



**SELINUS UNIVERSITY**  
**BUSINESS SCHOOL**

**Overcoming Resistance and Facilitating  
Technology Adoption in SMEs through  
Effective Change Management**

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**A DISSERTATION**

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## **DECLARATION**

I, Rabih Georges Samara, do hereby declare that I am the sole author of this thesis and that its contents are only the result of the work, experience, readings and research I have conducted and that all citations stated in this thesis have been acknowledged.

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## **ABSTRACT**

This thesis explores the critical role of technology integration for the growth and sustainability of small and medium-sized enterprises (SMEs) among competitive business landscapes. Despite its importance, resistance from employees often hinders successful technology adoption. The primary objective is to investigate how comprehensive change management strategies can help SMEs overcome resistance and seamlessly integrate technology, focusing on transitioning from traditional to modern operational methods.

The research identifies sources and types of resistance during technology adoption in SMEs, emphasizing fundamental change management principles and the impact of effective strategies on mitigating resistance. Drawing from personal experience and data collected from NGOs, particularly in farming and agriculture SMEs, the study employs diverse sources for a literature review on change management and technology adoption. Various research methodologies and empirical analyses will be employed to establish a solid foundation.

Ultimately, the thesis aims to demonstrate that effective change management significantly reduces resistance and promotes technology adoption in SMEs. The proposed framework offers guidance for enhancing change management strategies, facilitating a smoother technology integration. In conclusion, the research seeks to provide actionable insights for SMEs, contributing to the knowledge base on change management and technology adoption, and serving as a foundation for future research and practical applications.

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## LIST OF ABBREVIATIONS

B2B: Business to Business.  
B2C: Business to Consumer.  
BDS: Business Development Services.  
CEO: Chief Executive Officer.  
FL: Financial Literacy.  
IoT: Internet of Things.  
KPI: Key Performance Indicators.  
MSME: Micro Small Medium Enterprise.  
SME: Small Medium Enterprise.  
SR: Small Ruminant.  
ROI: Return on Investment.

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# CHAPTER 1

## INTRODUCTION

### **1.1. Background and significance of change management and technology adoption in SMEs.**

Small and Medium-sized Enterprises (SMEs) form the backbone of economies worldwide, contributing significantly to job creation and economic growth. In today's digital age, the adoption of technology has become crucial for SMEs to remain competitive and sustain their operations. At the heart of this technological transformation lies effective change management, which is essential for the successful integration of new technologies and processes within SMEs.

Traditionally, SMEs have faced challenges in keeping up with technological advancements due to resource constraints, limited access to expertise, and resistance to change. However, the rapid pace of digitalization and the evolving business landscape have made technology adoption an imperative rather than a choice. Technology can enhance productivity, efficiency, and competitiveness, enabling SMEs to compete on a global scale.

The significance of this thesis resides in the critical role that effective change management and technology adoption play in the growth and survival of SMEs. Without proper change management, the implementation of new technologies can lead to resistance, confusion, and even failure.

On the other hand, SMEs that embrace technology and manage change effectively can unlock new opportunities, streamline processes, reduce costs, and improve customer satisfaction.

## **1.2. Research Problem Statement:**

The central research problems addressed in this study are:

"How can SMEs effectively manage change and adopt technology to enhance their competitiveness and sustainability in the digital age?"

“How can SMEs overcome the resistance manifested in the workspace by the employees towards change and technology implementation?”

“What are the tools, procedures and methodologies necessary to facilitate, assist and accelerate the transition inside SMEs to ensure a successful and effective transition?”

This problem is particularly relevant due to the ever-increasing importance of technology in business operations and the specific challenges faced by SMEs in this regard. SMEs often lack the financial resources and in-house expertise to handle technology adoption seamlessly, making effective change management even more critical.

## **1.3. Research Objectives and Research Questions:**

To put the research objectives into perspective they can be stated as follows:

- Analyzing the key challenges SMEs encounter when implementing change management initiatives: This objective aims to identify and understand the obstacles that SMEs face when trying to manage change within their organizations.
- Investigating the barriers to technology adoption in SMEs: This objective seeks to explore the factors that hinder SMEs in successfully adopting and integrating technology.
- Exploring successful change management and technology adoption strategies: This objective will uncover best practices and strategies that have proven effective in SMEs.
- Assessing the impact of effective change management and technology adoption on SME performance: This objective will examine the outcomes of successful change management and technology adoption on SMEs, including financial performance, market share, and competitive positioning.

As for the research questions corresponding to the objectives can be elaborated as follows:

- What are the primary challenges SMEs encounter when implementing change management initiatives? This question will identify and categorize the challenges that SMEs face when attempting to manage change.
- What are the key barriers that hinder technology adoption in SMEs? This question aims to pinpoint the factors, such as cost, lack of skills, or resistance, that impede technology adoption.

- What strategies have been successful in managing change and adopting technology in SMEs? This question will explore case studies and success stories to identify effective strategies.
- How does effective change management and technology adoption influence SME performance? This question will examine the impact of successful change management and technology adoption on various performance metrics in SMEs.

#### **1.4. Research Methodology and Scope of the Study**

The research will employ a mixed-methods approach, combining quantitative surveys and qualitative inputs. The survey will be distributed to a diverse sample of SMEs, focusing on businesses of varying sizes and industries. The data will provide in-depth insights into specific cases of successful change management and technology adoption. The data analysis will involve both quantitative statistical techniques and qualitative content analysis.

As for the Scope of the Study:

This study will focus on SMEs operating in a specific geographic area, allowing for a more targeted investigation. The data collection and analysis will be conducted over a specific period of time, mainly during the project conducted with selected groups, to capture the evolving dynamics of change management and technology adoption within the SMEs. The study recognizes potential limitations related to resource constraints and data availability, which will be addressed throughout the research process.

In conclusion, this research aims to shed light on the challenges, opportunities, and strategies related to change management and technology adoption within SMEs. The significance of these topics in enhancing SME competitiveness and sustainability in the digital age cannot be overstated. Effective change management and technology adoption have the potential to revolutionize the operations and outcomes of SMEs, making this research imperative for policymakers, practitioners, and academia.

## CHAPTER 2

### LITERATURE REVIEW

#### **2.1. Overview of change management theories and frameworks.**

There are a number of ways in which change can be categorized most are related to the extent of the change and whether it is seen as organic (often characterized as bottom-up) or driven (top-down). Different kinds of change require different strategies and plans to effectively gain employee engagement and acceptance of change. The three types of change that occur most frequently in organizations are developmental, transitional and transformational. Change management theories effectively support how to deal with developmental and transitional change, but are less effective at dealing with successfully implementing transformational change. A critical step in determining which approach to use in overcoming resistance to implementing organization change is to determine which type of change the organization is experiencing.

##### **2.1.1. Developmental change**

May be either planned or emergent; it is first order, or incremental. It is change that enhances or corrects existing aspects of an organization, often focusing on the improvement of a skill or process. Developmental change occurs when a company makes an improvement to their current business. If a company decided to improve their processes, methods or performance standards, this would be considered developmental change. Companies are continually processing developmental change to some degree in order to stay competitive. This



type of change should cause little stress to current employees as long as the rationale for the new process is clearly conveyed and the employees are educated on the new techniques. When major change occurs, such as the decision to close a division, the company might consider implementing developmental change as the first step in streamlining the business; employees may be more likely to accept the change. The employees could see that the company attempted different strategies before determining that closing the division was the only option.

### 2.1.2. **Transitional change**

It seeks to achieve a desired state that is different from the existing one. It is episodic, planned and second order, or radical. Transitional change has a three- stage process involving:

- Unfreezing the existing organizational equilibrium, which involves:
  - Disconfirmation of expectations.
  - Creation of guilt or anxiety.
  - Provision of psychological safety that converts anxiety into motivation to change.
- Moving to a new position; achieved through:
  - Identifying with a new role model or mentor.
  - Scanning the environment for new relevant information.
- Refreezing in a new equilibrium position, which occurs when the new point of view is integrated into:
  - The total personality and concept of self.
  - Significant relationships.

Transitional change is more intrusive than developmental change as it replaces existing processes or procedures with something that is completely new to the company. The period when the old process is being dismantled and the new process is being implemented is called

the transitional phase. A corporate reorganization, merger, acquisition, creating new products or services, and implementing new technology are examples of transitional change.

Transitional change may not require a significant shift in culture or behavior but it is more challenging to implement than developmental change. The future of the organization is unknown when the transformation begins which can add a level of discomfort to employees.

The outcome of transitional change is unknown so employees may feel that their job is unstable and their own personal insecurities may increase.

Education on the new procedures should be commenced at each stage of the new process. This will allow employees to feel that they are actively involved and engaged in the change. As an employee's level of engagement in the new procedure increases, their resistance to change may decrease. Management should be cognizant of the impact and stress these changes will have on their employees. The company should continue to inform the employees of their status offering support and helping them dealing with the personal adjustments they will have to make.

### **2.1.3. Transformational change**

Transformation can result in an organization that differs significantly in terms of structure, processes, culture and strategy. Therefore, it may result in the creation of an organization that operates in developmental mode – one that continuously learns, adapts and improves. Transformational change occurs after the transition period. Transformational change may involve both developmental and transitional change. It is common for transitional and transformation change to occur in tandem. When companies are facing new emerging of radically different technologies, significant changes in supply and demand, unexpected competition, lack of revenue or other major shifts in how they do business, developmental or

transitional change may not offer the company the solution they need to stay competitive. Instead of methodically implementing new processes, the company may be forced to drastically transform themselves. (Ackerman, L. (1997), Organization Development Classics. [http://www.karis.biz/storage/crew\\_cw/types%20of%20change.pdf](http://www.karis.biz/storage/crew_cw/types%20of%20change.pdf) – retrieved 12-06-11)

## **2.2. Planned versus emergent change**

Sometimes change is deliberate, a product of conscious reasoning and actions. This type of change is called planned change. In contrast, change sometimes unfolds in an apparently spontaneous and unplanned way. This type of change is known as emergent change. Change can be emergent rather than planned in two ways.

Managers make a number of decisions apparently unrelated to the change that emerges. The change is therefore not planned. However, these decisions may be based on unspoken, and sometimes unconscious, such implicit assumptions dictate the direction of the seemingly disparate and unrelated decisions, thereby shaping the change process by drift rather than by design.

External factors or internal features influence the change in directions outside the control of managers. Even the most carefully planned and executed change program will have some emergent impacts.

This highlights two important aspects of managing change:

- The need to identify, explore and if necessary challenge the assumptions that underlie managerial decisions.
- Understanding that organizational change is a process that can be facilitated by perceptive and insightful planning and analysis and well crafted, sensitive

implementation phases, while acknowledging that it can never be fully isolated from the effects of serendipity, uncertainty and chance.

### **2.3. Episodic versus continuous change**

Another distinction is between episodic and continuous change. Episodic change is “infrequent, discontinuous and intentional”. Sometimes termed “radical” or “second order” change, episodic change often involves replacement of one strategy or program with another.

Continuous change, in contrast, is “ongoing, evolving and cumulative”. Also referred to as “first order” or “incremental” change, continuous change is characterized by people constantly adapting and editing ideas they acquire from different sources. At a collective level these continuous adjustments made simultaneously across units can create substantial change.

The distinction between episodic and continuous change helps clarify thinking about an organization’s future development and evolution in relation to its long- term goals. Few organizations are in a position to decide unilaterally that they will adopt an exclusively continuous change approach. They can, however, capitalize upon many of the principles of continuous change by engendering the flexibility to accommodate and experiment with everyday contingencies, breakdowns, exceptions, opportunities and unintended consequences that punctuate organizational life

Articulating the reasons for the change and sharing the vision of the senior leaders of the organization can help alleviate some of the resistance to change. Employees will naturally resist change but are more likely to accept the change if they view top management as keeping them informed and supporting them throughout the process. Employees will look for a rationale for the implementation of this major change. Top management should be prepared to involve

employees in all phases of the transition. (Ackerman, L. (1997), Organization Development Classics. [http://www.karis.biz/storage/crew\\_cw/types%20of%20change.pdf](http://www.karis.biz/storage/crew_cw/types%20of%20change.pdf) – retrieved 12-06-11)

#### **2.4. Distinguishing between First-Order and Second-Order changes**

Different studies conducted on types of organizational change showed two major types of change: First-order and Second-order. We have to consider each one of these in more detail.

A common distinction in the change management literature is between First- Order, incremental, Continuous and Second-Order, transformational and revolutionary, discontinuous change:

First-Order, incremental change may involve adjustments in systems, processes, or structures, but it doesn't involve fundamental change in strategy, core values, or corporate identity. First-Order changes maintain and develop the organization: they are changes designed, almost paradoxically, to support organizational continuity and order.

Second-Order, discontinuous change, is transformational, radical, and fundamentally alerts the organization at its core. Second-Order change entails not developing, but transforming the nature of the organization. (Palmer, Ian, Dunford, Richards, & Akin, Gib (2009) *Managing Organizational Change – A multiple Perspectives Approach*. Singapore: Mc Graw-Hill International Edition pp. 86-87.)

On the other hand, we can see applications to the theory that is more or less fit to the situation in hand. Nothing is made standard especially the theories discussed in this chapter. They merely form a guideline for the strategies that will be applied in a real-life situation.

Carlos Ghosn, CEO of Nissan, faced the same situation when he was trying to identify the type of change he was facing. In this book *Shift: Inside Nissan's Historic Revival*, Ghosn clearly states that the plan had to be introduced in a way that it wouldn't be as if it was top-down neither bottom-up, but a combination.

The future success of the of the plan was in large part due to the fact that it was neither imposed from the top-down, by bosses leading as though by divine right, nor did it bubble up from below in a bottom-up process, which often results in a lowest common denominator. It resulted, in fact, from a combination of these two approaches. (Ghosn, Carlos, & Riès, Philippe (2005) *Shift – Inside Nissan's Historical Rvival*. USA: Doubleday p. 110)

## 2.5. **Resistance to change.**

From the time a change is announced to when the change takes root, most employees, regardless of level of experience, will go through a certain level of confusion and stress and a sense of loss. Some individuals are better able to cope with the disruption of change because they have developed a perspective through their life and work experiences that views change as an opportunity. The communications and training programs that usually accompany change initiatives are welcome and sought-after sources of information. This personal, adaptable quality within an organization makes a manager's job easier.

Even excellent performers can get stuck in change. The manager needs to recognize their behavior as a reaction to change and not as a performance issue.

