001). Two big issues as to how global business leaders currently lead

change are the following: the need to be 'good citizens' and at the same time profitable and the gap between strategy makers and other stakeholders (Nixon, 2002). According to Gill (2003), change programs mostly fail because of poor management:

- Lack of resources and know-how: budget, time and information, necessary expertise
- **Incompatible practices**: they sometimes remain the same, and become irrelevant with the post-change strategy
- **Poor planning and control**: focusing more on the objective than on the steps

Resistance to change is very common. Kubr (1996) states that the reasons are a lack of knowhow, a lack of conviction that change is necessary, and a dislike of 'imposed change', a lack of confidence (self-confidence and in others), lack of respect in the change agent(s)... The human aspect of change is often not well considered in change management programs. Mulligan and Barber (1998), speak of the 'yin and yang' of change, namely the leadership (emotional and social considerations) and the management (technical aspects). According to McLagan (2002), focusing only on a technical approach (e.g. managerial approach) won't allow the organization to 'absorb' the change. Kotter (1995) states: "In failed transformations, you often find plenty of plans and directives and programs (...). But nowhere was there a clear and compelling statement of where all this was leading. Not surprisingly, most of the employees with whom I talked were either confused or alienated'. Sadler (1997) added: 'We have observed dramatic transformations in British industry in recent times which appear to be due more to inspirational leadership than to good management"... Therefore, it seems like change management is first about leadership.

Guidelines for an effective leadership for change

According to R. Gill (2003), several 'tracks' provide a dimension and a set of requirements for efficient leadership:

Cognitive intelligence ('thinking'): solve problems and make decisions to 'win people's minds'

- **Spiritual intelligence ('meaning'):** animate people in what they are looking for and do, to 'win people's souls'
- **Emotional intelligence ('feeling'):** understand people and respond to them in relevant ways, to 'win people's hearts'
- **Behavioral skills ('doing'):** communicating in other ways than body language (writing, speaking, listening...)

Still according to Gill (2003), an integrative model of leadership for change is necessary, taking into consideration several elements:

- Vision: the foundation of effective leadership consists in building and sharing a vision of the future. It needs to be "imaginable, desirable, feasible, focused, flexible and communicable" (Kotter, 1995)
- Values and culture: shared values are key to a strong organizational culture. Culture and change programs are about 'changing hearts, minds and souls' of employees (Rajan, 2000)
- **Strategy**: strategies are key to pursuing the vision and mission. Effective leadership is about implementing business strategies based on possible scenarios. A good strategy for change would be to get a team working together to lead change.
- **Empowerment**: it is about making people able to do what they need to do in the change process (through skills, knowledge, confidence...). According to Bennis (1999), the key to real change is empowered teams. Encouraging intrapreneurship, for instance, consists in empowerment.
- **Motivation and inspiration**: leaders must be credible (e.g. align organization goals with peoples' interests and aspirations) and point out short term wins.

#### 2.2.2 Lewin's model

#### Description of the model

Lewin is one of the main contributors in the 20<sup>th</sup> century theory about change management. He has been a pioneer psychologist in the social psychology area, notably via his introduction of the 'group dynamic' concept (e.g. understanding how individuals behave). In his work, Lewin treats change like a complete episode of an organization's life, yet possible to control if we manage well the groups present within the organization. Lewin's model (1940s) is articulated around three steps:

- The first step involves unfreezing the current situation. During the unfreezing step, which consists in lowering the barriers to change in order to create the opportunities for an efficient change, active communication and participation are crucial. Indeed, in transformation projects, managers usually don't make a real effort to communicate on the nature of the change and on its possible consequences before introducing a new technology. Yet they need to ask individuals to participate in an effort to improve their company's productivity, and to explain them that this can only happen thanks to the implementation of the new technology. They also must be assured that their position will be maintained in the new organization. (Levasseur, 2001).
- **The second step** is to make change actually happen. During the change phase, managers must continue their efforts of active communication and participation, even though the company has already started implementing the change. The change agents must embody visionary leadership and involve all the individuals, and forget about top-down management, which is a barrier to successful change.
- **The third step** is freezing the new situation. During the refreezing phase, the change agents mustn't let the individuals implement the new technology alone. They must stay involved and help the individuals adopt new behaviors, and make sure those new

behaviors will last indefinitely. This is a long process that requires much patience from both the change agents and the individuals.

#### Additions to Lewin's model

One of the major additions to this model has seen the day thanks to Armstrong (2006). He argued that first, during the unfreezing stage, it is important to focus on the reasons why people feel threatened by change. This way, the change agents will be able to adapt their actions accordingly. Then, during the refreezing stage, it's crucial to dedicate as much time as needed to introduce all the new ways of working to the people who will be impacted. Indeed, one thing is to bring a new technology, another is to make sure the individuals will adopt it and that change will be successful.

Ritchie (2006) also improved Lewin's model. Speaking of Lewin's unfreezing stage, he stated that it mainly consists in preparing the individuals to the change, namely helping them accept it by looking at the current state and realizing it is not optimal. However, the change phase is often more problematic. Indeed, some individuals may accept the change while others might have much more difficulty breaking up with their old habits and ways of working. For instance, from one person to another, the level of acceptance of changing the job location (or keeping the same location while doing a different job) can vary a lot. Finally, the refreezing part is when individuals get used to the new methods and tools, and to the new ways of working. If change has occurred successfully, then the refreezing part is also the moment when people finally feel trusting again in the future of the organization. According to Ritchie, it is therefore essential to hold a celebration to make the individuals feel recognized for the part they played in the organizational change. It is all the more essential that change won't happen only once and will most certainly take place again in a near future.

Beckhard was a pioneer in the field of organization development. defines organizational development, which he defined as an "effort, planned, organization-wide, and managed from the top, to increase organization's process, using behavioral-science knowledge". In the late 1960s, he came up with an interesting change program in big steps. Change agents must:

- **Define goals** and the future state required after the change
- **Define precisely the activities** that will be needed to close the gap between the current state and the future state needed
- **Think of strategies** to manage the transition: this should mainly consist in the impactanalysis about the change

Ten years after Beckhard, Thurley (1979) came up with five main strategies to deal with in change management. Thurley was a teacher in industrial relations at the London School of Economics in the early 1990s. He has worked in industrial relations and management both as an employee and as a teacher and researcher. His five strategies to manage change are:

- **Directive**: the managers impose change without consulting the individuals. This situation occurs mainly after a crisis, or after other methods have failed
- Bargained: this is a strategy articulated around the idea of a shared power between employers and employees. Therefore, before any change is decided, negotiation and agreement occur
- **Hearts and minds**: this strategy focuses on the importance of commitment, but not necessarily on the participation of all individuals in the change process
- **Analytical**: this strategy is very scientific. It starts with the diagnosis of the situation, and then goes to the listing of goals, the design of the change, the measuring of the results, and the listing of the goals for the next phase in the change process
- **Action-based**: this strategy is based on the statement that there is very little in common between what managers say they will do, and what they actually do. There is often a gap between the theoretical model and their practical behavior.

#### 2.2.3 Kotter's model

#### Description of Kotter's model

Kotter was a famous teacher at the Harvard Business School. He synthesized his research in a book called 'Leading Change', in which he created a very useful method to help managers transform their organization, or punctually lead targeted changes. The idea is to consider the organization in a global way, rather than working in an isolated and fragmented manner. In 1996, he came up with an eight steps model: "Leaders who successfully transform businesses do eight things right and they do them in the right order". Kotter stated that many change initiatives have had terrible effects on the organization and on its employees. Kotter's eight steps are:

- Establishing a sense of urgency
- Forming a powerful guiding coalition
- Creating a vision
- Communicating the vision
- Empowering others to act on the vision
- Creating short-term wins
- Consolidating improvements and producing still more change
- Institutionalizing new approaches

#### What happens if Kotter's model is not followed

Kotter & Cohen (2004) linked the eight steps Kotter's model with 34 real organizations all around the world. In their book, we can find case studies showing the best practices, and what doesn't work in a change process. Kotter also points out the importance of following those eight steps in the right order. The authors list the consequences of not following the eight steps correctly:

- **Establishing a sense of urgency** transformation or change do start, but then freeze and don't eventually succeed
- **Forming a powerful guiding coalition** if some people are not involved, then efforts will be lost, and the change will never really take off
- **Creating a vision** the vision is crucial in helping the individuals understanding what they are part of
- Communicating the vision every single individual must be kept updated through the entire process and thanks to any communication channel available. Also, managers and employees need to be aligned to prevent any lack of communication to cause the failure of the plan
- **Empowering others to act on the vision** everyone must do anything they can to make this vision real, otherwise entailing the plan's failure
- **Creating short-term wins** change is a long and difficult process. If people don't get rewarded when proof occurs that change effectively succeeded, they will get discouraged
- Consolidating improvements and producing still more change premature celebration may ruin the whole change process, which can take up to years
- Institutionalizing new approaches if most things beyond the surface don't really change, then it is most likely that the change process has failed

## 2.3 Change management in practice

## 2.3.1 Main reasons of change programs' failures

#### Most common obstacles

Not less than 70% of organizational change projects fail (Implementation Management Associates, Inc., 2018). The main reasons are:

- The restraining forces happening during Lewin's unfreezing step: whenever change occurs, opposite forces appear immediately in order to maintain the previous equilibrium.
   Those forces are hard to point at (and therefore to eliminate), because they often consist in group norms deeply rooted in the company's culture (Lewin, 1940s).
- The errors coming from the change agents: for a change program to be successful, it is crucial that change agents realize actions and responses will vary from one context to another. They need to apply a change model that is adapted to the situation. For instance, each of those Thurley's (1979) five strategies (directive, bargained, hearts and minds, analytical and action-based can be used either alone, or in combination with another depending on the organization. In addition, Lockitt (2004) stated the real difficulty of change management is "to recognize what strategies to employ, when, where and how to use them in order to be most effective".
- The human nature itself: according to Lewin, human change (both at the individual and group level) involves a highly complicated process of unlearning, and an equally complicated process of new learning (Levasseur, 2001).

#### Focus on human resistance

Accord to Schein (1996), several psychological mechanisms can help employees from companies accept change better:

- Survival anxiety: e.g. accepting the new data that must be learnt is indeed relevant and unavoidable. Yet another mechanism often prevents survival anxiety: it is the "learning anxiety" mechanism, the feeling that if we may lose our very own identity because of change
- Psychological safety: to suppress with this learning anxiety, the learner must feel
  psychological safety, which can be enabled by embracing errors rather than condemning
  them, communicating a positive vision, dividing a complex learning process into several
  easy steps, providing adapted learning...
- **Identification to a role model**: this mechanism can be very useful, especially when unfreezing has occurred and the learner, who is ready for the change, needs to receive the new information. Indeed, it is very efficient to talk to someone who has a different view over a concept.
- Cognitive restructuring: this mechanism is about understanding new concepts within the
  company's environment. For change to remain stable, the new behavior of the learner
  must reflect his personality, so the learner must be encouraged to point the solutions that
  best fit him through an analysis of his company's environment.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> It is however important to note that identification to a role model can be tricky considering the impacted person and the role model may not have the same personalities – and therefore may not have the same needs. For instance:

The consultant: many consulting missions fail precisely because of this identification to the wrong role model. Consultants create solutions that don't necessarily fit into the culture of the client company: those solutions will therefore be adopted only for a while

<sup>-</sup> **Benchmarking**: a benchmark consists in a very fast and simple process of identification of the best practices in a given sector. This can entail two consequences: on one hand, the best practices identified may fit only with specific cultures or environments, and therefore not be directly applicable in your company. On the

## 2.3.2 Ways of working as a change agent

#### Consultant-client collaboration

Often, digital transformations are led thanks to the help of a consulting company. The Change Agent and the client must be both equally involved in the change process. The consultant must give an equal attention to what he is doing in the client company, and what the impacts of his actions are. The business must connect the individuals, creating a homogenized methodology (Lewin, 1940s).

Schaffer (2002) investigated on how clients and consultants could work together in order to achieve great results. Too often, consultants give their clients insights about change, and don't really help them apply change. Moreover, even though clients are involved, consultants often do their job and hand over their decks to clients. Clients are then expected to accept and implement the recommendations, without really having participated to their creation, being busy with their daily routines. Yet to make sure a consulting program will succeed, consultants must create action plans that the client wants and can implement.

#### Collaborative and aware teams

Traditional teams are structured in a hierarchical manner, enhancing coordination and control thanks to authoritarian leaders who define the strategy, allocate resources, and solve

other hand, you may qualify some practices as "best" or "optimal" only because several actors of a given sector apply them, which is an abusively straightforward conclusion: only because many companies do something doesn't mean it is an optimal practice.

conflicts. Yet hierarchical structures are not the solution anymore. Employees mustn't rely on their management and wait for their leaders' directions (Snow, Fjeldstad, and Langer, 2017).

Also, they must have a deep comprehension of the global structure, so that they understand the role they play in the overall organization's profit. This way, they feel they benefit from it too. The organizational structure of teams must facilitate the horizontal transfer of knowledge and resources. Most of traditional organizational structures are in favor of specialization. This translates into several units managed separately, and silos. Therefore, those teams need to be redesigned in order to enhance communication across units, and collaboration between individuals. Only then will employees be able to consider the bigger picture and fully understand the role they play in the whole company (Global Performance improvement, 2015).<sup>2</sup>

#### 2.3.3 Communication to stakeholders

New technologies – such as data analytics, mobile technologies, social networks, and virtual conferencing – are having a great impact on cultural changes. It has become crucial for companies to rethink the ways of communicating to stakeholders both internally and externally with them, and to develop a strategic framework in order to enhance their engagement and their adaptation to digital transformation. Yet too often during a change process, the plans are designed and implemented in alignment with managers and budgets, while excluding the most central element: the people that will effectively be impacted by the change. For change to happen, it is crucial that leaders and change agents:

- **Involve** all individuals during the change program

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<sup>&</sup>lt;sup>2</sup> "Situation awareness" for instance, designates the ability to understand what is going on in the company It makes the individuals able to access relevant information in order to take the best decisions possible. A large panel of new platforms is emerging in order to support shared situation awareness. Several platforms support project management, and several tools such as documents and spreadsheets are designed to enhance a steady collaboration within actors. (Endsley, 2000).

- **Explain** to the individuals how to solve each problem they encounter: this is the only process known to that day that actually has real chances to allow a successful change
- **Provide them with some opportunities** to contribute directly to the change (Kotter and Cohen, 2002).<sup>3</sup>

It is also crucial for companies to use technology to encourage their employees to use digital platforms. Those will enhance their creativity, their collaboration, and give them more flexibility in their ways of working:

- Intranets (namely platforms which share up to date stories about a company or a project)
   have been proven to be a very efficient manner to maintain employees' both willingness
   to collaborate and motivation
- Distinct email groups in order to ensure a target communication, which will of course be more impactful and efficient.
- Virtual town halls are powerful leadership communication tools. They allow leaders of a company of a project to share information and listen to the employee's concerns.
- Social medias such as blogs, podcasts, chat rooms or discussion forums connect employees with one another and allow them to share experiences and ideas
- Surveys and feedbacks: sending surveys to employees allow human resources teams to assess the employees' level of engagement and define the company's objectives consequently (Newman, 2017).

Moreover, in order for employees to be engaged, it is crucial that companies point out several groups based on geographical and structural levels. Communication should enhance the adoption of common values and culture within employees. Employees can't all be considered as

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<sup>&</sup>lt;sup>3</sup> One good illustration of this is Beer's (1990) study of the implementation of change programs in twelve different organizations. The result of his study showed that change can't be successful if some individuals are not involved in the process. It is crucial that all departments and all managers are on board, otherwise the change is most likely to collapse. Change will have more chances to happen if the change agents make the effort to investigate on the organization's culture as an upstream research. The culture will orientate the actions of the change agents' work.

belonging all to the same group. Depending on the stakeholders' interests and points of view, it is necessary to decline the purpose of a given communication (Galigali, 2017).

## 2.3.4 Role allocation and training

Employees' role definition

Jobs in a digitalized business must be designed in order to meet the following three crucial psychological needs: competence, relatedness and autonomy. Only this way will individuals be creative and motivated. Inversely, it any of those three basic psychological needs isn't met, the people – and therefore the organization as a whole – will suffer a loss of both efficiency and well-being (Langer, 2017).

Moreover, in most organizations, roles and activities are defined rigorously, which often causes individuals to stick to their responsibilities in order not to have problems with management. This rigidity can be addressed within digital organizations through a redefinition of the roles and activities descriptions, which should be updated as many times as necessary, and by people who are experts in the given area (Global Performance Improvement, 2015).

Employees' role allocation

Whenever a reorganization occurs – in the context of a digital transformation for instance - new roles are created. One of the change agents' tasks is to allocate those new roles to the right employees. In order to do this, two manners can be used:

- **Informal role allocation**: when teams aren't too big, there is often a candidate that fits more than the others to the job – a job being defined by a list of roles. In this case, a

- simple conversation between the change agents and the manager(s) can be enough to allocate new roles
- **Formal role allocation**: if the workforce is bigger, several employees may fit the same job. Change agents may therefore have to organize interviews or elections for instance (Robertson, 2015).

There are several steps to follow in order to smoothly conduct a reorganization implied by a digital transformation:

- **Identification of the to-be model**: new functions and their distribution across the new organization
- Development of the to-be model: before/after org charts, job descriptions (including roles and activities), list of impacted employees
- Determination of capabilities needed for each job
- Assessment of the gap between current/future needed skills for each impacted employee
- Determination of training needs and resources
- Creation of training materials and implementation of training (University of Berkeley,
   2019)

#### Employees' training

In reorganization, one the key responsibilities of change agents is to develop employees impacted by change, making sure they are provided with the relevant learning and development materials in order to fulfill their new job needs. If formal training materials and classes are very useful in providing the employees with the new information they need, they must also practice their new skills within their work environment and be supported by their managers and by change agents before the actual end of the training program. Also, training materials should be personalized, in order to help employees identifying their strengths, weaknesses by encouraging communication (University of Berkeley, 2019).

This literature review developed the main theories in change management, notably when applied to supply chain dynamic environments. The synthesis of all the best practices mentioned by the authors referred to above allowed the development of a theoretical framework called the 'Change Agent Guide'.

## 3. Theoretical part

The 'Change Agent Guide' is a synthesis table of the main change management best practices developed by authors from the mid-20<sup>th</sup> century to today. This theoretical framework will be our reference grid all along the thesis, to help us assess to what extent change agents on SC Project adapt change management best practices to their environment.

## 3.1 Presentation of the theoretical framework

The main pillars of successful change management are:

- Topic 1: Change agents' skills and capabilities
- Topic 2: Change agents' communication and way of working
- Topic 3: Employees' role allocation and training

The 'Change Agent Guide' is summarized in the following table:

TOPIC 1:	Change agents'	Don't wait for your leaders to define your objectives,	Snow,
CHANGE AGENTS'	collaboration	take initiatives	Fjeldstad,
SKILLS AND			Langer (2017
CAPABILITIES		Don't work in separate units/silos, and be connected	GPI (2015)
		to all change agents	
	Change steps &	Big steps must be taken in a change program: define	Beckhard
	strategy	goals, define the activities and analyze change impact	(1989)
		Don't necessarily adopt a single strategy, but	Thurley (1979)
		combine as many as relevant	Lockitt (2004
TOPIC 2:	Before change	Involve the client in the change process as much as	Lewin (1940s)
CHANGE AGENTS'		yourself	
COMMUNICATION		Don't just hand over your decks to the client, but	
		create the action plan collaboratively	

AND WAY OF		Have a deep expertise of the supply chain (length,	Lambert and
WORKING		processes, network organization)	Cooper (2000)
		Realize the gap between theory and practice, and	
		adapt your actions	
		Involve everyone	Kotter and
		Understand the organization's culture	Cohen (2004)
		Deeply explain to the employees the reasons of	Lewin (1940s)
		change	Levasseur
			(2001)
		Understand why people feel threatened, and adapt	Armstrong
		your actions	(2006)
		Don't try and apply some supply chain best practices	Hughes, Ralif
		to any supply chain without adapting them to the	and Michels
		strategy and challenges	(1998)
		Don't underestimate the importance of cultural	(1330)
		barriers, and adapt your actions consequently	
		Embody a vision for the supply chain transformation	Jindal (2013)
	During change	Deeply explain to the employees how to solve their	Kotter and
	During change	problems	Cohen (2004)
		Provide employees with opportunities to contribute	Conen (2004)
		directly to the change	Ditabia (2006))
		Realize the level of change acceptance varies form	Ritchie (2006))
	Afternal sures	one employee to another and adapt your actions	
	After change	If change has been a success, celebrate so employees	
		feel recognized	A 4:11:1
		After change in SC, use KPIs s in order to measure	Milliken
		the success of supply chain change	(2012)
	Technology	Use technologies to enhance transparency and	Galigali (2017)
	importance	motivation	
		Create distinct email groups (e.g. geography,	
		hierarchy) and decline the purpose of a given	
		communication	
		Conduct surveys and define your actions	
		consequently	

TOPIC 3:	Role definition	Build relevant roles descriptions	Langer (2017)
EMPLOYEES' ROLE		Redefine the roles and activities descriptions as many	Global
ALLOCATION AND		times as necessary	Performance
TRAINING			Improvement
			(2015)
	Role allocation	In case of small teams, role allocation can be	Robertson
		performed with managers	(2015)
		Identify and develop the to-be model	University of
		Determine the capabilities needed for each job	Berkeley
		Assess the gap between current/future needed skills	(2019)
		for each impacted employee	
	Training	Make sure employees impacted by change are	
		provided with the relevant learning and development	
		materials	
		Make sure trained employees practice their new	
		skills during coaching sessions	
		Personalize the training materials (e.g. via strengths	
		and weaknesses analysis)	

Table A: The 'Change Agent Guide'

#### 3.2 Use of the theoretical framework

To answer the problematic – "To what extent do change agents adapt change management best practices in a dynamic supply chain environment?" – the three research questions will be answered by assessing the gap between the 'Change Agent Guide' and the collected data, according to the following framework:

RESEARCH QUESTIONS	REFERRING PART OF THE GUIDE
Question 1: "To what extent do change agents on SC Project respect	TOPIC 1: CHANGE AGENTS' SKILLS AND
the main best practices in terms of skills and capabilities?"	CAPABILITIES
<b>Question 2:</b> "To what extent do change agents on SC Project respect	TOIPC 2: CHANGE AGENTS'
the main best practices in communication and way of working?"	COMMUNICATION AND WAY OF
	WORKING
<b>Question 3</b> : "To what extent do change agents on SC Project respect	TOPIC 3: EMPLOYEES' ROLE
the main best practices in employees' role allocation and training?"	ALLOCATION AND TRAINING

Therefore, for each of the best practices in the 'Change Agent Guide', we will assess whether change agents on SC Project respect them or not. The three topics of the guide will be treated one after the other:

- **Topic 1:** Change agents' skills and capabilities
- **Topic 2**: Change agents' communication and way of working
- **Topic 3**: Employees' role allocation and training

### 4. Empirical part

The empirical part gathers data from interviews of the central change team of SC Project, and secondary data from internal project documentation. Case study data analysis employs pattern-matching, which assessed whether change management on SC Project matches the theoretical model (e.g. the 'Change Agent Guide').

#### 4.1 Methodology

#### 4.1.1 Justification of the case study research design

#### Qualitative method

According to Kalika, Mouricou and Garreau (2018), the qualitative methods:

- "Help us understand phenomena": here, whether we can apply a preconceived change management model to any transformation project
- "Point concepts, and to determine their links": here, change agents' capacity to respect best practices in ways of working, communication, role allocation and training, and change management adaptation to supply chain specificities
- "Allow us to deep dive into the study of phenomena and their context, notably through the environment consideration": here, Global Pharma Corp environment.

Bonoma (1985) shows a rising trend among researchers towards the use of qualitative research methods (opposed to quantitative ones). The literature about change management confirmed the need to deep-dive, via a case study analysis, into the possibilities for change agents to apply a preconceived change management model to any transformation project.

#### Case study methodology

The most popular qualitative research is the case study. It often designates a short description of a company, serving the purpose of illustrating a problematic in a simple way (Hlady Rispal, 2002). Therefore, the case study immediately appeared as the most relevant method to use in this thesis. Yin (1994) gives the following definition: "a case study is an empirical inquiry that investigates a contemporary phenomenon (the. 'case') in depth and within its real-world context". According to him, case studies:

- "Allow the understanding of dynamics within a unique environment": here, the change management dynamics within the unique environment of SC Project
- "Are limited to a very specific field of investigation": here, Global Pharma Corp
- "Allow the collection of very diverse data": here, interviews and project documentation

Wacheux (1996) gives two main reasons why the case study is the most popular method used in management sciences.

- **Its easy assimilation** to an organization (even though an individual, a group or a population of organizations can constitute report objects)
- **Its adequation** with the reality of an organization

Yet he also states this research strategy is only relevant if it tests a problematic, and in the context of an explicit definition of management situations. In most cases, a case study serves the purpose of generating new theory based on observations and descriptions. It is even more relevant when existing theory is incomplete or clarifies only part of the studied phenomenon. The researcher must focus on the meaning of the phenomena in order to build an interpretation based on the data he is observing (Hlady Rispal, 2002). Therefore, in this thesis, based on data collected on SC Project, I tried to interpret to what extent change agents have to adapt a preconceived change management model to their transformation projects.

The case study is a method that allows the researcher to access data from a wide variety of sources (documents, interviews...) and to draw a complete portrait of a complex phenomenon

(Miles and Huberman, 1984 – Bonoma, 1985 – Yin, 1994). In the context of a worldwide transformation project, it provided me with a complete picture of change management in 'real-time', instead of answering my research questions with multiple surveys (Johnston, 1999). Finally, for Halinen and Törnroos (2005), case study methodology is very relevant in business network research, part of several geographical, social, political, technological and market structures. Understanding the complex dynamics of change management in the context of the digital transformation of Global Pharma Corp's international supply chain was possible thanks to the case study methodology, which allowed me to deep dive into multiple sources of evidence (interviews and project documentation).

