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Analysis of the OKR (Objective and Key Results) methodology, its application to an Intesa Sanpaolo case study and its possible use in complex business systems



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Abstract

The thesis project "*Analysis of the OKR (Objective and Key Results) methodology, its application to an Intesa Sanpaolo case Study and its possible use in complex business systems*" starts by studying the OKR methodology from a theoretical point of view. Although the academic literature on the topic is scarce, the literature review proposes a theoretical method to apply the OKR framework, execute it and finally present a monitoring and evaluation process.

Following the deductive methodology (from the study of theory to the observation of a particular case), the model and typical aspects of the OKR methodology, presented in the Literature Analysis, are applied to analyse and evaluate the management of a particular Case Study, which I personally followed during an internship period at Intesa Sanpaolo Bank.

The case study is called Digital Sales and aims to implement the digitalisation of insurance products. Initially, the project is presented; then we go on to describe how it was created. The latter is a company with complex organizational charts, including numerous factories, suppliers and collaborators. Digital Sales is a project that aims to implement a digital sales process, on Self-channels, for a new smartphone protection insurance product. The methodology followed to implement Digital Sales is mainly the "Waterfall" method; only for the implementation of the first part of the project ("Discovery"), the "Agile" method was followed.

The Case study analysis demonstrates that it is possible to use the model and typical aspects of the OKR methodology as a tool to analyse and evaluate other management methods, thus obtaining a practical and concrete application of the method.

Thanks to the collection of data on the project, tables were constructed, which allowed the evaluation of Digital Sales management to date and the analysis of the aspects of the OKR methodology that have been applied. Implementations are proposed, in line with OKRs, to improve the less efficient aspects of the project.

From the specific case, the study moves on to generalization: the study demonstrates the practical non-applicability of the OKR management methodology in its entirety and this certainly applies to large companies with complex business systems.

Finally, the limits and barriers that hinder its adoption are explored in depth.

I thus hope to make new contributions to academic research.

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1. Introduction

In recent times, the OKR (Objective & Key Results) methodology of management by objectives is gaining more and more fame. This is because, compared to traditional methods, in which the organisational model seems to 'crush' the individual worker, OKRs manage to stimulate without number anxiety, incentivise collaboration between people and teams and enable the company to achieve much higher goals.

Academic research on the subject, however, does not go hand in hand with the growing popularity of the methodology. It is, on the contrary, very scarce.

Thus, the practical use of OKRs is little or not at all documented from a theoretical point of view.

Consequently, there is a lack of detail on why or how to use OKRs, i.e., to date there is no model that can guide companies in the adoption and implementation of OKRs.

This thesis project aims to contribute to the advancement of the ongoing academic research on OKRs by providing a practical and concrete application of the OKR method as a tool for analysing and evaluating non-OKR corporate management.

The literature review so far only provides the OKR methodology presented from a theoretical point of view; it is therefore difficult to imagine that it can be used for the analysis of practical case studies, especially when dealing with complex, non-linear projects.

This position will be refuted during the thesis.

This will be done starting from the study of OKRs, carried out in Chapter 2, which goes so far as to propose a theoretical method to apply this methodology and to set up a system of monitoring and evaluation process.

In order to be able to demonstrate that the model and typical aspects of the OKR methodology studied in the literature review can be applied for the analysis and evaluation of the management of large companies with complex business systems, a case study is used.

The case study examined is an Intesa Sanpaolo Bank project that I followed during my internship in the company. It was chosen because it presents a non-OKR project management. It is mainly carried out with the "Waterfall" method and has some parts developed with the "Agile" method. It is a complex project both from an organisational and a planning point of view; moreover, it takes place in a very articulated company system and organisation chart. It therefore satisfies the constraint that the company must be large and with complex business systems.

The analysis of the case study shows that it is possible to use the model and typical aspects of the OKR methodology as a tool for analysing other non-OKR project management methods. In addition, the model also makes it possible to assess whether the non-OKR methodology adopted in the project is effective and to propose possible implementations.