Closely observe behavior: watch what people say and do in meetings and informal settings.

Become sensitive to how people feel.

Study how people react: learn the underlying psychology of the change experience through courses, texts, and books.

Recognize that these reactions impact everyone: to a greater or lesser degree, all employees react to change. Expect it, look for it. (Maginn, Michael (2007). *Managing in times of change – 24 tools for managers, individuals and teams*. Berkshire, England: McGraw-Hill Publishing Company, pp. 76-77)

### 2.5.1. Signs of resistance to change

Resistance to change is tridimensional involving affective, behavioral, and cognitive components. The affective component is how a person *feels* about the change, the cognitive component is how a person *thinks* about the change, and the behavioral component is what a person *does* in the face of a change.

The behavioral response may take many forms. A distinction between active and passive response identifies a range of —symptoms‖ associated with each. The symptoms of active resistance are identified as being critical, finding fault, ridiculing, appealing to fear, using facts selectively, blaming or accusing, sabotaging, intimidating or threatening, manipulating, distorting facts, blocking, undermining, starting rumors, and arguing.

Those symptoms identified with passive resistance are: agreeing verbally but not following through; failing to implement change; procrastinating or dragging one's feet, feigning ignorance; withholding information, suggestions, helps, or support.

This list is not exhaustive and there can clearly be some debate about whether the various symptoms are mutually exclusive. not reduce its value, which is primarily to alert the management to the diverse range of phenomena through which resistance to change can

manifest. (Palmer, Ian, Dunford, Richards, & Akin, Gib (2009) *Managing Organizational Change – A multiple Perspectives Approach*. Singapore: Mc Graw-Hill International Edition p. 160)

### 2.5.2. Reasons for resistance

In order to understand and deal with change we have to analyze why people resist change.

- Dislike of change: it is very common to hear it said that the major impediment that managers face in introducing change is that people dislike change and will resist it. It is unwise to assume that dislike of change is an innate human characteristic. Individuals vary considerably in their dispositional resistance change . However, for the majority of people, it is contextual factors, that is, the specific characteristics of the specific change, which determine how they react. (Ibid P.162)
- Discomfort with uncertainty: individuals tend to vary in terms of how comfortable they are with ambiguity. Some revel in or at least are not particularly perpetuated by mystery flights where the destination is unknown. Others are uncomfortable in this situation, and this leads to resistance to change unless significant details of the journey and destination are reveled. The key point here is action is not due to over resistance or even apathy; it is due to the lack of a clear understanding of what such supportive action would look like.
- Perceived negative effect on interests: the readiness for change also will be affected by people's perceptions of the likely effect of the change on their interest, a term that can cover a wide range of factors including their authority,



status, rewards (including salary), opportunity to apply expertise, membership of friendship networks, autonomy, and security.

- Attachment to the established organizational culture/identity: readiness for change can be significantly affected by the degree of attachment to the existing culture.
- Perceived breach of psychological contract: a breach or violation occurs when employees believe that the employer is no longer honoring the nature of the reciprocal relationship between them and their employer.
- Lack of conviction that change is needed: it helps change advocates if the belief that change is needed is widespread within the organization. But what seems clear for some is not necessarily clear for others. People are likely to react negatively to change when they feel that there is no need for the change.
- Lack of clarity as to what is expected: proposed changes, particularly of a strategic nature, are not complemented by clear information as to the specific implications at the level of action by individuals. In this case, the chances increase that employees will fail to convert a change initiative into supporting action at their level of the organization.
- Belief that the specific change being proposed is inappropriate: employees affected by a proposed change are likely to form a view that it is either a good idea or a bad idea. In turn, this view is likely to affect their readiness for change. Those who are unsupportive to the idea are given the pejorative label of resistant to change.
- Believe that the timing is wrong: employees may resist, not because they think that the proposed change is wrong —they may, in fact, like the idea— but

because they believe the timing to be wrong. This may be due to a change fatigue or it may be due to a completely different matter such as the view that proposed change would have undesirable effect on key customers or employees or alliance partners.

- Excessive change: it is characterized as having two forms. The first form occurs where an organization is pursuing several change initiatives at once and these are perceived by people in the organization as unrelated in conflict. The second form occurs where an organization introduces a series of changes and people in the organization feel that resources are being reassigned to new initiatives before the earlier ones have been given sufficient attention for them to be effectively implemented.
- Cumulative effect of other changes in one's life: individual's readiness for change at work is affected by what else is going-on in their lives. Indexes of stress comprise elements from diverse aspects of one's life, not just those associated with the employment relationship.
- Perceived clash with ethics: obedience to authority indicates that resistance might be motivated by individuals' desires to act in accordance with their ethical principles.
- Reaction to the experience of previous changes: the experience of previous organizational changes is the most reliable predictor of how people will interpret the implications of an announced change. The significance of this is that managers, when seeking to implement change in an organization, are likely to be the unfortunate victims, or fortunate beneficiaries, of scripts that were

generated in context in which they had no part and of which they are quite likely to be unaware.

- Disagreement with the way the change is being managed: it is easy to understand how a manager can be attracted to the proposition that the lack of success of a change program in which he or she is deeply involved is due to resistance to change as this explanation displaces attention from the actions of the manager to the actions of the recipients. It is also an explanation that is likely to seem very plausible to many people because of the almost universal acceptance of the view that people resist change. (Palmer, Ian, Dunford, Richards, & Akin, Gib (2009) *Managing Organizational Change – A multiple Perspectives Approach*. Singapore: Mc Graw-Hill International Edition pp. 167-168)

### 2.5.3. **Ways to minimize resistance to change**

There are several ways to minimize resistance to change, these ways are:

- Provide training: offer training and coaching where appropriate, so that all individuals are confident in any new roles they have to perform.
- Provide information: give detailed reasons for why the change needs to happen, and encourage questioning of the existing situation.
- Encourage involvement: where possible, involve individuals in the development of your strategy they are more likely to accept it if they have played a part in its creation.
- Engineering the situation: create a crisis to encourage closer teamwork in crisis, people usually stop silly arguments and work together on the main task.

- Work with the group: provide facilitation where group resistance is a problem, and work individually with members of the group.
- Tackle fear: provide reassurance that the future, under the new strategy, will be better than the present. (Riggio, Ronald, & Bass, Bernard (2006) *Transformational Leadership*. USA: Psychology Press, pp. 60-61.)

#### 2.5.4. Methods for dealing with change

The management of resistance can be seen with a range of different approaches. Each takes a different angle on how to deal with resistance. Collectively they provide an array of options for managers to consider.

##### 2.5.4.1. A situational approach

A Harvard business review article by Kotter and Schlesinger provides the classical prescription on managing resistance to change. They proposed six methods for managing resistance:

- Education and communication.
- Participation and involvement.
- Facilitation and support.
- Negotiation and agreement.
- Manipulation and cooptation.
- Explicit and implicit coercion.

This approach is situational in that they argue that the selection of method by managers should be determined by contextual factors. However, according to Kotter and Schlesinger, the

most common mistake managers make is to use only one approach or a limited set of them regardless of the situational. (Palmer, Ian, Dunford, Richards, & Akin, Gib (2009) *Managing Organizational Change – A multiple Perspectives Approach*. Singapore: Mc Graw-Hill International Edition p. 17)

Method	Characteristic	Context (Where to use)	Concern(possible difficulties)
Education and Communication	Informing people as the rationale for the change; providing information	Where resistance is due to lack of information or misinformation	May be very time consuming, which, in some change situations, may be a significant problem
Participation and Involvement	Involving people in the change process as active participants	Where resistance is a reaction to a sense of exclusion from the process	May slow the process and may introduce an element of compromise in decisions that could reduce the optimality of the change
Facilitation and Support	Providing resources, both technical and emotional	Where resistance is due to anxiety and uncertainty	Requires financial, time, and interpersonal support that managers might not feel able or prepared to give
Negotiation and Agreement	Offering incentives to actual or potential resisters	Where resisters are in a strong position to undermine the change if their concerns are not addressed	May lead to a watering down of key elements of the change
Manipulation and Cooptation	Selective use of information; buying the support of certain individuals by giving them key roles in the change process	Where participation, facilitation, or negotiation is too time-consuming or resource demanding	This approach runs the risk of creating a backlash if it is seen as a crude and unethical attempt to trick or bribe them into compliance
Explicit and implicit Coercion	Threatening people with undesirable consequences if they resist	Where the change recipients have little capacity to effectively resist; where survival of the organization is a risk if change does not occur quickly	The desired change may occur; however, support achieved in this manner is likely to be superficial and a threat to the enduring nature of the change. Underlying resentment may come back to haunt the manager(s)

Table No 1 - Methods for Managing Resistance to Change

## 2.6. The power of resistance

Rather than treating resistance to change as something that must be overcome, the power of resistance can be a powerful tool to build support for change. This approach is based on the view that showing respect toward resisters builds stronger relationships and thereby improves the prospects of success of the change. There are five fundamental touchstones:

- Maintain clear focus: Keep focused on the objective; persevere and don't be diverted or demotivated if the immediate reaction of others is to resist.
- Embrace resistance: find out more about the resistance, their entity, their formation and how many levels they consist of. And most importantly find the deeper unmentioned reason below the stated reason.
- Respect those who resist: assume that those who are resistant to the initiative are doing so in good faith. Treat them, and their views, with respect.
- Relax: resist the temptation to push back if attacked. Tension limits your ability to keep the broader picture in mind. Listening will enable you to learn more about their hopes and fears and the action that they might take.
- Join with the resistance: listen for points of commonality to establish some common ground.

Managers should reconsider resistance by recognizing it as a natural part of the adaptation to change process, a form of energy that may be able to be tapped and a form of feedback about the change process. (Palmer, Ian, Dunford, Richards, & Akin, Gib (2009) *Managing Organizational Change – A multiple Perspectives Approach*. Singapore: Mc Graw-Hill International Edition pp. 177-178.)

Most of the major organization had to deal with resistance. CEO of Nissan, Carlos Ghosn, had to deal with a great amount of resistance during the takeover of Nissan's management. First of all, the cultural difference and the idea of a foreigner taking over management created a fear factor and somewhat hostility toward him. But soon enough he was able to break that barrier and open communication channels with everyone in Nissan. His plan was simple, involve everyone in this way everyone shared him his vision and saw the goals that he was aiming for.

Even Nissan's union people trusted him and gave Ghosn a big burden to carry. They specifically told him:

*"We've had our fill of plans, especially unsuccessful ones, which is to say all those that have been presented to us until now. This company is bleeding. The employees are anxious. We have to get Nissan out of the hole. As long as we believe that you are acting constructively and taking our remarks and observations into account, we won't do anything to hinder the revival process."* (Ghosn, Carlos, & Riès, Philippe(2005) *Shift –Inside Nissan's Historical Revival*. USA: Doubleday p. 95.)



# CHAPTER 3

## THEORETICAL FRAMEWORK

### 3.1. Synthesis of change management and technological adoption theories.

Businesses must constantly evolve and adapt to meet a variety of challenges from changes in technology, to the rise of new competitors, to a shift in laws, regulations, or underlying economic trends. Failure to do so could lead to stagnation or, worse, failure. Among all the reasons mentioned maybe the most critical and crucial of them all is the changes in technology and adaptability.

Approximately half of all organizational change initiatives are unsuccessful, highlighting why knowing how to plan for, coordinate, and carry out change is a valuable skill for managers and business leaders alike.

When it comes to SMEs or even MSMEs the resistance plays a big role. That's why we have to understand exactly what we are dealing with and find the best approach to tackle the situation.

Change can be either adaptive or transformational:

- Adaptive changes are small, gradual, iterative changes that an organization undertakes to evolve its products, processes, workflows, and strategies over time. Hiring a new team member to address increased demand or implementing a new

work-from-home policy to attract more qualified job applicants are both examples of adaptive changes.

- Transformational changes are larger in scale and scope and often signify a dramatic and, occasionally sudden, departure from the status quo. Launching a new product or business division, or deciding to expand internationally, are examples of transformational change.

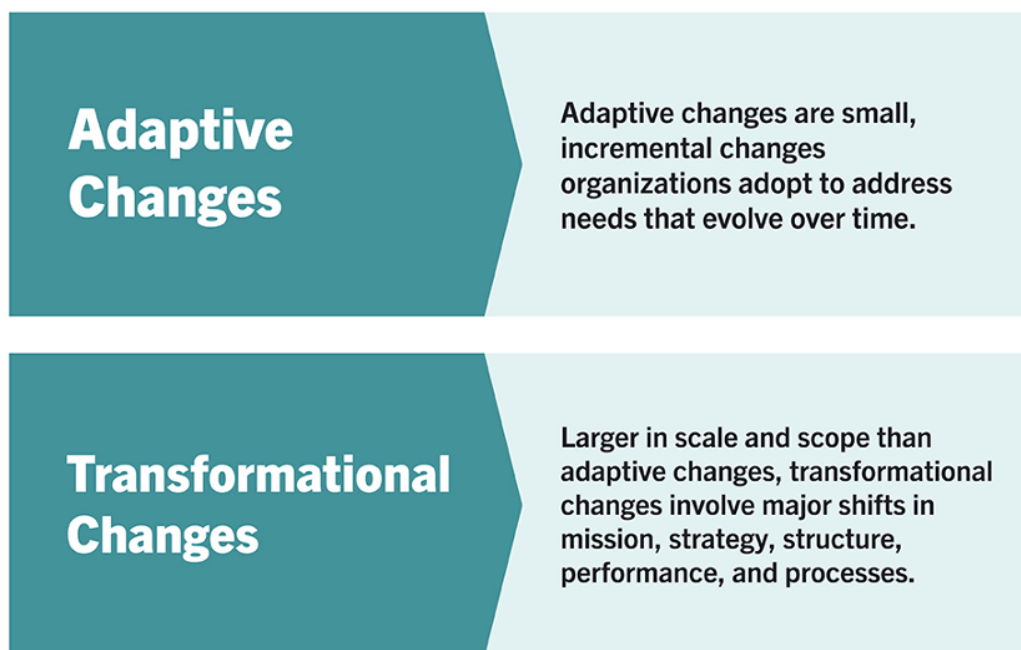


Fig No 1 Adaptive vs Transformational changes (Harvard Business School Online)

Change management is the process of guiding organizational change to fruition, from the earliest stages of conception and preparation, through implementation and, finally, to resolution.