# 4.1.2 Case study research design

The development of a research design taking into account the quality criteria of validity and reliability makes the case study a valid research methodology (Miles and Huberman, 1984 – Yin, 1994 – Dul and Hak, 2008). According to Yin (1994), to guarantee the validity of data and findings, the case study must comply with the concepts of:

- **Construct validity:** use of multiple sources of evidence (e.g. data triangulation: here, interviews and project documentation)
- **Internal validity**: development of a research framework based on theory (here, 'Change Agent Guide'), as well as the use of research strategies such as pattern-matching and data triangulation (here, interviews and project documentation)
- **External validity:** establishment of a sample domain where the findings can be generalized (here, transformation projects in international companies)
- **Reliability**: replication of the same case by providing documentation and further information as to how the data was collected

The research design links the data collected in order to answer the research questions. It is composed by five main elements (Yin, 1994):

- **The study question(s):** here, the problematic and the three research questions mentioned in the *Introduction* and in the *Theoretical part*
- **Its proposition(s):** here, to what extent do change agents respect best practices in terms of skills and capabilities, of communication and way of working, and of employees' role allocation and training.
- **Its unit of analysis:** here, the central change management team of SC Project, the digital transformation of Global Pharma Corp's supply chain
- The logic linking the data to the propositions: here, the research questions determine the variables (e.g. skills and capabilities, communication and way of working, and employees' role allocation and training.). Eight interviews were conducted with the change agents from the central change management team of SC Project. The development of an interview guide (see Appendix 3) helps reflecting the validity of case study findings. The data I collected through direct interviews was then linked with other sources of evidence taking the form of project documentation. To assure the validity of my findings, I demonstrated convergence of proofs via data triangulation. For each of my four research questions, I collected evidence from several data sources, and analyzed them in a corroboratory way (Yin, 1994 Johnston, 1999).
- **The criteria applied for interpreting the data**: here, the 'quality' criteria.

#### 4.1.3 Sample description

#### Sample choice

The reason why I picked the central change management team of SC Project as my sample is that I myself have been part of that team from November 2018 to August 2019. This job has provided me with the opportunity to access a large amount of internal project documentation, as well as to interview the whole central change team. In order to choose a sample, two steps must be followed (Kalika, Mouricou, Garreau (2018):

Assessing the relevancy of the field for the problematic: either by exploring a field that

has already been studied, or by justifying a choice for a given field by the fact that it has

not been explored much by researchers working on the same subject. Here, I chose to

study the field of Global Pharma Corp in the context of the transformation of its supply

chain. It has never been explored by researchers working on change management in

supply chain context.

Assessing the accessibility of the field and its data: if the author is an intern within a

company, he/she will be able to collect much data easily. Here, being a change agent on

SC Project for ten months, it has been easy for me to collect data.

Sample description: Global Pharma Corp, a pharma global leader

Global Pharma Corp is a multinational pharmaceutical company committed to preventing

diseases and treating people across the world (see Appendix 4). It engages in the research and

development, manufacturing and marketing of pharmaceutical products. It has five key

therapeutic areas: Diabetes and cardiovascular, General medicines & Emerging markets,

Specialty care (rare diseases), Vaccines and Consumer Healthcare. It employs more than 100 000

people, representing 145 nationalities.

It is present in 100 countries: it has 75 manufacturing sites in 33 countries and provides

healthcare solutions in more than 170 countries around the world. The 2018 company sales were

of 34 464 million euros. The biggest therapeutic area is General medicines & Emerging markets

(12,948 million euros for 2018 sales), and most products are sold in the United States (11,540

million euros for 2018 sales). Global Pharma Corp is much engaged in research and development,

with a 5,894 million euros invested in 2018. It currently has 18 projects in development, in 4 hubs

across Europe, North America and Asia, and 35 projects in Phase 3 or submitted for approval.

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Global Pharma Corp has a complex supply network, with 120 distribution centers, 80 manufacturing plants, 380 contract manufacturing organizations, and 27 000 stock keeping units, as well as an atomized and disintegrated system landscape and related processes. Therefore, in 2017, Global Pharma Corp launched SC Program, a five-years transformation project (see Appendix 5 & 6). The project's ambition is to transform supply chain capabilities, setting up the improved processes and innovative solutions required to deliver world class supply chain performance for each global business unit. By 2021, SC Project will allow Global Pharma Corp to move from heterogonous processes, fragmented tools and unaligned functions to automation, aligned processes, and end-to-end visibility and integration by setting up:

- A new innovative solution, Software K, being the core planning system and the one source of truth. More than 300 what-if scenarios will be performed every day, allowing supply chain workers to identify the cause of a problem within a week (vs. 3 months today)
- More than 80 interfaces between running daily and ensuring a consistent data set almost in real time
- Specialized and standardized processes, allowing perfect synchronization all along the supply chain (see Appendix 7).

Two important information must be noted for the understanding of the upcoming Case study:

- **Two different consulting companies worked on this project:** the global design phase (2017-2018) and was led by renamed multinational consulting company. As from 2018,

this consulting company was replaced by Consulting Corp<sup>4</sup>, which will lead SC Project for the four remaining years (until 2021).

'Central' level is opposed to 'deploy' one: on one hand, the 'central' team is based in the project's hub (Global Pharma Corp Barcelona headquarters) and defines the global strategy. On the other hand, then, 'deploy' teams decline this central strategy is into local strategies and deploy Software K all around the world.

#### Change management on SC Project

The central change team of SC Project works from the project's hub, in Global Pharma Corp Barcelona headquarters. Central change agents are charged with developing change approach, methods and tools, and create awareness around SC Project program. The global change management strategy is articulated around four pillars:

- 1. **Change activities**: to ensure consistency in the way to deliver change through the appropriate methodology, and to monitor change adoption
- 2. **Communication**: to drumbeat communication all along the program
- 3. **Growing capabilities planning:** to support and monitor target roles adoption and capability model implementation
- 4. **Learning and support:** to secure the appropriate of new processes and ways of working

I interviewed the whole central change team (e.g. my eight colleagues) to have the larger amount of data possible. The profiles are various: several hierarchical levels (Analyst, Consultants, Managers, Senior manager), several areas of expertise (communication, role

<sup>&</sup>lt;sup>4</sup> . Consulting Corp reported net revenues of 39.6 billion dollars in 2018, with more then 459 000 employees serving clients in 120 countries

allocation and training, growing capability planning, supply chain...), several nationalities (French, Spanish, Columbian, Polish, and Iranian)<sup>5</sup>:

NAME	COMPANY	HIERARCHY
Change Agent 1	Consulting Corp	Consultant
Change Agent 2	Consulting Corp	Manager
Change Agent 3	Consulting Corp	Analyst
Change Agent 4	Consulting Corp	Consultant
Change Agent 5	Global Pharma Corp	Communication Lead
Change Agent 6	Consulting Corp	Senior Manager
Change Agent 7	Consulting Corp	Manager
Change Agent 8	Consulting Corp	Manager

#### 4.1.4 Data measurement procedures

Dul and Hak (2008) split data measurement into data collection and data reduction (e.g. data coding). If the research design includes valid data collection and coding techniques, then it will be valid and reliable.

#### Data collection

A given research can either be based on one single type of data or on various collect modes in order to analyze the field from complementary angles (Kalika, Mouricou and Garreau,

Change Agents 3,4 and 8 are specialized in communication. Therefore, they were not able to provide me with relevant answers about Topic 3 (e.g. Role allocation & Training). Whenever needed, their answers will be replaced by 'N/A' (e.g. 'Non-applicable').

<sup>&</sup>lt;sup>5</sup> Change Agent 5 is the only change agent from the client side (e.g. Global Pharma Corp).

2018). Data collection links several sources to triangulate the researcher's perceptions on data in a wider context, which allows him to fully picture the sample under study (Bonoma, 1985). Case studies combine data from different sources (interviews, observations, archives...), which result consists into a qualitative and/or quantitative evidence. The triangulation of several data sources is therefore a way to strengthen the validity of outputs (Eisenhardt, 1989). Therefore, I chose to use two collect modes:

Interviews (with 8 change agents from central change team): they are the most common type of interview used by researchers in management sciences and allow the researcher to push the respondent to deliver rich and detailed data. This type of interviews rely on an interview guide in which discussions themes are specified (see Appendix 3) and is neither a questionnaire nor an informal conversation: "It is an optimal compromise between the freedom of expression of the respondent and the research structure" (Romelaer, 2005). In 2012, Gavard-Perret added: "The order of the discussion isn't imposed".

Being a Change agent on SC Project myself, it was very natural to choose to conduct interviews. I conducted my eight interviews between May 20<sup>th</sup> and June 5<sup>th</sup>, in Barcelona. For each interview, I booked a conference room for one hour. First, I would tell my colleague about my thesis's subject and explain the interview's structure based on my pre-developed 'Change Agent Guide' (see Table A). Second, I would ask the change agent to present herself. Third, I asked them specific questions related to the change agent guide and listen to what the change agent was willing to tell me about each of them. All interviews were recorded.

- SC Project documentation: it can be either public or confidential (documents internal to an organization, PowerPoint presentations, emails...). It can be used to complete other collect modes, or as the unique source of data (Kalika, Mouricou and Garreau, 2018). Again, being a change agent on SC Project myself, the choice of analyzing project documentation was logic. I could easily access it on the SharePoint of the project, or in my mailbox.

INTERVIEWS (1 hour each)
Interview of Change Agent 1
Interview of Change Agent 2
Interview of Change Agent 3
Interview of Change Agent 4
Interview of Change Agent 5
Interview of Change Agent 6
Interview of Change Agent 7
Interview of Change Agent 8
INTERNAL PROJECT DOCUMENTATION
'Change management key drive'
'Local change management strategy'
'From global to local change management strategy'
'Global change management strategy'
'Plan local change management activities'
'Growing capabilities planning standard timeline for phase 1'
'GCP / Roles allocation – Poland'
'Organization model by role for 2019 GCP Exercises'
'Role competencies / SCP – Markets (functional capabilities)'
'Role competencies / SCP – Markets (lead competencies & business competencies)'
'Capability assessment (example)'
'SC Project video presentation (screenshots)'
'SC Project structure and scope'
'SC Project expected benefits'
'Email from Change Agent 2 (Manager) to me'
'Email from Chance Agent 6 (Senior Manager) to the central change team'
'Change management flash report (communication, GCP, and learning & support)'
'Global strategy (change activities, communication, GCP, and learning & support)'
'Local strategy (map the journey, prepare stakeholders, plan GCP, enable new ways of working, assess adoption,
connect the organization)'
'SC Project overall roadmap'

'SC Project pre go-live communication flyer'

'Communication & mobilization (March 2019)'

'Email from SC Project Global communication to all SC Project actors'

'Transformation GPS survey topics'

'Adoption survey topics'

'Role descriptions for SCP Markets'

'Functional capabilities descriptions for SCP Markets'

'SCP Training materials (agenda & extract)'

'Coaching sensibilization session (agenda & extracts)'

'Central change management strategy on SC Project'

'SC Project change management KPI dashboard (June 2019)'

Table B: Summary of all data collected

#### Data coding

Qualitative coding is 'the process by which segments of data are identified as relating to, or being an example of, a more general idea, instance, theme or category' (Lewins and Silver, 2007). The analytic aspect of data coding allows us to consider it is fully part of data analysis. Data coding consists in 'selecting, focusing, simplifying, abstracting, and transforming the raw data that appear in edited field note' (Miles and Huberman, 1984). There are three coding techniques (Strauss and Corbin, 1990): open coding, axial coding, and selective coding. My Case study applied the two first ones:

Open coding: I grouped the best practices emerging from literature into topics and subtopics corresponding to those from my theoretical framework, the 'Change Agent Guide'. This first level of coding resulted into 4 code families, 14 codes, and 56 sub-codes. My constant questioning as to how to reduce data decreased the risk for subjectivity and research bias.

- **Axial coding:** I noticed some sub-codes could merge. In this second level of coding, the number of code families decreased to 3, codes to 13, and sub-codes to 32. The final coding scheme is summarized in the table below:

Code family 1: CHANGE AGENTS' SKILLS AND CAPABILITIES	
Code 1.1:	Sub-code 1.1.1: Don't wait for your leaders to define your objectives, take initiatives
Change agents' collaboration	Sub-code 1.1.2: Don't work in separate units/silos, and be connected to all change agents
Code 1.2: Change	Sub-code 1.2.1: Big steps must be taken in a change program: define goals, define the activities and analyze change impact
steps & strategies	Sub-code 1.2.2: Don't necessarily adopt a single strategy, but combine as many as relevant

Code fa	amily 2: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING
Code 2.1:	Sub-code 2.1.1: Involve the client in the change process as much as yourself
Before change	Sub-code 2.1.2: Don't just hand over your decks to the client, but create the action plan
	collaboratively
	Sub-code 2.1.3: Have a deep expertise of the supply chain (length, processes, network
	organization)
	Sub-code 2.1.4: Realize the gap between theory and practice, and adapt your actions
	Sub-code 2.1.5: Involve everyone
	Sub-code 2.1.6: Understand the organization's culture
	Sub-code 2.1.7: Deeply explain to the employees the reasons of change
	Sub-code 2.1.8: Understand why people feel threatened, and adapt your actions
	Sub-code 2.1.9: Don't try and apply some supply chain best practices to any supply chain
	without adapting them to the strategy and challenges
	Sub-code 2.1.10: Don't underestimate the importance of cultural barriers, and adapt your
	actions consequently
	Sub-code 2.1.11: Embody a vision for the supply chain transformation
Code 2.2 During	Sub-code 2.2.1: Deeply explain to the employees how to solve their problems
change	Sub-code 2.2.2: Provide employees with opportunities to contribute directly to the change
	Sub-code 2.2.3: Realize the level of change acceptance varies form one employee to another
	and adapt your actions
Code 2.3:	Sub-code 2.3.1: If change has been a success, celebrate so employees feel recognized

After change	Sub-code 2.3.2: After change in SC, use KPIs s in order to measure the success of supply chain
	change
Code 2.4:	Sub-code 2.4.1: Use technologies to enhance transparency and motivation
Technology	Sub-code 2.4.2: Create distinct email groups (e.g. geography, hierarchy) and decline the
importance	purpose of a given communication
	Sub-code 2.4.3: Conduct surveys and define your actions consequently

	Code family 3: EMPLOYEES' ROLE ALLOCATION AND TRAINING
Code 3.1:	Sub-code 3.1.1: Build relevant roles descriptions
Employees' role definition	Sub-code 3.1.2: Redefine the roles and activities descriptions as many times as necessary
Code 3.2:	Sub-code 3.2.1: In case of small teams, role allocation can be performed with managers
Employees' role	Sub-code 3.2.2: Identify and develop the to-be model
allocation	Sub-code 3.2.3: Determine the capabilities needed for each job
	Sub-code 3.2.4: Assess the gap between current/future needed skills for each impacted employee
Code 3.3:	Sub-code 3.3.1: Make sure employees impacted by change are provided with the relevant
Employees'	learning and development materials
training	Sub-code 3.3.2: Make sure trained employees practice their new skills during coaching sessions
	Sub-code 3.3.3: Personalize the training materials (e.g. via strengths and weaknesses analysis)

Table C: Coding scheme of the Change Agent Guide: Theoretical patterns of Change management in a dynamic supply chain environment

# 4.1.5 Data analysis procedures

According to Yin (1994), "data analysis consists of examining, categorizing, tabulating, or otherwise recombining the evidence to address the initial propositions of the study". Propositionstesting in case studies is qualitative and consists in pattern-matching (Dul and Hak, 2008). This process assures internal validity, via the assessment of whether the observed patterns from the

collected data (interviews and project documentation) correspond to the propositions (theoretical framework, e.g. the 'Change Agent Guide').

#### Pattern matching

This is the most common approach in analyzing case studies (Yin, 1994). If the empirical data matches the theoretical concept and propositions, then the researcher can assume that the empirical and theoretical patterns coincide. He/she can therefore prove internal validity of the case study. The strength of pattern-matching lies in its potential to use complex propositions and concepts to analyze data from multiple angles (Trochim, 1989). It is especially important if the subject concerns a complex phenomenon, such as the change management in the context of the digitalization of a worldwide supply chain like the one of Global Pharma Corp, that necessitates the understanding of a wide set of environmental and behavioral factors.

According to Trochim (1989), more complex theoretical patterns, if combined, hold stronger internal validity for the theoretical concept. My study combines three theoretical views (e.g. best practices in skills and capabilities, in communication and way of working, and in employees' role allocation and training) into an integrative framework (e.g. the 'Change Agent Guide'). The extent of empirical and theoretical pattern matching will validate the degree of adaptation of change management approaches to external environment.

#### Steps for conducting the data analysis

In our empirical part, we will analyze the change agents' adoption of change management practices, based on our pre-developed change agent guide and summarized in our coding scheme.

#### STEP 1: BUILD CITATIONS TABLES

The Citations tables can reassure the reader regarding the volume of the data that allowed the development of the analysis (Kalika, Mouricou, Garreau, 2018). Therefore, for each of the best practices, I built a *Citations table* (see Appendix 8) by choosing the eight most relevant citations (one per change agent).

#### **STEP 2: BUILD CONDENSED MATRIXES**

They are a synthesis of the *Citations tables* and allow the reader to have an overview on the data that was used to produce the analysis (Miles, 2014). Therefore, for each of the best practices, I built a *Condensed matrix* (see Appendix 9), namely a summary of the *Citations tables*.

#### STEP 3: LOOK FOR ILLUSTRATING PROJECT DOCUMENTATION

I investigated mostly on SharePoint but also on my mailbox to find the decks that could provide me with immediate and clear answers. I selected among those decks the slides that would allow me to proceed with the analysis. I finally proceeded with the analysis by assessing whereas change agents are succeeding in respecting standard change management best practices.

#### **STEP 4: WRITE THE STORYTELLING**

One of the most popular methods to justify a qualitative analysis is to use interviews citations to show that the analysis is built on empirical elements (Kalika, Mouricou and Garreau, 2018). Therefore, for each of the best practices, I picked out a couple citations from the corresponding *Citations table* and build a storytelling around them.<sup>6</sup>

#### STEP 5: BUILD SUMMARY TABLES FOR EACH OF THE THREE CODE FAMILIES

Each time a code family were treated, I built a tableau summarizing all the elements that helped me in the analysis. In those tables, I state, for each sub-code, the interview elements and/or project documentation elements of observation.

<sup>&</sup>lt;sup>6</sup> It is important to note that answers from Change Agent 5 (CA5) are often contradictory with the others. This notably comes from the fact that she wishes to protect her Manager on client side (Change Lead on the project, unfortunately impossible to interview) by embellishing reality.

## 4.2 Case study

The upcoming case study conducted with Global Pharma Corp merges interview data and project documentation data to assess the extent to which change agents adopt change management best practices (the 'Change Agent Guide') in a dynamic supply chain environment.

# 4.2.1 Change agents' skills and capabilities on SC Project

In the first part of this case study, we will answer our first research question: "To what extent do change agents on SC Project respect best practices in terms of capabilities and skills?" by referring to the first part of the 'Change Agent Guide'. 'Green' means empirical patterns correspond with theoretical ones; 'red' means no matching took place or no empirical evidence was found):

	Code family 1: CHANGE AGENTS' SKILLS AND CAPABILITIES
Code 1.1:	Sub-code 1.1.1: Don't wait for your leaders to define your objectives, take initiatives
Change agents' collaboration	Sub-code 1.1.2: Don't work in separate units/silos, and be connected to all change agents
Code 1.2: Change	Sub-code 1.2.1: Big steps must be taken in a change program: define goals, define the activities and analyze change impact
steps & strategies	Sub-code 1.2.2: Don't necessarily adopt a single strategy, but combine as many as relevant

Table C: Coding scheme of the Change Agent Guide Part 1: Change agents' skills and capabilities

#### Sub-code 1.1.1 (Code family 1/ Code 1.1)

#### "Don't wait for your leaders to define your objectives, take initiatives"

This best practice is not respected on SC Project. Initiative taking is prevented by the separation of the change management pillars (e.g. Change activities, Communication, Growing Capabilities Planning, Learning & Support): "If you're on GCP and Learning, you get a sense of what goes on in Communication and Change activities, but you don't work on that." (CA2). Therefore, change agents are assigned to one or two given pillars and can't take any decision or action in the other pillars, even though the whole change management code shouldn't be so disintegrated: "It shouldn't be so separated. The whole thing is change management." (CA3). Initiative-taking is also tough because of client former habits with the previous consulting company: "For Consulting Corp, it was complicated to arrive after the previous consulting company. Global Pharma Corp had habits with the previous teams (..) Consulting Corp had to capitalize on what had been done already." — limiting change agents from Consulting Corp to only adding their touch to some previous work.

#### Sub-code 1.1.2 (Code family 1/ Code 1.1)

#### "Be connected to all change agents"

This best practice is not respected on SC Project. Change agents are not really connected. Indeed, on one hand, the consultants have various profiles (e.g. culture, language, seniority), which involves numerous different mindsets and ways of working: "We have a challenge that we have French and Spanish people (language, ways of working). We have many levels (internship, CA3, consultant, manager, CA6) working sometimes in the same document..." (CA3). On the other hand, as mentioned earlier, the four pillars don't help an easy collaboration: "It's too separated for me. Sometimes I see the CA3 stays until 10pm, and I can't even propose her help, or even understand whether she needs help. The only person who has visibility is the Senior Manager, not anyone else." (CA8). Finally, the absence of personal fit between the client and the consultant

(reminder: the change team is composed by 8 consultants and 1 client) is also a barrier to the connection between CA5 (client) and the rest of the team (consultants): "Also, we have client counterparts very emotional. (...) when there's no personal fit between the clients and us, collaboration is tough." (CA6).

#### Code 1.2: Change steps & strategy

#### Sub-code 1.2.1 (Code family 1/ Code 1.1)

"Big steps must be taken in a change program: define goals, define the activities, and analyze change impact"

This best practice is respected on SC Project. According the 'Change management key driver' project deck, change agents respect the following steps:

- First, they defined three main goals: ensuring SC Program adoption at all levels, perform a soft transition, and increase commitment of all stakeholders:
- Second, they defined the activities
- Third, they analyzed change impact. The definition of activities consists in determining which activities are relevant for each phase of the change plan. The analysis of change impact consists in identifying populations, processes and tools that will be most impacted by SC Project.

#### Sub-code 1.2.2 (Code family 1/ Code 1.1)

"Don't necessarily adopt a single strategy, but combine as many as relevant"

This best practice is respected on SC Project. Change agents combine two strategies. On one hand, the global strategy is defined in the Barcelona hub, and concerns the whole project. On the other hand, local strategies consist in an adaptation of the global strategy to local specificities all across the world, for each deployment phase:

- **The global strategy** is about the four pillars mentioned several times all along this thesis: Change activities, Communication, Growing capabilities, and Learning and support:
- **The local strategy** is composed by five steps: Map the journey, Prepare stakeholders, Plan GCP, Enable new ways of working, Assess adoption, that happen chronically in this same order, and by a sixth one, Connect the organization (e.g. communicate about SC Project), which is an ongoing step.

Table E below (Pattern-Matching regarding 'Change agents' skills and capabilities') summarizes the results of our case study, which is whether the observations of our case study (empirical patterns) coincide with our predefined theoretical patterns:

THEORETICAL PATTERNS		EMPIRICAL PATTERNS
	Code fami	y 1: CHANGE AGENTS' SKILLS AND CAPABILITIES
		INTERVIEWS:
Code 1.1	Sub-topic 1.1.1	<ul> <li>Initiatives prevented due to long and numerous validation processes</li> <li>Change agents' expertise limited to given pillars, preventing them from taking initiatives in other pillars</li> <li>Sometimes, lack of sharing of some useful information from client side, preventing change team to adapt some interventions consequently</li> <li>Difficulties for client to get used to new consultants and ways of working</li> </ul>
	Sub-topic 1.1.2	after building habits with previous consulting company  - Lack of understanding of change team organization preventing collaboration
		<ul> <li>Numerous cultures (language, ways of working) and seniority levels (from intern to senior manager)</li> <li>No personal fit between consultants and clients within change team,</li> </ul>
		implying difficult team leading and collaboration  - Change management pillars implying silos and preventing collaboration
		PROJECT DOCUMENTATION:
Code 1.2	Sub-topic 1.2.1	Documentation title: 'Change management key driver' - First, change agents define their main goals - Then they define the change activities

		- Finally, they analyze the change impact
Sub-	-topic 1.2.2	Documentation titles: 'Global vs. Local change management strategies' –
		'The four pillars of the global change management strategy' & 'Plan local
		change management activities'
		- Change agents combine two different strategies
		- Global strategy is defined in the hub, and concerns the whole project
		- Local strategies adapts the global strategy to local specificities

Table E: Pattern-Matching regarding 'Change agents' skills and capabilities'

# 4.2.2 Change agents' communication and way of working on SC Project

In the second part of this Case study, we will answer our second research question: "To what extent to change agents on SC Project respect best practices in communication and way of working?" by referring to the second part of the 'Change Agent Guide':

Code	Code family 2: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING	
Code 2.1:	Sub-code 2.1.1: Involve the client in the change process as much as yourself	
Before change	Sub-code 2.1.2: Don't just hand over your decks to the client, but create the action plan collaboratively	
	Sub-code 2.1.3: Have a deep expertise of the supply chain (length, processes, network organization)	
	Sub-code 2.1.4: Realize the gap between theory and practice, and adapt your actions	
	Sub-code 2.1.5: Involve everyone	
	Sub-code 2.1.6: Understand the organization's culture	
	Sub-code 2.1.7: Deeply explain to the employees the reasons of change	
	Sub-code 2.1.8: Understand why people feel threatened, and adapt your actions	
	Sub-code 2.1.9: Don't try and apply some supply chain best practices to any supply chain without adapting them to the strategy and challenges	
	Sub-code 2.1.10: Don't underestimate the importance of cultural barriers, and adapt your actions consequently	
	Sub-code 2.1.11: Embody a vision for the supply chain transformation	

Code 2.2:	Sub-code 2.2.1: Deeply explain to the employees how to solve their problems
During change	Sub-code 2.2.2: Provide employees with opportunities to contribute directly to the change
	Sub-code 2.2.3: Realize the level of change acceptance varies form one employee to another and adapt your actions
Code 2.3:	Sub-code 2.3.1: If change has been a success, celebrate so employees feel recognized
After change	Sub-code 2.3.2: After change in SC, use KPIs s in order to measure the success of supply chain change
Code 2.4:	Sub-code 2.4.1: Use technologies to enhance transparency and motivation
Technology importance	Sub-code 2.4.2: Create distinct email groups (e.g. geography, hierarchy) and decline the purpose of a given communication
	Sub-code 2.4.3: Conduct surveys and define your actions consequently

Table F: Coding scheme of the Change Agent Guide Part 2: Change agents' communication and way of working

Code 2.1: Before change

#### Sub-code 2.1.1 (Code family 2/ Code 2.1)

#### "Involve the client in the change process as much as yourself"

This best practice is respected on SC Project. Client involvement in the change process is very high. The main reason lies in the client's history: for years, consultants have only been helping them with operational tasks. For the first time, they are charged of the strategy (e.g. change management) and trust is tough: "For Global Pharma Corp, consultants are just helpers for meetings, they don't trust their expertise. It's true on the whole project (not only change management). For the last decades, Global Pharma Corp has worked with many consultants, but few strategic consulting firms. Yet Consulting Corp is a high-value consulting firm." (CA1). The client wants it be involved so much that it prevents consultants' decision making: "To be honest, I don't think we take any decision. With Global Pharma Corp, it's impossible to coach." (CA8). Client involvement is tough for consultants, notably because of project's size (e.g. number of different streams) and the complexity of their relationship with the client: "Relationship with Global Pharma Corp is complex. Collaboration is not as good as what I saw on other projects, and

it's not constructive. It's very difficult. Many efforts are needed. Behaviors aren't pragmatic, we lose much time thinking of the past instead of future." (CA7).