Continuing the study also shows that there are obvious limitations and barriers in large companies, which make the OKR methodology not applicable in its entirety. This is what one observes despite the fact that the methodology we are talking about presents very positive practices for fostering communication, corporate and personal growth, transparency and motivation, which, if applied at the global level in the management of a company, lead to considerable competitive advantage in the long run.

We arrive at this conclusion by first analysing the specific Case Study and then arrive at a generalisation by considering a complex company system.

This study contributes to the advancement of research on OKR but also paves the way for future developments and research, first and foremost the definition of a universally applicable model, able to guide companies in the adoption and implementation of this method.

2. Literature Analysis

In a globalised and constantly changing world, where there is a lot of competition, companies must have the necessary resources to adapt to the market's challenges, which is why it is increasingly important to invest in models that favour the achievement of planned results. Today many tools can help managers decide on objectives. For a company in 2023, existing is no longer enough to survive or succeed; it must gain a competitive advantage ¹ over its competitors by investing in new strategies and how to implement them effectively, research and development, market analysis and resource management.

Devising new strategies or continually updating them is difficult for a company because it requires time and energy that is difficult to find. Many scholars and economists have proposed and studied different models of strategy that organisations then decide to apply or not. To report a historical fact, it was probably the historian Alfred D. Chandler Jr. in 1962 who was the first to give a formal definition of the concept of strategy, as "...*the determination of a company's basic long-term goals and objectives and the adoption of courses of action and the allocation of resources necessary for the realization of these objectives*" [Chandler 1962, p.13].

In particular, Mitzberg² proposed five different approaches to strategy:

- **SWOT Matrix** is a framework that identifies and analyses an organisation's strengths, weaknesses, opportunities and threats.
- CANVAS business model is a strategic management model. It consists of a graph made up
 of blocks that describe the value proposition of a company or product, infrastructure,
 customers and finances. It is used to better visualize business models and present them to
 potential investors, as well as order and align activities.
- Five Porter Forces analysis is a tool that organizations can use to evaluate their competitive position and the forces at work in the economic environment.
- BCG Matrix, Balanced Scorecard, is a performance management framework used by managers to make the right decisions about a business. It both reports a set of strategic

¹ **Competitive advantage** is what enables a firm to record higher profitability and superior performance compared to competitors. This is because the company is able to produce a good or service more efficiently or at a lower cost. [Twin Alexandra, 2023]

² Henry Mitzberg is a Canadian economist, scholar and researcher in management science, operations research, organisation, and business strategy.

objectives and monitors the progress made towards those objectives. It offers a vision of the organization from both an internal and external perspective.

- Objectives and key results (OKR) which will be explored in more detail in this chapter.

Venture capitalist ³John Doerr reveals how the OKR methodology has proven to be an important tool for the strategy of large companies such as Intel, Google, Amazon and many others. By using OKRs they have experienced explosive growth. Furthermore, Doerr claims that OKRs can also help small and medium-sized companies to succeed. However, despite this, the OKR approach has not achieved the same dissemination and implementation as other tools.

"Any company that embarks on an implementation of OKRs will realize soon after starting work that it is much more than a measurement project" [Niven & Lamorte, 2016, p. xiii]. This situation highlights the importance of gaining a deeper understanding of how the OKR approach works and identifying the challenges and benefits associated with it [Fernandes B., Gomes J., 2023].

When analysing the literature on OKRs, it is important to note that it is a fairly new field and closely linked to the corporate environment and business management. For this reason, the literature on OKRs is not as extensive and well-established compared to the other models reported above. However, you can access various articles and web sources dealing with OKRs, including books, academic publications and resources available online, which provide a detailed analysis of this framework.

2.1 What are OKRs?

OKRs, which stand for Objectives and Key Results, are a very simple but also very effective and powerful framework for defining objectives, key results and their monitoring within an organization. These are results that must be achieved to attain the objective. The OKR methodology is useful for companies, managers, executives, teams, and employees.