It is essential to understand the change management process to ensure that the SMEs can navigate transitions smoothly. Doing so can determine the potential impact of any changes and prepare your plans accordingly. When you and your team is prepared, you can ensure everyone is on the same page, create a safe environment, and engage the entire team toward a common goal.

Change processes have a set of starting conditions (point A) and a functional endpoint (point B). The process in between is dynamic and unfolds in stages. Here's a summary of the key steps in the change management process.

### **1- Prepare the SMEs for Change**

For an organization to successfully pursue and implement change, it must be prepared both logistically and culturally. Before diving into logistics, cultural preparation must first take place to achieve the best business outcome.

In the preparation phase, the manager is focused on helping employees recognize and understand the need for change. They raise awareness of the various challenges or problems facing the organization that are acting as forces of change and generating dissatisfaction with the status quo. Gaining this initial buy-in from employees who will help implement the change, this can remove friction and resistance later on.

### **2- Craft a Vision and Plan for Change**

Once the organization is ready to embrace change, managers must develop a thorough, realistic, and strategic plan for bringing it about.

The plan should detail:

- Strategic goals: What goals does this change help the organization work toward?
- Key performance indicators: How will success be measured? What metrics need to be moved? What's the baseline for how things currently stand?
- Project partners and team: Who will oversee the task of implementing change? Who needs to sign off at each critical stage? Who will be responsible for implementation?
- Project scope: What discrete steps and actions will the project include? What falls outside of the project scope?

While it's important to have a structured approach, the plan should also account for any unknowns or roadblocks that could arise during the implementation process and would require agility and flexibility to overcome.

### **3- Implement the Changes**

After the plan has been created, all that remains is to follow the steps outlined within it to implement the required change. Whether that involves changes to the company's structure, strategy, systems, processes, employee behaviors, or other aspects will depend on the specifics of the initiative.

During the implementation process, change managers must be focused on empowering their employees to take the necessary steps to achieve the goals of the initiative and celebrate any short-term wins. They should also do their best to anticipate roadblocks and prevent, remove, or mitigate them once identified. Repeated communication of the organization's vision is

critical throughout the implementation process to remind team members why change is being pursued.

#### **4- Embed Changes Within Company Culture and Practices**

Once the change initiative has been completed, change managers must prevent a reversion to the prior state or status quo. This is particularly important for organizational change related to business processes such as workflows, culture, and strategy formulation. Without an adequate plan, employees may backslide into the “old way” of doing things, particularly during the transitory period.

By embedding changes within the company’s culture and practices, it becomes more difficult for backsliding to occur. New organizational structures, controls, and reward systems should all be considered as tools to help change stick.

#### **5- Review Progress and Analyze Results**

Just because a change initiative is complete doesn’t mean it was successful. Conducting analysis and review, or a “project post mortem,” can help business leaders understand whether a change initiative was a success, failure, or mixed result. It can also offer valuable insights and lessons that can be leveraged in future change efforts. (Kelsey Miller - Harvard Business School Online - March 19, 2020. <https://online.hbs.edu/blog/post/change-management-process>)

### **3.2. Development of a comprehensive framework integrating change management and technology adoption in SMEs**

Developing a comprehensive framework to integrate change management and technology adoption in SMEs requires a thoughtful approach that addresses the unique challenges faced by these businesses. Here's a proposed framework that could be used:

#### **1. Assessment of Current State:**

- Conduct a thorough assessment of the SME's current technological landscape, including existing systems, processes, and infrastructure.
- Evaluate the organization's readiness for change and technology adoption. This assessment should include factors such as leadership support, employee skills, and organizational culture.

#### **2. Identify Technological Needs and Goals:**

- Work closely with stakeholders to identify the specific technological needs and goals of the SME.
- Align technological investments with the overall business strategy and objectives.

#### **3. Change Management Strategy:**

- Develop a change management strategy tailored to the needs of the SME, considering factors such as organizational culture, employee capabilities, and the nature of technological change.

- Communicate the vision for technological transformation effectively throughout the organization, emphasizing the benefits and addressing any concerns or resistance.

#### 4. Training and Development:

- Provide comprehensive training and development programs to equip employees with the skills and knowledge necessary to effectively use new technologies.
- Offer ongoing support and resources to facilitate continuous learning and adaptation.

#### 5. Pilot Implementation and Feedback:

- Implement technological changes on a small scale or in pilot projects to test their effectiveness and gather feedback from users.
- Use feedback to iterate on the technology and refine the implementation strategy as needed.

#### 6. Full-Scale Implementation:

- Roll out the technology across the organization, leveraging insights gained from the pilot phase to inform a smooth transition.
- Monitor progress closely and address any issues or challenges that arise during the implementation process.

#### 7. Performance Monitoring and Evaluation:

- Establish key performance indicators (KPIs) to track the impact of technological adoption on business outcomes.
- Regularly monitor and evaluate the performance of the technology and its alignment with organizational goals.

#### 8. Continuous Improvement:

- Foster a culture of continuous improvement by encouraging feedback, learning from successes and failures, and adapting strategies as needed to optimize the use of technology.
- Stay informed about emerging technologies and market trends to ensure the SME remains competitive and adaptable in the long term.

By integrating change management principles with technology adoption initiatives, this framework aims to minimize resistance, maximize adoption, and ultimately drive positive outcomes for SMEs seeking to overcome technological barriers.

### **3.3. Explanation of the proposed framework and its components.**

When it comes to the methodology and explanation of the proposed framework and its components, we can break them down phase by phase and tailor the magnitude to conform with our needs especially when it comes to SMEs and MSMEs.



Starting with the Assessment Phase:

The *Current State Analysis* role is to evaluate the SME's existing technology infrastructure, capabilities, and organizational culture in order to have a clear image and help us conduct a detailed *Needs Assessment* to identify technological gaps, opportunities, and strategic objectives aligned with the business goals.

Next step would be the Strategic Planning:

We need to have an *Alignment with Business Strategy* that ensure that technology adoption efforts are aligned with the overall business strategy and objectives. Also, an imperative point in the strategic planning phase *Goal Setting* is a key element for the success of the mission. Define clear and measurable goals for technology adoption, considering both short-term milestones and long-term vision.

Now comes the Change Management Strategy:

The cardinal rule of Successful Change management is *Communication*. A comprehensive communication strategy must be developed to convey the rationale for technological changes, address concerns, and create acceptance. This can all be accomplished with good *Leadership Engagement*, secure leadership support and involvement to champion the change initiative and role model desired behaviors.

Successful change by default means *Training and Development*. Provide tailored training programs to equip employees with the necessary skills and knowledge to embrace new technologies effectively.

As for the Technology Selection and Implementation:

Starting off with the *Vendor Evaluation* in order to conduct thorough research and evaluation to select technology solutions that best fit the SME's needs and constraints.

Then comes the *Pilot Testing* to Implement technological solutions in small-scale pilot projects to assess feasibility, identify potential challenges, and gather user feedback. Once that has been accomplished throughout an *Iterative Implementation* we need to roll out technology solutions gradually, incorporating lessons learned from pilot testing and making adjustments as needed to optimize adoption and performance.

The next phase would be Performance Monitoring and Evaluation:

Key Performance Indicators (KPIs) will be defined to measure the impact of technology adoption on business performance, such as productivity, efficiency, and customer satisfaction. Plus, we need a clear *Monitoring Mechanisms* through systems and processes for ongoing monitoring and evaluation of technology usage, user satisfaction, and achievement of objectives. All that will eventually come to a *Feedback Mechanisms*. We solicit feedback from employees, customers, and other stakeholders to identify areas for improvement and course corrections.

Finally, we need Sustainment and Continuous Improvement:

One of the most essential key success factors in change management is *Change Reinforcement*. Implementing mechanisms to reinforce and sustain changes in behavior and practices over time, such as recognition programs, incentives, and performance management systems. In addition to *Continuous Learning* using a culture of continuous learning and improvement by encouraging experimentation, sharing best practices, and leveraging external resources and

networks. Success comes eventually from *Adaptation to Change* and how we remain agile and adaptable in response to evolving technology trends, market conditions, and organizational needs, proactively adjusting strategies and priorities as necessary. Eventually SMEs can effectively navigate the complexities of technological adoption while addressing potential resistance through systematic change management practices. (Making Sense of Change Management: A Complete Guide to the Models, Tools and Techniques of Organizational Change – Fourth Edition , 2015 By Ester Cameron and Mike Green)

# Chapter 4

## Research Methodology

Defining Research Methodology is simple. It is a way of explaining how a researcher intends to carry out their research. It's a logical, systematic plan to resolve a research problem. A methodology details a researcher's approach to the research to ensure reliable, valid results that address their aims and objectives.

( <https://www.indeed.com/career-advice/career-development/research-methodology>)

### 4.1. Research Design

Choosing a research design can affect the outcome of any thesis or research paper. Several research methods can be implemented form example:

- Exploratory research design
- Observational research design
- Descriptive research design
- Case study
- Action research design
- Experimental research design
- Causal research design
- Correction of the search design
- Diagnostic in search design

And many more, but what we will be using for this research paper is the Mixed Method Approach.

#### 4.1.1. Mixed Methods Approach

According to the Community Engagement Program by HARVARD CATALYST

The Mixed method approaches allow researchers to use a diversity of methods, combining inductive and deductive thinking, and offsetting limitations of exclusively quantitative and qualitative research through a complementary approach that maximizes strengths of each data type and facilitates a more comprehensive understanding. ([www.catalyst.harvard.edu](http://www.catalyst.harvard.edu))

Five important characteristics of mixed methods designs are:

- **Triangulation:** This design allows the use of multiple methods to collect data on the same topic. It seeks convergence and validation of results from different methods.
- **Complementarity:** The results of one method are elaborated, enhanced, illustrated, and clarified with the results of another method.
- **Initiation:** Newly obtained insights help in the stimulation of new research questions.
- **Development:** The results of one method are used to build another method.
- **Expansion:** The research breadth and range are expanded using different methods for different areas of investigation.

In our research we will be collecting data using mix of qualitative studies and quantitative studies and compiling the results of the three main data collection methods: Surveys, Interviews and Case studies.

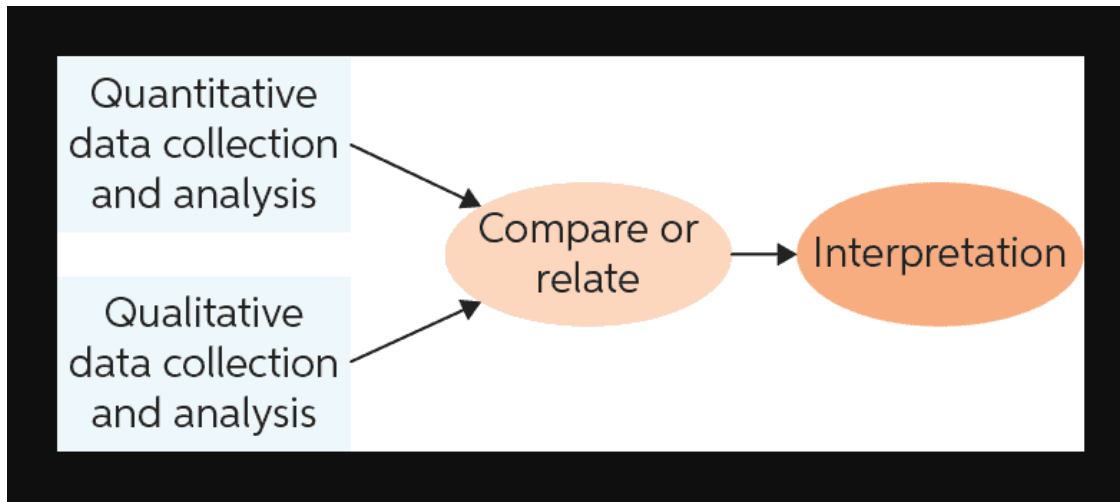


Fig No2: Quantitative vs Qualitative Analysis  
(<https://www.chegg.com/writing/guides/research/mixed-methods-research/>-Published November 22, 2021. Updated December 13, 2021.)

#### 4.1.2. Research Design: Quantitative Studies

Quantitative research involves the collection and analysis of data in numerical form.

The main four main types of quantitative research designs exist: descriptive, correlational, experimental, and quasi-experimental.

First of all, *The Descriptive Research Design* aims to describe existing conditions, behaviors, or characteristics by scientifically gathering information without directing variables. As for *The Correlational Research Design* aims to identify and measure relationships between two or more variables without manipulation whatsoever.

Whereas *The Experimental Research Design* tends to determine causal relationships between variables by manipulating independent variables and controlling dependent variables.

Finally, *The Quasi-Experimental Research Design* identifies causal relationships without random assignment, often due to practical or ethical constraints.

Hence, in our research the quantitative research designs offer various approaches to investigate phenomena, each with distinct advantages and limitations.

#### **4.1.3. Research Design: Qualitative Studies**

Qualitative studies encompass various research design types, but we will focus on four noticeable approaches: phenomenological, grounded theory, ethnographic, and case study designs.

Starting with *The Phenomenological Research Design*, it involves exploring the meaning of lived experiences without imposing preconceived ideas. It aims to understand individuals' perspectives, emotions, and behaviors through interviews or open-ended questionnaires.

As for *The Grounded Theory Research Design*, it seeks to develop theories based on iterative analysis of data without preconceptions. It takes an inductive approach, letting data guide theory development. In this method interviews, observations and iterative analysis are key.

One important research design is *The Ethnographic Research Design* that involves observing and studying a culture-sharing group in their natural setting. The focus is on understanding behaviors, beliefs, and values within their proper context by combining observation with in-depth interviews.

Lastly, the famous *Case Study Design* which investigates a single individual or group in-depth to understand experiences or behaviors. It offers detailed insights into specific circumstances within a bounded setting. This method is widely used and very reliable in single-

case, multiple-case, and longitudinal designs. Each research design offers unique strengths and challenges.

In this research we have select the most suitable approaches and research design to overcome the nuances of each design and ensures a rigorous and insightful research outcome.

## 4.2. Data Collection Methods

As we have discussed previously, there are many methods that we can use to collect the information in order to answer research questions and to achieve our aims and objectives. Data collection methods are mostly related to sampling and since the methods used to collect information must be appropriate for the sample that is selected. We will be using mainly three methods:

- Surveys
- Interviews
- Case studies.

We will tackle each method and explain how this method will contribute to our research.

### 4.2.1. Survey

In quantitative research, surveys are often the quickest and cheapest way to collect data. The researcher is able to gather data from a large population, which could also serve to make the findings more generalizable.