#### Sub-code 2.1.2 (Code family 2/ Code 2.1)

#### "Don't just hand over your decks to the client, but create the action plan collaboratively"

This best practice is respected on SC Project. The change action plans are created collaboratively by the consultants and the client. The main reason is the lack of consultants' functional expertise: "You can't know the functional specificities of the process to be able to ask the right questions or understand the outcomes. If the employees start discussing very specific operational codes, your knowledge of change management reaches a certain point: you need the functional teams' support." (CA2). Yet this high degree of collaboration in the creation of action plans entails numerous and long validation processes: "In terms of approvals, supervision, it's very much dependent of the client. Consulting Corp has a limited trust given by Global Pharma Corp. There was a lot of validation. That wasn't so mandatory or detailed in my former projects." (CA4). Also, many coordination meetings are therefore needed, preventing change agents from building a relationship with impacted employees: "This complexity of structure entails too many meetings: it generates much stress and loss of time. In change, we need to be close from site, to end users." (CA7).

#### Sub-code 2.1.3 (Code family 2/ Code 2.1)

## "Have a deep expertise of the supply chain (length, processes, network organization...)"

This best practice is not respected on SC Project. Change agents don't have even the basic expertise about supply chain: "Change agents on SC Project are clearly not supply chain experts. We're not supposed to be though. (...) We need to understand what people do today, what they'll do tomorrow, and point out the gaps." (CA6). This doesn't seem to prevent them from understanding what workers from Global Pharma Corp daily activities are and will be in the tobe model. Yet it prevents them from adapting their change actions: "I don't understand all SC

stakes, and I'm frustrated. (...) We don't adapt our actions to supply chain. It's sad (...)." (CA7). Even though change agents would like to build an action plan that is adapted to supply chain specificities (culture, size, complex processes...), they can't. Luckily, functional teams are supply chain experts: "The actual understanding is on the functional side: that's why we're always so close to them. (...) They're the ones to know what to provide, which practical exercises make sense." (CA2). Therefore, some change actions are indeed adapted to supply chain (e.g. trainings).

#### Sub-code 2.1.4 (Code family 2/ Code 2.1)

#### "Realize the gap between theory and practice and adapt your actions"

This best practice is not respected on SC Project. Change agents realize there is a gap between theory (e.g. deliverables content) and practice (e.g. plants reality): "SC workers wear security shoes, white blouses, no jewelry... they're often men, change agents are often women. None of this was told to us during our job interviews. We're not trained for this, and yet it's very important" (CA1). They are also aware of the gap between consultants and workers languages: "I worked in a plant after my studies: I could see what was going on and understand their language. I was working about inventories, warehouse etc. (as head of operations): you get better results if you have visibility." (CA8). If change agents are able to speak the same language as workers from Global Pharma Corp, they increase the chances for change success. Yet again, it doesn't seem like they have the resources to act on this theory/practice gap: "We're focusing on slides, and deliverables. We're not having a broad approach, ambition of the real impact on the whole company. (...) We lose the sense of risk linked to supply chain, we think the risk is the failure in very detailed things." (CA2). As mentioned earlier, SC Project is more about theory (e.g. building and validating deliverables and toolkits) than concrete actions. Yet change management is all about concrete actions, and change can't be effective if workers aren't provided with actions matching their industry and company cultures.

# Sub-code 2.1.5 (Code family 2/ Code 2.1) "Involve everyone"

This best practice is not respected on SC Project. Pre go-live communication does not involve impacted employees. In most cases, the tightness of roadmaps prevented a complete communication: "On the executive side, it was a "quick-win" logic (...). You may have the go-live, it doesn't mean the team is informed enough." (CA2). Some go-lives happened without all impacted employees being enough aware of SC Project. Also, the absence of local visits cuts central change team from on-site reality - "We're all in the same Barcelona tower and we think everybody know what we know but it's false" (CA3) — making them deliberately forget to involve some people they think would be aware of SC Project. One of the consequences is the non-involvement of neighboring functions (e.g. not supply chain: marketing, finance...): "We miss the neighboring functions (...) We feel that supply chain leaders don't feel yet like they have enough legitimacy to go to those neighboring functions and tell them about this (e.g. 'SC Project')." (CA6)

# Sub-code 2.1.6 (Code family 2/ Code 2.1)

# "Understand the organization's culture"

This best practice is respected on SC Project. The change team understood the workers expectations as to pre go-live communication: "We did make an effort to actually understand the client's communication style and culture. It was quite well done and very much adapted to Global Pharma Corp's context." (CA4). First, impacted workers need much gratification because of their strong attachment to their plants: "In supply chain, workers are very implied (...) The turnover is low (often 25 years in the same plant), there's a strong sense of belonging (...) Therefore, it's important to thank them, (...) to stick their portraits on the plants' walls" (CA1). Second, workers need very concrete communication: "We noticed that in France for instance, they're tired of Excel files. They need real things" (CA7). They don't always access computers on a daily basis, and prefer posters, events, goodies... Finally, workers would rather be addressed via less channels (e.g. Yammer, WhatsApp, Intranet, Newsletters...) - "People said there are too many channels." (CA8) — and again, concrete communication is much preferred.

#### Sub-code 2.1.7 (Code family 2/ Code 2.1)

#### "Deeply explain to the employees the reasons of change"

This best practice is not respected on SC Project. Pre go-live communication doesn't focus enough on the detailed explanations of change reasons. When change agents from Consulting Corp arrived on the project after the previous consulting company, some crucial pre go-live communication supports were still missing: "When we arrived on SC Project, we didn't have any document where the program was explained (..) It should have been done at the beginning, everybody should know those key points!" (CA3). Therefore, change agents eventually noticed some workers were lacking basic information: "We notice some people lack some crucial information." (CA7). Without an efficient communication, deep explanations as to why change must happen couldn't be provided to workers. Apart from the content of the communication, the channels don't seem to be appropriate either: "The focus of communication in the core level has been very narrowed. We're limited to flyers, goodies, take pictures. It's very transactional." (CA2). If this type of communication does inform workers about the existence of SC Project, it doesn't provide them with reasons why this project will benefit both their company and themselves. Yet to be engaged and motivated in the upcoming phases, workers need to deeply understand this.

#### Sub-code 2.1.8 (Code family 2/ Code 2.1)

#### "Understand why people feel threatened, and adapt your actions"

This best practice is not respected on SC Project. Change agents don't seem to adapt their actions to workers' fears. Their first mistake was to skip the change impact assessment step: "I haven't seen a proper change impact assessment done (...) It's really hard to start with communication when you haven't seen that document." (CA4). Without this assessment, change agents couldn't provide the workers with an appropriate communication. Second, the communication is too disconnected from the local reality: "We have things led by central change team, but nothing that touches directly end users (...). We weren't able to implement actions, and to personalize." (CA7). If communication is too abstract, there is not enough personalization to

address properly workers doubts. Third, the content itself is lacking information about actual benefits for workers, which doesn't help in fear mitigation - "There's no communication on the big process changes, on the benefits. There's a huge lack of communication within Global Pharma Corp, whereas (...) the whole world knows Global Pharma Corp's transforming its SC." (CA1). Impacted workers seem to be forgotten in comparison of the external world. Finally, and as mentioned earlier, the communication channels don't help: "We're missing the relation. It's good to give someone a notebook, but if the person hasn't seen the whole change team accompaniment, you're missing the key point of building trust and doing change along with the teams." (CA2).

#### Sub-code 2.1.9 (Code family 2/ Code 2.1)

"Don't try and apply some supply chain best practices to any supply chain without adapting them to the strategy and challenges"

This best practice is not respected on SC Project. Change agents are aware that they can't copy a preconceived change model successful in previous supply chain transformations to their current project without adapting it: "You can't copy a successful SC change program in any supply chain. Even if you're a supply chain expert, it just allows you to be faster. You must start from scratch each time." (CA1). Each project is unique. Yet again, they don't have the resources to act: "We could adapt more. We have a 'Consulting Corp suitcase' with methodologies and screwdrivers. It's not a good way. We need to be more flexible." (CA8). Change agents do apply preconceived methodologies to SC Project without adapting them. Luckily, they again have the support of functional teams in plants: "They (e.g. functional teams at local levels) need to understand local specificities, because that's where change will really happen." (CA6). Even though change programs aren't adapted on a strategical level, they are on a more practical/operational level (e.g. local).

#### Sub-code 2.1.10 (Code family 2/ Code 2.1)

#### "Don't underestimate the importance of cultural barriers, and adapt your actions"

This best practice is not respected on SC Project. Change agents don't underestimate the importance of cultural barriers but don't really adapt their actions either: "We are assuming that everyone has the same lifestyle as us, but it's false." (CA3). A first barrier leis in the workers' sensitivity, possibly jeopardizing their relationship with change agents: "You can't do what you want with them. (...). Once they don't like you, they don't hide it. Sometimes, you may get insulted during meetings. You mustn't be sensitive. Change management in a plant isn't change management in Finance." (CA1). Change management in supply chain is particularly challenging. Another barrier is their distance from new technologies linked to their maturity: "Supply chain workers are mature, so they're not ready to adapt to change or to new technologies. You arrive with your communication and change, and they're like: 'Who's this 30-years-old lady appearing from nowhere with her communication and change?'" (Client). As change agents often use digital supports, technology reluctance can endanger change success. Therefore, those barriers must disappear not to be an obstacle to the success of SC Program.

#### Sub-code 2.1.11 (Code family 2/ Code 2.1)

#### "Embody a vision for the supply chain transformation"

This best practice is not respected on SC Project. Change agents don't succeed in embodying a vision for the transformation. Notably because of the project's size, change agents' role is too often limited to coordination between streams (e.g. making sure given activities happen in the right order/timing): "Change agents are more in charge of coordination." (CA7). They don't have the importance they should. For instance, they are now allowed to meet workers in their plants: "During workshops on other projects, I did amazing things with them (e.g. we played with a box to define the new process). At Global Pharma Corp, it's impossible. I'm in a business tower in Barcelona, whereas the project's being deployed in French plants..." (CA1). There is a too strong disintegration between central (e.g. 'theoretical') and local (e.g. 'practical') levels on SC Project. One of the consequences of this is change agents don't address workers the right way: "The

language is not good. We speak consultancy language from global level, to key users or end users (...) For us, it's a consultancy alphabet. But for them, it's like 'A monster is coming, which is going to take the old ways of working and fit us in a new model'". (CA8). Workers' fears as to what will happen to them with SC Project is a proof that change agents aren't succeeding in embodying a real vision.

Code 2.2: During change

#### Sub-code 2.2.1 (Code family 2/ Code 2.2)

#### "Deeply explain to the employees how to solve their problems"

This best practice is not respected on SC Project. During the change phase (e.g. from go-live to hypercare phase), communication doesn't provide the workers with solutions to their new problems: "People aren't that confident with the change. We've collected feedbacks that prove there's something more to do there" (CA3). For instance, with the new tool (e.g. Software K), the importance of supply chain workers' role increases, and they now belong to meetings with neighboring functions. Yet they are not informed as to how to communicate with these new colleagues: "As from now, during meetings, SC workers are surrounded by Human resources Heads or Finance Heads, and they must promote the project and its benefits (...) There's a total shift for SC, which therefore needs a specific communication. Change agents should help SC workers communicate, train them. Not send them newsletters" (CA1). Also, the central change team doesn't get enough support from local leaders, who don't always cascade information (e.g. solutions to problems) to workers: "Often, if remains at their leadership levels. Then we arrive locally, and realize people are not aware of some key messages that leadership was supposed to cascade." (CA6)

#### Sub-code 2.2.2 (Code family 2/ Code 2.2)

#### "Provide employees with opportunities to contribute directly to the change"

This best practice is not respected on SC Project. During lead models (e.g. first deployments), it was possible for workers to contribute to the change because teams were small: "For the lead models on GCP exercise, we were able to know them better. There were few people, we could meet them all. I can put a face on all of them." (CA2). There was a solid relationship between the central change team and the impacted workers from Global Pharma Crop, allowing their involvement in the change process. Yet in further deployments, teams will be too big to permit this: "I think there's a challenge for the deployments. We'll have big teams, simultaneously. We won't need to be close to everyone." (CA2). From their Barcelona headquarters, the change agents will therefore have to limit themselves to global communication: "During the actual change (...) it was the project team that was on site and talking to people about the impact of the change, doing trainings. Change teams wasn't involved there unfortunately." (CA4). Project teams will take care of workers' involvement (e.g. 'deployment teams', opposed to 'central teams' like the change one).

#### Sub-code 2.2.3 (Code family 2/ Code 2.2)

# "Realize the level of change acceptance varies from one employee to another and adapt your actions"

This best practice is not respected on SC Project. Change agents know that resistance to change varies from one worker to another: "Each worker has a different resistance curve" (CA1). Therefore, during lead models, it was possible to adapt communication plan accordingly, because they were the only deployments occurring back then: "I'd say we did it (e.g. 'adapt communication plan to variations in change resistance) for the lead models: you can identify who's improved, who's reluctant, who you thought would lead change and instead has been an obstacle." (CA2) Change agents could point the workers profiles and execute communication plan in consequence. Yet for further deployments, this kind of adaptation is logistically impossible: "With the deployments, we won't reach that, because some groups are spread geographically: we don't have the capacity. People in the local teams are willing to help: groups have requested

more communication, activities, information. We should leverage on that." (CA2). Despite the wish of local teams to help change agents in personalizing change actions, the client (from central change team) doesn't seem to think a global communication is a problem - "We can't adapt or personalize the communication, we do a global communication. And then supply chain workers adapt." (Client) – and would rather let the workers adapt on their own.

Code 2.3: After change

#### Sub-code 2.3.1 (Code family 2/ Code 2.3)

#### "If change has been a success, celebrate so employees feel recognized"

This best practice is not respected on SC Project. Change success isn't celebrated but go-lives are: "We don't celebrate change success. Before the go live (couple weeks before), we sent them goodies, and they feel they're part of a group." (Client). Yet goodies aren't enough gratifying for workers: "Celebrating is important, to reward employees, who dedicate personal time to project. Events are nice, but SC Project events are cheap (...) Goodies (caps, t-shirts) are useless. SC workers would have preferred something federating the teams within the plants: a huge townhall for instance, with all their colleagues acclaiming them." (CA1). Goodies are too impersonal, a huge celebration with people greeting impacted workers would have been more appropriate. Apart from goodies, workers also receive video testimonials "We're going to create a video with English speaking end users telling about their experience (...) We then share it locally to people who will go-live someday." (CA8) Again, it isn't a gratifying way of celebrating change success.

#### Sub-code 2.3.2 (Code family 2/ Code 2.3)

#### "After change has occurred, use KPIs in order to measure the success of supply chain change"

This best practice is respected on SC Project. Change agents use KPIs to measure supply chain success after change. Numerous KPIs are built continuously. On one hand, communication and GCP KPIs: "We're building KPIs on an ongoing basis. We have communication KPIs (what channels

are preferred, what communication mediums to use depending on the people we're addressing, how many visits, how many likes) (...) We have GCP KPIs too, with the confidentiality level required of course (people identification, assessment, role allocation)." (CA6). On the other hand, training KPIs: "For training KPIs: how many planned, how many delivered, how much audience targeted, how many receive, satisfaction rate (very important)" (CA8). Yet the main team in charge of KPIs isn't the change one, but another transversal team (by opposition with 'functional' ones), Value realization: "Value realization stream is in charge of this. Generally, you think of change activities, and you transform them in indicators that can be understandable by leadership (how many trained people, etc.)." (CA7). Change agents' role is more about providing this Value realization stream with change activities outputs, so they can translate them into KPIs.

Code 2.4: Technologies importance

#### Sub-code 2.4.1 (Code family 2/ Code 2.4)

#### "Use technologies to enhance motivation and transparency"

This best practice is not respected on SC Project. Technologies don't seem to be great motivation catalysts.: "The global methodology (newsletters, WhatsApp group, Yammer) doesn't fit at all supply chain culture. Supply chain workers need posters in their plants, weekly meetings, even daily meetings to plan production (...) They don't mind about reading newsletters." (CA1). Plants workers aren't used to these new channels and would rather have concrete communication such as meetings: "They need change agents to go there, to organize meetings with them. To sit with them, to have breakfast. To make them believe we support them." (CA8). Therefore, by using these technologies with this kind of audience, change agents can't enhance motivation. Finally, technologies don't seem to be transparency catalysts either: "When you're doing a restructuring, you need to be open and transparent. On SC Project, there are too many confidential codes. It's becoming complicated." (CA2). This lack of transparency doesn't seem to be as much a question of channel choice than a matter of excessive confidentiality within Global Pharma Corp.

#### Sub-code 2.4.2 (Code family 2/ Code 2.4)

#### "Create distinct email groups and decline the purpose of a given communication"

This best practice is not respected on SC Project. Communication isn't personalized: "We have monthly webinars with change ambassadors, no matter their different deployment levels (...) The communication is too global, and therefore useless." (CA1). As mentioned earlier, communication on SC project has been defined as very global, preventing change agents from adapting purposes according to audiences. Two reasons can explain this. On one hand, the absence of a dedicated communication team (instead of some members of the change team partly in charge of communication): "I know in big projects you need almost an internal communication team. But there should be someone to deal with local communication (...) There should be more done locally in terms of effort and tailor-made communication." (CA4). Even though change agents are well aware of the fact that communication is too global, they simply don't have the resources to act on it. On the other hand, the wrong method to choose communication channels: "We first need to analyze the size of the groups (...) and then we adapt channels. On SC Project, we first decide which channels, and then fit them to the audience." (CA8) By choosing global channels (e.g. global newsletters, Intranet, WhatsApp, Yammer...) that didn't fit target workers form Global Pharma Corp, change agents found themselves in the incapacity to perform a targeted and tailor maid communication.

#### Sub-code 2.4.3 (Code family 2/ Code 2.4)

#### "Conduct surveys and define your actions consequently"

This best practice is not respected on SC Project. Two main types of surveys are sent: to project actors and to impacted stakeholders from Global Pharma Corp's side. Yet change actions don't seem to be linked to surveys' answers. On one hand, the Pulse check is supposed to take the temperature within SC Project, but answers don't seem to be honest: "The feedbacks are quite positive (...) I was expecting some things like "we're staying too late at night", "some people are not respectful"..." (CA7). On the other hand, the Adoption survey is sent to impacted workers

to assess how well they are dealing with change. It replaced the TGPS (e.g. 'Transformation GPS'), a digital tool providing a detailed mapping as to whether a company is ready for a transformation. Two reasons explain the abandon of TGPS. On one hand, the client reluctancy towards technologies: "Global Pharma Corp's not mature enough to introduce digital tools. Maybe they're afraid they won't be able to handle the situation after having generated expectations from the employees, with a survey benchmarking with a lot of analytics, and 3D mapping etc." (CA2). On the other hand, leaders fear to be confronted to reality "Abandoning TGPS is a political decision, out of my scope. There's a certain scare of really asking people what their feelings are." (CA3)

Table G below ('Pattern-Matching regarding 'Change agents' communication and way of working') summarizes the results of our case study:

THEORETICAL PATTERNS		EMPIRICAL PATTERNS			
Co	Code family 2: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING				
		INTERVIEWS:			
Code 2.1	Sub-code 2.1.1	- Strong involvement of functional teams from client side			
		- No possibility for Change agents to take decisions			
		- Client impossible to coach			
	Sub-code 2.1.2	- GCP exercise performed collaboratively with functional teams (clients)			
		- Strong decisional power on client side as to approvals and supervision			
		- High validation degree as to deliveries from previous consulting company			
	Sub-code 2.1.3	- SC understanding on functional side (and not on change management side)			
		- No adaptation of change actions to SC			
	Sub-code 2.1.4	- Gap between project's hub reality in Barcelona and workers' plant reality			
		- Too much focus on slides and deliverables, not enough adaptation			
		- Too narrow approach as to real impacts for the company			
	Sub-code 2.1.5	- Barriers from Region SC Heads due to their non-involvement in the project			
		- Numerous impacted workers ignorant of basic project information			
		- Quick-win logic from executive side, preventing efficient communication			
	Sub-code 2.1.6	- Efforts to understand client's culture but no adaptation			
		- Too many Excel files, not enough 'real' things			
		- Complex project structure implying too much focus on theory			

		- Complaints about number of communication channels
	Sub-code 2.1.7	- Global lack of project awareness at local level
		- Transactional communication limited to objects (goodies, flyers)
		- Communication too focused on project actors (Global communication)
		- Lack of depth in change reasons' explanations
	Sub-code 2.1.8	- Lack of internal communication about change and its benefits
		- Weak relationship between change agents and impacted SC workers
		- No change impact assessment and no stakeholder analysis done
	Sub-code 2.1.9	- Unsuccessful adaptation of change by agents to supply chain specificities
		- Functional teams charged with adaptation of change activities at local levels
		- Too much trust in the "Consulting Corp suitcase", more flexibility needed
	Sub-code 2.1.10	- Change agents' underestimation of lifestyle differences
		- Difficulties for change agents to get things executed
		- Client not always fully transparent towards change agents
	Sub-code 2.1.11	- Client complexity preventing change agents to be trusted by workers
		- Huge project size limiting change agents' roles to coordination
		- Wrong language (e.g. consultancy language) spoken to plants workers
Code 2.2	Sub-code 2.2.1	- No deep explanations as to change and its reasons
		- No cascading to SC workers
		- Too high focus on irrelevant or weak channels (e.g. newsletters)
	Sub-code 2.2.2	- Lack of confidence in change preventing workers from feeling they belong
		- No possible involvement of impacted employees by change agents
		- Missing Change network at Region level to link leadership and lower levels
	Sub-code 2.2.3	- Missing Change network at Region level to link leadership and lower levels - Too global communication
	Sub-code 2.2.3	
	Sub-code 2.2.3	- Too global communication
Code 2.3	Sub-code 2.2.3 Sub-code 2.3.1	- Too global communication - Realization of difference in SC workers' resistance curves but no adaptation
Code 2.3		<ul> <li>Too global communication</li> <li>Realization of difference in SC workers' resistance curves but no adaptation</li> <li>Current communication not fitting all workers' expectations</li> </ul>
Code 2.3		<ul> <li>Too global communication</li> <li>Realization of difference in SC workers' resistance curves but no adaptation</li> <li>Current communication not fitting all workers' expectations</li> <li>Lack of change success celebration due to actual lack of change success</li> <li>More focus on pre go-live than on post go-live communication</li> <li>Not much communication needed in the post go-live period</li> </ul>
Code 2.3		<ul> <li>Too global communication</li> <li>Realization of difference in SC workers' resistance curves but no adaptation</li> <li>Current communication not fitting all workers' expectations</li> <li>Lack of change success celebration due to actual lack of change success</li> <li>More focus on pre go-live than on post go-live communication</li> <li>Not much communication needed in the post go-live period</li> <li>Value realization stream in charge of building KPIs</li> </ul>
Code 2.3	Sub-code 2.3.1	<ul> <li>Too global communication</li> <li>Realization of difference in SC workers' resistance curves but no adaptation</li> <li>Current communication not fitting all workers' expectations</li> <li>Lack of change success celebration due to actual lack of change success</li> <li>More focus on pre go-live than on post go-live communication</li> <li>Not much communication needed in the post go-live period</li> <li>Value realization stream in charge of building KPIs</li> <li>Change activities transformed into indicators understandable by leadership</li> </ul>
	Sub-code 2.3.1 Sub-code 2.3.2	<ul> <li>Too global communication</li> <li>Realization of difference in SC workers' resistance curves but no adaptation</li> <li>Current communication not fitting all workers' expectations</li> <li>Lack of change success celebration due to actual lack of change success</li> <li>More focus on pre go-live than on post go-live communication</li> <li>Not much communication needed in the post go-live period</li> <li>Value realization stream in charge of building KPIs</li> <li>Change activities transformed into indicators understandable by leadership</li> <li>Numerous KPIs for each of the four change management pillars</li> </ul>
Code 2.3	Sub-code 2.3.1	<ul> <li>Too global communication</li> <li>Realization of difference in SC workers' resistance curves but no adaptation</li> <li>Current communication not fitting all workers' expectations</li> <li>Lack of change success celebration due to actual lack of change success</li> <li>More focus on pre go-live than on post go-live communication</li> <li>Not much communication needed in the post go-live period</li> <li>Value realization stream in charge of building KPIs</li> <li>Change activities transformed into indicators understandable by leadership</li> </ul>

	- Change agents should communicate directly to and with SC workers at local levels
Sub-code 2.4.2	<ul> <li>Global webinars and townhalls even if they don't concern all attendees</li> <li>Absence of distinct email groups, entailing excessive communication</li> <li>No personalization in terms of content and audience</li> </ul>
Sub-code 2.4.3	<ul> <li>Leadership barriers from client side as to change adoption measurement</li> <li>Insufficient client maturity towards digital surveys (and tools in general)</li> <li>Leaders' fears on client side to face impacted employees' feelings</li> </ul>

Table G: Pattern-Matching regarding 'Change agents' communication and way of working

# 3.2.3. Employees' role allocation and training on SC Project

In the third part of this Case Study, we will answer our third research question: 'To what extent do change agents on SC Project respect best practices in employees' role allocation and training?' by referring to the third part of the 'Change Agent Guide':

Code family 3: EMPLOYEES' ROLE ALLOCATION AND TRAINING			
Code 3.1	Sub-code 3.1.1: Build relevant roles descriptions		
Employees' role definition	Sub-code 3.1.2: Redefine the roles and activities descriptions as many times as necessary		
Code 3.2	Sub-code 3.2.1: In case of small teams, role allocation can be performed with managers		
Employees'	Sub-code 3.2.2: Identify and develop the to-be model		
role allocation	Sub-code 3.2.3: Determine the capabilities needed for each job		
	Sub-code 3.2.4: Assess the gap between current/future needed skills for each impacted employee		
Code 3.3	Sub-code 3.3.1: Make sure employees impacted by change are provided with the relevant		
Employees'	learning and development materials		
training	Sub-code 3.3.2: Make sure trained employees practice their new skills during coaching sessions		
	Sub-code 3.3.3: Personalize the training materials (e.g. via strengths and weaknesses analysis)		

Table H: Coding scheme of the Change Agent Guide Part 3: Employees' role allocation and training

#### Sub-code 3.1.1 (Code family 3/ Code 3.1)

#### "Build relevant role descriptions"

This best practice is respected on SC Project. Role descriptions have been very well built. When Consulting Corp arrived, this exercise had been almost entirely performed by the former consulting company: "This exercise was almost finished when Consulting Corp took the project from the previous consulting company. Role descriptions had been co-built with functional teams and HR." (CA6) Change agents weren't the only ones to build those descriptions, they collaborated with functional teams and human resources. Also, building those descriptions took months, implying a high-quality content: "We took in consideration all the functional leads opinions and knowledge. It's a work that lasted for months. The definitions are very good." (CA2). Therefore, change agents are proud of their efforts: "It's one of the activities we've done the best." (CA2)

#### Sub-code 3.1.2 (Code family 3/ Code 3.1)

#### "Redefine the roles descriptions as many times as necessary (and with the help of experts)"

This best practice is respected on SC Project. Role descriptions are redefined on an ongoing basis. On one hand, adjustments were performed after lead models (e.g. first deployments) to correct what had been badly done during the initial creation of role descriptions: "The way we build the second phase of the GCP (e.g. 'Growing Capabilities Planning') exercise is to review and adjust whatever was missing or not consistent in the initial role design. We review what they do locally. "(CA2). To adjust role descriptions, change agents consider local activities. On the other hand, adjustments were performed because of a reorganization project taking place in parallel of SC Project: "We also have been disturbed by the parallel operating model (reorganization). (...) Now, they're changing all these new role levels, and the challenge is for both projects to be coherent, and to have a common and clean copy at the end. (...) We're integrating this operating

*model in SC Project job catalogue."* (CA6). Indeed, considering both projects impact workers from Global Pharma Corp, it is crucial that they deliver coordinated role descriptions.