This tool has become famous thanks to companies like Google and consists of setting ambitious objectives (the "Objectives") and measurable key results (the "Key Results") that indicate the progress and alignment of efforts towards achieving the set objectives. John Doerr, who is an engineer, a venture capitalist and the chair of Kleiner Perkins⁴, was the one

³ Venture capitalist (VC) is a private investor who provides capital to companies that he sees as having high growth potential. He asks for a shareholding in the company in return. A Venture Capitalist can, for example, invest in a start-up or in small to medium-sized companies that want to expand by providing funding.

⁴ Kleiner Perkins, established in 1972, is an American venture capital firm that deals with investments in incubation, early stage and growth companies.

who promoted the OKR method to Google in 1999. He uses the following words in the book *Measure What Matters* to describe the method: "*OKRs are not a silver bullet. They cannot substitute for sound judgment, strong leadership, or a creative workplace culture. But if those fundamentals are in place, OKRs can guide you to the mountaintop.*"

The OKR methodology does not resolve management errors: a good manager must know how to relate to people and understand their value. But it is a method that works well for any type of organization: from the analog production of objects to the digital production of software, to teams of individual workers.

John Doerr continues by telling what his first PowerPoint slide reported which he defined as OKRs: "A management methodology that helps to ensure that the company focuses efforts on the same important issues throughout the organization." [Doerr John, Measures what Matters, 2018]. Furthermore, it is important to highlight that "OKR is a representative of agile, decentralised and bottom-up planning and execution methods" [Kotik, V and Voracek, J, 2020].

The bottom-up approach is a decision-making process that starts with the employees, those who work on the front line, and gradually rises to higher levels. This is to enhance the ideas and perspectives of those who are directly involved in the day-to-day operations of the company. Their point of view can provide very useful insights into the implementation of the company's strategy. The bottom-up approach is the predominant one; but teams and individuals, in defining OKRs, consult with managers. It is therefore a two-way process. All objectives are never imposed from above so as not to compromise employee motivation. **Figure 1** below summarises the difference between top-down and bottom-up.



Figure 1: Top-down vs Bottom-up [Tefi Alonso, 2023]

Summarising the main definition, it can be said that Objective Key Results allow one to define, and share key objectives and to keep track, thanks to KR (Key Results), of progress towards the goal.

In the framework, the objective defines the direction the company wants to take, while the KRs are concrete key activities that can be DONE or NOT DONE (there is no possibility of misunderstanding). They are very easy to monitor and both the objectives and the KRs are expressed in a very simple way so that they are understandable at every level and shareable.

A company or team's OBJECTIVE defines the WHAT: what you want to become, what you want to achieve. It indicates the direction to follow. According to John Doerr, the secret of success is to set goals and to know why you do what you do.

Objectives must be:

- ➢ meaningful.
- \succ concrete.
- \succ action-oriented.
- Ideally motivating.

Companies often set and accomplish their goals (e.g., sell a certain number of products, reach a certain number of users, introduce new products), but lack an understood purpose that inspires their team and their actions.

To set objectives in the right way, it is crucial at the beginning to have a clear sense of why you are going in that direction. Only by understanding the reasons for wanting to achieve a goal can teams combine ambition with passion and purpose. This leads to a greater awareness of how individual work contributes to the achievement of company objectives; it is well known that the clearer the relationship between their work and the company's goals is for employees, the more motivation grows [Martins Julia, 2020].

"When done well, goal setting is a very powerful tool," said Doerr during an interview on Betterworks⁵. "Each team member can link their goals to those of the company, knowing that their work has a direct impact on the company's success." [Duggan, 2022].

⁵ Betterworks is a company that has developed cloud-based human capital management software (software of the same name) that allows employees to write and formulate objectives and key results (OKRs) and link them to organizational objectives.

In summary, the objectives must be associated with a specific time frame (for example three years),

be qualitative and represent an aspiration. A good objective must be ambitious but achievable: for example, you want to increase the level of satisfaction of customers who use a certain assistance service, or you want to reduce the technical debt that afflicts software.

The KRs, on the other hand, are the HOW: how the objective is achieved and what steps are necessary.

KR they must be:

- Specific and time-bound.
- Ambitious but realistic.
- Measurable.
- Verifiable.