(Rowley, J. (2012). Conducting research interviews. *Management Research Review*, 35(3/4), 260–271. <https://doi.org/10.1108/01409171211210154>)



In our case, surveys were administered in person and via social media platforms such as “WhatsApp” , and included open-ended and closed-ended questions. Open-ended questions had no specific answers and invite the candidate to provide an answer in their own words. Closed-ended questions provided a variety of items for candidates to complete. These could be in the form of a Yes/No responses or Agree – Disagree even a Multiple-Choice Questions.

Response rate was an important factor to consider, and in our case was very high given the nature of the project in hand and the benefits that will result from it to the beneficiaries.

#### **4.2.2. Interviews**

Interviews are commonly used by researchers to explore the views, beliefs and experiences of study participants. When using qualitative methods to gather data, interviews can provide an in-depth understanding of participant perspectives. In some cases, it is only through interviews that we are able to get a deeper, more contextually relevant understanding, especially when our participants are the only people to have undergone the experience under investigation. (Gill, Stewart, Treasure, & Chadwick. (2008). Methods of data collection in qualitative research: interviews and focus groups. *Br Dent J*, 204(1476–5373 (Electronic)), 291–295. <https://doi.org/10.1038/bdj.2008.192>) (Gill, Stewart, Treasure, & Chadwick. 2008).

An example of using an interview to collect data would be a one-on-one interview with employees, asking questions regarding their views on the current work status. In this example, we would need to ensure that the participants we select for our sample have actually been in situations or faced challenges that would enable them to provide some insight into the business model in hand.

### **4.2.3. Case Studies**

A case study is a method for gathering data related to an individual, group or phenomenon that is complex, conducted in a local context, and requires an in-depth analysis in order to understand. It is usually qualitative in nature, although a variety of different data gathering methods can be used within the case study. The researcher gathers a lot of rich, subjective information and then tries to understand how it all fits together in order to explain the topic of interest. Case studies enable researchers to explore topics or events in a holistic way.

An example of a case study might be in the medical field : an individual patient whose clinical presentation is different to what was expected. For example, they may not respond to treatment in the way that is suggested and the clinician must then gather a wide variety of data to understand the reasons underlying the different presentation. The case study may also serve to guide alternative treatment options.

## **4.3 Data Analysis Procedures**

Data analysis is a crucial phase of research where raw data is transformed into meaningful insights. This process involves various techniques and procedures aimed at organizing, interpreting, and drawing conclusions from the collected data. Data analysis procedures can broadly be categorized into two main approaches: qualitative and quantitative analysis.

#### **4.3.1. Thematic Analysis**

Thematic analysis is a widely used qualitative data analysis technique that involves identifying, analyzing, and reporting patterns or themes within the data. It is a flexible and systematic approach that can be applied to various types of qualitative data, including interviews, focus groups, and open-ended survey responses. Thematic analysis typically involves several steps:

- Familiarization: Researchers immerse themselves in the data to become familiar with its content.
- Coding: Data is systematically coded to identify meaningful segments or patterns.
- Theme Development: Codes are organized into overarching themes or patterns that capture key concepts or ideas.
- Review and Refinement: Themes are reviewed, refined, and defined in relation to the research question.
- Report Writing: Findings are interpreted and presented in a coherent narrative, supported by illustrative quotes or examples.

Thematic analysis is valuable for exploring complex phenomena, understanding participants' perspectives, and generating rich, contextualized insights. It emphasizes the subjective interpretation of data and allows for the exploration of diverse perspectives and experiences.

#### **4.3.2 Statistical Analysis**

Statistical analysis, used in our research, involves the application of mathematical and statistical techniques to quantify relationships and patterns within data. It is commonly used in

quantitative research to test hypotheses, make predictions, and draw conclusions based on numerical evidence. Statistical analysis procedures vary depending on the research design and objectives but often include:

- **Descriptive Statistics:** Summarizing and describing the characteristics of a dataset using measures such as mean, median, mode, and standard deviation.
- **Inferential Statistics:** Making inferences and generalizations about a population based on sample data, using techniques such as hypothesis testing and confidence intervals.
- **Regression Analysis:** Examining the relationship between one or more independent variables and a dependent variable to model and predict outcomes.
- **Factor Analysis:** Identifying underlying factors or dimensions that explain patterns of variation in a dataset.
- **Cluster Analysis:** Grouping data points into distinct clusters based on similarity or proximity.

Statistical analysis provides researchers with objective tools for analyzing data, testing hypotheses, and making evidence-based decisions. It emphasizes quantifiable relationships and patterns and allows for the comparison of groups or conditions.

While thematic analysis and statistical analysis are distinct approaches, they are not mutually exclusive and can complement each other in our mixed methods research used in this thesis.

We will be using thematic analysis to explore qualitative data and identify themes or patterns, which can then inform the development of quantitative measures or hypotheses for statistical analysis.

Also, we will be combining qualitative findings from thematic analysis with quantitative results from statistical analysis to enhance the validity and reliability of research findings by supporting or validating insights across our findings.

Thematic analysis will provide depth and context to statistical findings by explaining the underlying meanings, experiences, and perspectives of participants, enriching the interpretation and understanding of quantitative results.

While thematic analysis and statistical analysis represent distinct approaches to data analysis, combined will offer us a comprehensive toolkit for exploring and understanding the data and results in hand.

#### **4.4 Ethical Considerations**

When discussing research methodologies related to change management resistance in SMEs, several ethical considerations should be carefully addressed to ensure the integrity, respect, and well-being of all participants, subjects or employees involved. Following key ethical are essential factors to be taken into considerations:

1. Informed Consent:

- Ensure that participants fully understand the purpose, procedures, potential risks, and benefits of the research before agreeing to participate.
- Clearly explain how their data will be collected, stored, and used, including any confidentiality measures in place.

- Obtain voluntary, informed consent from all participants, allowing them to withdraw from the study at any time without repercussions.
2. Confidentiality and Anonymity:
- Protect the confidentiality of participants' information by securely storing and anonymizing data to prevent unauthorized access or disclosure.
  - Allow the option for participants to consider using real names or any identifying information in research outputs or publications unless explicit consent has been obtained.
3. Avoiding Harm:
- Minimize the risk of harm or discomfort to participants by conducting research in a manner that respects their dignity, privacy, and well-being.
  - Anticipate and mitigate any potential negative consequences of the research, particularly regarding sensitive topics such as organizational change and resistance.
4. Respect for Autonomy:
- Respect participants' autonomy and decision-making authority by allowing them to freely express their opinions, experiences, and perspectives without coercion or undue influence.
  - Acknowledge and validate diverse viewpoints, including dissenting opinions or expressions of resistance to change.
5. Fair Treatment:
- Ensure equitable treatment of all participants regardless of their role, status, or background within the SME.

- Avoid favoritism or bias in participant selection, data collection, or analysis to maintain the integrity and validity of the research findings.

6. Transparency and Integrity:

- Maintain transparency throughout the research process by clearly documenting methodologies, procedures, and findings to facilitate scrutiny and reproducibility.
- Declare any potential conflicts of interest or biases that may influence the research outcomes and take steps to mitigate their impact.

7. Respect for Privacy and Boundaries:

- Respect the privacy and boundaries of participants by obtaining permission before observing or recording interactions within the SME.
- Obtain consent from SME owners, managers, or relevant authorities before accessing proprietary information or sensitive data.

8. Beneficence and Social Responsibility:

- Ensure that the research contributes to the advancement of knowledge and the improvement of organizational practices related to change management in SMEs.
- Consider the broader societal implications of the research findings and strive to promote positive outcomes for SMEs, employees, and other stakeholders.

By addressing these ethical considerations in the discussion of research methodologies related to change management resistance in SMEs, researchers can uphold ethical standards, protect the rights and well-being of participants, and enhance the credibility and impact of their research outcomes. (Paradis, E., Brien, B. O., Nimmon, L., Bandiera, G., Athina, M., &

Martimianakis, T. (2016). Design: Selection of Data Collection Methods. *Journal of Graduate Medical Education*. <https://doi.org/http://dx.doi.org/10.4300/JGME-D-16-00098.1>)

Our project's success was based on many factors and by far the most controversial issue was the ethical part, since most of the SMEs had similar field of work and somehow had a common market. The trust was established by our teams to keep our work and intervention at a maximum level of ethical and professional integrity to assure that the benefices focus is channeled toward progress without the perturbing factor of secrecy and personal space invasion or the exposure of any business insides to competitors participating in the program.



## CHAPTER 5

### EMPERICAL ANALYSIS

As a definition, *Empirical Analysis* is a research methodology focused on uncovering tangible and verifiable evidence. It is guided by the scientific method, enabling researchers to eliminate personal biases and rely on concrete, accurate, and reproducible real-world data to formulate conclusions. The core principle of empirical analysis asserts that direct observation offers the most effective approach to explore reality and ascertain facts.

As a pivotal component of scientific inquiry, empirical analysis equips scientists with valuable methods for conducting research and presenting substantive evidence. It plays a crucial role in enhancing researchers' understanding of research practices and facilitating the generation of precise and specific findings.

In the previous chapter we have discussed in detail our research methodology for this thesis. A mixed approach between qualitative and quantitative will be considered to achieve the most out of the data available.

#### **5.1. Data collection from a representative sample of SMEs**

To start off, we clearly have to define the project, the partners, the beneficiaries, the scope, the challenges and the outcome.

##### **5.1.1. Project Partners, collaborators and contributors**

AFDAL II (AGRICULTURAL FARMERS DEVELOPMENT AND LIVELIHOODS PROJECT)

This project was funded by the Federal Ministry of Economic Cooperation and Development - BMZ Germany-operated by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH supported by WFP and implemented by CARE International in partnership with the Association for Development and Rural capacities, The Chamber of Commerce Industry and Agriculture of Tripoli, Fair Trade Lebanon , and Rene Mouawad Foundation

These highly reputable local and international organizations have a massive experience and a history that can be summarized as follows:

- **UNWFP (United Nations World Food Program):**

The World Food Program is the world's largest humanitarian organization saving lives in emergencies and using food assistance to build a pathway to peace, stability and prosperity, for people recovering from conflict, disasters and the impact of climate change.

WFP works with governments, other United Nations agencies, non-governmental organizations, private companies and others to mobilize resources, find innovative solutions and reach vulnerable communities with the assistance they need.

(<https://www.wfp.org/who-we-are>)

- **GIZ - German Cooperation in Lebanon :**

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH has been supporting Lebanon's economic and social development for more than 40 years.

Working mainly on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ), with substantial co-funding from the European Union (EU), GIZ works in the following areas in Lebanon: economic development and employment, education and security, reconstruction and peace.

To create job opportunities and better economic prospects for the people in the country, projects combine several measures. This includes improving vocational education and training, supporting job matching and coaching services and creating short-term employment opportunities.

MSMEs and start-ups, specifically in the agricultural sector, receive support, with a focus on food processing. (<https://www.giz.de/en/worldwide/370.html>)

- **RMF (Renee Moawad Foundation)**

The René Moawad Foundation was created on November 22, 1991, on the second anniversary of President René Moawad's assassination. He had been elected President of the Lebanese Republic on November 5, 1989 and was killed 17 days later. He is remembered as believer in the unity of the Lebanese people and actively strove towards civil peace, dialogue, national unity and the equality of all Lebanese citizens.

Since its creation over 25 years ago, RMF has worked tirelessly to help develop and enhance Lebanese society through improving education, economic empowerment, provision of social and health care, and the promotion of democratic values to the most marginalized and needy communities throughout Lebanon.

The René Moawad Foundation has grown from a small grassroots organization into a well-respected and nationally recognized NGO, cooperating with many different

national and international institutions and organizations in the pursuit of a more peaceful, prosperous and democratic Lebanon. As RMF has grown and evolved over the years as an organization, it always remains true to its roots and values in honor and remembrance of President Rene Moawad, whose desire for a better Lebanon will never be forgotten.

The Rene Moawad Foundation's mission is to promote social, economic and rural development in Lebanon and the MENA region and to contribute in building a responsible civil society that promotes democratic values, justice, pluralism and moderation.

RMF works to empower the human being both intellectually and financially through education, health and economic development to guarantee their dignity and basic rights, and to build their capacities as responsible citizens through various fixed operation centers, and donor supported projects. (<https://rmf.org.lb/our-story/>)

- **ADR (Association for the Development of Rural Areas) :**

ADR activities are aimed to empower marginalized or disadvantaged individuals, groups, or communities and help them improve their living conditions.

ADR has no political or religious affiliations and currently works in the south of Lebanon. Their interventions encourage partnership and decentralized cooperation as well as solidarity spirit. (<http://www.adr.org.lb/>)

- **CARE (Care International)**

CARE is a global leader within a worldwide movement dedicated to ending poverty. We are known everywhere for our unshakeable commitment to the dignity of people.

For 78 years, CARE has led the way to a better life for the world's most vulnerable people. This year, CARE and partners worked in 109 countries, reaching 167 million people through more than 1,600 projects. (<https://www.care.org/about-us/>)

- **LCC (Lebanese Chamber of Commerce).**

Established in 1887, the Beirut Chamber is the largest and most influential business organization in Lebanon with a membership roster exceeding 10,000 SMEs and young entrepreneurs.

The Chamber provides a wide array of support services, targeting the achievement of the UN Sustainable Development Goals (SDGs 2030) namely Decent Work & Economic Growth, Inclusive and Quality Education, Youth Empowerment and Gender Equality.

Within its mission, the Beirut Chamber offers training and capacity-building programs specifically designed to improve the skills and competencies of young employees within Lebanese SMEs and to empower young entrepreneurs and startups, enabling them to expand and contribute significantly to the enhancement of Lebanon's economy. (<https://www.ccib.org.lb/en>)

The cooperation and of all those highly reputable organizations gave birth to AFDAL program.

#### **5.1.2. Program Overview:**

Within the framework of the WFP FFT program and with funding from BMZ through the World Food Program (WFP), CARE International in Lebanon (CIL) is leading the Agriculture Farmer Development and Livelihood (AFDAL II) project implemented in

partnership with Association for Development for Rural capacities (ADR), Chamber of Commerce, Industry and Agriculture in Tripoli (CCIAT), Fair Trade Lebanon (FTL) and René Mouawad Foundation (RMF); to address the multi-faceted challenges facing vulnerable communities in the Small Ruminants sector in Lebanon.