Code 3.2: Employees' role allocation

#### Sub-code 3.2.1 (Code family 3/ Code 3.2)

#### "In case of small teams, role allocation can be rapidly performed with managers"

This best practice is respected on SC Project. Change agents perform role allocation with managers (e.g. SC Heads). Even though the project is big, the number of deployment phases is important, and allows change agents to deal with small teams each time. According to the 'Growing capabilities standard timeline planning' project deck, role allocation sessions consist in 2-4h on-site sessions. Their main outcome consists in a table linking Global Pharma Corp's employees to their respective roles. On the Supply chain Planning stream (reminder: on SC Project, there are four functional streams: Supply chain planning, Customer service, Warehousing and Transportation) workers can have between one and four roles.

#### Sub-code 3.2.2 (Code family 3/ Code 3.2)

#### "Identify and develop the to-be model"

This best practice is respected on SC Project. Change agents define the to-be model for each GCP exercise. To each deployment phase corresponds a new to-be model. According to the 'Organization model by role' project decks, the to-be model shows the repartition of roles at all levels: local, regional, global on one hand, markets and plants on the other hand.

#### Sub-code 3.2.3 (Code family 3/ Code 3.2)

#### "Determine the capabilities needed for each job"

This best practice is respected on SC Project. According to the 'Role competencies' project decks, change agents determine capabilities needed for each role (and therefore for each job, because a job is composed by one or several roles):

- **The functional capabilities** are specific functional & technical abilities required to fulfill the job
- The lead competencies are those needed to successfully manage people and teams
- **The business competencies** are not specific to a particular job but needed to perform regular business activity (e.g. industry knowledge):

#### Sub-code 3.2.4 (Code family 3/ Code 3.2)

#### "Assess the gap between current/future needed skills for each impacted employee"

This best practice is respected on SC Project. The gap between current/future needed skills are assessed individually via a tool that change agents call the 'spiders'. For each employee, change agents compare, role by role, the gap between his/her current level and profitable level for a given functional capability (the spiders are linked to Excel tables doing the computations) The 'Capability assessment' project decks are all composed by:

- Functional capabilities: the list of the functional capabilities needed for the new role
- **Target proficiency levels:** the levels (from 0 to 4) that must be reached in the future for all capabilities
- Current proficiency levels: the current level of the employee for all capabilities
- Spiders: the output (looking like a spider) illustrating how far the employee is from the target. The spider is green and/or blue. The blue surfaces on each spider represent the gap between current and target proficiency levels. Individual training paths are then built accordingly.

#### Sub-code 3.3.1 (Code family 3/ Code 3.3)

# "Make sure employees impacted by change are provided with the relevant learning and development materials"

This best practice is respected on SC Project. Impacted workers are provided with relevant learning materials. The content is exhaustive, and workers have the opportunity to practice: "The content in general is very complete: it combines processes and tools, big picture for the user about why they're doing this, not only what they should do. They also have practical exercises." (CA2). Workers are being told the reasons why they must train, which enhances their motivation. Also, the individual training path are determined by the role allocation - "The role allocation triggers the training paths (...) This way we can easily say "Mister X has this role, automatically, he must have this list of corresponding trainings". (CA6) — and workers train only for roles they must master in the to-be model. The training approach is also relevant: "Our approach is "Train the trainers". We train the key users (selected people) and then they're in charge of training the end users. I think it's a good approach." (CA3). Workers can have a direct contact with someone.

#### Sub-code 3.3.2 (Code family 3/ Code 3.3)

#### "Make sure trained employees practice their new skills during coaching sessions"

This best practice is respected on SC Project. Workers can practice their new skills during coaching sessions, happening after training sessions (in the hypercare phase): "We proposed to Global Pharma Corp to have two months of coaching on site after go-live: "for real", with new processes/ tools/ meetings. (...) It's complementary to the classic training." (CA6). The main advantage of those coaching sessions is for workers to practice 'for real'. Also, coaching is personalized - "Some people have more difficulties then others concerning key points in the usage of the tool, we take this into consideration for the coaching period." (CA3) — whereas training isn't. Yet coaching presents one limit: it can't be improved, because change agents aren't allowed to act on negative feedbacks: "We noticed we couldn't communicate on negative feedbacks. So

we try to communication through coaching with end users, but it's filtered, because Global Pharma Corp's leadership is scared that it's perceived like something bad by the end users." (CA7). Again, some leadership barriers on client side prevent change agents from Consulting Corp to perform well.

#### Sub-code 3.3.3 (Code family 3/ Code 3.3)

#### "Personalize the training materials (e.g. via strengths and weaknesses analysis)"

This best practice is not respected on SC Project: "Taking into consideration the strengths and weaknesses is impossible: we have too many deployments and people." (CA3). The main reason is, again, the lack of change agents' resources to deal with the huge size of the project. Yet even though trainings aren't personalized for individuals, they are personalized in terms of roles. Each role corresponds to one training, so workers train only for roles that concern them: "It's not totally personalized to people for now (even though it's an ambition), but it's "role based". (...) We adjust training needs according to roles." (CA6). Moreover, the trainings should be more personalized in the future. On one hand, workers will be able to look for specific information via digital tools: "When all modules will be updated, people will be able to redo trainings as much as they want. They'll be able to be autonomous and look for specific information. Via tools, we'll be able to personalize." (CA6). On the other hand, short videos will be pushed to specific users according to their training needs: "As from now, we're an agile project: we'll adapt solutions (...) we will create mini videos of 1 minute, which can be pushed on the end users screen." (CA7). It is just a matter of time before trainings personalization.

Table I below ('Pattern-Matching regarding 'Employees' role allocation and training') summarizes the results of our case study:

THEORETICAL PATTERNS		EMPIRICAL PATTERNS
	Code family	3: EMPLOYEES' ROLE ALLOCATION AND TRAINING
		INTERVIEWS:
Code 3.1	Sub-code 3.1.1	- Change agents should be very proud of their performance as to defining
		roles
		- One of best performed activities
		- Strong collaboration between Functional teams and Change team
	Sub-code 3.1.2	- Initial role design reviewed and adjusted during second phase of GCP
		exercise
		- Ongoing review of local activities, and addition of missing key activities
		- Reorganization project forcing a continuous update of role descriptions
'		PROJECT DOCUMENTATION:
Code 3.2	Sub-code 3.2.1	Documentation title: 'Growing capabilities standard timeline planning'
		project deck
		- Role allocations consist in 2-4h on-site sessions
		- Main outcome of those sessions: table linking Global Pharma Corp's
		employee to their respective roles
	Sub-code 3.2.2	Documentation title: 'Organization model by role' project decks
		- Change agents define the to-be model for each GCP exercise
		- To-be model shows the repartition of roles at all levels (local, regional,
		global vs. markets, plants)
	Sub-code 3.2.3	Documentation title: 'Role competencies' project decks
		- Change agents determine capabilities needed for each role
		- Three types of capabilities: functional, lead and business ones
	Sub-code 3.2.4	Documentation title: 'Capability assessment' project decks
		- Gap between current/future needed skills assessed individually via a tool
		called the 'spiders'
		- Tool inputs: functional capabilities, target proficiency levels, current
		proficiency levels
		- Tool output: spider illustrating how far the employee is from his target
		(thanks to green/blue surfaces appearing after an Excel computation)

		INTERVIEWS:
Code 3.3	Sub-code 3.3.1	<ul> <li>Complete content, combining processes and tools</li> <li>Positive feedbacks from end users as to training quality</li> <li>Good training approach ('Train the trainer')</li> </ul>
	Sub-code 3.3.2	<ul> <li>Two moths coaching on site after go-live, complementary to classic training</li> <li>Coaches chosen among SC people (and not change agents)</li> <li>Future Q&amp;A or Webex would allow Key users to give feedbacks too</li> </ul>
	Sub-code 3.3.3	- No matter personalization degree for training materials, users' frustration  - Impossible personalization due to important number of deployments  - Future personalization possible via tools (I Learn)

Table I: Pattern-Matching regarding 'Employees' role allocation and training'

Overall, the results of our pattern-matching analysis reveal that 14 out of 32 best practices (sub-codes) are respected by change agents on SC Project. Tables J and K below summarize the respected vs. non-respected best practices:

	Code family 1: CHANGE AGENTS' SKILLS AND CAPABILITIES
Code 1.2:	Sub-code 1.2.1: Big steps must be taken in a change program: define goals, define the activities,
Steps &	and analyze change impact
strategies	Sub-code 1.2.2: Don't necessarily adopt a single strategy, but combine as many as relevant
Cod	e family 2: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING
Code 2.1:	Sub-code 2.1.1: Involve the client in the change process as much as yourself
Before	Sub-code 2.1.2: Don't just hand over your decks to the client, but create the action plan
change	collaboratively
	Sub-code 2.1.8: Understand the organization's culture
Code 2.3:	Sub-code 2.3.2: After change in SC, use KPIs s in order to measure the success of supply chain
After	change
change	
	Code family 3: EMPLOYEES' ROLE ALLOCATION AND TRAINING
Code 3.1:	Sub-code 3.1.1: Build relevant roles descriptions
Role	Sub-code 3.1.2: Redefine the roles and activities descriptions as many times as necessary
definition	

Code 3.2:	Sub-code 3.2.1: In case of small teams, role allocation can be performed with managers
Role	Sub-code 3.2.2: Identify and develop the to-be model
allocation	Sub-code 3.2.3: Determine the capabilities needed for each job
	Sub-code 3.2.4: Assess the gap between current/future needed skills for each impacted
	employee
Code 3.3:	Sub-code 3.3.1: Make sure employees impacted by change are provided with the relevant
Training	learning and development materials
	Sub-code 3.3.3: Make sure trained employees practice their new skills during coaching sessions

Table J: Best practices respected by change agents on SC Project

	Code family 1: CHANGE AGENTS' SKILLS AND CAPABILITIES
Code 1.1:	Sub-code 1.1.1: Don't wait for your leaders to define your objectives, take initiatives
Change	Sub-code 1.1.2: Don't work in separate units/silos, and be connected to all change agents
agents'	
collaboration	
Code	family 2: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING
Code 2.1:	Sub-code 2.1.5: Involve everyone
Before	Sub-code 2.1.7: Deeply explain to the employees the reasons of change
change	Sub-code 2.1.3: Have a deep expertise of the supply chain (length, processes, network
	organization)
	Sub-code 2.1.4: Realize the gap between theory and practice and adapt your actions
	Sub-code 2.1.8: Understand why people feel threatened, and adapt your actions
	Sub-code 2.1.9: Don't try and apply some supply chain best practices to any supply chain
	without adapting them to the strategy and challenges
	Sub-code 2.1.10: Don't underestimate the importance of cultural barriers and adapt your
	actions
	Sub-code 2.1.11: Embody a vision for the supply chain transformation
Code 2.2:	Sub-code 2.2.1: Deeply explain to the employees how to solve their problems
During	Sub-code 2.2.2: Provide employees with opportunities to contribute directly to the change
change	Sub-code 2.2.3: Realize the level of change acceptance varies form one employee to another
	and adapt your actions

Code 2.3:	Sub-code 2.3.1: If change has been a success, celebrate so employees feel recognized
After	
change	
Code 2.4:	Sub-code 2.4.1: Use technologies to enhance transparency and motivation
Technology importance	Sub-code 2.4.2: Create distinct email groups (e.g. geography, hierarchy) and decline the purpose of a given communication
	Sub-code 2.4.3: Conduct surveys and define your actions consequently
	Code family 3: EMPLOYEES' ROLE ALLOCATION AND TRAINING
Code 3.3:	Sub-code 3.3.3: Personalize the training materials (e.g. via strengths and weaknesses analysis)
Training	

Table K: Best practices not respected by change agents on SC Project

The case study analysis shows that standardized change management best practices are helpful, but they need to be adapted to a given environment, considering environments change dynamically. Therefore, following a standardized framework is useful, and adapting it to the environment is critical. In other words, this empirical study about Global Pharma Corp shows that some best practices are observable, while others are not.

#### 5. Discussion and conclusion

In the fifth and last part of this thesis, we will summarize the results of the case study about Global Pharma Corp, which shows that some best practices are observable, while others not. We will also try to understand the challenges leading change agents to modify certain best practices of change management.

#### 5.1 Synthesis

What immediately came out of this case study were the following results: less than half of the empirical practices match with the theoretical framework. Change agents respect 14 best practices included in the 'Change Agent Guide' out of 32. The answer of the problematic, "To what extent do change agents adapt change management best practices in a dynamic supply chain environment", is therefore the following: up to a certain limit. For each non-respected best practice, let's point out the reasons why it couldn't be respected, and the consequences it had on the project.

# 5.1.1 Change agents' skills and capabilities on SC Project

The central change team (based in Barcelona) is composed of eight change agents (apart from me), all women, and including only one client. It is very heterogenous: all seniority levels are represented (Analyst, Consultant, Manager, Senior manager), several cultures (Columbian, Iranian, Spanish, French, Polish), and as many ways of thinking and working. If this can be a great richness for a team, it also implies many challenges. Indeed, collaboration between consultants change agents can be tough, especially considering most of the decks are created by a couple different change agents. The biggest challenge is probably the collaboration with the client (Change Agent 5 or 'CA5') and her Manager who are both very emotional. If emotions are

important in change management, it can be a strong barrier to communication at work and jeopardizes the work atmosphere within the change team. Moreover, the four change management pillars (Change activities, Communication, Growing Capabilities, and Learning & Support) are very disintegrated, which prevents change agents from really collaborating with one another, simply because they don't know what topics some of their colleagues are working on. This way of working in silos also prevents them from taking some initiatives, again because they are not fully aware of everything that is going on within the change team.

Concerning change steps, change agents on SC Project proceed like they should: first, they define goals. Second, they define activities. Third, they perform a change impact analysis, in order to determine which activities are relevant for each phase of the change plan. Change agents on SC Project also apply several change management strategies depending on their needs. On one hand, the global strategy is defined in the Barcelona hub, and concerns the whole project. On the other hand, local strategies consist in an adaptation of the global strategy to local specificities all across the world, for each deployment phase.

# 5.1.2 Change agents' communication and way of working on SC Project

For years, Global Pharma Corp has been working with many consulting companies. In all previous projects, consultants mostly represented an operational added-value. Yet with SC Project, it is the first time they work with a high-value consulting firm like Consulting Corp. Consultants deal with the strategy, which is new for Global Pharma Corp. Therefore, employees from the client side are fully involved in all decisions (which is partially linked to a lack of trust in Consulting Corp) and decision making for consultants is much reduced, which is unfortunate, because many good ideas are prevented from taking shape. Moreover, the project size being huge (hundreds of project actors, thousands of stakeholders, deployments in over 100 countries all around the world...), involving the client is often very tough: it implies numerous and long validation processes, as well as numerous coordination meetings. Naturally, the time spent on

making sure the client is involved in any decision making and any deck creation entails much loss of time.

Communication on SC Project may be the topic where change agents have the more improvement to do. The first barrier to a qualitative communication is the choice of communication channels (e.g. Yammer, WhatsApp, Newsletters, Intranet...), which don't fit at all Global Pharma Corp's culture. The consequences are numerous: no possibility of deep explanations as to why Global Pharma Corp's supply chain is transforming, no adaptation of communication actions to workers' fears, no deep explanations of solutions, and a decreased motivation from workers overall. When Consulting Corp took SC Project to the previous consulting company, there was some crucial pre go-live information missing. Therefore, some workers were lacking key information, and couldn't be as engaged as they should.

Central communication is very disconnected from local reality: the content is too global, and the communication purpose isn't declined according to distinct groups. No personalization is possible, and workers' doubts therefore can't be addressed. Goodies (e.g. t-shirts, caps) are distributed during go-lives, but it is certainly not enough to build trust. Local support form leaders could also be better. Often, SC Heads don't cascade key messages to their employees, who are not aware of key messages and therefore can't be confident with change. Leadership support is crucial in transformation projects, especially when a project is that huge. The teams are very big and spread geographically: this prevents change agents from providing opportunities for workers to contribute to change, and from adapting change actions individually depending on change acceptance. For a project of that size, communication shouldn't 'just' be a change management pillar: there should be a dedicated communication team working hand to hand with change agents.

A parallel reorganization project has been launched one year after SC Project (in theory, it should have been the other way around). It has been confidential for months, preventing change agents from being fully transparent in their communication materials. Overall, there is an excessive confidentiality from Global Pharma Corp's side, and many internal barriers due to leadership fears' of revealing of truth. This notably led to the abandonment of TGPS

('Transformation GPS', a digital tool providing a detailed mapping as to whether a company is ready for a transformation) and its replacement by a simpler survey ('Adoption survey'), mostly useless because change agents are prevented from revealing the negative feedbacks. As to celebration events, they happen only for go-lives. No change success is celebrated downstream, even though it would enhance workers' motivation and change sustainability.

On SC Project, change agents don't adapt their change actions to the fact they are dealing with a supply chain transformation. First, even though they realize that there is a gap between theory and practice and are aware of some local specificities (supply chain workers profiles, personality traits, education, attitude towards new technologies, language spoken...), change agents on SC Project are not supply chain experts at all. This expertise is exclusively on the functional side. Overall, change agents focus too much on theory and slides, and lose the real sense of priorities. They see risks in small details, which prevents their management of change from being real and concrete enough. They trust what a change agent called the 'Consulting Corp suitcase' (e.g. their consulting methodologies), which prevents them from being flexible enough. One consequence of this is their adoption of a wrong language to address supply chain workers. They use consulting words and codes that workers can't understand. Therefore, workers are scared by the change team and by SC Project as a whole, and they don't feel confident about change.

Moreover, change agents can't embody a 'vision for the transformation' for the workers, simply because they don't meet them. The central change team is blocked in Global Pharma Corp's Barcelona headquarters, they don't meet the workers impacted by change locally. Change management should all about 'real', and on SC Project, it seems like it is more about decks and meetings. Finally, the project's huge size limits some of the change agents to a role of coordinators/ project managers and sadly, reduces the overall importance and strength of change management in SC Project.

#### 5.1.3 Employees' role allocation & training on SC Project

Role allocation & training is the topic where change agents perform best. All best practices are respected. Change agents built very relevant role descriptions with the help of functional teams and human resources. The building process took months. Moreover, they redefine roles continuously, partially because of the parallel reorganization project, which impacted the whole Global Pharma Corp organization, and therefore some of the roles.

Change agents on SC Project perform a high-quality role allocation thanks to relevant methodologies and tools. Role allocation sessions consist in on-site sessions with local managers. They base themselves on 'spiders' created via a digital tool (mix of Excel and PowerPoint) showing the gap between the current and future level of the employee for all the functional capabilities of his future role. On SC Project, there are three types of capabilities: functional, lead and business. The ones which are used by change agents and managers to perform the role allocations are the first ones (specific functional and technical abilities).

Regarding trainings, change agents perform very well too. They provide workers with relevant training materials, and individual training paths are determined by the role allocation (one role corresponds to one training). The training approach, 'train the trainers', consisting in a first phase of key users' training by functional teams, followed by the end users' training by key users' (e.g. the 'trainers'), is very effective. If the number of the deployments and the size of the teams prevents change agents from personalization, there will be more personalization in the future, notably thanks to digital tools allowing workers to pick-up the trainings they need, and to short videos pushed individually to specific users. Finally, coaching sessions take place once the training phase is over, allowing workers to practice 'in real life'. Those sessions could be improved, but again, fears from leadership as to negative feedbacks prevents change agents to act on those...

#### 5.2 Contributions

#### 5.2.1 Theoretical contributions

The main topics from literature helped building a theoretical framework called the 'Change Agent Guide', which lists all best practices emerging from the literature (total of 32) around the three topics:

- **Topic 1:** Change agents' skills and capabilities
- **Topic 2**: Change agent's communication and way of working
- **Topic 3**: Employees' role allocation and training

This 'Change Agent Guide' can constitute a basis on future research on the subject (e.g. Change management best practices to a dynamic supply chain environment). It can be improved by adding topics and sub-topics and/or increasing the number of best practices listed.

#### 5.2.2 Practical contributions

After conducting the case study, I listed all the problems mentioned by the change agents and preventing them from respecting the best practices listed in the 'Change Agent Guide'. I then grouped them into thematic categories. It appeared that all the problems mentioned by change agents on SC Project can fit into those four categories:

- Category 1: Managerial actions to deal with international transformation projects
- Category 2: Managerial actions to deal with organizational structures
- Category 3: Managerial actions to deal with client culture
- Category 4: Managerial actions to communicate better to stakeholders

Therefore, for each problem belonging to those four topics, I tried to think of solutions, namely concrete actions that managers could take to deal with these problems and be able to respect more change management best practices.

Managerial actions to deal with international transformation projects

On an international transformation projects, the deployments are numerous, and each one comes with its own specificities and own challenges. Also, project actors come from all around the world. The implications for change agents are the following:

- **Problem 1 : Tight roadmaps** (due to the important number of deployments), implying a mindset too much 'go-live oriented' and forcing change agents to skip and/or rush some activities: a solution could be to cascade some activities to local project actors (e.g. change ambassadors in Global Pharma Corp's plants) so that central change agents' teams have more resources (time, agents) to perform activities like they would want to.<sup>7</sup>
- Problem 2: Heterogeneous teams reuniting people from several cultures (sometimes working together from miles away) and/or several hierarchical levels, often creating communication and collaboration barriers: a first solution could be trainings (cross-cultural management for instance) to teach the employees how to understand how cultural differences impact international business. Another solution would be to provide project actors with official guidelines as to how to work together (for instance, French people have lunch at noon, whereas Spanish people two hours later. A guideline could be 'Unless absolutely necessary, please try not to book meetings on your colleagues' lunch slots')

<sup>7</sup> An ideal solution would be to extend the project global roadmap (from 5 to 10 years for instance), to be sure enough time is left to all project actors to perform due activities). Yet this is financially impossible, because an international transformation project can cost up to billions.

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- **Problem 3: Several consulting companies working on a same project**: during transformation projects, it is common that a consulting company takes the project to another one, forcing the new change agents (consultants) to capitalize on some preexisting work and/or to adapt to client expectations about their relationship. If the client had built a strong relationship with the change agents from the previous consulting company, it is part of the new change agents' responsibility to deeply understand the social strengths of the previous consultants, and to have those too. Otherwise, there can be no trust nor personal fit with the client, and this will negatively impact the project.

#### Managerial actions to deal with organizational structures

On an international transformation project, it is important to determine a clear organizational structure (e.g. functional teams, change management team, value realization team, communication team, sponsors, local change ambassadors...) so that the project doesn't collapse. Yet it can lead to an excessive separation between actors:

- **Problem 1: Silos within a change management team:** topics may be too disintegrated (e.g. communication, role allocation, training...), preventing change agents to collaborate with one another. If it is important for each of them to have expertise, they can stop working in 'silo' thanks to weekly meetings for instance. Yet those meetings must have a format that will force them to understand their colleagues' topics (a 15 minutes intervention of a change agent about his main achievement of the month for instance).
- **Problem 2: Silos between the change management team and the functional teams**: on projects where deployments are numerous, functional teams may have so much work they won't dedicate enough time or attention to the change programs. A solution could be to have one (or several) change agent(s) in each functional team, instead of having a separate change team, which importance will be too often underestimated.
- **Problem 3: Silos between the central team and the deploy team**: change agents should work within the impacted employees' environment (e.g. plants in the case of Global

Pharma Corp). Otherwise, too much time and effort will be spent on theory (toolkits, validations...) and not enough on concrete thinking/acting. A solution could be to give more autonomy to change agents, instead of forcing them to remain in the project hub.

#### Managerial actions to deal with client culture

If it is part of any good consultant's job to be adaptable to any client culture, some clients can be tougher than others. If no personal fit happens, the consequences on the project may be disastrous, especially in change management, when human is at the center of everything. Big challenges that consultants can face are the following:

- **Problem 1: Lack of trust from the client**: this can be due to many factors (e.g. first time that the client works with a high-value/ strategical firm, previous consulting company on the project with whom relationship was great...). In this case, it is the change agents' (consultants) responsibility to have some patience and to prove to the client he/she can trust them. An efficient way to do this is via a fully transparent communication (regularly send decks and emails recapitulating deadlines, risks & solutions, KPIs...) and social events (teambuilding, dinners...).
- **Problem 2: Lack of support from leadership:** in a consulting mission, it is common that leaders don't cascade all information to their employees. A solution could be to provide the leadership with concrete guidelines as to when and how cascade key messages (via a monthly mail pushed to a leadership mailing list for instance).
- Problem 3: Conflicts of interest within client company: all transformation projects have their opponents within the client side. To act on this resistance, change agents must perform a stakeholder analysis (which can be a simple Excel tool, mapping all stakeholders from the most reluctant to the most motivated). This way change agents will be able to understand their problems (e.g. 'I'm scared to lose my interests', 'Nobody warned me about the project'...) and adapt their change actions via individual plans.

In any transformation project, a high-quality communication is needed (especially in an international project), namely: relevant messages, to targeted audiences, via the appropriate channels:

- Problem 1: Inappropriate channels: if they don't fit the client culture (e.g. too much digital, not fancy enough, too many...), communication won't have the desired impact(s) on them (e.g. trust in the project ambition and actors, motivation...). Therefore, change agents must perform an analysis of the audiences and chose, for each audience, the appropriate(s) channels.
- **Problem 2: Too global communication**: if one receives a newsletter called 'Global Newsletter' and sees it has been sent to a mailing list called 'all X Project actors', he/she won't feel personally involved. This can have bad consequences on the motivation and engagement of a project's actors. Therefore, change agents must adopt a targeted communication, by adapting their messages to the specific audience they are addressing. It can be achieved thanks to the creation of a dedicated communication team.
- Problem 3: Change ambassadors (on local levels) not fully dedicated to the project: in a transformation project, the central change management team picks-up some of the employees of the client company to be 'change ambassadors', namely to hold change actions on site (cascade messages, answer to impacted workers' doubts...). Yet those change ambassadors have other daily tasks to execute and may have little time left to deal with change. Therefore, management must support them and make change management an incentive for them (via annual performance reports, congratulations, etc.). This way, they will be motivated to dedicate free more time in their agendas to deal with their roles of change ambassadors.