KR must be measured so in the end it can be understood without any misunderstanding whether an action was performed or not. For example, a service wants to get 100 5-star reviews (an easily trackable number). Or a piece of software that wants to fix, by the end of the quarter, 10 bugs that currently create a lot of manual work for technicians. To correctly apply the OKR methodology, it is essential to choose the reference time frame. For example, for a company, you can choose a semester. For each time frame approximately 3 objectives are defined and for each objective 3 to 5 Key Results are decided.

Finally, it can be said that the OKR system fully embraces the Agile philosophy.

 Image: Description of the section o

Figure 2 below summarises the main concepts explained so far.

Figure 2: Anatomy of the OKR framework [Chatterjee, 2023]

To clarify these concepts, a practical example is useful. Consider a children's clothing manufacturing company that wants to create an e-commerce site. The OKR methodology starts from the objectives: this objective is defined based on a quarterly plan.

Objective: launch a new e-commerce site with an excellent pre- and post-sale purchasing experience.

To achieve this objective, the KRs identified are:

- interview 50 couples with children to understand what type of pre and post-sales assistance they need.
- Create 50 FAQs for each product to improve online assistance.
- Acquire 100 new customers.
- Have 100 customers who already know the brand purchase a product within the service.
- Get full marks on all requests for assistance that arrive.

Within the OKR methodology, an objective is considered completed and achieved NOT when its completion percentage is 100%, but when the completion percentage is 70-75%. This is because we must not be afraid to define ambitious objectives and, above all, we must not see the fact of not being able to achieve them 100% as a problem. Because the very fact of having tried is already to be considered a success. This puts individuals in a position to set themselves even more ambitious goals immediately afterwards and, therefore, move forward.

In conclusion, it is important to understand what OKRs should be used for. It doesn't help us monitor the performance of a company, those are the KPIs and the distinction will be explored in more detail later. OKR serves to define a direction and ensure that everyone is aligned to pursue that direction (from the manager to the team, to the CEOs).

2.2 Origin and Development

The OKR model is considered relatively new because many people associate its origin with the late 1990s when John Doerr introduced it at Google. Indeed, it is the result of several approaches and philosophies applied in previous decades. **Figure 3** shows the fundamental moments that characterized the birth and development of OKRs. They will be detailed below.



Figure 3: *History of OKRs*

In the 1950s, Peter Ducker, considered by many to be the founder of management as we know it today, recognized a common problem among companies: managers often remained focused on monitoring activities (of processes, of progress, of activities). This happened so much that, in the long run, they were unable to visualize key activities to achieve the company vision. Thus, they remained 'locked' in micro-management⁶, without being able to identify key activities to advance a particular vision.

In addition, Drucker wanted to prevent managers from measuring performance only to achieve professional success. With the technological change taking place in those years, employees with specialised roles were becoming increasingly important in companies. It would have been a problem if they had focused on individual results and not on the company's objectives. With the publication of the book The Practice of Management in 1954, Ducker proposed a new system called Management by Objective (MBO). In the book he introduces the model in this way:" *Each manager, from the "big*

⁶ **Micromanagement**, in the context of corporate management, is a supervisory mode in which managers closely monitor and/or control the work of their employees or subordinates.

boss" down to the production foreman or the chief clerk, needs clearly spelt-out objectives" [Drucker, 1954].

The basic principle of MBOs is to set goals that are well communicated and shared (that bring employees and management together) to obtain better performance. Ducker was convinced that deciding on goals in a participative way led to more involvement among employees and a greater chance of achieving and realising the goals.

The MBO process is divided into five steps:

- 1) setting of objectives: measurable, achievable, relevant and time-bound.
- 2) review of objectives.
- 3) objective division: division of tasks between employees.
- 4) monitoring progress and feedback for continuous improvement.
- 5) rewarding those who achieve objectives.