The project is in line with the updated Food Security and Agriculture Sector strategy as well as Sustainable Development Goal (SDG) which recognize sustainable livelihood opportunities improvement and small farmers empowerment as goals to achieve.

### **5.1.3 Project Objectives**

Improve sustainable livelihood opportunities for 1,150 vulnerable community members in targeted refugee and Lebanese communities in North Lebanon and South Lebanon by strengthening competitiveness, quality and productivity of small ruminants (Goat and Sheep) value chain, while addressing immediate food consumption needs of targeted households. Three main specific objectives have been identified to contribute to the achievement of the overall objective:

- Enhance production and business capacities of vulnerable small holder farmers in the SR value chain. SR value chain farmers will benefit from improved production capacities and quality as a result of strategical empowerment activities based on participatory approach, mainly access to technical knowledge as well as life, soft basic financial literacy skills enhancement to integrate into profitable roles within the small ruminants' value chain markets.

- Improve skills and capacities of vulnerable individuals in food processing and retail in the SR value chain. SR value chain processors will benefit from incomes and food security increase following the provision of tailored and adapted services targeting agro-products improvement as well as business development. The intervention will enhance the economic growth and create livelihoods opportunities for vulnerable groups.
- Strengthen market linkages and support functions in the SR value chain. Identified SR value chain systems will be strengthened through improved market linkages, marketing strategies and research, and sustainable linkages will be built between SR value chain stakeholders through capacity building and quality control

As for the project duration, it was designed to be implemented over 19 months and to be concluded by December 2021.

#### **5.1.4. Project Approach**

The project aims to fortify the beneficiaries with their current businesses and empower them to grow and expand coping with the changing world around them and addressing their wants and need on several levels.

The intervention tends to offer opportunities through partnerships with larger more experienced companies or partnership with other complementary SMEs or MSMEs to form a stronger alliance in their market.

Crisis-oriented treatment and teaching in order to resolve crises arising from changes which have disrupted a previous equilibrium or occurred from unexpected circumstances.

Also, the project major target was to teach the beneficiaries the basics of management, marketing, accounting, budgeting, technology, ethics and environmental sensibility.

#### 5.1.5. Project location and target ratio

The project was divided into two areas in Lebanon, separate teams were dispatched to handle several locations under the supervision and guidance of the head managing team.

○ Intervention in Northern Lebanon:

- Minnieh/Dannieh
- Akkar
- Bcharre
- Batroun
- Koura

○ Southern Lebanon :

- Sour
- Marjeyyoun
- Hasbaya
- Nabatieh



Fig No:3 Project distribution and locations

A target ratio was a corner stone when choosing and screening the participants along with other criteria to ensure transparency, diversity and equality

60% Female and 40% Male

70% Lebanese and 30% Syrian

20% Youth aged between 18 and 30 years old.



## 5.2. Analysis of change resistance factors in SMEs

Change resistance in Micro, Small and Medium-sized Enterprises can result from various factors that need to be carefully analyzed and addressed. MSMEs often face unique challenges compared to larger corporations when it comes to implementing change, making it crucial to understand the factors contributing to resistance. In our case, many indicators revealed potential problems that might rise during the implementation of the project plan. Forty MSMEs were selected for the project, in very specific sectors all based in the rural areas of Lebanon with either farming livestock (cattle, sheep, pigs, goats), Poultry (chicken , roosters , turkey ) and food processing ( dairy, forage , compote) as primary source of income.

Upon studying the groups major gaps was obvious these SMEs. A small handful of those businesses were adapting basic technological tools. The majority were relying on pen and paper and basic math skill when it comes to daily businesses and transactions.

On the other hand, there was a huge lack in two major and critical fields : business development and financial literacy, hence the problem with the resistance to change. These factors can be elaborated as follows:

- Unpleasant past experience with change : Some have already suffered from unsuccessful, unmonitored transitions that ended up setting them back or costing them a lot of money that eventually spent in vain.
- Learning barriers and challenges, when change occurs, beneficiaries are often asked to learn new skills and adapt their working style to fit the new current situation. The emotionally support in times of uncertainty often caused by organizational change initiatives. This support improves the experience and can positively influence or amend negative perceptions about change and overcome learning obstacles.

- Level of commitment, If the beneficiary does not feel himself or herself as a part of this society and the change happening around , they probably will show in a position that is very neuter or resist to that change to protect their current status.
- Beliefs and values, people grow up and get shaped by some beliefs and values through their families , education , friends , life experiences , society , laws and environment in general.. Everyone does not think in the same way and does not have to believe in the same things, if a person has a belief that the change is bad, or was taught that change equals to uncertainty , then automatically this person is preprogrammed to resist the change. In the same way, if a person's values are just like the current thing is always the best thing, then this implies a conservative person and may show a resistance to change.
- Educational level, generally the higher the educational level of a person, the more open minded she or he is. Then we can say that people with low educational level are mostly resisting to the change. Never the less, some showed great enthusiasm towards exploring and learning, knowing that it's the only way to survive in a fast-changing world.
- Lack of Information, if the employees are not informed well about the change that can be done best with a good communication among the organization members then the resistance should be met normally.
- Culture and age, if they grew up in a conservative environment then most likely they will resist the change. As for the age, the older people are the more they resist the change. This is related with the generation difference. Surprisingly , in our sampling and screening, some of the beneficiaries who passed the age of 70,

shocked us with their enthusiasm to adopt new technologies and techniques. The main reason was that they either had grandchildren or they themselves were scrolling and exploring on their smart phones, checking what is new and innovative in the market worldwide.

- Personality and characteristics play an important role on determining whether resisting or accepting the change. People who are modern-head and open minded like to change or accept change somehow, conservative and narrow-minded people may show resistance to the change and stay in where they exactly are; maybe little changes, but nothing major.
- Position in the firm, If the employee's position or the owner in the organization is important and if the change looks beneficial to the organization, then they will probably accept the change. But an ordinary low-level employee will not care about the change and will probably show resistance to the change by fearing of losing the current position or the job entirely.
- Growth / Risk averters, some SMEs showed a certain level of aversion to growth, which means they love the current situation and hate growing, then this can reflect to the change as a resistance. But somehow they understand that everything is moving forward around them and that this is damaging their business and eventually they will be left out.
- Lack of vision, the beneficiaries had a fear of the unknown and what good can come of this change and this new addition that will alter the way things are now and have been from the beginning , so why change.

- Resistance to learn, by being stubborn and refusing the new inputs and technological evolution that can boost his business, cutting his cost and contributing to his profit margin.

All of these factors and , many more were not a surprise to us. When planning and undergoing a huge project like AFDAL, reactions and barriers were expected and dealing with these barriers was well tailored to suit every case's need.

### 5.3. Identification and analysis of barriers to technological adoption in SMEs

The identification and analysis of barriers to technological adoption in Small and Medium-sized Enterprises (SMEs) are critical for understanding why some SMEs may struggle to adopt new technologies despite their potential benefits. In our case, AFDAL had to tackle these concerns by identifying and analyzing them.

This was addressed by conducting a survey: a questionnaire was formulated for the beneficiaries containing numerous questions that eventually gave us a clear perspective of what we were dealing with. In summary the following point paved a path for us to tailor the necessary tools for this project and contribute to its success.

- **Cost Considerations:**

The primary obstacle was the alleged high cost of adopting new technologies, including investment, maintenance and training .This was also an issue when the analysis of the cost-benefit was discussed, would this technology adoption increased efficiency, reduced errors, and competitive advantages ?

In addition to the lack of knowledge when exploring alternative financing possibilities such as leasing, financing programs, NGOs , or government grants to mitigate financial barriers.

- **Lack of Technical Expertise:**

Most of our beneficiaries had a lack in technical expertise or IT in general, managing with the very simple basics if there was any. Implementing and managing new technologies effectively was considered a massive challenge. Evaluating their current skill sets and identifying gaps in technical knowledge and capabilities was a must. All that in order to tailor and provide training, workshops, or hiring external consultants to bridge the skills gap and build internal capacity for technology adoption.

- **Compatibility Issues:**

A small number of beneficiaries had a shy existing infrastructure, software, or processes that they feared it may not be compatible with new technologies, leading to additional challenges. These concerns were manifested also in factors such as data migration, interoperability, and scalability with existing systems and workflows.

- **Security and Privacy Concerns:**

SMEs may hesitate to adopt new technologies due to concerns about data security, privacy breaches, and regulatory compliance. Our main mission, and based on our ethical conduct, we made sure to transmit to the beneficiaries all the information to comfort them that security and secrecy was and will always be our number one concern.

- **Limited Awareness and Information:**

Most SMEs but not all needed awareness of available technologies, their benefits, and how they can be personalized to meet specific business needs. Our job was to provide them with education and training sessions, attend industry events, and engage with technology providers to inform them about latest developments and technological updates.

- **Resource Constraints:**

Limited resources such as time, manpower, and infrastructure hindered most of our beneficiaries from investing in and adopting new technologies. The basic resources such as electricity, transportation and internet were scarce in some remotely rural area, which in some cases was considered a basic need for any technological upgrade.

- **Uncertain Return on Investment (ROI):**

One main question was asked by the SMEs that were hesitant to adopt new technologies and that was about the expected ROI and tangible benefits. Explaining the productivity gains, cost savings, revenue growth, and customer satisfaction was elementary for most SMEs. The upper has come from our part, when most of the needed training and machinery were a free grant but under conditions. Never the less, elaborating on the ROI was a must especially when the cost of the continuation and maintenance after the grant conclusion was considered.

The identification and analysis of barriers to technological adoption in SMEs required a holistic approach that considers financial constraints, technical expertise and change management strategies. AFDAL successfully addressed these barriers systematically and

proactively, to assure the readiness and provide a smooth transition to new technologies and for business to growth and flourish .

#### 5.4. Evaluation of the effectiveness of existing change management strategies and technological adoption approaches in overcoming resistance and facilitating adoptions.

According to the best seller *Leading Change* by John P. Kotter, 2012 , there are eight steps for leading and producing lasting change. We will elaborate on those steps and find the coloration between theory and practice within our case study which eventually led to the success of our project.

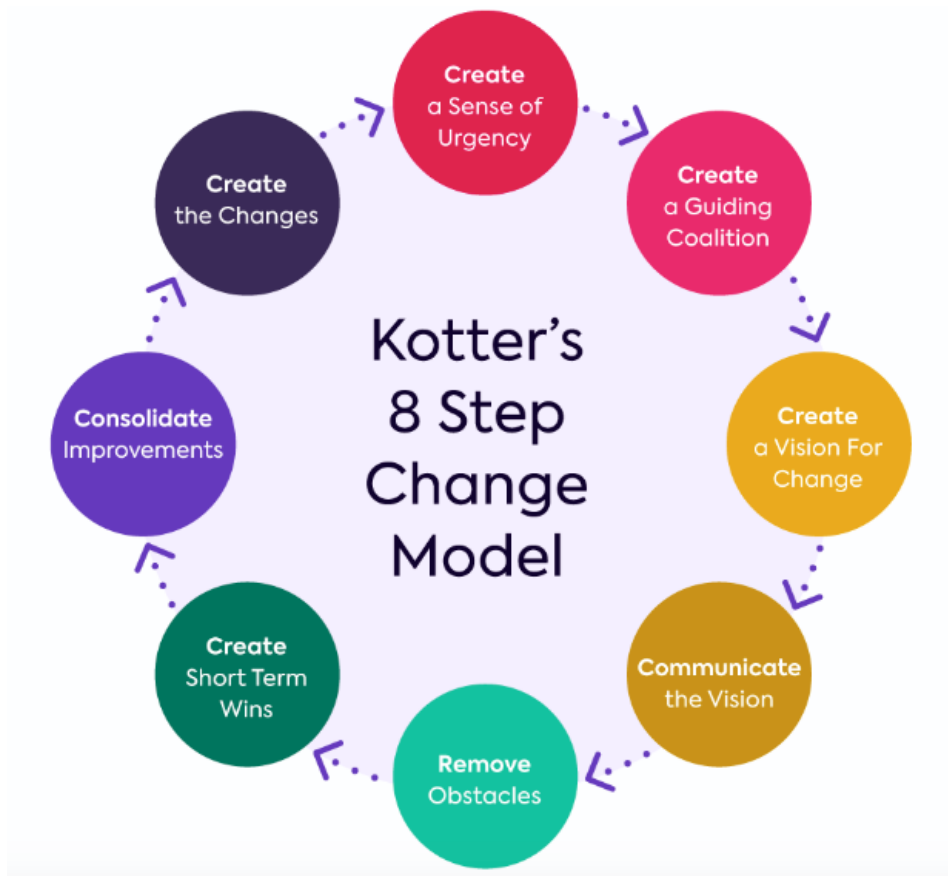


Fig No: 4 Kotter's Model (<https://getlucidity.com/strategy-resources/guide-to-kotters-8-step-change-model/>)

Firstly, create a sense of urgency. This includes communicating the need for change by highlighting market trends and competitive threats that necessitate immediate action. Creating urgency helps overcome gratification and generates drive for change. In our project, the main motivation was by influencing the subjects through examples of other similar businesses that took the leap and accepted change vs other that eventually were extinct due to the resistance and rejection of any form of change.

Secondly, build a guiding coalition of leaders and influencers. This coalition should advocate the change effort, provide resources, and align efforts toward achieving the set goals. Association within the coalition helps develop a shared vision and strategy for driving change effectively, and this was the main mission of all the managerial teams, consultants, instructors, doctors, vets and field workers at AFDAL. More than 125 professionals were recruited to assure the success of this project, all equipped with a massive academic and professional background ready to share their knowledge and expertise.

Next, create a clear strategic vision for change. This vision should outline the desired future state of the organization post-change and be communicated in a compelling and accessible manner. Clarifying how the future will be different from the past and get buy-in for how you can make that future a reality. The simplicity of the vision and the way to transmit it played a big role with the beneficiaries to remove any unwanted resistance towards our intervention. Communicating the vision effectively to the SMEs using various channels and methods and ensuring that communication is consistent, transparent, and reinforces the urgency and importance of the change initiative.

Enlist a volunteer army, Kotter refer to this as the fourth step in his model. Large-scale change can only occur when people rally around a common opportunity. At an individual level, they MUST want to contribute willingly. Courage is contagious, hence if a large



number see in the change an opportunity rather than a threat, automatically they will seek to achieve the goal. All we have to do is provide them with the necessary information and knowledge, resources, authority, and support. Consequently, we foster a culture of innovation, collaboration, and accountability.