#### 5.3 Research limits and possible future extension

My case study was based on interviews data (of the central change team of SC Project) as well as project documentation, to assure construct validity thanks to data triangulation. As Simon (1996) argued, case studies can hardly be generalized, and provide insight to the management practices of the company being investigated.

All interviews were conducted with the central change team, because I myself belonged to that team for 10 months, whereas I had no contact in other teams (which also often weren't in the Barcelona hub). Therefore, a first limit lies in the homogeneity of the sample. It would be interesting to interview other actors than the central change team:

- **Plant workers** impacted by the transformation: they probably are the best placed to assess change management on SC Project, considering they are the targeted audience.
- Functional teams: by opposition to transversal teams such as change management or value realization teams, they are in permanent contact with local levels. They would therefore have been able to assess change actions' concrete impacts locally
- Clients (sponsors, change ambassadors, SC Heads...): the central change team is almost exclusively composed by consultants (8 vs. 1 client, CA5). This can impact answers with consulting bias (e.g. language, mindset...). Data collected from 'industrial' profiles would have been interesting.

A second limit is the reduced number of interviewees. Unlike quantitative studies, results from a small sample are not supposed to represent change management on all supply chain transformation projects (and even less on all transformation projects of any type). A future challenge can be to apply our theoretical framework (the 'Change Agent Guide') to a wider pool of interviewees. Findings will then be generalizable to all transformation projects.

A third limit lies in the fact that I belong to the central change team for 10 months. If this made it easy for me to schedule and conduct interviews, being physically in the same place as the change agents, it also may have impacted their answers' somehow. On one hand, I felt like

some change agents weren't completely realistic about change management on SC Project, because officially admitting that there were some lacks would discredit their presence on this project (for others, and for themselves). On the other hand, I felt like some change agents weren't totally honest about some topics, because they may have been scared the answers would reach the client's ears (client, as mentioned above, very emotional) and have disastrous consequences on the project.

A fourth limit lies in the number of research methods (e.g. interviews and project documentation). The future generalization would be strengthened via the triangulation of several other methods, such as a mix between quantitative and qualitative data for instance.

A fifth limit consists in the character exclusively European of the central change team. Even though some change agents don't originally come from Europe (Iran, Columbia), they have been working in Spain for years. Moreover, due to the project hub location in Barcelona, the case study results may be impacted by ethnocentric bias. Future research could include data from other regions where SC Project is deployed (America, Asia, Middle East...) and would legitimate the generalization of findings. Moreover, it would incorporate cultural theories such as Meyer (2014) and her 'Cultural Map', which provides insights for working efficiently with colleagues from different cultures. She provides a field-tested model to understand how cultural differences impact business, by combining an analytical framework with practical advices for managers, who can analyze one culture's position relative to another (see Appendix 10).

A sixth limit lies in the fact that SC Project is still a 'young' project (one year of global design by the previous consulting company, one year of deployments led by Consulting Corp). This would be interesting to conduct future research in a couple years (right before or right after the project ends for instance). Change management should logically be better performed by then. It would be even more interesting to conduct future research years after the project has ended, to assess change's durability, and whether, yes or no, SC Project's change program will be part of the 70 per cent of failed change programs (Balogun and Hope Hailey, 2004).

## Bibliography

Armstrong, M. (2006). A handbook of human resource management practice. Kogan Page Publishers.

Balogun, J., & Hailey, V. H. (2008). Exploring strategic change. Pearson Education.

Beckhard R. (1969). A model for the executive management of transformational change, Addison-Wesley, Reading, MA

Bennis, W. (1999). Inclusion, Initiatives, and Cooperation of Followers. Organizational Dynamics, 27(i1), 71.

Bonoma, T. V. (1985). *Case research in marketing: opportunities, problems, and a process.* Journal of marketing research, 22(2), 199-208.

Bridges, W., & Mitchell, S. (2000). Leading transition: A new model for change. Leader to leader, 16(3), 30-36.

Brightman, B. K., & Moran, J. W. (2001). *Managing organizational priorities*. Career Development International, 6(5), 244-288.

Brisson-Banks, C. V. (2010). Managing change and transitions: a comparison of different models and their commonalities. Library Management, 31(4/5), 241-252.

Burnes, B. (2004). Managing change: A strategic approach to organizational dynamics. Pearson Education.

Dul, J., & Hak, T. (2007). Case study methodology in business research. Routledge.

Eisenhardt, K. M. (1989). *Building theories from case study research*. Academy of management review, 14(4), 532-550.

Endsley, M. R., & Garland, D. J. (Eds.). (2000). Situation awareness analysis and measurement. CRC Press.

Galigali, P. (2017). Digital transformation and its impact of organization's human resource management, IOR and Stakeholder Management, MCM, School of Communication and Information, Rutgers University

Gavard-Perret, M. L., Gotteland, D., Haon, C., & Jolibert, A. (2012). *Méthodologie de la recherche en sciences de gestion*. Réussir son mémoire ou sa thèse, 2.

Gill, R. (2001). Essays on leadership. Leadership Trust.

Gill, R. (2002). Change management--or change leadership?. Journal of change management, 3(4), 307-318.

Halinen, A., & Törnroos, J. Å. (2005). *Using case methods in the study of contemporary business networks*. Journal of business research, 58(9), 1285-1297.

Hughes, J., Ralf, M., & Michels, B. (1998). *Transform your supply chain: Releasing value in business*. Cengage Learning EMEA.

Jindal, J. (2013). Change Management - A Challenge in Supply Chain Management, Global Journal of Management and Business Studies

Johnston, W. J., Leach, M. P., & Liu, A. H. (1999). *Theory testing using case studies in business-to-business research*. Industrial marketing management, 28(3), 201-213.

Kalika, M., Mouricou, P., & Garreau, L. (2018). Le mémoire de master-5e éd.: Piloter un mémoire, rédiger un rapport, préparer une soutenance. Dunod.

Kotter, J. P. (1995). Leading change: Why transformation efforts fail.

Kotter, J. P., Cohen, D. S., & Hoover, L. (2004). *The heart of change: Real-life stories of how people change their organizations*. Performance Improvement, 43(7), 45-46.

Kubr, M. (Ed.). (2002). Management consulting: A quide to the profession. International Labour Organization.

LaMarsh, J. (1995). Changing the way we change. Addison-Wesley Longman.

Lambert, D. M., & Cooper, M. C. (2000). *Issues in supply chain management*. Industrial marketing management, 29(1), 65-83.

Levasseur, R. E. (2001). People skills: Change management tools—Lewin's change model. Interfaces, 31(4), 71-73.

Lewin, K. (1947). Group decision and social change. Readings in social psychology, 3(1), 197-211.

Lockitt, B. (2004). Change management, Learning Lab

McLagan, P. (2002). Change Leadership Today, Training & Development

Meyer, E. (2014). The culture map: Breaking through the invisible boundaries of global business. Public Affairs.

Miles, M. B., & Huberman, A. M. (1984). *Qualitative data analysis: A sourcebook of new methods*. In Qualitative data analysis: a sourcebook of new methods. Sage publications.

Milliken, A. L. (2012). *The importance of change management in supply chain*. The Journal of Business Forecasting, 31(2), 4.

Mulligan, J., & Barber, P. (2001). *The client-consultant relationship*. Management Consultancy: A Handbook for Best Practice. 2nd ed. London: Kogan Page, 83-102.

Nixon, B. (2002). Responding Postively to the Big Issues. Professional Consultancy, 4, 24-26.

Rajan, A. (2000). *How Can Leaders Achieve Successful Culture Change*. Kent, Centre for Research in Employment & Technology in Europe.

Rispal, M. H. (2002). La méthode des cas. De Boeck Supérieur.

Ritchie, B. (2006), Lewin's Change Management Model: Understanding the Three Stages of Change, Consult Pivotal

Robertson, B. J. (2015). *Holacracy: The new management system for a rapidly changing world*. Henry Holt and Company.

Romelaer, P. (2005). *L'entretien de recherche*. Management des ressources humaines: méthodes de recherche en sciences humaines et sociales, 101-137.

Sadler, P. (2003). I8 *Leadership and Organizational Learning*. Handbook of organizational learning and knowledge, 415.

Schaffer, R. H. (2002). *High-impact consulting: Achieving extraordinary results*. Consulting to Management, 13(2), 12.

Schein, E. H. (1996). *Kurt Lewin's change theory in the field and in the classroom: Notes toward a model of managed learning*. Systems practice, 9(1), 27-47.

Silver, C., & Lewins, A. (2014). Using software in qualitative research: A step-by-step guide. Sage.

Simon, A., Sohal, A., & Brown, A. (1996). *Generative and case study research in quality management: Part I:* theoretical considerations. International Journal of Quality & Reliability Management, 13(1), 32-42.

Snow, C. C., Fjeldstad,  $\emptyset$ . D., & Langer, A. M. (2017). *Designing the digital organization*. Journal of organization Design, 6(1), 7.

Strauss, A., Corbin, J. (1990). Basics of qualitative research: Grounded theory procedures and techniques

Thurley, K. (1979). Five approaches to managing change

Todnem By, R. (2005). *Organisational change management: A critical review*. Journal of change management, 5(4), 369-380.

Trochim, W. M. (1989). *Outcome pattern matching and program theory*. Evaluation and program planning, 12(4), 355-366.

Wacheux, F. (1996). Méthodes qualitatives et recherche en gestion. Economica.

Yin, R. (1996). K.(1994) *Case study research—design and methods.* Applied social research method series (5): Sage: London.

#### Press and websites:

American Management Association (1994) Survey on Change Management

Digital transformation is not about technologies (2019), The Harvard Business Review

**Guide to Managing Human Resources**, The University of Berkeley (2019)

Impact of digitalization on organizational structure (2015), Global Performance Improvement

The history and future of Change management (2015), Prosci

**Top 10 Trends For Digital Transformation,** D. Newman (2017), *Forbes* 

Why change programs don't produce change (1990), The Harvard Business Review

### Summary

#### 1. Introduction

If the literature about change management keeps growing and underlies the importance of change, very little empirical evidence comes in support of those theories (Todnem By, 2005). This study tries to close that gap answering the problematic: "To what extent do change agents adapt change management best practices in a dynamic supply chain environment?". The main topics from literature helped building a theoretical framework called the 'Change Agent Guide', which lists all best practices emerging from the literature (total of 32) around the three following topics: 'Change agents' skills and capabilities', 'Change agent's communication and way of working', and 'Employees' role allocation and training'. Consequently, three research questions were formulated, matching the three topics of the theoretical framework: "To what extent do change agents on SC Project respect the main best practices in terms of capabilities and skills?"; "To what extent do change agents on SC Project respect the main best practices in communication and way of working?" and "To what extent do change agents on SC Project respect the main best practices in employees' role allocation and training?". Finally, the case study was conducted by assessing the gap between SC Project data (interviews of eight change agents, and internal project documentation), and the best practices listed in the 'Change Agent Guide'.

#### 2. Literature Review

#### 2.1 Change management in supply chain transformations

[2.1.1] Supply chain management refers to the multiple relationships across a supply chain, namely a network of several businesses and relationships. According to Lambert and Cooper (2000), the supply chain management framework is composed by three elements: the network structure, the business processes, and the management components. A successful supply chain management will be possible thanks to the understanding each of those management components, and how they are all related.

[2.1.2] Ralif and Michels (1998) named two mistakes change agents must avoid during a supply chain transformation: the 'leading supply chain practices' trap and the 'organizational cultural' trap. The volatility of the business environment combined with fast-changing technology are two catalysts of the supply chain change rate. Change management is therefore a particularly important challenge for supply chains. Jindal (2013), listed the main reasons why change management in a supply chain transformation is particularly challenging: the complexity of modern supply chains, the important disconnection between theory and local experience, the absence of coordination between all levels of the supply chain, the huge amount of work for supply chain executive, their absence of direct control...

[2.1.3] Jindal (2013) also listed a series of guidelines to increase chances of change success: feedback form all stakeholders, adaptability and clarity from change agents, target communication, continuous market attention, a vision for the supply chain... Also, some steps must be followed in order for change programs to be successful during supply chain transformations: as-is analysis, listing of the goals, focus on communication, creation of trainings, and establishment of KPIs.

#### 2.2 Change management in theory

[2.2.1] Over the past 30 years, change management has emerged and evolved from theoretical models to a well-acknowledged discipline. Prosci's research (2015) states three eras mark the history of change management: Pre-1990s (foundations – academics start investigating on human reactions to change, 1990s (change management enters the business environment) and 2000s (change management becomes a discipline). Today, change management is usually articulated around those three axes: processes and tools, jobs and roles, and organizational functions. Change management allows leaders to create a workplace open to change, innovative and agile, and is a catalyst for digital transformations. Yet change programs mostly fail because of poor management: lack of resources and know-how, incompatible practices...

[2.2.2] Lewin is one of the main contributors in the 20<sup>th</sup> century theory about change management. He has been a pioneer psychologist in the social psychology area. Lewin's model (1940s) is articulated around three steps: 'unfreezing', change', and 'refreezing.' During the first

step (e.g. lowering the barriers to change in order to create the opportunities for an efficient change), active communication and participation are crucial. During second step, managers must continue their efforts of active communication and participation. During the third step, the change agents mustn't let the individuals implement the new technology alone.

Two other interesting models come from Beckhard and Thurley. The first one was a pioneer in the field of organization development. defines organizational development, which he defined as an "effort, planned, organization-wide, and managed from the top, to increase organization's process, using behavioral-science knowledge". In the late 1960s, he came up with an interesting change program in big steps. Change agents must define goals, define the activities, and think of strategies. The second one was a teacher in industrial relations at the London School of Economics, came up with five main strategies to deal with in change management: 'directive', 'bargained', 'hearts and minds', 'analytical', and 'action-based'.

[2.2.3] In 1996, Kotter, a famous teacher at the Harvard Business School, came up with an eight steps model: "Leaders who successfully transform businesses do eight things right and they do them in the right order". The eight steps are: 'Establishing a sense of urgency', 'Forming a powerful guiding coalition, 'Creating a vision', 'Communicating the vision', 'Empowering others to act on the vision', 'Creating short-term wins', 'Consolidating improvements and producing still more change' and 'Institutionalizing new approaches'. In 2004, Kotter & Cohen listed the consequences of not following the eight steps correctly.

#### 2.3 Change management in practice

[2.3.1] Not less than 70% of organizational change projects fail (Implementation Management Associates, Inc., 2018). The main reasons are: the restraining forces happening during Lewin's unfreezing step, the errors coming from the change agents, and the human nature itself: according to Lewin, human change (both at the individual and group level) involves a highly complicated process of unlearning, and an equally complicated process of new learning.

[2.3.2] Too often, consultants give their clients insights about change, and don't really help them apply change. Also, traditional teams are structured in a hierarchical manner, enhancing coordination and control thanks to authoritarian leaders who define the strategy, allocate

resources, and solve conflicts. Yet hierarchical structures are not the solution anymore. Employees mustn't rely on their management and wait for their leaders' directions (Snow, Fjeldstad, and Langer, 2017). Often, digital transformations are led thanks to the help of a consulting company. The Change Agent and the client must be both equally involved in the change process.

[2.3.3] New technologies are having a great impact on cultural changes. It has become crucial for companies to rethink the ways of communicating to stakeholders both internally and externally with them, and to develop a strategic framework in order to enhance their engagement and their adaptation to digital transformation. For change to happen, it is crucial that leaders and change agents involve all individuals during the change program, explain to the individuals how to solve each problem they encounter, and provide them with some opportunities to contribute directly to the change.

In most organizations, roles and activities are defined rigorously, which often causes individuals to stick to their responsibilities in order not to have problems with management. This rigidity can be addressed within digital organizations through a redefinition of the roles and activities descriptions, which should be updated as many times as necessary, and by people who are experts in the given area (Global Performance Improvement, 2015).

There are several steps to follow in order to smoothly conduct a reorganization implied by a digital transformation: 'Identification of the to-be model, 'Development of the to-be model', 'Determination of capabilities', 'Assessment of the gap', 'Determination of training needs and resources', and 'Creation of training materials and implementation of training' (University of Berkeley, 2019).

In a reorganization, one the key responsibilities of change agents is to develop employees impacted by change, making sure they are provided with the relevant learning and development materials in order to fulfill their new job needs. They must also practice their new skills within their work environment and be supported by their managers and by change agents before the actual end of the training program. Also, training materials should be personalized, in order to

help employees identifying their strengths, weaknesses by encouraging communication (University of Berkeley, 2019).

#### 3. Theoretical part

#### 3.1 Presentation of the theoretical framework

Based on the literature, a 'Change Agent Guide' was developed. The main pillars of successful change management are: 'Change agents' skills and capabilities', 'Change agents' communication and way of working', and 'Employees' role allocation and training'. This Guide lists 32 best practices articulated around those 3 pillars (see Coding scheme in the Methodology part below).

#### 3.2 Use of the theoretical framework

We will answer the problematic according to the following framework:

RESEARCH QUESTIONS	REFERRING PART OF THE GUIDE
<b>Question 1</b> : "To what extent do change agents on SC Project respect	TOPIC 1: CHANGE AGENTS' SKILLS
the main best practices in terms of skills and capabilities?"	AND CAPABILITIES
<b>Question 2:</b> "To what extent do change agents on SC Project respect	TOIPC 2: CHANGE AGENTS'
the main best practices in communication and way of working?"	COMMUNICATION AND WAY OF
	WORKING
<b>Question 3</b> : "To what extent do change agents on SC Project respect	TOPIC 3: EMPLOYEES' ROLE
the main best practices in employees' role allocation and training?"	ALLOCATION AND TRAINING

#### 4. Empirical part

#### 4.1 Methodology

[4.1.1] The most popular qualitative research is the case study. It often designates a short description of a company, serving the purpose of illustrating a problematic in a simple way (Hlady Rispal, 2002). Therefore, the case study immediately appeared as the most relevant method to use in this thesis.

[4.1.2] According to Yin (1994), to guarantee the validity of data and findings, the case study must comply with the concepts of: 'Construct validity' (use of multiple sources of evidence),

'Internal validity' (development of a research framework based on theory as well as the use of research strategies such as pattern-matching and data triangulation), 'External validity' (establishment of a sample domain where the findings can be generalized), and 'Reliability' (replication of the same case by providing documentation and further information as to how the data was collected). The research design links the data collected in order to answer the research questions.

[4.1.3] The reason why I picked the central change management team of SC Project as my sample is that I myself have been part of that team from November 2018 to August 2019.

Global Pharma Corp is a multinational pharmaceutical company committed to preventing diseases and treating people across the world. It employs more than 100 000 people, representing 145 nationalities. It is present in 100 countries.

Global Pharma Corp has a complex supply network. Therefore, in 2017, Global Pharma Corp launched SC Program, a five-years transformation project. The project's ambition is to transform supply chain capabilities, setting up the improved processes and innovative solutions required to deliver world class supply chain performance for each global business unit. By 2021, SC Project will allow Global Pharma Corp to to automation, aligned processes, and end-to-end visibility and integration by setting up: a new innovative solution (Software K).

The central change team of SC Project works from the project's hub, in Global Pharma Corp Barcelona headquarters. The global change management strategy is articulated around four pillars: 'Change activities', 'Communication', 'Growing capabilities planning', and 'Learning and support'. I interviewed the whole team – 8 of my colleagues - to have the larger amount of data possible.

[4.1.4] The triangulation of several data sources is a way to strengthen the validity of outputs (Eisenhardt, 1989). Therefore, I chose to use two collect modes: Interviews and SC Project documentation. I used 'open data coding' (I grouped the best practices emerging from literature into topics and subtopics corresponding to those from my theoretical framework, the 'Change Agent Guide') and 'axial coding' (I noticed some sub-codes could merge. The final coding scheme is summarized in the Table below:

Code family 1: CHANGE AGENTS' SKILLS AND CAPABILITIES		
Code 1.1:	Sub-code 1.1.1: Don't wait for your leaders to define your objectives, take initiatives	
Change agents' collaboration	Sub-code 1.1.2: Don't work in separate units/silos, and be connected to all change agents	
Code 1.2: Change	Sub-code 1.2.1: Big steps must be taken in a change program: define goals, define the activities and analyze change impact	
steps & strategies	Sub-code 1.2.2: Don't necessarily adopt a single strategy, but combine as many as relevant	

Code fa	amily 2: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING
Code 2.1:	Sub-code 2.1.1: Involve the client in the change process as much as yourself
Before change	Sub-code 2.1.2: Don't just hand over your decks to the client, but create the action plan
	collaboratively
	Sub-code 2.1.3: Have a deep expertise of the supply chain (length, processes, network
	organization)
	Sub-code 2.1.4: Realize the gap between theory and practice, and adapt your actions
	Sub-code 2.1.5: Involve everyone
	Sub-code 2.1.6: Understand the organization's culture
	Sub-code 2.1.7: Deeply explain to the employees the reasons of change
	Sub-code 2.1.8: Understand why people feel threatened, and adapt your actions
	Sub-code 2.1.9: Don't try and apply some supply chain best practices to any supply chain
	without adapting them to the strategy and challenges
	Sub-code 2.1.10: Don't underestimate the importance of cultural barriers, and adapt your
	actions consequently
	Sub-code 2.1.11: Embody a vision for the supply chain transformation
Code 2.2 During	Sub-code 2.2.1: Deeply explain to the employees how to solve their problems
change	Sub-code 2.2.2: Provide employees with opportunities to contribute directly to the change
	Sub-code 2.2.3: Realize the level of change acceptance varies form one employee to another
	and adapt your actions
Code 2.3:	Sub-code 2.3.1: If change has been a success, celebrate so employees feel recognized
After change	Sub-code 2.3.2: After change in SC, use KPIs s in order to measure the success of supply chain
	change
Code 2.4:	Sub-code 2.4.1: Use technologies to enhance transparency and motivation

Technology	Sub-code 2.4.2: Create distinct email groups (e.g. geography, hierarchy) and decline the
importance	purpose of a given communication
	Sub-code 2.4.3: Conduct surveys and define your actions consequently

	Code family 3: EMPLOYEES' ROLE ALLOCATION AND TRAINING
Code 3.1:	Sub-code 3.1.1: Build relevant roles descriptions
Employees' role definition	Sub-code 3.1.2: Redefine the roles and activities descriptions as many times as necessary
Code 3.2:	Sub-code 3.2.1: In case of small teams, role allocation can be performed with managers
Employees' role	Sub-code 3.2.2: Identify and develop the to-be model
allocation	Sub-code 3.2.3: Determine the capabilities needed for each job
	Sub-code 3.2.4: Assess the gap between current/future needed skills for each impacted employee
Code 3.3:	Sub-code 3.3.1: Make sure employees impacted by change are provided with the relevant
Employees'	learning and development materials
training	Sub-code 3.3.2: Make sure trained employees practice their new skills during coaching sessions
	Sub-code 3.3.3: Personalize the training materials (e.g. via strengths and weaknesses analysis)

Coding scheme of the Change Agent Guide: Theoretical patterns of Change management in a dynamic supply chain environment

[4.1.5] Pattern-matching is the most common approach in analyzing case studies (Yin, 1994). If the empirical data matches the theoretical concept and propositions, then the researcher can assume that the empirical and theoretical patterns coincide. The steps I followed for the data analysis are: build citations tables, build condensed matrixes (e.g. summary of the Citations tables), look for relevant project documentation, write the storytelling (e.g. analysis), and build summary tables for each of the three code families.