In practice, MBOs have rarely been applied due to the hierarchical mentality of many companies; but in the 1970s Andy Grove recognised the substantial value of the process. Andy Grove was a business scholar and was CEO of the Intel Corporation from 1987 to 1998. Grove embedded the MBO strategy within Intel, making changes that transformed it into Intel Management by Objectives, which he later simplified to Objectives and Key Results, today better known as OKR. Under his leadership, Intel went from being a manufacturer of memory chips to the main supplier of microprocessors in those years. Grove's new approach was based on his innovative belief that you get better performance by focusing on the results (Key Results) to be achieved, not the procedures to be followed. Grove set a goal and let Intel's employees find a way to achieve it: he did not tell them how to go about it.

Other aspects that Grove mentioned as 'driving' Intel's key goals and achievements are:

- 1) Being able to focus on specific objectives, to focus on too many goals risks being inconclusive.
- 2) Setting objectives and key results frequently (e.g., quarterly), underlining the importance of routinely giving rapid feedback within the organisations.
- 3) Objectives and Key Results should NOT become binding and force employees to what they have proposed, nor should they be the sole criteria for evaluating performance.
- 4) The formulation of OKRs at Intel wanted top-down and bottom-up involvement.

Grove's new method was, therefore, quite different from the old MBOs, as is clear in Table 1:

МВО	INTEL OKRs	
"What"	"What" and "How"	
Annual	Quarterly or Monthly	
Private and Siloed	Public and Transparent	
Top-down	Bottom-up or Sideways (~50%)	
Tied to Compensation	Mostly Divorced from Compensation	
Risk Averse Aggressive and Aspirational		

Later, John Doerr began his career at Intel in 1975 and enthusiastically absorbed Andy Grove's many management lessons, including the OKR model. Doerr recognised the value and potential of the model and continues to share it with entrepreneurs today. In 1999, he first presented OKRs to Larry Page and Sergey Brin, famous for being the founders of Google. The OKR model has thus become the preferred performance management tool throughout Google. Every quarter since then, every Googler has written down his objectives and his key results, evaluated them and published them for all employees to see. These are not used for bonuses or promotions; these aspects are set aside. OKRs are used for a higher purpose: to get collective commitment and to truly stretch goals.

There is a tendency to believe that OKRs began their rise immediately after Google adopted the programme. However, it was only in 2010, thanks to Google partner Sundar Pichai, that the methodology began to gain fame. He had set himself a goal: to build the next-generation client platform for the future of web applications. In other words, to build the best browser.

He was very thoughtful about how he chose his key results. Every year he stuck to the same key results (KR). he asked himself the question: "How to measure the best browsers?" Whose answer was the number of users, because users are going to decide if Chrome is a great browser or not.

So, he had a three-year-long objective: build the best browser. And then every year he stuck to the same key result: the number of users, but he upped the ante.

In the first year, his Key Result reached 20 million users by the end of 2008, and he missed it. He got less than 10 million.

In the second year, he raised the bar to 50 million by the end of 2009, and he got 37 million users (somewhat better). For two years the goal was not achieved, but as Larry Page said, "*If you set a*

crazy, ambitious goal and you miss it, you will still achieve something extraordinary". Failure is part of the OKR mindset and should not be seen as something negative because, by asking what can be done differently, the foundations are laid to go beyond the problem and reach the goal. So, in the third year, Sundar Pichai upped the ante once more to a hundred million by the end of 2010. He launched an aggressive marketing campaign, broader distribution, and improved the technology and in the end, he got 111 million users [Doerr John, Measures what Matters, 2018]. The graph below shows how the established number of users to be reached (Key result), despite not being reached for two years, has increased. Coming, in 2010, to exceed the expected result and make Google Chrome the best browser.



Chart 1: How Chrome became the best browser

This story clearly shows someone carefully choosing the right objective and then sticking to it year after year. "Now, I think of OKRs as transparent vessels that are made from the whats and hows of our ambitions. What really matters is the why that we pour into those vessels. That's why we do our work. "Said John Doerr about OKR.

No organization, including Intel, has been able to adopt and implement OKRs as effectively as Google. While conceptually simple, Andy Grove's regimen requires rigour, commitment, clarity of thought, and intentional communication. It's not just about creating a list of goals to cross off when they're completed. It's about developing the ability to set goals and strive to achieve meaningful results. However, Google leaders never backed down [Niven & Lamorte, 2016, pp. 1-6].