No matter how small the progress or achievement, it should be acknowledged, communicated and celebrated if not even rewarded. Short-term wins and successes during the change journey build momentum, confidence, and motivation among others.

Teaching participants in this program to continuously monitor and evaluate the impact of change initiatives, address any emerging issues, make necessary adjustments and learn. Having a keen sense of learning keeping an open-eye for change is imperative to keep up the progress curve and familiarize the idea of technology and its benefits.

Finally, aligning values, norms, incentives, and leadership practices with the desired change outcomes to ensure long-term sustainability.

## CHAPTER 6

### PROPOSED FRAMEWORK APPLICATION

#### 6.1. Application of the comprehensive framework in selected SMEs.

Based on the data collected from the beneficiaries and the study of the wants and needs, in addition to the vision and the mission of the project, several courses have been tailored to transmit to the SMEs as part of the full program in order to nurture and fill the gaps and eventually fulfill the scope of the program and obtain the grant that will be awarded at the completion of the project.

Our part as lectures was divided into two main sectors : theoretical and practical. The theoretical part included two courses : *Business Development* and *Financial Literacy*, as for the practical part it included site visits from experts in the dairy production, agricultural engineers and veterinarians.

In our case we will tackle the managerial part that has a direct impact in reforming the mindset of the beneficiaries and introduce the technology in the daily business and teach the benefits of this adaptation.

To start, we will tackle the *Business Development* course : The below training topics and titles served as an indicative support to the development of the training material by the training provider. The training provider is not expected to exactly match the below topics, but rather work on developing a training material that will enable MSMEs to achieve the learning outcomes listed below.

The course curriculum was divided as follows :

<b>Training Topics</b>	<b>Learning outcomes</b>
<b>Management and Finance</b>	<ul style="list-style-type: none"> <li>a. Know how to set a business plan with SMART targets</li> <li>b. Using accurate financial records and systems</li> <li>c. Using the breakeven method</li> </ul>
<b>Market access and visibility</b>	<ul style="list-style-type: none"> <li>a. Seek market information (How an SME can get to know its customers and competitors)</li> <li>b. Support better packaging practices</li> <li>c. Use effective Labelling and Branding for the products</li> <li>d. Take a part in trade fairs and product exhibitions</li> <li>e. Use appropriate, effective, and feasible online advertising platforms</li> <li>f. Choose your distribution channels</li> <li>g. Know the B2B concepts and trends</li> <li>h. Serve best your customer</li> </ul>
<b>Cost Reduction</b>	<ul style="list-style-type: none"> <li>a. Know how to achieve effective productivity through (specialization, capacity utilization, and process optimization)</li> <li>b. Know how to eliminate values that the client doesn't look for</li> </ul>
<b>technology transfer</b>	<ul style="list-style-type: none"> <li>a. Stimulate technology and innovation adapted to the SME (feasibility of renewable energy or technology transfer)</li> <li>b. Linking MSMEs and technology suppliers</li> <li>c. Taking good decisions regarding transport and delivery</li> </ul>
<b>Stock management, Procurement of Inputs, and Pricing</b>	<ul style="list-style-type: none"> <li>a. Make strategic decisions for storage (to stock or not)</li> <li>b. Access input supply resources and follow a procurement procedure</li> <li>c. Set an input order plan and control the stock</li> <li>d. Set an effective pricing strategy</li> </ul>
<b>Alternative financing mechanisms</b>	<ul style="list-style-type: none"> <li>a. How to facilitate supplier credit</li> <li>b. Introduce the equipment leasing and rental concept</li> <li>c. How to deal with Micro financing institutes</li> </ul>

Table No 2 - BDS Course Curriculum

This course was presented with basic requirements from the trainer such as a training calendar with session titles, samples of training books/materials and a curriculum handout organized by training sessions.

Also, the curriculum must contain the followings:

- Session topic.
- Learning objectives.
- Duration of the session.
- List of key contents and talking points.
- Sequence of steps to deliver the session.
- Required materials.

On the other hand, the pre- and post-training test questionnaires was essential to verify the level of competences and learning. The tests had to be delivered before the start date of the training and after the last session. These tests were key in tailoring and dividing the groups by levels in order to assure that the info is transmitted with maximum efficiency and suitable for all levels.

Delivery of the 10 training sessions of 4 hours each, in total 40 hours for each group. A weekly report indicating training progress by topic, challenges, participant's feedback, success stories, and recommendations for future trainings had to be presented by the lecturer as a benchmark for future adjustments if necessary. Conducting and sharing the pre and post scores, to assure that the information is obtained and grasped clearly by the beneficiaries in each group.

All participants had to present a business plan brief or Feasibility study for their MSME to justify their need for a grant. As a lecturer, it was one essential to help and nurture the subjects on how to create a business plan with tools and clear understanding of their vision and the capability to transmit it vividly through this plan.

In this course two field visits were required an initial visit backed up with a report , describing the gaps and opportunities in each of the 20 MSME. And a second visit that will

reveal the changes that occurred and how these beneficiaries benefited from the courses and how the learning curve evolved.

The second course was the *Financial Literacy* training: This training will help participants to manage their daily finances by using the appropriate financial tools to survive and have more chances to start and grow a small business.

This module's objective was to introduce essential key financial management concepts, terms, and tools to enable the value chain actors to manage their money, organize their expenses and revenues, and to calculate the equilibrium point, so that they will be able to apply this knowledge and manage their business properly.

Financial literacy education has been widely promoted for increasing financial well-being. Several global institutions stress on the importance of financial education, especially in times of crisis. The most important goal of financial literacy is to build a financially strong society of individuals and families who are financially literate and able to make wise choices with their money. In this context, these sessions aimed at introducing main pillars of the financial literacy for participants in order to increase their economic resilience.

The adoption of financial literacy was imperative and the use of technology was changing, since most of the MSME's were still using basic method in conducting financial transactions. Lack of technology, software or any other tech related tools made the job more challenging and set the starting point further back.

The following table elaborates the breakdown of the course objectives and requirements and served as a guideline to support and follow during the conduction of the material.

Topic	Sub-Topic	Objectives (during the training, trainees will)	Outcomes (After the training, trainees will be able to)	Practical Learning Activities
<b>Introduction to Financial literacy</b>	Splitting between personal and business transactions and accounts	1.1. Understand the benefits of good personal finances handling	1.1. Rationalize on good vs. bad financial practices	1.1. Ice breaking activities
	Expenses and Revenues	1.2. Learn to document money transactions 1.3. Learn to split between personal and business money transactions 1.4. Differentiate between different personal financial behaviors	1.2. Segregate personal and Business money transactions 1.3. Improve their personal financial behaviors	1.2. Working group
<b>Basic Households Financial management</b>	Personal Budgeting & Spending plan	1.1. Understand the importance and methods of households financial budgeting	1.1. Perform good household budgeting	1.1. Personal/Household Budget management working group
	Personal Debts management	1.2. Differentiate between the types of expenses	1.2. Identify what is "available to spend"	
	Savings	1.3. Learn debts and saving management methods	1.3. Track their spendings	
	Smart shopping	1.5. Acquire the principles of smart shopping	1.4. Increase the household economic resilience	
<b>Basic Business Financial management</b>	Profit and Loss statement	1.1. Understand that what can be measured can be improved	1.1. Perform simple financial procedures	1.1. Basic business budgeting individual exercise
	Cash Flow	1.2. Learn how to interpret money ransactions documents	1.2. Increase the economic resilience of a micro-entreprise	
	Cash Balance	1.3. Calculate the cash balance		
<b>Assessment of an exciting or potential businesses and goals</b>	Business or Business Idea SWOT Analysis	1.1. Valorize the importance of Business assessment	1.1. Perform critical thinking SWOT analysis on a business	1.1. SWOT and SMART analyses working groups
	SMART Goals	1.2. Learn how to assess a Business using SWOT analysis 1.3. Learn how to set SMART personal/financial/business goals	1.2. Increase the ability for planning and prioritizing 1.3. Develop SMART goals coherent to the results of a SWOT analyses	

Table No 3 – BDS Course Guidelines

This activity helped participants to think and brainstorm among groups about different personal financial behaviors, which created persons *Money Personality*. Throughout this

activity, participants were able to think about their own financial behavior and to perceive other participants behaviors, while acquiring the appropriate support of the instructor

Also, these modules aimed at raising awareness on the importance of personal and households' budget management. It included notions of how to establish a personal budget plan which coped with the personal needs and incomes, and how to make evidence-based financial decisions. These modules are interactive and requiring working groups, one-to-one, trainer-participants and participants-participants interactions.

Good personal and household budget management is critical for a better economic resilience. Throughout these practical exercises, participants tried to list individually their incomes and expenses on provided spreadsheets, in order to visualize the dynamics of their spending and evaluate their economic status (Income – Expenses balance).

Throughout these sessions, participants understood the basics of small businesses financial management. Concepts of personal vs. business money splitting, P&L statement, cash flow and cash balance. After these sessions, participants were able to perform simple financial procedures which would help them to put their small businesses on the right track.

These practical sessions were similar to a certain extent to the personal/households budget management, but with more complexity and definitely more exigency. All participants were supposed to have primary experience in the value chain that they are being trained on, therefore these sessions reflected participants' real case studies. Profit and Loss, Cash Flow and Cash Balance spreadsheets were manipulated in this session for optimal outcome.

## **6.2. Implementation of customized change management strategies to address resistance and facilitate technology adoption.**

In this part we will elaborate on how implementing customized change management strategies to address resistance and facilitate technology adoption were tackled by tailoring approaches based on specific needs, challenges, and goals. Here is how this was executed effectively:

In the beginning we had to assess the current state and we had to identify the challenges. Our team conducted a thorough assessment of the SMEs and MSMEs current state, including existing processes, systems, culture, and capabilities related to technology adoption, and then we identified specific challenges and sources of resistance, such as lack of technical expertise, cultural barriers, fear of market loss, communication gaps, or resource constraints.

Naturally after that we had to define reasonable objectives and goals: goals of the technology adoption initiative, including desired outcomes, benefits, timeline, and success criteria. We had to constantly bear in mind that this had to come in as smooth as possible without imposing or magnifying the expectation beyond our reach.

At this point, we had to develop a customized change management plan that addresses the identified challenges and aligns with the objectives of technology adoption. These tailored change management strategies, tactics, and communication approaches based on the unique characteristics of these SMEs, MSMEs and beneficiaries were in a constant state of evolution based on the feedback and responsiveness of the participants .

Even our training had to undergo several changes, as a comprehensive training program tailored to the needs of different user groups, roles, and skill levels, several updates, changes and updates had to be made along the way to coop with the wants and needs that faced us during the sessions.



One of the major problems that we faced when it came to implementing technology and innovation with the SMEs was simply trust. That factor created an undeniable factor to deal with. We had to address this concern on many levels to assure that it is dealt with, tackled and most importantly contained. During the process of implementing change management best practices such as group engagement, change impact assessments, risk management, and feedback mechanisms, we managed to address the fear factor and most importantly we managed to contain it and forbidding it to spread. We know courage is contagious but so is fear.

Upon every accomplishment, participants were asked to share their success and elaborate the process and motivate others to do so. These milestones, achievements, and successful technology adoptions when recognized, reinforced positive behaviors and outcomes among all participants.

Once the benefits of technology adoption were communicated as a success story, and the idea and culture of innovation and continuous improvement flourished among participants, paving the way for more growth and prosperity.

By implementing customized change management strategies tailored to address resistance and facilitate technology adoption, our MSMEs were able to increase the probability of successful change initiatives, maximize the benefits of our sessions, and drive towards a completely new approach for understanding technology and business management.

### **6.3. Comparison and assessment of the results and outcomes of the proposed framework.**

First of all, in order to conduct a transparent comparison and assessment of the proposed framework for change management strategies and technology adoption, we had to conduct several quantitative and qualitative measures that align with our goals and objectives.

These criteria included :

- Adoption rates for change and implementation of new technologies.
- Feedback and satisfaction related to training.
- Impact on productivity, efficiency.
- Cost savings or revenue growth attributed to technology adoption.

Mainly, the program started with a simple pre-test that included a series of questions involving general knowledge on business management, strategic planning, marketing and book keeping. (Pre/post-test attached Appendix 1). In addition to a grant justification form elaborating the need for the grant and the SME's six-month turnover, projection and business plan. (Grant justification form Appendix 2).

Upon completion of the program the test was retaken and results were compared. The outcome was outstanding in terms of knowledge and implementation. The beneficiaries developed a keen sense of managerial level thinking, they started looking into things in another perspective. The change was drastic, at least on the mental level and the use of technology was part of the mindset.

Participants understood the need to evolve, to use spreadsheets, cost calculation, projection, social media marketing benefits, branding, packaging, customer satisfaction, feedbacks and follow-ups, in addition to innovative thinking and business development.

At the end of the AFDAL program a grant was offered to the beneficiaries, these grants consisted of tools, materials, office equipment and other items based on the wants and needs of each SME. These grants summed up to approximately 100,000 US Dollars (One Hundred thousand USD) all in material related to food processing, farming and agriculture. (Grant breakdown sheet Appendix 3).

Two major and remarkable events occurred during the program that had a huge impact on our course of action. The first event occurred when some of the participants, and as a result of our teachings, recalculated their options and eventually changed their requests when applying for the grant. They shifted their requests from basic pots and pans to more sophisticated tech related material in order to boost their business and immerse in a new innovative means of production. This was a solid proof that change can be done and that with the proper guidance resistance can be delt with and that technology is a must in order to cope with this fast-changing word. The second event occurred when in one of the sessions and upon debating a business model related to business development, one of the participants offered her business as a case study. After receiving her consent and the approval of our management, we undertook her project and worked on it during our sessions, brainstorming and discussing facts, problems and solutions. This was a magnificent way to implement all of the academic and theoretical teaching in a real-life scenario witnessed by participants and watching its evolution. As a result, this business took a huge turn and a complete make over, and surprisingly attracted three other beneficiaries to become partners and complement each other's product and form an alliance and flourish all four businesses.

On the other hand, we conducted an on-site visit aiming to analyze SMEs feedback and level of satisfaction related to training, support, and overall experience with the training , change in general and technology adoption process in particular. We had the chance to visit the work in progress, production lines and how evolution and technology found its way into their daily work and how it altered production and created a positive impact on the business in general. We also identified concerns, challenges, and areas of satisfaction or improvement based on participants feedback which would help us improve any upcoming projects. These

site visits were used as feedback to assess the effectiveness of training programs, support mechanisms, and communication strategies.