#### 4.2 Case study

[4.2.1] In the first part of this case study, we answered our first research question: "To what extent do change agents on SC Project respect best practices in terms of capabilities and skills?"

by referring to the first part of the 'Change Agent Guide'. The table below (Pattern-Matching regarding 'Change agents' skills and capabilities') summarizes the results of our case study:

THEORETICAL PATTERNS		EMPIRICAL PATTERNS
Code family 1: CHANGE AGENTS' SKILLS AND CAPABILITIES		
INTERVIEWS:		INTERVIEWS:
Code 1.1	Sub-code 1.1.1	- Initiatives prevented due to long and numerous validation processes
		- Change agents' expertise limited to given pillars, preventing them
		from taking initiatives in other pillars
		- Sometimes, lack of sharing of some useful information from client
		side, preventing change team to adapt some interventions
		consequently
		- Difficulties for client to get used to new consultants and ways of
		working after building habits with previous consulting company
	Sub-code 1.1.2	- Lack of understanding of change team organization preventing
		collaboration
		- Numerous cultures (language, ways of working) and seniority levels
		(from intern to senior manager)
		- No personal fit between consultants and clients within change team,
		implying difficult team leading and collaboration
		- Change management pillars implying silos and preventing
		collaboration
		PROJECT DOCUMENTATION:
Code 1.2	Sub-code 1.2.1	Documentation title: 'Change management key driver'
		- First, change agents define their main goals
		- Then they define the change activities
		- Finally, they analyze the change impact
	Sub-code 1.2.2	Documentation titles: 'Global vs. Local change management
		strategies' – 'The four pillars of the global change management
		strategy' & 'Plan local change management activities'
		- Change agents combine two different strategies
		- Global strategy is defined in the hub, and concerns the whole project
		- Local strategies adapts the global strategy to local specificities

Pattern-Matching regarding 'Change agents' skills and capabilities'

[4.2.2] In the second part of this Case study, we answered our second research question: "To what extent to change agents on SC Project respect best practices in communication and way of working?" by referring to the second part of the 'Change Agent Guide'. The table below ('Pattern-Matching regarding 'Change agents' communication and way of working') summarizes the results of our case study:

THEORETICAL PATTERNS		EMPIRICAL PATTERNS		
Code family 2: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING				
		INTERVIEWS:		
Code 2.1	Sub-code 2.1.1	- Strong involvement of functional teams from client side		
		- No possibility for Change agents to take decisions		
		- Client impossible to coach		
	Sub-code 2.1.2	- GCP exercise performed collaboratively with functional teams (clients)		
		- Strong decisional power on client side as to approvals and supervision		
		- High validation degree as to deliveries from previous consulting company		
	Sub-code 2.1.3	- SC understanding on functional side (and not on change management side)		
		- No adaptation of change actions to SC		
	Sub-code 2.1.4	- Gap between project's hub reality in Barcelona and workers' plant reality		
		- Too much focus on slides and deliverables, not enough adaptation		
		- Too narrow approach as to real impacts for the company		
	Sub-code 2.1.5	- Barriers from Region SC Heads due to their non-involvement in the project		
		- Numerous impacted workers ignorant of basic project information		
		- Quick-win logic from executive side, preventing efficient communication		
	Sub-code 2.1.6	- Efforts to understand client's culture but no adaptation		
		- Too many Excel files, not enough 'real' things		
		- Complex project structure implying too much focus on theory		
		- Complaints about number of communication channels		
	Sub-code 2.1.7	- Global lack of project awareness at local level		
		- Transactional communication limited to objects (goodies, flyers)		
		- Communication too focused on project actors (Global communication)		
		- Lack of depth in change reasons' explanations		
	Sub-code 2.1.8	- Lack of internal communication about change and its benefits		
		- Weak relationship between change agents and impacted SC workers		
		- No change impact assessment and no stakeholder analysis done		

	Sub-code 2.1.9	- Unsuccessful adaptation of change by agents to supply chain specificities
	305 Code 2.1.5	
		- Functional teams charged with adaptation of change activities at local levels
		- Too much trust in the "Consulting Corp suitcase", more flexibility needed
	Sub-code 2.1.10	- Change agents' underestimation of lifestyle differences
		- Difficulties for change agents to get things executed
		- Client not always fully transparent towards change agents
	Sub-code 2.1.11	- Client complexity preventing change agents to be trusted by workers
		- Huge project size limiting change agents' roles to coordination
		- Wrong language (e.g. consultancy language) spoken to plants workers
Code 2.2	Sub-code 2.2.1	- No deep explanations as to change and its reasons
		- No cascading to SC workers
		- Too high focus on irrelevant or weak channels (e.g. newsletters)
	Sub-code 2.2.2	- Lack of confidence in change preventing workers from feeling they belong
		- No possible involvement of impacted employees by change agents
		- Missing Change network at Region level to link leadership and lower levels
	Sub-code 2.2.3	- Too global communication
		- Realization of difference in SC workers' resistance curves but no adaptation
		- Current communication not fitting all workers' expectations
Code 2.3	Sub-code 2.3.1	- Lack of change success celebration due to actual lack of change success
		- More focus on pre go-live than on post go-live communication
		- Not much communication needed in the post go-live period
	Sub-code 2.3.2	- Value realization stream in charge of building KPIs
		- Change activities transformed into indicators understandable by leadership
		- Numerous KPIs for each of the four change management pillars
Code 2.4	Sub-code 2.4.1	- KPIs demonstrating over quantity of communication channels
		- Wrong choice of communication channels
		- Change agents should communicate directly to and with SC workers at local
		levels
	Sub-code 2.4.2	- Global webinars and townhalls even if they don't concern all attendees
		- Absence of distinct email groups, entailing excessive communication
		- No personalization in terms of content and audience
	Sub-code 2.4.3	- Leadership barriers from client side as to change adoption measurement
	547 504C £1713	- Insufficient client maturity towards digital surveys (and tools in general)
		- Leaders' fears on client side to face impacted employees' feelings  Pattern-Matching regarding 'Change agents' communication and way of working

Pattern-Matching regarding 'Change agents' communication and way of working

[4.2.3] In the third part of this Case Study, we answered our third research question: "To what extent do change agents on SC Project respect best practices in employees' role allocation and training?" by referring to the third part of the 'Change Agent Guide'. The table below ('Pattern-Matching regarding 'Employees' role allocation and training') summarizes the results of our case study:

THEORETICAL PATTERNS		EMPIRICAL PATTERNS	
	Code family 3: EMPLOYEES' ROLE ALLOCATION AND TRAINING		
INTERVIEWS:			
Code 3.1	Sub-code 3.1.1	- Change agents should be very proud of their performance as to defining	
		roles	
		- One of best performed activities	
		- Strong collaboration between Functional teams and Change team	
-	Sub-code 3.1.2	- Initial role design reviewed and adjusted during second phase of GCP	
		exercise	
		- Ongoing review of local activities, and addition of missing key activities	
		- Reorganization project forcing a continuous update of role descriptions	
,		PROJECT DOCUMENTATION:	
Code 3.2	Sub-code 3.2.1	Documentation title: 'Growing capabilities standard timeline planning'	
		project deck	
		- Role allocations consist in 2-4h on-site sessions	
		- Main outcome of those sessions: table linking Global Pharma Corp's	
		employee to their respective roles	
•	Sub-code 3.2.2	Documentation title: 'Organization model by role' project decks	
		- Change agents define the to-be model for each GCP exercise	
		- To-be model shows the repartition of roles at all levels (local, regional,	
		global vs. markets, plants)	
•	Sub-code 3.2.3	Documentation title: 'Role competencies' project decks	
		- Change agents determine capabilities needed for each role	
		- Three types of capabilities: functional, lead and business ones	
	Sub-code 3.2.4	Documentation title: 'Capability assessment' project decks	
		- Gap between current/future needed skills assessed individually via a tool	
		called the 'spiders'	

		<ul> <li>Tool inputs: functional capabilities, target proficiency levels, current proficiency levels</li> <li>Tool output: spider illustrating how far the employee is from his target (thanks to green/blue surfaces appearing after an Excel computation)</li> </ul>
		INTERVIEWS:
Code 3.3	Sub-code 3.3.1	<ul> <li>Complete content, combining processes and tools</li> <li>Positive feedbacks from end users as to training quality</li> <li>Good training approach ('Train the trainer')</li> </ul>
	Sub-code 3.3.2	<ul> <li>Two moths coaching on site after go-live, complementary to classic training</li> <li>Coaches chosen among SC people (and not change agents)</li> <li>Future Q&amp;A or Webex would allow Key users to give feedbacks too</li> </ul>
	Sub-code 3.3.3	<ul> <li>No matter personalization degree for training materials, users' frustration</li> <li>Impossible personalization due to important number of deployments</li> <li>Future personalization possible via tools (I Learn)</li> </ul>

Pattern-Matching regarding 'Employees' role allocation and training'

#### 5. Discussion and conclusion

#### 5.1 Synthesis

Change agents respect 14 best practices included in the 'Change Agent Guide', therefore less than 50 per cent. The answer of our problematic, "To what extent do change agents adapt change management best practices in a dynamic supply chain environment?", is therefore the following: up to a certain limit.

[5.1.1] Collaboration within the central change team is tough, notably because of the heterogeneity of the team, and to the high disintegration of the four change management pillars. Best practices in terms of change steps and strategy are respected.

[5.1.2] Due to Global Pharma Corp's culture, decision making is almost impossible for change agents from the consulting side. Also, communication should be improved: better channels, reduction of the gap between theory and local reality, more personalization, more support from leadership, more transparency... Another big issue is the lack of adaptation to the change management to supply chain specificities.

[5.1.3] Role allocation and training are very well performed. Role descriptions and training materials are relevant, and continuously adapted. More personalization is needed but is planned in a near future.

#### **5.2 Contributions**

[5.2.1] My theoretical contributions consist in the 'Change Agent Guide', which lists all best practices emerging from the literature (total of 32) around three topics. It can constitute a basis on future research on the subject and can be improved by adding topics and sub-topics and/or increasing the number of best practices listed.

[5.2.2] My practical contributions consist in concrete actions that managers could take to deal with problems in four categories:

- 1. Managerial actions to deal with international transformation projects In the case of tight roadmaps: a solution could be to cascade some activities to local project actors so that central change agents' teams have more resources. In the case of heterogeneous teams: a first solution could be trainings (cross-cultural management for instance). Another solution would be to provide project actors with guidelines as to how to work together. In the case of several consulting companies working on a same project: it is part of the new change agents' responsibility to deeply understand the social strengths of the previous consultants.
- 2. Managerial actions to deal with organizational structures In the case of silos within a change management team: they can stop working in 'silo' thanks to weekly meetings for instance. In the case of silos between the change management team and the functional teams: a solution could be to have one (or several) change agent(s) in each functional team. In the case of silos between the central team and the deploy team: a solution could be to give more autonomy to change agents, instead of forcing them to remain in the project hub.
- 3. Managerial actions to deal with client culture In the case of lack of trust from the client: a solution can be a fully transparent communication and social events (teambuilding, dinners...). In the case of lack of support from leadership: a solution could be to provide the leadership with concrete guidelines as to when and how cascade key messages. In the case of conflicts of interest

within client company: change agents must perform a stakeholder analysis and adapt their change actions via individual plans.

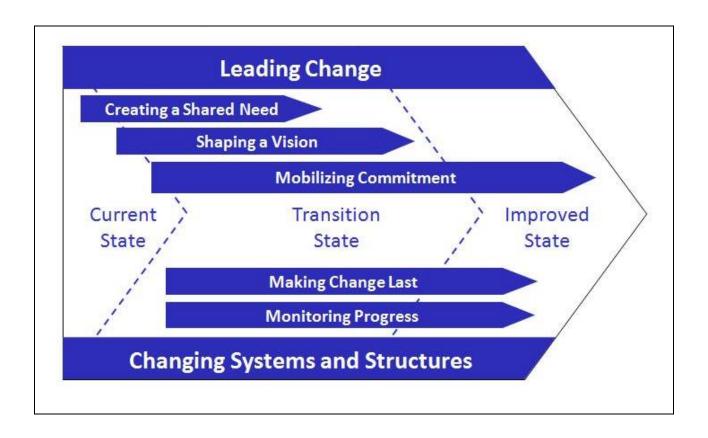
4. Managerial actions to communicate better to stakeholders - In the case of inappropriate channels: change agents must perform an analysis of the audiences and chose, for each audience, the appropriate(s) channels. In the case of a too global communication: change agents must adopt a targeted communication, by adapting their messages to the specific audience they are addressing. In the case where change ambassadors (on local levels) are not fully dedicated to the project: management must support them and make change management an incentive for them.

#### 5.3 Limits

A first limit lies in the homogeneity of the sample. It would be interesting to interview other actors than the central change team: plant workers impacted by the transformation, functional teams, clients. A second limit is the reduced number of interviewees. A future challenge can be to apply our theoretical framework (the 'Change Agent Guide') to a wider pool of interviewees. A third limit lies in the fact that I belong to the central change team for 10 months. It may have impacted their answers' somehow (lack of realism, lack of honesty). A fourth limit lies in the number of research methods (e.g. interviews and project documentation). The future generalization would be strengthened via the triangulation of several other methods, such as a mix between quantitative and qualitative data for instance. A fifth limit consists in the character exclusively European of the central change team. The case study results may be impacted by ethnocentric bias. Future research could include data from other regions where SC Project is deployed (America, Asia, Middle East...). A sixth limit lies in the fact that SC Project is still a 'young' project (one year of global design by the previous consulting company, one year of deployments led by Consulting Corp). This would be interesting to conduct future research in a couple years (right before or right after the project ends for instance).

#### **Appendices**

# Appendix 1: The General Electric Change Acceleration Process (1990)



# Appendix 2: Leadership, the first key to a successful change (American Management Association survey, 1994)

Table 1 Keys to successful change: Survey of 259 senior executives in Fortune 500 companies in the USA	
Tortaine 500 compani	% mentioning this
Leadership	92
Corporate values	84
Communication	75
Teambuilding	69
Education and training	64

# **Appendix 3: Interview guide for SC project 8 change agents**

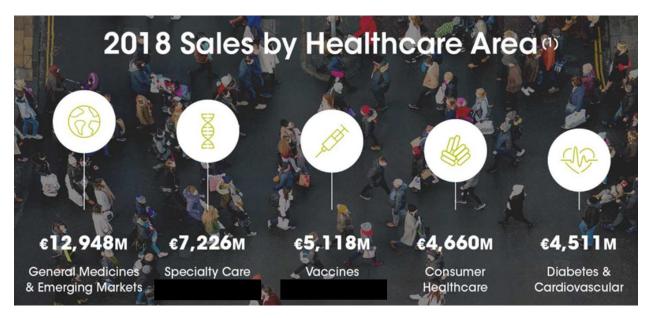
Code family 1:	Code 1.1 :	What can you tell me about change agents' relationships within the
CHANGE AGENTS'	Change	central change team?
SKILLS &	agents'	
CAPABILTIIES	collaboration	
Code family 2:	Code 2.1:	What can you tell me about client-consultant relationships?
CHANGE AGENTS'	Before change	
COMMUNICATION		Do you think change agents from the central change team are supply
& WAY OF		chain experts?
WORKING		
		What can you tell me of pre go-live communication?
	Code 2.2:	To what extent do we adapt our change actions to the fact we are
	During change	dealing with supply chain?
		What can you tell me about communication happening between go-live
		and hypercare (e.g. 'support) phase?
	Code 2.3 :	What can you tell me about post go-live communication?
	After change	
		To what extent do we measure supply chain success after change has
		occurred?
	Code 2.4 :	What do you think of our use of technologies (channels, messages)?
	Technologies	
	importance	
Code family 3:	Code 3.1:	What can you tell me about role definition on SC Project?
EMPLOYEES' ROLE	Employees'	
ALLOCATION &	role definition	
TRAINING	Code 3.3:	What can you tell me about training on SC Project?
	Employees'	
	training	

### **Appendix 4: Global Pharma Corp's key figures**







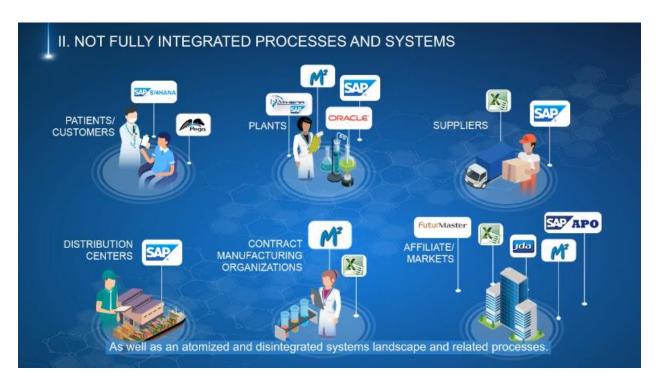




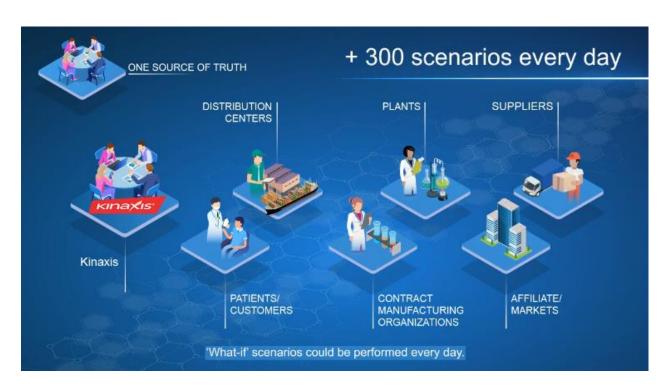
## **Appendix 5: SC Project at a glance**





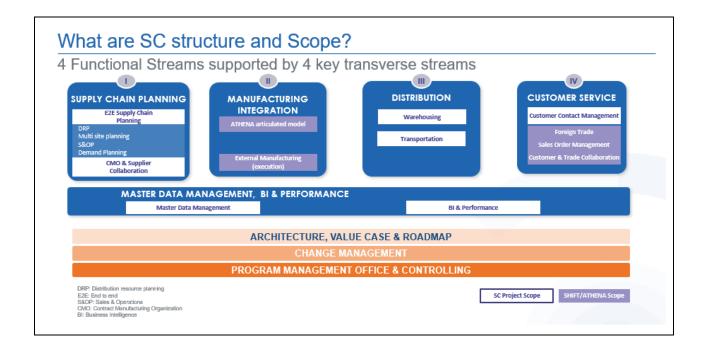








## **Appendix 6: SC Project structure and scope**



# **Appendix 7: SC Project's expected benefits**

GBUs	<ul> <li>Foster Business Value creation for GBU providing E2E vision and data alignment through S&amp;OP/IBP</li> <li>Lead E2E integration of our Supply Chain, ensuring consistency of decision making and having strong link b/w tactical and operational levels</li> <li>Increase Agility for routes to markets development and M&amp;A acceleration</li> </ul>
Customers	<ul> <li>Enhance customer Centricity, Product Availability and Reduce Inventory by improving reliability and anticipation of demand signal.</li> <li>Move from Claim management to Collaborative, professional and loyal relationship with customers</li> <li>Enable Panel of Services with fast track delivery for better Customer Satisfaction</li> </ul>
Suppliers & CMOs	<ul> <li>Improve Supplier-CMOs Service Level by giving visibility on requirements (demand, inventory, capacity)</li> <li>Engage Supplier-CMOs on a committed-feasible plan based on real capacity at long term</li> </ul>
Supply Chain organization	Provide E2E full visibility and Seamless Integration of Supply Chain Develop Supply Chain Capabilities and be ready for the future Simplify operating models thanks to harmonized Core Processes
Global Pharma Corp	Generate Business value by the optimization of service and inventory:     Costs: reduce destruction and distribution costs     Cash: Optimize inventory level     Turnover: Improve Service Level

# **Appendix 8: Citations tables (TOTAL: 26)**

Note: The citations in bold are the ones cited in the Case study.

	1.1.1
	CHANGE AGENTS' SKILLS AND CAPABILITIES – Change agents' collaboration
CA1	"I have been in charge of SC Project deployment within French plants for 1 month: I am still waiting for communication plan validation, for project plan validation"
CA2	"If you're on GCP and Learning, you get a sense of what goes on in Communication and Change activities, but you don't work on that."
CA3	"For me the four pillars are too separated, it should be more integrated. We're in the right path, we're changing things. But for me it shouldn't be so separated. The whole thing is change management."
CA4	"Sometimes one lead was working with a client, and we weren't aware of many things that could have been useful for us in terms of change management intervention. But in general, collaboration was quite sufficient."
CA5	"I wasn't happy of the two Consulting Corp people (Manager & Consultant) I worked with before the new person arrived. They didn't anticipate, the onboarding was very long, they weren't interested on the project or on its communication. We had to repeat the same things all over CA4in, whereas the new person has immediately adapted."
CA6	"For Consulting Corp, it was complicated to arrive after The previous consulting company. Global Pharma Corp had habits with the previous teams, so it was hard to get used to new people/ways of working. () Consulting Corp had to capitalize on what had been done already and add its own touch to help Global Pharma Corp on acceleration/deployment."
CA7	"Now I know the pillars and people better, so I succeed in getting the information I need whenever I need it."
CA8	"There shouldn't be such thing as "I do my things and you do yours, and I don't want to be involved in your side", and the way we're organized looks like this."

Citations table 1.1.1: CHANGE AGENTS' SKILLS AND CAPABILITIES – Change agents' collaboration

	1.1.2
	CHANGE AGENTS' SKILLS AND CAPABILITIES – Change agents' collaboration
CA1	"I don't really understand the internal organization of the change team on SC Project. We are too many, and also not enough, because much work must be done last minute."
CA2	"When we have to put together things, we're able to collaborate."
CA3	"We have a challenge that we have French and Spanish people (language, ways of working). We have many levels (internship, CA3, consultant, manager, CA6) working sometimes in the same document"
CA4	"It could be better in terms of collaboration between leads of different change pillars. Not in terms of detailed actions, but on a higher level. It's not enough."
CA5	"The new person asks questions whenever necessary, I'm always available to answer. It's great that collaboration goes well now."
CA6	"Also, we have client counterparts very emotional. Very human too, which is good in change. But in terms of team leading, when there's no personal fit between those clients and us, collaboration became tough."
CA7	"It's hard to have visibility on everything, notably because there are too many meetings, and I can't assist to all of them."
CA8	"It's too separated for me. Sometimes I see CA3 stays until 10pm, and I can't even propose her help, or even understand whether she needs help. The only person who has visibility is CA6, not anyone else. We can't help each other. I can't ask CA3 to help me about a communication event. It doesn't make sense. This organization isn't friendly."

Citations table 1.1.2: CHANGE AGENTS' SKILLS AND CAPABILITIES – Change agents' collaboration

	2.1.1		
	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change		
CA1	"For Global Pharma Corp, consultants are just helpers for meetings, they don't trust their expertise. It's true on the whole project (not only change management). For the last decades, Global Pharma Corp has worked with many consultants, but few strategic consulting firms. Yet Consulting Corp is a high-value consulting firm."		
CA2	"In particular for the two pillars I'm leading, it has been a strong collaboration with the functional core team."		
CA3	"It ('collaboration') is tricky, because there are many streams in Global Pharma Corp."		
CA4	"Client involvement in change processes is quite high"		

CA5	"I think collaboration between Global Pharma Corp and Consulting Corp isn't great."
CA6	"It is a huge project: everyone focuses on their expertise, and an additional level of effort is required to connect everyone"
CA7	"Relationship with Global Pharma Corp is complex. Collaboration is not as good as what I saw on other projects, and it's not constructive. It's very difficult. Many efforts are needed. Behaviors aren't pragmatic, we lose much time thinking of the past instead of future."
CA8	"To be honest, I don't think we take any decision. With Global Pharma Corp, it's impossible to coach."

Citations table 2.1.1: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change

	2.1.2
	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change
CA1	"For Global Pharma Corp, consultants are just helpers for meetings, they don't trust their expertise."
CA2	"You can't know the functional specificities of the process to be able to ask the right questions or understand the outcomes. If the employees start discussing very specific operational topics, your knowledge of change management reaches a certain point: you need the functional teams' support."
CA3	"Sometimes not easy to collaborate with the client, because he has his own ways of working, and isn't willing to change. We're trying to improve his ways of working and show new ways of doing things. We want to be better in that sense, but it's hard."
CA4	"In terms of approvals, supervision, it's very much dependent of the client. Consulting Corp has a limited trust given by Global Pharma Corp. There was a lot of validation. That wasn't so mandatory or detailed in my former projects."
CA5	"It's not the same ways of working than the previous cabinet (The previous consulting company). ().  They made me validate everything, I had my word to say on their work. In general terms, I'm not sure  Consulting Corp's deliveries match Global Pharma Corp's expectations."
CA6	"We work collaboratively with functional experts. () It's great to know we have change management experts coordinating the methodology, but also people from functional teams to activate change. Then we have a third level, the Change network. We identify within Global Pharma Corp who are our Change ambassadors: we give them the vision/key messages/ what they must do, and they tell us how it happens on site."
CA7	"We keep reviewing documents and have many different versions. The global context is complicated. It's surprising considering we have a good governance, the right meetings etc. () The theory, and structure/ governance is here, but behaviors don't follow. Moreover, this complexity of structure

entails too many meetings: it generates much stress and loss of time. In change, we need to be close from site, to end users."

**CA8** "We can't propose anything. We need to follow them."

Citations table 2.1.2: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change

	2.1.3
	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change
CA1	"Some of my former clients provided me with huge SC trainings (e.g. how to build a process). I can't make SC workers change if I don't understand SC processes. I can't tell them the benefits if I don't understand what they do, and the implications."
CA2	"We're still not experts on SC. () I may understand when they talk about inventory, stock, supply demand reviews in general. The actual understanding is on the functional side: that's why we're always so close to them. () They're the ones to know what to provide, which practical exercises make sense."
CA3	"I don't think I'm a SC expert, but the good thing is that we work a lot with functional streams (who are the experts), so it allows us to understand what we're doing, and how the environment and the industry are."
CA4	"I didn't before SC Project, but I think after this project I have a better understanding of the governance, organization, processes, the culture."
CA5	"I'm definitely not a supply chain expert. I'm not an engineer, I work in communication. I never received any training on supply chain. I wish I could though. SC Project project was presented to me, but that's all."
CA6	"Change agents on SC Project are clearly not supply chain experts. We're not supposed to be though.  () We need to understand what people do today, what they'll do tomorrow, and point out the gaps."
CA7	"I don't understand all SC stakes, and I'm frustrated. () We don't adapt our actions to SC () It's sad, because it would be more interesting to have this expertise. This is also true for bank, resources A functional expertise is crucial in change management"
CA8	"I'm a supply chain expert, I've worked for ten years as a chief of operations in supply chain. But we're not SC experts in change management. We don't understand the language."

Citations table 2.1.3: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change

	2.1.4
	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change
CA1	"SC workers wear security shoes, white blouses, no jewelry they're often men, change agents are often women. None of this was told to us during our job interviews. We're not trained for this, and yet it's very important."
CA2	"Generally on this project, we have to keep in mind there is a big gap between our 'reality' in our Barcelona tower, and the workers' one in their plants"
CA3	"We're focusing on slides, and deliverables. We're not having a broad approach, ambition of the real impact on the whole company. () We lose the sense of risk linked to supply chain, we think the risk is the failure in very detailed things."
CA4	"It prevents us from really adapting our change actions to plants' reality, often quite far from what we have in mind."
CA5	"Supply chain is very special/technique, people are very special."
CA6	"We need functional teams to explain to us what'll happen exactly. If we don't understand, we won't be able to communicate well to SC workers."
CA7	"It's the only way we can assess the gap between the theory we put on our decks, and the reality of the employees impacted by change."
CA8	"I worked in a plant after my studies: I could see what was going on and understand their language. I was working about inventories, warehouse etc. (as head of operations): you get better results if you have visibility."

Citations table 2.1.4: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change

	2.1.5
	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change
CA1	"Communication before change is very bad, it barely exists. Considering the Region SC Heads (under the World SC Head) are CA4inst SC Project, they cut all communication. We, as consultants/ change agents, should refuse to start a project without the leadership commitment, because it's useless."
CA2	"On the executive side, it was a "quick-win" logic: in terms of functional features and go-living as fast as possible. You may have the go-live, it doesn't mean the team is informed enough."
CA3	"Not everybody's knowledgeable about very basic things. <b>We're all in the same Barcelona tower and we think everybody know what we know but it's false.</b> We're talking about a worldwide project, we have a lot of improvements to make in communication."

CA4	"For the pilots, we could have communicated better and more to the users. But if you don't even know who they are, it's hard to do it."
CA5	"Pascale (Change management lead on SC Project, Global Pharma Corp side) did everything that was needed: onboarding sessions, involved everyone (stakeholders, end users, key users, top management)"
CA6	"We miss the neighboring functions: finance must understand why supply chain now wants to be involved in this S&OP process (marketing and sales too). We feel that supply chain leaders don't feel yet like they have enough legitimacy to go to those neighboring functions and tell them about this. This can be a problem locally, because collaboration can't happen if the neighboring functions don't understand this switch in importance/role for supply chain (e.g. in forecasting and analytics). "
CA7	"We could imagine taking some time centrally to rethink the way we approach those people. CA5 created categories, which is great. We should now create user journeys per population (e.g. top leadership, middle management, SC heads, key users). It's been done by site, but not by population, and no corresponding documents were created. "
CA8	"We could definitely communicate better."