So far, OKRs have been adopted and implemented by numerous organizations around the world: both by large companies in Silicon Valley such as LinkedIn, Twitter and Zynga and by small and medium-sized businesses.

2.3 Differences between OKRs and KPIs

The terms OKR and Key Performance Indicators (KPI), in many cases, are confused. But it's good to clarify:

- **Objective**: the direction the company wants to take.
- **KPIs**: how to monitor performance. They are important to understand how the company is doing and to monitor whether the company is in good health.

The key difference is this: KPIs represent the current situation, while OKRs tell you about the direction in which the organization wants to go. It will go into detail deeper into this topic below.

2.3.1 Review of KPIs

The famous Key Performance Indicator (KPI) is the top-down style of the process as the company's leadership usually sets the fixed outcome they are looking for and forces the employees to align their goals with the company [Hao & Yu-Ling, 2018].

The KPI will represent the established objective, usually subject to review only once a year. Most employees may be tempted to set modest goals, aiming to ensure a safe achievement and a positive score at the end of the year, which in turn would lead to a bonus or salary increase. Although this KPI facilitates the evaluation of employee performance thanks to its quantitative nature and its defined time horizon, it can at the same time compromise employee motivation. This is because it would often lead employees to avoid ambitious goals, thus reducing opportunities for professional growth and development.

The KPI article by Lavy et al. classified the performance evaluation indicator into four categories which are:

- Financial indicators are linked to the financial performance of costs and expenses.

- *Physical indicators* can be evaluated qualitatively, such as the physical condition of the building, office, or factory, or quantitative indicators such as the energy consumption of the building.

- *The functional indicator* measures functional performance and organizational objectives. For example, job satisfaction is linked to the job function and affects overestimating the shift, the company's empathetic space is linked to the use of the office.

- *The survey-based* indicator that measures the questionnaire or survey of customers or users [Lavy, S., Garcia, J., 2010].

2.3.2 OKR framework review

According to Wodtke, in his book Introduction to OKRs, the Objectives and key results must be described qualitatively. The main goal and main result can come from brainstorming sessions, meetings or individual formulation to establish the ambitious objective. It is important for the methodology that OKRs are reviewed at regular intervals, mainly every quarter. The achievement of the main results will indicate whether the main objective will be achieved or not [Wodtke, 2016].

Researchers have shown that OKR influences the constitution of human capital. This study also found that OKR has a positive effect on the company's economic activities and ensures the dissemination of information within the company. Furthermore, it increases the transparency of communication within the company. The OKR also ensures the unity of all departments of the company to work together and achieve the goal of the company as a whole. OKR also improves the professional competence of individual employees [Anatolyevna et al.,2020].

2.3.3 OKR and KPI compared

Comparing OKRs and KPIs, the biggest difference between the two is that OKRs are a goal-setting framework, while KPIs are measurable values that highlight how effectively a company is progressing towards its main objectives.

Below, 5 other relevant differences have been identified:

For KPIs, the company objective is closely linked to the employee objective, which makes it easier to monitor the organization's progress. While the OKR leads to combining employee development with company growth.

In KPIs, the top-down approach ensures that there is consistency between employee and company performance. There is clarity and all parties involved are moving in the same direction. instead for OKR, the approach followed is both top-down and bottom-up, therefore it opens up two-way communication between management and the employee.

KPIs encourage employee concentration on a unique performance decided by the leadership which must be achieved 100%. On the other hand, by following the OKR approach employees can bring new ideas or innovations on how to develop the organization. An objective is considered completed the completion percentage is 70-75%.



For KPIs, less time and resources are needed to evaluate performance because monitoring is constant. While the OKR is not directly linked to performance, it allows employees to understand the direction the company is following. Thanks to measurable KRs it is possible to understand how the goal is being achieved.