When addressing the impact on productivity and efficiency, several factors had to be taken into consideration, such as performance comparison, task completion rate, error rates, task completion and resource utilization before and after the implementation of change and new technologies adoption. This gave us a clear perspective to evaluate the extent to which technology adoption had streamlined processes, reduced manual work, and improved overall efficiency.

The most important part that directly concerned the participants was cost and revenue. At the end of the day most MSMEs main concern is money making. Measuring and quantifying any cost savings or revenue growth credited to technology adoption and the customized change management strategies was a solid proof for the beneficiaries that the process is working and that this evolution is exponential and it is on the correct path. A very basic approach that we thought during our financial literacy course was how to calculate ROI (Return on Investment) or cost-benefit analysis to determine the economic value generated by the change initiative. Once they got the hand on these financial managerial tools especially upon technology adoption and simple spreadsheet techniques, a clearer image was presented and eye-opener for most of the SMEs that helped identify what sectors in their business is working and what is not.

We as moderators of the transition and change process, we synthesized the findings from the evaluation process, taking into account all the data, feedback, and analysis conducted and naturally identified strengths, weaknesses, opportunities, and areas for improvement based on the comparison and assessment of results, making these data-driven results recommendations for refining strategies, optimizing processes, addressing challenges, and sustaining positive outcomes in future change initiatives.

These qualitative and quantitative steps and the mix created were imperative for us to be able to conduct a comprehensive comparison and assessment of the results and outcomes of the proposed framework for this customized change management and technology adoption. This evaluation process helps identify successes, lessons learned, and areas for improvement, leading to continuous improvement and better outcomes in change initiatives.

# CHAPTER 7

## DISCUSSION AND FINDINGS

### 7.1. Interpretation, discussion and analysis of the empirical data

Interpreting and analyzing empirical data on change resistance in Small and Medium-sized Enterprises (SMEs) requires a systematic approach to derive meaningful insights and actionable recommendations.

First of all, we proceeded by sorting out the data collected from participants in this project, in order to have valid data that we could rely on. We had to clean out any errors, inconsistency or outliers that might distort the analysis. The data structure and format clearly defined and well labeled made the interpretation faster, clearer and more accurate.

The next step was interpreting this data in way to help us tailor the courses for this project. As a result, the managerial weaknesses were tackled by two courses: *Business Development* and *Financial Literacy*.

The descriptive part of the data collection formed a foundation of the wants and needs that the participants showed during the survey. Of course, we had to abide by certain criteria that the beneficiaries somehow imposed on us, such as level of education, availability to attend courses, means to attend (decent internet connection, phone, laptop....)

Basically, to avoid resistance to change in general and technology adoption in general, we had to come up with a teaching method that is somehow innovative. This method should include all the necessary information and fill all the gaps shown by the participants. The course must be understandable by the mass and at the same time interactive and deals with real-life

situations. The use of visual techniques such as histograms, box plots, scatter plots, and bar charts to visually explore the data, made the transmission of the information smoother and fairly acceptable. The major breakthrough was the live case studies, these cases were discussed and were treated more like a consulting session to solve an actual problem that one of the participants was facing at the time.

At this point, we as instructors were benefiting from this case or more like intervention to expand the boundaries of the course syllabus and collect more info regarding the beneficiaries and understand how they would deal with problems when facing them each with a different perspective which clarified many hidden concerns that the participants did not disclose during the preliminary data collection. During these interventions we could clearly identify patterns, trends, relationships, and anomalies that may reveal insights into change resistance factors.

Some cases imposed on us a type of regression analysis of the data already in hand. This regression analysis identified the predictors or factors that contribute significantly to change resistance in SMEs. The cause for this was basically coming from the comfort and ease that the participants were at, in addition to the trust that the lecturer provided in terms of knowledge, experience and expertise.

As we went further with the courses, we had to conduct internally as small segmentation analysis each lecturer on a personal level based on relevant criteria such as company size, industry sector, organizational culture, or technology adoption stage. Then we made a small comparison to assess change resistance levels across different segments to identify variations, trends, and potential drivers of resistance. Also, we conducted comparative analysis by comparing change resistance between different phases of the project. This approach helped

identify changes over time, differences in perceptions, and areas of improvement or regression in managing change resistance.

Based on the above, as per the data provided and the data acquired during the sessions and based on the analysis and interpretation of empirical data, actionable recommendations were developed as guidelines for addressing change resistance in this type of projects and with SMEs in general.

Bottom line, this study paved the path and helped propose strategies, interventions, training programs, communication approaches, and organizational changes to mitigate resistance and foster successful change initiatives. By effectively interpreting and analyzing empirical data, we can confidently lead informed decisions, targeted interventions, and improved change management practices.

## **7.2. Identification of key factors influencing change resistance and technology adoption.**

Identification of key factors influencing change resistance and technology adoption in Micro, Small and Medium-sized Enterprises (MSMEs) requires a comprehensive analysis of various internal and external factors.

- **Culture:** Resistance to change can be influenced by the prevailing culture. If the culture emphasizes tradition, stability, and risk aversion, participants may resist new technologies and changes to established processes. The main factors that helped us were mainly related to leadership skills, and communication norms that created an impact on how beneficiaries perceive and respond to change initiatives.



- **Leadership:** Strong leadership support is crucial for driving change and fostering technology adoption in SMEs. Leaders who champion change, communicate the vision effectively, and actively involve employees in decision-making tend to reduce resistance and enhance adoption rates. Our role as lecturers was somehow falling under this category. Most of the MSMEs were lacking leadership skill and we had to fill the gap, make sure that the process is on the right path and then transfer the mission to them. Lack of leadership commitment, unclear direction, or conflicting messages can contribute to resistance and hinder technology adoption efforts.
- **Change Management:** The ability to effectively plan, implement, and manage change initiatives is essential for overcoming resistance and facilitating technology adoption in SMEs. Factors such as change readiness assessments, engagement strategies, communication plans, training programs, and support mechanisms influence the success of change management efforts.
- **Resource:** Adequate resources, including financial resources, technical expertise, training facilities, level of education and time, play a crucial role in supporting technology adoption and addressing change resistance. Limited resources, competing priorities, and budget constraints can hinder the implementation of change initiatives and lead to resistance from employees.
- **Commitment, Involvement and Participation:** We worked hard on involving and not imposing the change process, addressing their concerns and not

neglecting them can reduce resistance and increase buy-in for technology adoption. Factors such as empowerment, collaboration, feedback mechanisms, and recognition of contributions can positively impact change readiness and adoption rates.

- **Observed Benefits and Risks:** MSME's perception of the benefits and risks associated with technology adoption influence their willingness to embrace change. A clear communication of benefits, demonstration of tangible outcomes, risk mitigation strategies, and addressing concerns about job security or job roles affect drastically the outcome how the participants perceived and responded to change.
- **Training:** Providing adequate training, skill development opportunities, and support to learn new technologies was for successful adoption. The perfectly tailored training programs, accessibility of resources, relevance of training content and ongoing adaptability and amendment in the training program contributed immensely to overcoming resistance and improving technology adoption rates.
- **External Environment and Industry Dynamics:** External factors such as market trends, competitive pressures, regulatory requirements, customer expectations, and industry standards can influence technology adoption in SMEs. Factors such as industry disruptors, technological advancements, customer preferences, and market demands may create opportunities or challenges that impact change resistance and adoption efforts. This part had a huge part in our preparation, knowing that most of the participants share the

same market and are somehow competitors raised many concerns. Dealing with this issue was achieved with mainly transparency and highlighting the importance of teamwork among all beneficiaries to assure the success of the program and eventually obtaining the grant promised at the completion of the program.

- **Organizational Flexibility and Adaptability:** The ability of the MSME to be flexible, adaptable, and responsive to changing conditions, feedback, and lessons learned during the change process influences technology adoption. Factors such as agility in decision-making, willingness to experiment, learn from failures, and adjust strategies based on feedback contribute to overcoming resistance and sustaining change efforts.

In my humble experience, I always referred to the famous Japanese proverb and shared it in all of my sessions : *“The bamboo that bends is stronger than the oak that resists”* . In my opinion this proverb sums it all, if you are stiff and hard you will break, if you are soft you will get squeezed but if you are flexible you can survive and overcome anything that you might encounter.

### **7.3. Assessment of the effectiveness of the proposed comprehensive framework.**

As it turns out, the recipe for fostering change is fairly simple. The basic problem is how to be effective, how to encourage change in the workplace environment, where both your influence and your resources are limited. The answer is surprisingly simple, although getting

the details right can be tricky. All we needed was to implement three basic steps to keep the situation under control:

- 1- *Demonstrate Design Behavior*: One of the major problems with change is that newcomers to the process sometimes have a lot of trouble imagining just what the change is going to be like, and how it is going to affect them. So instead of adopting change, no matter how promising it might sound, they tend to be pretty conservative in their actions. Until, that is, they see some examples of people demonstrating design behavior in the workplace and seeing that they get reward for it, and not criticized or ostracized. In this case, our job was to be a living, breathing example of how people will work and interact with each other as the changes are made. That way, fence-sitters and others will see that it's okay to be involved with the change, it's not really as risky as it might have seemed.
- 2- *Reward Design Behavior in others*: The goal is to get more of the behavior you reward. Co-workers, managers and supervisors, we can talk to them until we're blue in the face about how important change is to our organization. In the workplace, the "talking cure" isn't that reliable as we need it to be. Maybe we'll convince a few people. Maybe a few of those will even give our change a try. But that is a big "if" to bet our success on. On the other hand, if we reward design and design-compatible behaviors, we will almost certainly get more design behaviors and as a direct result we'll get more positive change.
- 3- *Create a critical mass of design behaviors*: reaching critical mass is the most powerful tool you have. What is critical mass? It isn't a large group of people willing to criticize your work. Critical mass is the point where enough people understand and support the change that most of the rest does along willingly. It is the point

where the payoff for the change becomes so obvious that more and more people start cooperating, and you see a sudden, dramatic movement in your direction. Critical mass is really about using the power of numbers to our advantage. The way to change behaviors in an organization is to gradually increase the number of behaviors who share our point of view. Stop worrying about one person, or one manager, or one president. Just keep building our critical mass, and the rest will follow. (Schoemer, Karl G. (2009). *Change is your competitive advantage – strategies for adapting, transforming and succeeding in the new business reality*. Massachusetts: Adams media, p.124)

As a result, for the assessment, implementation and assessment, there are no real secrets.

The following guidelines are the result:

- Don't over-plan: Having a good plan with the number of details and a practical routine of meetings is the first stage to success.
- Get the tools in place early: By now tools that will help us develop our plan and communicate as a team must have been identified. These might include the templates required for capturing information on our current situation, risks and suchlike. Endeavor to have all these tools up and running before the projects starts and ensure that everyone knows how to access them and use them.
- Handle conflicts early: Teams will be stretched in their thinking and have pressures on their time. They will be looking at procedural changes, organizational changes and cultural changes. This pressure will often give rise to conflict. In order for the project to be a success, conflicts should be addressed

quickly and resolved urgently. The key is to act decisively and so prevent other team members from losing momentum.

- Don't do too much: Perversely, one of the best ways to increase the chances of success is to do less. Avoiding long detailed documents and vague summaries is a must. Also, it is imperative to keep our deliverables simple and concise and the strategy based on facts and data whenever possible.
- Focus on priorities: Focus on those aspects of the strategy that will deliver the best results. The French have a saying that "perfection is the enemy of the good". This holds true with strategy, where spending too much time trying to get to "the right answer" becomes counter-productive as it delays completion and disrupts the plan.
- Consider the workload of team members: We have to take into consideration that team members will have other work to do. Make the tasks specific enough to complete the plan but not too complicated that they become a chore.
- Ensure enough resources: It is important that you keep everyone's attention focused on the plan. If we require other resources, such as office space and budget, these should also be agreed upon at the beginning of the project.
- Don't be too soft: Most tasks and project need to be handled within a specific time frame and a well-defined priority. When team members ask for delay or fail to make commitments, they should be held to account. Sometimes we will need a firm hand to get the job done.
- Communicate success: Finally, communicate success or "quick wins" to all stakeholders so that people can see that the overall approach is working and

worthwhile. (Mckean, David (2009). Fast track to success: Strategy. Great Britain: FT Press, p 110)

We made sure to transmit all of those points to our beneficiaries as part of our program and assure that the change is sustainable and above all the mindset has changed and became more and more business oriented with a strategic focus.

#### **7.4. Identification of limitations and areas for further research.**

When dealing with resistance to technology adoption in MSMEs, especially with our relatively small sample, it's essential to acknowledge the limitations of current research and identify areas for further investigation. Here are some common limitations and potential avenues for future research:

- **Sample Size and Generalization:** Studies on technology adoption that have limited sample sizes may, affect the generalizability of findings. Future research could focus on conducting larger-scale studies involving diverse SMEs across different industries, regions, and contexts to enhance the generalizability of results.
- **Contextual Factors:** Research often overlooks the influence of specific contextual factors such as organizational culture, leadership style, industry dynamics, and regulatory environments on technology adoption and resistance. Also, Future research could explore how these contextual factors interact with resistance to technology adoption in SMEs and develop context-specific strategies for addressing resistance.
- **Long-term Impact and Sustainability:** Many studies focus on short-term outcomes and fail to assess the long-term impact and sustainability of technology

adoption initiatives in SMEs. Future research could investigate the long-term effects of technology adoption on organizational performance, innovation capabilities, competitive advantage, and resilience.

- **Change Management Strategies:** While our research has identified various change management strategies for addressing resistance, there is limited understanding of their effectiveness in different sectors or industries. In our case many changes have been made in order to successfully adapt change management strategies. Future research could evaluate the effectiveness of different change management strategies in overcoming resistance and facilitating technology adoption specifically in SME contexts.
- **Employee Perspectives:** During our literature review, studies often prioritize organizational perspectives and may overlook the experiences, perceptions, and motivations of individual employees regarding technology adoption. This oversight is significant as it can heavily influence the project's outcome, either leading to success or failure. Future research could explore deeper into employee perspectives, attitudes, beliefs, and behavioral intentions related to technology adoption, considering factors such as technology readiness, perceived usefulness, and ease of use.
- **Technology Characteristics:** Research often focuses on the adoption of specific technologies without considering the unique characteristics, functionalities, and complexities of different technologies. Future research could examine how technology characteristics (e.g., complexity, compatibility, trialability) influence resistance and adoption processes in SMEs and develop technology-specific strategies.