Citations table 2.1.5 : CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change

	2.1.6
	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change
CA1	"In supply chain, workers are very implied: they often come to the plants during weekends in case of
	line problem. The turnover is low (often 25 years in the same plant), there's a strong sense of
	belonging. Exchanging with SC workers is easy, because they're not reluctant to change. Yet they want
	to understand everything, otherwise they may close the plant. They want to be sure it's going to work,
	that it's the right tool, they need to be persuaded. It's much investment, they don't count hours.
	Therefore, it's important to thank them, even to pay them (their wages are low), to stick their
	portraits on the plants' walls"
CA2	"We tried to understand the client culture"
CA3	"We want to understand Global Pharma Corp's culture"
CA4	"We did make an effort to actually understand the client's communication style/culture. It was quite
	well done and very much adapted to Global Pharma Corp's context."
CA5	N/A
CA6	"We're doing a transformation driven by supply chain, but a big part of this transformation is S&OP,
	which was historically driven by Sales within Global Pharma Corp (and not supply chain). It's a
	collaborative process: all functions meet and challenge themselves to understand tomorrow's demand,

	the production and distribution capacities of the plants, and the financial valorization of this mix of supply and demand."
CA7	"We noticed that in France for instance, they're tired of Excel files. They need real things. And this seems
	to be the case everywhere. Because of this complex project structure, we use much theory before deep
	diving into concrete actions. Yet change management is all about concrete things."
CA8	"People said there are too many channels."

Citations table 2.1.6: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change

	2.1.7
	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change
CA1	"In SC Project, we arrive on the sites (also, the roadmaps keep changing all the time) and nobody is aware of the project, not even the SC director. () The directors don't know the project's impacts."
CA2	"The focus of communication in the core level has been very narrowed. We're limited to flyers, goodies, take pictures. It's very transactional."
CA3	"When we arrived on SC Project, we didn't have any document where the program was explained (even after a couple months), the basics: what is it, where are we going? It should have been done at the beginning, everybody should know those key points!"
CA4	"I haven't seen a proper change impact assessment done. () It's really hard to start with communication when you haven't seen that document. I also don't know whether the stakeholder analysis was done for end users."
CA5	"She (Change Lead, client side) explained how communication and change would impact them () If people had questions during webinars, we answered via a FAQ. If we didn't know the answer, we obtained them from the stream leaders."
CA6	"For now, we focus much on supply chain community, we talk regularly to top leadership."
CA7	"We notice some people (e.g. neighboring functions) lack some crucial information."
CA8	"In my opinion, change reasons aren't enough explained to people."

Citations table 2.1.7: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change

	2.1.8
	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change
CA1	"There's no communication on the big process changes, on the benefits. There's a huge lack of communication within Global Pharma Corp, whereas there's much communication externally (the whole world knows Global Pharma Corp's transforming its SC)."
CA2	"We're missing the relation. It's good to give someone a notebook, but if the person hasn't seen the whole change team accompaniment, you're missing the key point of building trust and doing change along with the teams."
CA3	"When we arrived on SC Project, we didn't have any document where the program was explained (even after a couple months), the basics: what is it, where are we going? It should have been done at the beginning, everybody should know those key points!"
CA4	"I haven't seen a proper change impact assessment done. () It's really hard to start with communication when you haven't seen that document. I also don't know whether the stakeholder analysis was done for end users."
CA5	"The communication pre-go-lie was great. We tried to be visible, and to give as much information as possible."
CA6	N-A
CA7	"Until now, in terms of change and in communication, we have things led by central change team, but nothing that touches directly end users (). We weren't able to implement actions, and to personalize."
CA8	"Because for now, we can't prevent workers' fear of not legitimate enough."

Citations table 2.1.8: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change

	2.1.9
	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change
CA1	"You can't copy a successful SC change program in any SC. Even if you're a SC expert, it just allows you to be faster. You must start from scratch each time."
CA2	"We should in theory. The way we've addressed the methodology in the global teams could be adapted to the local teams. We're trusting the regional leads and local change ambassadors to transfer that knowledge they have on the cultural aspects to these methodologies, to make something consistent."
CA3	"We're trying to adapt to SC culture. For instance, the most challenging stream was Warehousing. At least, in Supply chain planning or Transportation they used laptops. In Warehousing, they didn't even have laptops! So we designed trainings, but it was weird."
CA4	"Well let's say we're trying to adapt, we know we have to but we don't succeed that much."

CA5	"Of course, current communication channels (e.g. Yammer and WhatsApp) are not adapted to everyone.
	That's why I also created and printed posters for some plants. It depends on populations."
CA6	"I'd say we understand Global Pharma Corp's SC in a "macro" way in the Barcelona central team. But
	we have bigger expectations concerning the functional teams at local levels. They need to understand
	local specificities, because that's where change will really happen."
CA7	"Training: apart from content, the approach is not adapted to SC specifically. We just wonder: how many
	countries do I have, how many users
	Communication: we adapt communication to profile types (for instance, sticking posters in plants where
	workers don't have daily access to computers) ()
	GCP: the methodology can be declined anywhere."
CA8	"We could adapt more. We have an Consulting Corp suitcase with methodologies and screwdrivers.
	It's not a good way. We need to be more flexible."

Citations table 2.1.9: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change

	2.1.10
	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change
CA1	"Supply chain employees are workers: they're not used to change ambassadors. Therefore, we can propose many innovative things, test, they don't have any judgment, because they simply don't know it. () SC workers want to understand each line, to be sure it corresponds to their machine and this is great! But you can't do what you want with them. (). Once they don't like you, they don't hide it. Sometimes, you may get insulted during meetings. You mustn't be sensitive. Change management in a plant isn't change management in Finance."
CA2	"What is the best way to communicate? How you actually do these activities? Is it better to do it face to face with the SC Head? Is it better to do it with the team? Does it require several meetings (because the SC Heads like to be included in the conversations, not only in the output)? That's a call that the local teams and regional teams need to be doing."
CA3	"We're assuming that everyone has the same lifestyle as us, but it's false. Maybe it's one of the reasons why warehousing is a stream that eventually couldn't execute SC Project program."
CA4	"Global Pharma Corp's SC culture is very much linked to Global Pharma Corp's culture itself. It's also related to the fact it's a French company, it's very political. Sometimes it's hard to get things done. You don't always have a full transparency."
CA5	"Supply chain workers are mature, so they're not ready to adapt to change or to new technologies.  You arrive with your communication and change, and they're like: "who's this 30-years-old lady

	appearing from nowhere with her communication and change? So yes, it has been very challenging for
	me."
CA6	"At local level, we need to have a concrete communication, because SC workers are wondering: "today I do this task like this, tomorrow, what will happen precisely?"."
	do this task like this, tollionow, what will happen precisely:
CA7	"On SC Project, we don't understand SC culture. On SCPOPE project, I worked with a consultant who understood SC business very well and could understand the way the client thinks. The goal was to move functions, jobs and people. This person could understand impacts very well. I'm sure that understanding SC is very useful."
CA8	"They don't have the same level of study. We need to adapt. In the training sessions, we have great Consulting Corp teams."

Citations table 2.1.10: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change

	2.1.11
	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change
CA1	"During workshops on other projects, I did amazing things with them (e.g. we played with a box to define the new process). At Global Pharma Corp, it's impossible. I'm in a business tower in Barcelona,
	whereas the project's being deployed in French plants"
CA2	"What I've seen so far is that sometimes, you don't give instructions to people, and sometimes you give instructions and then they limit to that and they don't want to think out of the box. Now we need the team to be creative."
CA3	"We're implementing a tool! Normally, people go from an Excel file to a tool. For Warehousing employees, they were changing from nothing, to take a computer and learn how to use a tool. It was crazy. We're not prepared. But we're in the right path to improve I think."
CA4	"It's hard to fully understand Global Pharma Corp's culture, first because it's very political, second because supply chain is a complex sector. This is probably the main reason why us, as change agents, can't really represent the project's vision for impacted workers. They either don't know us, or they don't fully trust us"
CA5	"What's funny is they're still asking me things about my former job. Nobody replaced me, so sometimes they still need me. Supply chain is very specific. And it's a small world, so everyone knows everyone."
CA6	"We need to be precise, in communication/ training. If we keep global messages of ambition/ vision shared at central level, they won't feel involved."
CA7	"Change agents are more in charge of coordination."

"The language is not good. We speak consultancy language from global level, to key users or end users. They don't understand what E2E means (end-to-end), or roadmap (calendar). For us, it's a consultancy alphabet. But for them, it's like "a monster is coming, which is going to take the old ways of working and fit us in a new model". (...) It's the first thing we can improve."

Citations table 2.1.11: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change

	2.2.1
	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – During change
CA1	"As from now, during meetings, SC workers are surrounded by Human resources Heads or Finance Heads, and they must promote the project and its benefits. SC workers don't want to produce without understanding anymore. As from today, they adapt their production to tools predictions concerning future diseases appearances for instance, or future machine breaks. There's a total shift for SC, which therefore needs a specific communication. Change agents should help SC workers communicate, train them. Not send them newsletters"
CA2	"But overall, I'm not sure workers feel like solutions are enough explained to them."
CA3	"The reality is we haven't been that good in executing these activities. People aren't that confident with the change. We've collected feedbacks that prove there's something more to do there."
CA4	"We could definitely explain solutions more deeply to impacted workers."
CA5	"We follow them. We did events post go-lives, the same in all sites. We did webinars, townhalls in order to involve everyone. We worked a lot."
CA6	"We regularly contact the leadership of Global Pharma Corp supply chain world, yet they don't always cascade information. Often, if remains at their leadership levels. Then we arrive locally, and realize people are not aware of some key messages that leadership was supposed to cascade."
CA7	"We are still present, but more via the functional teams present at local levels. All meetings (e.g. Steercos) become more frequent."
CA8	"We're too focus on sending newsletters, and not enough on really helping workers."

Citations table 2.2.1: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – During change

	2.2.2
	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – During change
CA1	"With the current type of communication, workers can't feel like they're part of any high level change
	plan."

CA2	"For the lead models on GCP exercise, we were able to know them better. There were few people, we
	could meet them all. I can put a face on all of them. It can be the same when you start deployments:
	you always need to do the trade-off personalizing things vs. reaching everyone. I think there's a
	challenge for the deployments. We'll have big teams, simultaneously. We won't need to be close to everyone."
CA3	"How can you want to belong to something if you're not confident in this thing (e.g. change)?"
CA4	"During the actual change, it was CA4in very much global communication. There was a lot of focus
	on event, bringing leaders, breakfasts etc. But it was the project team that was on site and talking to
	people about the impact of the change, doing trainings. Change teams wasn't involved there
	unfortunately."
CA5	"We try and follow them, via videos for instances (called "Connecting the dots") we explain what will
	happen in July. We always try to know their feedbacks, it's very important for us."
CA6	" A local Change network is great locally to know what happens on site, but it could also be great if we
	have another Change network for Regions (one level above), to make this link between leadership and
	lower levels."
CA7	"Key users and end users use the new tool. The tool is almost here before go-live, and this is
	communication in a way."
CA8	"Workers filmed in the video feel they belong to change; workers watching it, not that much I think."

Citations table 2.2.2: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – During change

	2.2.3
	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – During change
CA1	"Each worker has a different resistance curve."
CA2	"I'd say we did it for the lead models: you can identify who's improved, who's reluctant, who you thought would lead change and instead has been an obstacle. With the deployments, we won't reach that, because some groups are spread geographically: we don't have the capacity. People in the local teams are willing to help: groups have requested more communication, activities, information. We should leverage on that."
CA3	"But then of course, not all workers think the same thing, some are confident in change, others aren't."
CA4	"Also, too global communication prevents us from adapting to the variations in terms of change acceptance/reluctance."
CA5	"We can't adapt/personalize the communication, we do a global communication. And then supply chain workers adapt."

CA6	"Yet they don't all agree with us and they don't all have the same levels of commitment."
CA7	"It may not fit to all workers though, they all have different expectations as to change and what it can
	bring them."
CA8	"And overall, all workers don't accept change the same way, it depends on many things."

Citations table 2.2.3: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – During change

	2.3.1
	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – After change
CA1	"Celebrating is important, to reward employees, who dedicate personal time to project. Events are
	nice, but SC Project events are cheap. In my former project, we bought Halloween costumes, pizzas and
	candies: events don't need to be expensive! We took photos, and SC workers were happy and smiling.
	Events must be adapted. Goodies (caps, t-shirts) are useless. SC workers would have preferred
	something federating the teams within the plants: a huge townhall for instance, with all their
	colleagues acclaiming them."
CA2	"Post go-live, communication is much less needed by workers. At least that's what I think. We could and
	should celebrate change success though But it hasn't been that successful for now."
CA3	"We celebrate go-lives, but we don't celebrate change success"
CA4	"For the lead models (Iberia & Benelux) it's hard to celebrate success, because it's the pilots, there are
	usually some bugs they need to deal with. For further deployments, in terms of communication, we
	produced this video with end users testimonies during hypercare and we distributed it across the whole
	program."
CA5	"We don't celebrate change success. Before the go live (couple weeks before), we sent them goodies,
	and they feel they're part of a group
	It's been very important for them, because they all see the goodies on the photos. During the go-live
	celebration, they wore the goodies (tee-shirts etc.) and they were very happy. The sponsors were there
	and congratulated everyone, there was a communion."
CA6	"The focus is more on the pre go-live communication. What we could do though is celebrate change
	success, it helps motivating the impacted workers on the long term."
CA7	"What we may be missing too are celebrations to congratulate the workers after go-live."
CA8	"Usually after go-live, they don't need that much communication. They just need to know what's
	happening in the other places where the project's deployed. We're going to create a video with English
	speaking end users telling about their experience, their expectations before, their feelings post go-live,

Citations table 2.3.1: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – After change

advices... We then share it locally to people who will go-live someday."

	2.3.2
	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – After change
CA1	"We used to measure leadership commitment thanks to TGPS, but it was abandoned."
CA2	"We do have KPIs for each of change management four pillars."
CA3	"There's a stream dedicated to KPIs (Value Realization stream). We're trying to keep specific Change
	management KPIs, for instance for the trainings we have a feedback form (score of the uses, scoring
	trainers, materials). For the capability assessment we have the number of assessed people, the
	assessment itself, and the improvement (before go-live vs. after hypercare period). This way, we can see
	how much they improved. I think it's the most powerful KPI we have."
CA4	"I was only involved in communication KPIs. I'd be surprised if we had KPI's to measure the leadership
	commitment/support. And that may be a mistake!"
CA5	"We're working on communication KPIs right now. Some examples can be: how many people read the
	newsletters, watched the videos, post on Yammer, on WhatsApp, how many click on Flash news directly.
	"
CA6	"We're building KPIs on an ongoing basis. We have communication KPIs (what channels are preferred,
	what communication mediums to use depending on the people we're addressing, how many visits,
	how many likes). We're very lucky that the Value realization stream exists. () We have GCP KPIs too,
	with the confidentiality level required of course (people identification, assessment, role allocation).
	We can know how many people we assessed, trained, what are the gaps, whether we have risky
	capabilities and need to adapt trainings accordingly"
CA7	"Value realization stream is in charge of this. Generally, you think of change activities, and you transform
	them in indicators that can be understandable by leadership (how many trained people, etc.)."
CA8	"In change and communication: Number of pulse checks launched, % of plants we completed, % we have
	left to deliver the materials (surveys, videos, TH, webinars, goodies).
	For training KPIs: how many planned, how many delivered, how much audience targeted, how many
	receive, satisfaction rate (very important).
	We have 15 pages of KPIs, for each of the four change pillars on SC Project."
	ns table 2.2.2; CHANCE ACENTS' COMMUNICATION AND WAY OF WORKING. After change

Citations table 2.3.2: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – After change

#### 2.4.1 CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Technology importance CA1 "The global methodology (newsletters, WhatsApp group, yammer) doesn't fit at all SC culture. SC workers need posters in their plants, weekly meetings, even daily meetings to plan production. (...). They do have access to emails, but they don't mind about reading newsletters. They want to know which messages they must address to the directors during meetings, how to promote the project at the coffee machine" CA2 "When you're doing a restructuring, you need to be open and transparent. On SC Project there are too many confidential topics. It's becoming complicated. We have a lot of communication channels for the core team, and not for the local teams." CA3 "There are too many channels, people get lost and bored: "CA4in, a communication?". Even in the SC Project team!" CA4 "Of course, you need to keep them informed, but producing one video per month to the project team to keep them happy is useless. I don't know if people are happy when they receive the video." CA5 "We did a communication campaign about Yammer in March (when we had 70 people): today we have 200. (...) People start getting used to it. When they see project's sponsors use Yammer and WhatsApp, they want to do the same: "my boss does it, why not me"?" CA6 "I think we are using too many channels. At least that's what communication KPIs seem to be proving. We should improve on this point." CA7 "I'm not convinced we're using the best channels to access all people. We should go to meetings, make sure SC heads talk about SC Project for 10 minutes at the end of their meetings (...) But this would request much time, to first plan all these actions, and then to create the corresponding documents." CA8 "Second thing is communication: Yammer and WhatsApp? They don't even have a computer with daily access on plants. Only way of communication is: TV screen in the kitchen, or blackboards. They need change agents to go there, to organize meetings with them. To sit with them, to have breakfast. To make them believe we support them: via Skype, we can't support them. We have to listen to them. I can't communicate well if I don't measure the needs from my audience."

Citations table 2.4.1: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING - Technology importance

#### 2.4.2 CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Technology importance CA1 "We have monthly webinars with change ambassadors, no matter their different deployment levels (...) Moreover, we have townhalls with everyone, even though they already have Steercos (steering committees) and weekly meetings. The communication is too global, and therefore useless." CA2 "And we don't even adapt our communication to the segment we're addressing" CA3 "I don't read all the communication emails, there are too many." CA4 "I know in big projects you need almost an internal communication team. But there should be someone to deal with local communication (...) There should be more done locally in terms of effort and tailor maid communication." CA5 "We made a Flash News, and a Global newsletter. The same one is sent to everyone, so 1000 people, more or less (from top management to end user), from Barcelona. We have a very global communication." CA6 "One priority topic should be adapting a bit more our communication formats and/or channels to the audience (e.g. sponsor, worker, SC Heads, etc.)." CA7 "Some things do exist: Webinars, Townhalls, Newsletters, Intranet, WhatsApp, Yammer... but it's not personalized." CA8 "We want to approach people: we first need to analyze the size of the groups, how many groups we have, how many people we have for townhalls, for newsletters... And then we adapt channels. On SC Project, we first decide what channels and then fit it to the audience."

Citations table 2.4.2: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Technology importance

	2.4.3	
CHA	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Technology importance	
CA1	"We wanted to measure change adoption of the leaders of Global Pharma Corp's SC (who, as I said, are against SC Project): we were told to stop () Therefore, we changed our survey and decided to ask very simple questions."	
CA2	"Global Pharma Corp's not mature enough to introduce digital tools. Maybe they're afraid they won't be able to handle the situation after having generated expectations from the employees, with a survey benchmarking with a lot of analytics, and 3D mapping etc. () Also, you have a lot of "old" leaders, not feeling comfortable with technology."	

CA3	"Abandoning TGPS is a political decision, out of my scope. There's a certain scare of really asking
	people what their feelings are. It's a challenge on SC Project, and for Global Pharma Corp specifically.
	We have to measure very well what we're asking in surveys"
CA4	"Also we should capitalize more on surveys. We do have several, but it's a very political client, we have to hide negative feedbacks"
CA5	"I'm doing the Pulse check (survey sent to SC Project actors: core and deploy, Global Pharma Corp and
	Consulting Corp) to know how they feel. It's bi-annual. () We made a survey recently, and Townhalls
	and Webinars seem to be the preferred communication channels."
CA6	"I hope we'll implement (sadly, not with TGPS) with Adoption survey, so we can assess the readiness of
	local teams towards transformation. We're going to track their understanding of ambition/vision, what
	SC Project means for them in terms of roles/ responsibilities, whether they feel involved in these new
	ways of working, there'll be communication questions too"
CA7	"The Pulse check is a survey sent to SC Project actors, to know how everyone feels. The feedbacks are
	quite positive, I don't know if it's linked to questions. I was expecting some things like "we're staying
	too late at night", "some people are not respectful""
CA8	"We also want to launch surveys post go-lives. They decided to send just one, global, no matter which
	step of the project people are. It's nonsense. You need to measure the temperature: how they feel, how
	we can do it better, if they lack training."

Citations table 2.4.3: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Technology importance

	3.1.1
	EMPLOYEES' ROLE ALLOCATION AND TRAINING – Role definition
CA1	"At Global Pharma Corp, we work only on roles, and not on jobs. We mix everything."
CA2	"Overall, role definition is one of the activities we can be the proudest of."
CA3	"It's one of the activities we've done the best. We took in consideration all the functional leads opinions and knowledge. It's a work that lasted for months. The definitions are very good."
CA4	N/A
CA5	N/A
CA6	"This exercise was almost finished when Consulting Corp took the project from The previous consulting company. Role descriptions had been co-built with functional teams and HR."
CA7	"Job descriptions were very well built. Three teams worked together: functional teams defined them and reviewed them with change team."

CA8 "I wish I could tell you something, but CA4in, change management pillars are too separated. Therefore
I have no information."

Citations table 3.1.1: EMPLOYEES' ROLE ALLOCATION AND TRAINING – Role definition

	3.1.2
	EMPLOYEES' ROLE ALLOCATION AND TRAINING – Role definition
CA1	"I'm in charge of Growing Capabilities Planning, and I didn't read role descriptions! They actually could interest me, but I wish I could go on site. In change, we must understand activity. On SC Project, we do change management in a too global way. A change agent must be specialized in the domain, especially in SC, which is very special."
CA2	"The way we build the second phase of the GCP exercise is to review and adjust whatever was missing or not consistent in the initial role design. We review what they do locally, and also if there are things to adjust because we're missing key activities in the descriptions for instance. Same for capabilities."
CA3	"We're trying to adapt at every change. For instance, there's a big change due to another project that's coming after SC Project, about centralization of roles. They're taking into consideration all the jobs we've been doing before."
CA4	N/A
CA5	N/A
CA6	"We also have been disturbed by the parallel operating model (reorganization). () Now, they're changing all these new role levels, and the challenge is for both projects to be coherent, and to have a common and clean copy at the end. () We're integrating this operating model in SC Project job catalogue."
CA7	"Now, SCOPE is adding roles and deleting functionalities, functional teams from SCOPE and CA2 are working together so that job descriptions are updated on an ongoing basis."
CA8	N/A

Citations table 3.1.2: EMPLOYEES' ROLE ALLOCATION AND TRAINING – Role definition

CA1

# 3.3.1 EMPLOYEES' ROLE ALLOCATION AND TRAINING – Training "We execute GCP exercise, which doesn't happen often in change programs and can be very good, and then we forget about it. We don't adapt training or coaching."

CA2	"The content in general is very complete: it combines processes and tools, big picture for the user about why they're doing this, not only what they should do. They also have practical exercises."
CA3	"Our approach is "Train the trainers". We train the key users (selected people) and then they're in charge of training the end users. I think it's a good approach."
CA4	"They really liked the training, and their impressions were quite allright."
CA5	N/A
CA6	"We have to be careful not to give them 10 different roles (otherwise they'll never be experts) at the role allocation, and this role allocation triggers the training paths () This way we can easily say "Mister X has this role, automatically, he must have this list of corresponding trainings".
CA7	"The train the trainer approach (very classic) has an advantage: end users need to have a direct contact with someone. We call key users in Barcelona to engage them, and then they go train the end users locally."
CA8	N/A

Citations table 3.3.1: EMPLOYEES' ROLE ALLOCATION AND TRAINING – Training

	3.3.2
	EMPLOYEES' ROLE ALLOCATION AND TRAINING – Training
CA1	"Coaches don't even know the targets workers must reach for each capability, and they execute the training without having any idea of the workers' current capabilities. () GCP exercise is now distributed to the coaches so they can adapt their coaching."
CA2	"Another challenge is to improve coaching, and to personalize them as much as possible."
CA3	"We're trying to personalize the coaching. So the training's standardized, but after, if we realize some people have more difficulties then others concerning key points in the usage of the tool, we take this into consideration for the coaching period."
CA4	N/A
CA5	N/A
CA6	"We proposed to Global Pharma Corp to have 2 months of coaching on site after go-live: "for real", with new processes/ tools/ meetings. () It's complementary to the classic training. () We decided coaches would be SC people (and not change people) so they could use the rights words with end users. We (change agents) couldn't have done that."
CA7	"There's coaching. But we noticed we couldn't communicate on negative feedbacks. So we try to communication through coaching with end users, but it's filtered, because Global Pharma Corp's leadership is scared that it's perceived like something bad by the end users. () What may be missing

	is a Q&A, a Webex, to invite all workers to connect, because for now, feedbacks concerning co				
	come to us from Coaches only (and not end users)"				
CA8	N/A				

Citations table 3.3.2: EMPLOYEES' ROLE ALLOCATION AND TRAINING - Training

	3.3.3 EMPLOYEES' ROLE ALLOCATION AND TRAINING – Training				
CA1	"We should take the time to think, to adapt the trainings to the needs."				
CA2	"Now it's also how you create the confidence in the user that the training they're getting is going to be enough for their needs. But you'll always have this complain that the users didn't get as much training as they'd have wanted."				
CA3	"We're trying to deliver a good training but in terms of personalization, taking into consideration the strengths and weaknesses is impossible: we have too many deployments and people. The training could be more personalized, but at least we have the coaching that's good and focused on the person."				
CA4	N/A				
CA5	N/A				
CA6	"It's not totally personalized to people for now (even though it's an ambition), but it's "role based".  () We adjust training needs according to roles. Tools help us (I-learn, Global Pharma Corp's system):  when all modules will be updated, people will be able to redo trainings as much as they want. They'll  be able to be autonomous and look for specific information. Via tools, we'll be able to personalize				
	For now, we personalize through roles only."				
CA7	"As from now, we're an agile project: we'll adapt solutions. It's hard to adapt trainings on web versions, on PPT it's easier. Generally, we forget about long content, and we create mini videos of 1 minute, which can be pushed on the end users screen."				
CA8	N/A				

Citations table 3.3.3: EMPLOYEES' ROLE ALLOCATION AND TRAINING – Training

# **Appendix 9: Condensed matrixes (TOTAL: 26)**

	1.1.1 CHANGE AGENTS' SKILLS AND CAPABILITIES – Change agents' collaboration					
CA1	- Initiatives prevented due to long and numerous validation processes					
CA2	<ul> <li>Change agents' expertise limited to given pillars, preventing them from taking initiatives in other pillars</li> </ul>					
CA3	- Lack of integration between four pillars of change management, preventing initiative taking					
CA4	<ul> <li>Sometimes, lack of sharing of some useful information from client side, preventing change team to adapt some interventions consequently</li> </ul>					
CA5	<ul> <li>No anticipation and interest from two previous consultant change agents</li> <li>Necessity for client to repeat instructions several times</li> <li>Immediate adaptation of new consultant change agent (CA3)</li> </ul>					
CA6	<ul> <li>Challenge for Consulting Corp to arrive after previous consulting company</li> <li>Difficulties for client to get used to new consultants and ways of working after building habits with previous consulting company</li> <li>Challenge for Consulting Corp to capitalize on previous company's work, and still take initiatives to add its own touch</li> </ul>					
CA7	- Hard initiative taking at arrival on the project, a bit easier now					
CA8	<ul> <li>Four change management pillars preventing initiative taking</li> <li>Change agents stick to activities within the pillar they belong to</li> </ul>					