- **External Influences:** External factors such as market trends, customer demands, competitive pressures, and technological advancements can impact technology adoption and resistance. Future research could explore the role of external influences on technology adoption in SMEs and how organizations can adapt to external changes while managing internal resistance.
- **Cross-cultural Studies:** There is a lack of cross-cultural studies examining technology adoption and resistance in SMEs from diverse cultural backgrounds. Future research could conduct comparative studies across different cultural contexts to understand how cultural norms, values, and communication styles influence resistance and adoption behaviors.
- **Mixed-methods Approaches:** Many studies rely solely on quantitative or qualitative methods, limiting the depth and breadth of insights into technology adoption and resistance. Future research could employ mixed-methods approaches to combine quantitative data (e.g., surveys, metrics) with qualitative data (e.g., interviews, observations) for a more comprehensive understanding.
- **Emerging Technologies:** With the rapid advancement of technology, there is a need to explore the adoption and resistance dynamics of emerging technologies such as artificial intelligence, blockchain, Internet of Things (IoT), and augmented reality in SMEs. Future research could focus on understanding how SMEs perceive, adopt, and manage emerging technologies, along with the associated challenges and opportunities.

By addressing these limitations and exploring these areas for further research, scholars and practitioners can advance knowledge, develop evidence-based strategies, and enhance the successful adoption of technology in SMEs while mitigating resistance effectively.

# CHAPTER 8

## CONCLUSION

### 8.1. Summary of the Study's findings

The management of resistance can be seen with a range of different approaches. Each takes a different angle on how to deal with resistance. Collectively they provide an array of options for managers to consider. In our case, a situational approach was the ultimate choice. The most common mistake managers make is to use only one approach or a limited set regardless of the situation.

As a simple guide for dealing with change incorporates the following key points:

Education and communication, participation and involvement, facilitation and support, negotiation and agreement, manipulation and cooptation, and explicit and implicit coercion.

These points address various aspects such as methods, characteristics, context, and concerns related to change management. Additionally, it emphasizes the significance and potential power of resistance. Rather than viewing resistance as a hurdle to overcome, acknowledging and respecting resistance can be a potent tool for harvesting support for change initiatives. This approach, founded on respect for resisters and their perspectives, fosters stronger relationships and enhances the likelihood of successful change implementation. The five fundamental touchstones outlined, maintaining clear focus, embracing resistance, respecting resisters, remaining relaxed, and finding common ground with the resistance, offer a nuanced approach to managing resistance effectively. Managers are encouraged to reframe resistance as a natural aspect of the change adaptation process, a source of energy, and valuable feedback about the change journey.

## 8.2 Practical implications for SMEs and recommendations for practitioners

Combining the findings and proposals based on this thesis and the case discussed throughout the course of this paper, a comprehensive table was the ultimate choice to serve as a visual brief, containing the major implications and recommendations.

Reference Area	Practical Implications	Recommendations
Understanding Organizational Culture	Recognize the influence of culture on change	Conduct a cultural assessment; tailor change strategies to align with culture; foster innovation and adaptability
Effective Communication and Engagement	Address communication gaps and lack of engagement	Implement clear, transparent communication; involve employees early; seek input and feedback; facilitate dialogue and engagement
Leadership Support and Role Modeling	Ensure visible leadership commitment and support	Champion the change effort; communicate vision clearly; allocate resources effectively; engage with employees
Empowering and Involving Employees	Empower employees to embrace change and technology	Provide training and resources; involve employees in decision-making; recognize contributions; foster ownership and accountability
Addressing Concerns and Resistance Proactively	Identify and address resistance factors early	Conduct change readiness assessments; address fears and misconceptions; provide support and incentives; demonstrate quick wins
Continuous Learning and Adaptation	Foster a culture of continuous learning and growth	Promote a growth mindset; embrace lessons from failures; celebrate successes; make data-driven adjustments
Technology Selection and Implementation	Choose user-friendly and scalable solutions	Involve stakeholders in technology selection; pilot test technologies; provide training and support; monitor usage and address challenges
Monitoring and Evaluation	Track progress and evaluate outcomes effectively	Define KPIs for technology adoption; assess progress regularly; gather feedback; make data-driven decisions

Table No 4 – Practical Implications and Recommendations

This table organizes the recommendations into distinct areas, highlights the practical implications, and provides actionable guidance for practitioners in SMEs dealing with resistance to technology adoption and change.

### **8.3. Suggestions for future researchers**

Future research on change resistance in technological adoption should consider several key recommendations to advance understanding and inform practical strategies.

Firstly, delving into the interactions between individual, team, and organizational factors influencing change resistance and technology adoption . This holistic view will provide insights into how these factors collectively shape resistance dynamics and adoption outcomes.

Cross-cultural comparisons are also essential, comparing change resistance and adoption processes across diverse cultural contexts and geographical regions.

Also, researchers can focus efforts on specific technologies that are relevant to SMEs, such as cloud computing, digital platforms, or AI. Factors that we didn't tackle in this paper due to the study group sample and the low technological understanding start up point that our beneficiaries had.

Study the coping strategies and coping mechanisms employed by employees, managers, and leaders to overcome resistance to technological adoption. This can be conducted by evaluating the effectiveness of various change management strategies in addressing resistance and facilitating technological adoption in SMEs. Identify best practices, lessons learned, and actionable recommendations for practitioners.

Finally examine how inter-organizational relationships influence change initiatives and adoption outcomes within SME ecosystems.

By embracing these recommendations, future researchers can contribute significantly to advancing knowledge, informing evidence-based practices, and driving positive outcomes in technological adoption and change management for SMEs.

In conclusion , the main results are: change is a phase in the life cycle of all organization without any exception. It can be manifested under many forms and shapes, from the simplest office redecoration up to a complete dramatic change. Many factors trigger change and enhance its effect, knowing them and coping with them is imperative. The best way to deal with change is to always act in a proactive way, to anticipate the environmental changes that might affect the organization. Changing the culture of the employees is hard, not impossible, but changing the organizational culture would be a start. Resistance is inevitable, dealing with it the best way to beat it. The success of the transition relies in a good strategy, good implementation and remarkable leadership skills.

These findings show that change is here to stay, now more than ever. Successful change management and transformational leadership are the best tools for the survival in today's fast changing world.

## CHAPTER 9

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**BDS - Entrepreneurship Training – Pre / Post-test (SCORED)**

- 1- **The entrepreneurial project is different from a regular project in terms of idea and method of work. (True/ False) .....**
  
- 2- **State 3 Entrepreneurial Traits.**
  - A - .....
  - B - .....
  - C - .....
  
- 3- **Entrepreneurs are born and not made. (True/ False) .....**
  
- 4- **Name a source for ideas for creating a small business.**  
 .....
  
- 5- **Brainstorming is not a way to generate ideas. (True/ False) .....**
  
- 6- **One of the advantages of buying an existing project. (Choose the correct answer(s))**
  - A. Taking advantage of being in place, it has its market, customers, suppliers and employees.
  - B. Benefit from and maintain project expertise.
  - C. Requires high cost for detailed study.
  
- 7- **What do you know about franchise ?**  
 .....  
 .....  
 .....  
 .....  
 .....
  
- 8- **State one of the features of a successful project.**  
 .....

Follows 

9- What is a business model?

.....  
 .....  
 .....

10- Is it possible to change our products/services to serve customers better?  
 (Yes/ No) .....

11- Why is customer service important?

.....  
 .....  
 .....

12- The direct distribution method is:

- A. From producer to consumer.
- B. Producer - Agent - Wholesaler - Retailer – Consumer.

13- When you make things more comfortable when using your product, it creates more value for customers. (True/ False) .....

14- Cross out the inappropriate answer.

The basic needs of launching a company:

- The Need for capital.
- The need for transport vehicles.
- The need for raw materials.
- The need for employees.

15- What do you think are the reasons that drive the creation of partnerships?

.....  
 .....  
 .....

16- State 3 ways to generate cashflow.

.....  
 .....  
 .....

Follows



- 17- **How do we increase revenue ?** (More than one answer can be selected)
- A. Motivate sales.
  - B. Add delivery services.
  - C. Add monthly expenses.
  - D. After-sales service / maintenance.
- 18- **The break-even point is the point where the quantity and value of sales are equal to fixed and variable costs.** (True/ False) .....
- 19- **What does SWOT analysis stand for?**
- .....  
.....
- 20- **The separation between the funds of the project owner and the funds of the project is one of the most prominent problems facing the success of the project.** (True/ False) .....

Financial Literacy Training - Pre/ Post test

1. **The entrepreneur, as the owner, can withdraw goods or money from his project without declaring the operation. (True/ False) .....**
2. **How do you know the outcome of the project each the month?**
  - A. Costs and revenues are calculated.
  - B. Count the amount of money we have.
3. **The rent of the land or project building is considered:**
  - A. Variable cost.
  - B. Fixed cost.
4. **A break-even point is achieved when:**
  - A. The total cost is equivalent to the amount of sales.
  - B. The quantity of sales is equivalent to the quantity of purchases.
5. **The project budget shows what he owns and what he owes to others. (True/ False) .....**
6. **Cash flow is the total amount of cash movements coming into the business. (True/ False) .....**
7. **Analyzing strengths, weaknesses, opportunities and threats helps you understand the internal and external factors that will affect your business. (True/ False) .....**
8. **The business idea becomes a real opportunity when we secure the required financing (True/ False) .....**
9. **The smart goal is:**
  - A. Specific, measurable, verifiable, realistic and time-bound
  - B. Specific, realistic and applicable
10. **Desires express the things we need fundamentally in life.(True/ False) .....**
11. **The Household budget contains:**
  - A. Table of expenditures
  - B. Table of expenditures and revenues
12. **If we cut our expenses and we are still short, we have to:**
  - A. Stop buying food.

Follows



B. We work on increase our income

13. **Saving is the amount you spend from your salary.** (True/ False) .....
14. **Smart shopping starts with a budget for shopping.** (True/ False) .....
15. **The types of savings are:**
  - A. Emergencies, needs, dreams
  - B. Emergency, Investment, Dreams
16. **To control your expenses, you have to:**
  - A. Keep invoices and record your expenses.
  - B. Buy whatever you want.
17. **NGOs can be considered as one of the sources of funding in the project.**  
(True/ False) .....
18. **Price fluctuations are not a challenge to agricultural finance.** (True/ False) .....
19. **A herd of small ruminants cannot be considered as collateral for a loan because:**
  - A. Value of the herd.
  - B. Diseases that may affect it.
20. **Inventory receipts in the warehouse are considered as collateral for credit institutions**  
(True/ False) .....

## MSME Feasibility study/ Grant justification Tool

MSME name:	
Name of the owner/s:	
Address:	
Sector:	

What are the main activities of the MSME?	
<b>Do you have enough market information regarding</b>	
Suppliers	
Customers (target groups - purchasing power - purchasing behavior – B2B and B2C)	
Competitors	
<b>What marketing mix does the organization adopt or will adopt and why? (Explain your plan according to)</b>	
Product Range	
Quality	
Packaging	
Branding	
Pricing	
Distribution Channels	
Advertising	
<b>Analyze strengths and weaknesses, opportunities and treats.</b>	
How will you leverage your strengths?	
How will you overcome weaknesses?	
How will you take advantage of the opportunities?	
How will you reduce the risks?	

Economic study			
<b>Investment Cost:</b> The number of assets needed, mention their estimated cost, and their impact on production, cost or sale. (Number of assets by priority)	Cost	Country of Origin	Impact (on the amount of production, cost reduction, profits...)
<b>Total investment cost</b>			

Six-month revenue and expected burdens schedule						
Revenue	January	February	March	April	May	June
Product sales 1 (quantity * selling price)						
Product sales 2 (quantity * selling price)						
3 Product sales (quantity * selling price)						
Other income						
<b>Total Revenue</b>						

Expenses	January	February	March	April	May	June
Cost of raw materials						
Packaging cost						
Building rent						
Electricity and fuel consumption						
Maintenance						
Salaries and Wages						
Marketing cost						
The cost of Communications and Transportation						
Other						
<b>Total Expenses</b>						
<b>Result (profit – loss)</b>						



# APPENDIX - D

## Course Outline for SMEs Training

### Training

#### **Module 1: Start-ups 8hrs**

- Start-ups from Concept to Launch.
- Types of Start-ups.
- SMART Goals.
- SWOT Analysis.
- Business model canvas:
  1. Customer segments.
  2. Customer relationships.
  3. Distribution Channels.
  4. Value propositions.
  5. Key Activities.
  6. Key Resources.
  7. Key Partners.
  8. Revenue streams.
  9. Cost Structure.

#### **Module 2: Business Ownership 4hrs**

- Sole Traders and Partnerships
- Limited Companies
- Private and Public Companies

#### **Module 3: Finance 8hrs**

- Financial Reporting
  1. The Accounting Cycle
  2. Financial Statements
- Financial Accounting
  1. Profit and Loss Statement
  2. Balance Sheet
  3. Cash Flow Statement
  4. Depreciation
  5. Amortization and Depletion
- Management Accounting
  1. Cash Flow
  2. Budgets
  3. Assets and Inventory
  4. Costs
  5. Product Costing and Pricing

#### **Module 4: Sales and Marketing 8hrs**

- Marketing Mix
  1. Product
  2. Product Positioning

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3. Product Packaging
  4. Product Life Cycle
  5. Price
  6. Place
  7. Promotion
  8. Market Research
  9. Market Segmentation
- Marketing Approaches
    1. Niche vs. Mass Marketing
    2. Traditional Marketing
    3. Digital Marketing and Social Media Marketing
  - Business Development
    1. Lead Generation
    2. Lead Conversion
    3. Customer Retention

### Module 5: Operations and Production **8hrs**

- Manufacturing and Production:
  1. Job Production
  2. Batch Production
  3. Flow Production
  4. Mass Customization
- Product:
  1. New Product Development
  2. Innovation and Invention
  3. Design
  4. Quality Management
  5. Product-Process Matrix
- Control:
  1. Managing Capacity
  2. Inventory
  3. Procurement
  4. Quality Control
- Technology
  1. Innovation and integration
  2. Know your suppliers
  3. Transport and delivery

### Module 6: Alternative Financing Solutions **4hrs**

- Investors
- NGOs
- Financial Institutions