Condensed matrix 1.1.1: CHANGE AGENTS' SKILLS AND CAPABILITIES – Change agents' collaboration

	1.1.2 CHANGE AGENTS' SKILLS AND CAPABILITIES – Change agents' collaboration					
CA1	- - -	Lack of understanding of change team organization  Too many change agents for daily tasks  Not enough change agents during rush periods				
CA2	-	Efficient collaboration whenever necessary				
CA3	-	Numerous cultures (language, ways of working) and seniority levels (from intern to senior manager)				

CA4	-	Collaboration could be better between Leads of four pillars			
CA5	-	Strong collaboration since arrival of new person			
CA6	-	- Very emotional change counterparts on client side			
	-	No personal fit between consultants and clients within change team, implying difficult team			
		leading and collaboration			
CA7	-	Difficult global visibility due to important number of meetings, preventing her to assist to all of			
		them			
CA8	-	Change management pillars implying silos and preventing collaboration			
	-	Impossible to help another Change agent, or to ask him/her help, because of lack of global			
		visibility over change team's activities			
	-	Global visibility only possible for Change lead (CA6)			
	-	Nonsense and unfriendly internal organization			

Condensed matrix 1.1.2: CHANGE AGENTS' SKILLS AND CAPABILITIES – Change agents' collaboration

	2.1.1				
	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change				
CA1	<ul> <li>Few high-value consulting missions through client's history implying a lack of trust in consultants' expertise</li> </ul>				
CA2	- Strong involvement of functional teams from client side, especially for Learning and	GCP pillars			
CA3	<ul> <li>Challenging client involvement by change agents due to important number of stream on client side</li> </ul>	ns (teams)			
CA4	- Client involved for change processes				
CA5	- Bad client/ consultant collaboration				
CA6	- Huge project size making the connection between client and consultant more difficu	lt			
CA7	- Complex relationship with client				
CA8	<ul> <li>No possibility for Change agents to take decisions</li> <li>Impossible to coach this client</li> </ul>				

Condensed matrix 2.1.1: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change

	2.1.2
	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change
CA1	<ul> <li>Few high-value consulting missions through client's history implying a lack of trust in consultants' expertise</li> </ul>
CA2	<ul> <li>Strong collaboration with functional teams from client side</li> <li>Change agents unable to understand all outcomes without client support</li> <li>GCP exercise performed collaboratively with functional teams from client side</li> </ul>
CA3	<ul> <li>Absence of client willingness to change ways of working, implying difficulties in change agents/</li> <li>client collaboration</li> </ul>
CA4	<ul> <li>Strong decisional power on client side as to approvals and supervision</li> <li>Limited trust in consultants from client side</li> <li>High number of validations</li> </ul>
CA5	<ul> <li>Different ways of working than preceding consulting company</li> <li>High validation degree as to deliveries from previous consulting company</li> <li>Low match between client expectations and deliveries from consultant change agents</li> </ul>
CA6	<ul> <li>Strong collaboration with functional experts on client side</li> <li>Change management consultants coordinating methodology, and functional teams on client side activating change</li> <li>Change network (impacted SC workers) provided with vision and key messages to activate on site</li> </ul>
CA7	<ul> <li>Many versions of one document, due to long validation process</li> <li>Much stress and loss of time due to complexity of structure entailing too many meetings</li> </ul>
CA8	<ul> <li>Impossible for Change agents to propose anything</li> <li>Deliverables guidelines given by client</li> </ul>

Condensed matrix 2.1.2: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change

	2.1.3
	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change
CA1	<ul> <li>SC trainings during former consulting missions</li> <li>Incapacity of being a good change agent without SC expertise</li> </ul>
CA2	<ul> <li>Not and expert in SC</li> <li>Global understanding of SC (e.g. inventory, stock, supply chain demand reviews)</li> </ul>

	- SC understanding on functional side, implying necessary collaboration between change teams and functional teams
CA3	<ul> <li>Lack of change agents' SC expertise</li> <li>Strong collaboration between change and functional teams, allowing change agents' understanding of SC environment and industry</li> </ul>
CA4	<ul> <li>No SC expertise before arriving on project</li> <li>SC expertise developed during the project (e.g. organization, processes, culture)</li> </ul>
CA5	<ul> <li>No expertise in SC</li> <li>Information about SC limited to an early project presentation</li> </ul>
CA6	<ul> <li>No necessity for change agents to be SC experts</li> <li>Need for change agents to understand gaps between today and tomorrow's states</li> </ul>
CA7	<ul> <li>No understanding of all SC stakes, implying frustration</li> <li>No adaptation of change actions to SC</li> <li>Functional expertise crucial in change management</li> </ul>
CA8	<ul> <li>Worked for 10 years in SC, therefore she is an SC expert</li> <li>Change agent team isn't expert in SC, no understanding of language</li> </ul>

Condensed matrix 2.1.3: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change

		2.1.4
	CHAN	GE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change
CA1	-	Numerous SC specificities (e.g. typical outfits, masculine environment)
	-	No change agents training as to SC reality implying a possible cultural shock
CA2	-	Gap between project's hub reality in Barcelona and workers' reality in plants
CA3	-	Too much focus on slides and deliverables
	-	Too narrow approach as to real impacts for the company
CA4	-	Plant reality far from what change team thinks
CA5	-	Realization of gap between theory and practice
	-	Specificities in terms of population
CA6	-	Gap theory/ practice understood thanks to functional teams' help
	-	Need to understand gap theory/practice to allow relevant communication to SC workers
CA7	-	Gap between decks theoretical content and reality of impacted workers
CA8	-	Understands gap theory/practice thanks to previous experience in SC
	-	Important for Change agents to have visibility over gap theory/practice in order to get better
		results

Condensed matrix 2.1.4: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change

		2.1.5
	CHANG	E AGENTS' COMMUNICATION AND WAY OF WORKING – Before change
CA1	-	Almost non-existent communication before change
	-	Barriers from Region SC Heads due to their non-involvement in the project
CA2	-	Quick-win logic from executive side, preventing efficient and complete communication
	-	Go-lives dates prevailing over quality of team information
CA3	-	Numerous impacted workers ignorant of basic project information
	-	Change agents from core team disconnected from local reality
	-	Communication not adapted to project's worldwide scale
CA4	-	Insufficient involvement of all impacted workers during pilots
	-	Difficulties for change agents to know who impacted workers are, implying incapacity of
		involving everyone
CA5	-	All actions taken (e.g. onboarding sessions) to involve everyone in the pre go-live period (from
		top management to end users)
CA6	-	Lack neighboring functions understanding (e.g. finance, marketing, sales) as to reasons why SC
		now involved in processes (e.g. S&OP)
	-	SC leaders doubts as to their legitimacy to inform neighboring functions about the project
	-	Impossible collaboration between SC and neighboring functions if lack of information as to SC
		new importance (e.g. forecasting, analytics)
CA7	-	Past creating of categories by site, but not by population, and no corresponding document
		created
	-	Wish for future creation of user journeys per population (from top leadership to end users)
CA8	-	Communication could be better

Condensed matrix 2.1.5: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change

	2.1.6
	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change
CA1	- Strong involvement and sense of belonging
	- Weak turnover
	- High change acceptance
	- Need for deep change understanding

	- Need for congratulations and gratitude
CA2	- Efforts to understand client's culture
CA3	- Wish to understand client's culture
CA4	- Efforts made to understand client culture, allowing communication adaptation
CA5	N/A (client herself)
CA6	- Understanding of client SC's history (S&OP historically driven by sales, and not by SC)
	- Assessment of all functions' new challenges
CA7	- Too many Excel files, not enough real things
	- Complex project structure implying too much focus on theory
	- Not enough deep diving into concrete actions, whereas change management should be all
	about this
CA8	- Complaints as to number of communication channels, proving lack of culture understanding
	from Change agents

Condensed matrix 2.1.6: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change

	2.1.7
CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change	
- Global lack of project awarene	ss at local level
<ul> <li>Lack of understanding of proje</li> </ul>	ct's impacts from SC directors
- Wrong communication format	preventing detailed change explanations
- Transactional communication	imited to objects (goodies, flyers)
- Absence of basic project comm	nunication months after project's start, preventing impacted
employees to understand char	nge reasons
- Weak communication at local	evel
- Communication too focused o	n project actors (Global communication)
- Lack of understanding of local	impact for change agents
- Deep explanations as to how o	hange would impact workers
- All workers questions answere	d either during webinars or after further investigation
- Efforts to provide SC communi	ty and top leadership with explanations of change reasons
- Some people lacking crucial in	formation, proving bad communication as to reasons of change
- Lack of depth in change reason	ns' explanations
	<ul> <li>Global lack of project awarene</li> <li>Lack of understanding of proje</li> <li>Wrong communication format</li> <li>Transactional communication l</li> <li>Absence of basic project commemployees to understand char</li> <li>Weak communication at local l</li> <li>Communication too focused or</li> <li>Lack of understanding of local</li> <li>Deep explanations as to how c</li> <li>All workers questions answere</li> <li>Efforts to provide SC communi</li> <li>Some people lacking crucial information</li> </ul>

Condensed matrix 2.1.7: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change

		2.1.8
	CHA	NGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change
CA1	-	Lack of internal communication about change and its benefits
CA2	-	Weak relationship between change agents and impacted SC workers
	-	Weak SC workers accompaniment by change agents, preventing trust
CA3	-	Absence of basic project communication months after project's start, entailing possible employees' scariness
CA4	-	No change impact assessment and no stakeholder analysis done, preventing change agents from creating reassuring communication for impact people
CA5	-	Great pre go-live communication
	-	Much visibility and information, allowing to mitigate employees' fears
CA6	-	Current incapacity for change agents to mitigate workers' fear (e.g. lack of legitimacy in their new role)
CA7	-	Change and communication led by central team, preventing to touch directly end users
	-	No actions implemented and no personalization, preventing change agents to mitigate SC
		workers' fears
CA8	-	Insufficient communication

Condensed matrix 2.1.8: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change

	2.1.9
	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change
CA1	<ul> <li>Change agents' expertise in SC allowing them to go faster, but not preventing them from adapting</li> <li>Impossible to copy a SC change program in any SC transformation</li> </ul>
CA2	<ul> <li>Conscience of adaptation needs in theory</li> <li>In practice, global methodology supposed to be adapted at local levels by local teams</li> <li>Local teams (Regional leads and Local change ambassadors) expected to use their knowledge of SC culture to adapt global methodologies locally</li> </ul>
CA3	<ul> <li>Attempts to adapt to SC culture</li> <li>Example of adaptation of training design to ways of working in client's warehouses (e.g. no workers' use of laptops)</li> </ul>
CA4	- Unsuccessful adaptation of change to supply chain specificities
CA5	- Adaptation of models as to choice of communication channels

	<ul> <li>Posters printed for plants where SC workers are technology averse</li> </ul>
CA6	<ul> <li>Macro understanding of SC stakes from change agents in central team</li> <li>Functional teams charged with adaptation of change activities at local levels, thanks to their</li> </ul>
	deep understanding of SC
CA7	- No adaptation of training or GCP
	<ul> <li>Adaptation of communication via posters stick on plants' wall, due to no daily access to computers</li> </ul>
CA8	- Not enough adaptation to SC
	- Too much trust in the "Consulting Corp suitcase", more flexibility needed

Condensed matrix 2.1.9: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change

	2.1.10	
	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change	
CA1	- SC workers not used to change, implying possibility for change agents to try many things	
	- SC workers very involved in their job, implying high change agent responsibility	
	- SC workers very honest people, preventing change agents from being sensitive	
CA2	- Local teams expected to adapt change actions to local culture	
CA3	- Change agents' underestimation of lifestyle differences, implying project's fail in some streams	
	(e.g. Warehousing stream)	
CA4	- Strong link between client SC's culture, and client's culture itself	
	- Very political company due to French identity	
	- Difficulties for change agents to get things executed	
	- Client not always fully transparent towards change agents	
CA5	- Ageing SC workers, implying lack of readiness as to change or technologies	
	- Fear of some SC workers as to change agents' purpose and objectives	
	- Challenging for change agents to conduct change in SC	
CA6	- Need for change agents to understand concrete changes for SC workers	
	- Concrete communication at local levels must be adapted to SC culture	
CA7	- SC understanding would be very useful for Change agents	
	- High SC expertise for Change agents on reorganization project (parallel project), allowing deep	
	understanding of impacts	
CA8	- Not enough adaptation, especially considering differences as to level of study	

- Great trainers from consulting company, but no expertise as to how to explain things to SC workers
- No understanding from Trainers (from Consulting company) as to ways of working with the new tool, and benefits

Condensed matrix 2.1.10: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change

	2.1.11
C	HANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change
CA1	<ul> <li>Easy for a change agent to embody a vision in a SC context (SC workers open to change)</li> <li>Change agents absent from local levels, preventing them from embodying a vision</li> </ul>
CA2	- Fears that embodying leadership may limit SC workers' creativity
САЗ	<ul> <li>Huge gaps from current to future state for some impacted employees (e.g. Warehousing stream), implying big challenge for change agents' as to embodying a vision</li> </ul>
CA4	- Client complexity preventing change agents to be trusted by workers
CA5	- Small size of SC world implying strong network and easier leadership embodiment
CA6	<ul> <li>High degree of precision needed in communication and training</li> <li>Global messages of ambition or vision prevent SC workers involvement</li> <li>Change agents charged with embodying vision in a concrete and understandable way</li> </ul>
CA7	<ul> <li>Huge project size implying limitation of Change agents' roles to coordination and preventing leadership embodiment</li> </ul>
CA8	<ul> <li>Wrong language (e.g. consultancy language) spoken to plants workers preventing change agents from being trusted</li> </ul>

Condensed matrix 2.1.11: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Before change

	2.2.1		
	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – During change		
CA1	<ul> <li>Total shift for SC workers due to new ways of working</li> <li>Wrong communication: newsletters instead of trainings as to how to promote the project with neighboring functions</li> </ul>		
CA2	<ul> <li>Feeling that workers aren't provided with enough explanations about new solutions</li> </ul>		
CA3	- Gap between quality of communication design and reality		

	<ul> <li>Change agents' inability to communication efficiently in post go-live phase, preventing</li> <li>employees' confidence in change</li> <li>Feedbacks collected confirmed need for efforts in post go-live communication</li> </ul>
CA4	- No deep explanations as to change and its reasons
CA5	<ul> <li>Strong post go-live accompaniment of workers</li> <li>Events (e.g. webinars, townhalls) in order to prove deep explanations and update</li> </ul>
CA6	- Client leaders provided with deep explanations, but no cascading to SC workers
CA7	<ul> <li>Solutions communicated by functional teams at local levels</li> <li>Increase in meetings frequency (e.g. Steering Committees)</li> </ul>
CA8	- Too high focus on irrelevant or weak channels (e.g. newsletters)

Condensed matrix 2.2.1: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – During change

	2.2.2
	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – During change
CA1	- Current communication preventing workers from feeling they are part of change
CA2	<ul> <li>Small teams during first deployments allowing change leaders to involve impacted SC workers in change process</li> <li>Bigger teams for further deployments preventing impacted SC workers from being involved in change process</li> </ul>
CA3	- Lack of confidence in change preventing workers from feeling they belong to change
CA4	<ul> <li>High involvement of project actors (e.g. events, breakfasts)</li> <li>No possible involvement of impacted employees by change agents, due to their inability to go on site</li> <li>Involvement of impacted employees performed by functional teams at local levels</li> </ul>
CA5	- Employees involved in change process via feedbacks and explanatory videos
CA6	<ul> <li>SC workers involved in change process via Change network</li> <li>Missing Change network at Region level (one level above) to link leadership and lower levels</li> </ul>
CA7	<ul> <li>Tool use by Key users and End users, thereby involved in change process</li> <li>Presence of tool in the pre go-live period being a communication itself</li> </ul>
CA8	- Testimonial videos allowing participating workers to feel they belong, but only a small minority

Condensed matrix 2.2.2: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – During change

		2.2.3
	CHAI	NGE AGENTS' COMMUNICATION AND WAY OF WORKING – During change
CA1	-	Realization of difference in SC workers' resistance curves
CA2	-	Identification of variations in change acceptance from one impacted employee to another during lead models  Impossible identification in further deployments because insufficient resources on change agents' side
	-	Local teams willing to help for this identification at local levels
CA3	-	Realization of difference in SC workers' resistance curves but no real adapation
CA4	-	Too global communication preventing change agents to adapt to change resistance variations
CA5	-	No possible consideration of change acceptance variations in communication  Necessity for SC workers to adapt to Global communication
CA6	-	"Yet they don't all agree with us and they don't all have the same levels of commitment."
CA7	-	Current communication not fitting all workers' expectations as to change benefits
CA8	-	Realization of difference in SC workers' resistance curves but no adaptation

Condensed matrix 2.2.3: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – During change

		2.3.1
	CHAN	IGE AGENTS' COMMUNICATION AND WAY OF WORKING – After change
CA1	-	Importance of change success celebration (in general)
	-	Format of celebration events not adapted to the project
	-	Useless goodies (caps, t-shirts)
	-	Celebration event format preventing federation of the impacted workers
CA2	-	Lack of change success celebration due to actual lack of change success for now
CA3	-	Celebration of go-lives, but absence of change success celebration
CA4	-	No change success celebration for lead models, due to important number of bugs entailing
		high frustration on employees' side
	-	For further deployments, change success celebration via video of end users testifying
CA5	-	No celebration of change success
	-	Goodies sent before go-live, and wore by SC workers during go-live celebration
	_	Congratulations from sponsors during go-live celebrations, implying communion and
		happiness among SC workers
CA6	-	More focus on pre go-live than on post go-live communication
CA7	-	Missing change success celebrations

CA8	-	Not much communication needed in the post go-live period
	-	Upcoming creating of a video of End users sharing their experience
	-	Video will be shared at local levels

Condensed matrix 2.3.1: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – After change

	2.3.2
	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – After change
CA1	- Assessment of leadership commitment stopped after abandon of TGPS survey
CA2	- KPIs for the four change management pillars
CA3	- Value realization stream dedicated to KPIs
	- Change management KPIs (e.g. training, capability assessment)
CA4	- Communication KPIs
	- No leadership commitment KPIs, considered as a mistake
CA5	- Much work executed as to communication KPIs (e.g. read and use of newsletters, videos,
	Yammer, WhatsApp, Flash News)
CA6	- Value realization stream in charge of building KPIs
	- Change management team building KPIs on an ongoing basis
	- Presence of communication KPIs (number of visits, of likes), and GCP KPIs (number of people
	assessed, gaps)
CA7	- Value realization stream in charge of KPIs
	- Change activities transformed into indicators understandable by leadership (e.g. number of
	trained people)
CA8	- Numerous KPIs for each of the four change management pillars

Condensed matrix 2.3.2: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – After change

	2.4.1			
СН	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Technology importance			
CA1	-	Wrong global communication (not adapted to SC culture)  Absence of communication about which messages SC workers must address		
CA2	- - -	Not enough transparency  Too many confidential codes, whereas restructuring contexts need full transparency  Many communication channels for the central team (in Barcelona)		

	-	Not enough communication channels for local teams
CA3	-	Too numerous communication channels, preventing positive impact on communication and/or
		transparency, and entailing boredom instead
	-	Boredom towards communication coming not only impacted employees, but also from project
		team itself
CA4	-	Too much communication preventing people from being happy while receiving
CA5	-	Increasing degree of involvement from SC workers as to use of communication channels (e.g.
		Yammer and WhatsApp)
	-	Sponsors use of communication channels implying an increased motivation and involvement
		from SC workers
CA6	-	KPIs demonstrating over quantity of communication channels
CA7	-	Wrong choice of communication channels
	-	No change agents' presence at local meetings, due to lack of time and resources
CA8	-	Not-adapted communication channels, preventing SC workers' motivation
	-	Transparency should be enhanced via TV screens and blackboards
	_	Change agents should communicate directly to and with SC workers at local levels

Condensed matrix 2.4.1: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Technology importance

	2.4.2
CHA	NGE AGENTS' COMMUNICATION AND WAY OF WORKING – Technology importance
CA1	<ul> <li>Global webinars and townhalls despite the fact they don't concern all attendees</li> <li>Too global communication, therefore useless</li> </ul>
CA2	- No adaptation to segment addressed
CA3	- Absence of distinct email groups, entailing excessive communication (e.g. mails)
CA4	<ul> <li>Missing internal communication team, preventing adequate local communication</li> <li>More efforts needed as to a more tailor maid communication at local levels</li> </ul>
CA5	<ul> <li>Same global newsletter sent to 1000 project's stakeholders</li> <li>Choice was made of a very global communication</li> </ul>
CA6	- Adaptation of communication formats and channels to audience as a priority
CA7	- Many communication channels, but no personalization in terms of content and audience
CA8	<ul> <li>In normal communication process, analysis of the groups (number, size, people) comes before channels choice</li> <li>On project, process executed the other way around</li> </ul>

Condensed matrix 2.4.2: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Technology importance

	2.4.3		
СНА	CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Technology importance		
CA1	- Leadership barriers from client side as to change adoption measurement		
	- Old change adoption measurement survey replaced by a simpler one		
CA2	- Insufficient client maturity towards digital surveys (and tools in general)		
	- Leaders' fears concerning the post-survey situation (e.g. employees' new expectations)		
	- Ageing leaders feeling uncomfortable with technology		
CA3	- TGPS abandon due to political decisions		
	- Leaders' fears on client side to face impacted employees' feelings		
	- Lack of change agents' freedom as to questions asked in surveys		
CA4	- Political barriers on client side preventing surveys from being really efficient		
CA5	- Bi-annual survey (Pulse check) sent to project actors		
	- Recent survey proving Webinars and Townhalls are preferred communication channels		
CA6	- Sad about TPGS abandon		
	- New survey (Adoption survey) to assess project understanding, involvement, communication		
CA7	- Internal survey sent to project's actors (Pulse Check)		
	- Positive previous feedbacks whereas negative oral feedbacks in central tower (Barcelona)		
CA8	- Global post go-live survey sent to all project people, preventing adequate temperature		
	measurement		

Condensed matrix 2.4.3: CHANGE AGENTS' COMMUNICATION AND WAY OF WORKING – Technology importance

		3.1.1
		EMPLOYEES' ROLE ALLOCATION AND TRAINING – Role definition
CA1	-	Confusion between roles and jobs form client side preventing roles descriptions from being entirely relevant
CA2	-	Change agents should be very proud of their performance as to defining roles
CA3	- -	One of best performed activities  Change agents' consideration of functional teams' expertise  High quality role definitions
CA4	N/A	
CA5	N/A	

CA6	- Role description executed by previous consulting company, almost finished when Consulting
	Corp arrived
CA7	- High quality of role descriptions
	- Strong collaboration between Functional teams and Change team
CA8	- No information, due to too high separation between Change management pillars

Condensed matrix 3.1.1: EMPLOYEES' ROLE ALLOCATION AND TRAINING – Role definition

		3.1.2	
	EMPLOYEES' ROLE ALLOCATION AND TRAINING – Role definition		
CA1	-	Didn't have to read role descriptions to perform her Change agent role	
CA2	-	Initial role design reviewed and adjusted during second phase of GCP exercise	
	-	Ongoing review of local activities, and addition of missing key activities (and capabilities) in	
		role descriptions whenever needed	
CA3	-	Attempts to adapt role descriptions after any change occurs	
	-	Reorganization project succeeding to current project, implying centralization of some roles	
		and redefinition of corresponding descriptions	
CA4	N/A		
CA5	N/A		
CA6	-	Parallel operating model (reorganization project) disturbing role descriptions & new role levels	
		implying changes in role descriptions	
	-	Current integration of operating model in role descriptions	
CA7	-	Parallel reorganization project forcing a continuous update of role descriptions	
CA8	N/A		

Condensed matrix 3.1.2: EMPLOYEES' ROLE ALLOCATION AND TRAINING – Role definition

3.3.1		
		EMPLOYEES' ROLE ALLOCATION AND TRAINING – Training
CA1	-	Training materials not adapted to GCP exercise outcomes, therefore not relevant
CA2	-	Complete content, combining processes and tools
	-	Explanations to uses about reasons of change
	-	Practical exercises, improving users' learning
CA3	-	Efficiency of the "Train the trainer" approach

CA4	-	Positive feedbacks from end users as to training quality
CA5	N/A	
CA6	-	Limitation in the number of roles attributed to a SC worker, to allow possible expertise
	-	Content of training materials linked to role allocation (one role: one training)
CA7	-	Good training approach ("Train the trainer") because allowing End users to have a direct contact
		with Key users
	-	Key users called in central Hub (Barcelona) to be engaged by central teams
	-	Local training assured by Key users at local levels
CA8	N/A	

Condensed matrix 3.3.1: EMPLOYEES' ROLE ALLOCATION AND TRAINING – Training

	3.3.2		
		EMPLOYEES' ROLE ALLOCATION AND TRAINING – Training	
CA1	-	Coaches ignorance of individual target levels SC workers must reach, preventing coaching from being efficient  Recent measure to distribute GCP exercise outcomes to coaches	
CA2	-	Coaching personalization important future challenge	
CA3	-	Personalized coaching	
CA4	N/A		
CA5	N/A		
CA6	-	Two moths coaching on site after go-live, complementary to classic training  Coaches chosen among SC people (and not change agents), in order for appropriate vocabulary  to be used and enhance end users comprehension	
CA7	-	No possible communication as to negative feedbacks from Coaches after coaching, due to fears from client's leadership  Future Q&A or Webex would allow Key users to give feedbacks too (current feedbacks coming from Coaches only)	
CA8	N/A		

Condensed matrix 3.3.2: EMPLOYEES' ROLE ALLOCATION AND TRAINING – Training

3.3.3		
		EMPLOYEES' ROLE ALLOCATION AND TRAINING – Training
CA1	-	Not enough time dedicated to trainings' adaptation to workers' needs

CA2	-	Users frustration due to feeling of insufficient training
	-	No matter personalization degree for training materials, users' frustration happens
CA3	-	Impossible personalization due to important number of deployments of people
	-	Absence of training materials adaptation as to individual strengths/ weaknesses
	-	Personalization of coaching
CA4	N/A	
CA5	N/A	
CA6	-	No individual personalization of training materials
	-	Training needs adjusted according to roles (one role: one training)
	-	Future personalization possible via tools (I Learn), where workers will be totally autonomous
CA7	-	Agile project, implying necessity for Change agents to adapt trainings
	-	Easiest way to provide End users with updates via short videos pushed on their screens
CA8	N/A	

Condensed matrix 3.3.3: EMPLOYEES' ROLE ALLOCATION AND TRAINING – Training

## Appendix 10: The Culture Map (Erin Meyer, 2014) - Example of the US, France and Thailand

Meyer's culture map is articulated around eight scales: communicating, evaluating, leading, deciding, trusting, agreeing and scheduling.