KPIs, once decided, are difficult to change. This can represent a limitation because circumstances can change and the fixed KPI may no longer be suitable. Otherwise, OKR focuses on measuring importance and can be adapted at any time as it requires frequent discussions between managers and subordinates [Pannaporn C., 2021].

Since it is a complex topic, **Table 2** helps to highlight the major differences.

Table 2: OKR and KPI, similarities and differences

	OKR	KPI
Measurable	Ø	Ø
Team and/or individual		
Shared transparently with the company	Ø	
Linked to an economic reward		
To be achieved 100%		Ø
Bottom-up approach		
Typical duration	Quarter	Year

2.3.4 OKRs and KPIs are used together.

What was said above can be summarized by quoting the study carried out in April 2023 by Al-Saadi and others: "Although Key Performance Indicators (KPIs) and OKRs might overlap, they are two distinct concepts. KPI is a type of performance measurement used to assess how well a current procedure or a particular activity is working [...]. OKRs can be considered as a framework by itself whereas KPIs are seen as a measurement within this framework. For instance, to evaluate the degree to which each key result has been accomplished, it is crucial to specify a clear and measurable key performance indicator for each key result."

OKRs are ambitious because they aim to achieve goals that foster growth for both employees and the organization. They entail a continuous and dynamic cycle of development for both the company and its staff [Al-Saadi and al.,2023].

To conclude by quoting the study on KPIs and OKRs by Pannaporn, it is important to point out that the OKR framework, unlike KPI indicators, is not suitable for every type of company. First, it may be difficult to implement in a manufacturing company where most of the work does not require critical thinking or problem-solving skills. Secondly, employees must demonstrate that they are creative and eager for self-development. Finally, leadership style can influence the OKR approach, for example, a strict and authoritarian manager can block ideas coming from teams [Pannaporn C., 2021].

2.4 OKR framework in companies

"The lack of alignment and connection between business objectives and the establishment of corporate purposes defined by areas of an organization affects companies of various sizes and segments" [Silva and Santos, 2023]. The use of the OKR management methodology helps make up for this lack and ensures that the entire organisation focuses its efforts on the same essential issues [Doerr, 2018]. The focus is on all employees sharing a common direction, with well-defined priorities. OKR is also classified, by Niven and Lamorte, as a framework of critical thinking and continuous discipline that aims to have all the staff working together, focusing their efforts to make measurable contributions that drive the company forward [Niven & Lamorte, 2016]. According to Wodtke, the primary use of OKRs in companies aims to improve aspects such as focus (the definition of priorities and their evaluation), alignment and acceleration, the latter to achieve business results more quickly. They allow groups to work around a single strategy [Wodtke,2016]

It is of primary importance for the company to define the appropriate **cadence of the OKR cycle: it usually has annual (or company) OKRs, in tune with long-term strategies, and quarterly (or team) OKRs, used for short-term objectives.** The latter allows organizations to be more flexible thanks to less stringent deadlines, to be more efficient thanks to more limited time and to carry out faster monitoring phases, which would favour faster learning and evaluation of the teams' work [Muniz and others, 2022].

2.4.1 OKR framework in complex business systems

To analyse the OKR methodology in complex business systems, assumptions were made, which will be maintained throughout the literature review, as follows:

- the time horizon of the Annual Objective is one year.
- The time horizon of the team objective is three months, which is considered 100% complete if all Key Results are achieved.
- The analysis was carried out by considering OKRs at company, team and individual employee levels. The sequence followed is this, starting from the bottom upwards: the individual Objectives must be aligned with team OKRs, which are aligned with the Annual Objectives. This assumption will be dissolved only in the following paragraph to learn more about the topic of the OKR hierarchy at the respective company levels.

The OKR methodology, in companies with complex organisational charts, is **a simple process of defining and aligning corporate** (they are designed for the long term, a year), **team** and **individual** (they are designed for the short term, a quarter) **objectives** and linking each team objective with 3-5 measurable outcomes (Key Results) with clear timeframes to measure progress.

By definition, the completion of all Key Results equals the achievement of the objective. **Key Results can be measured on a scale of 0-100%** or any numeric unit (e.g., dollar amount, %, elements, etc.). As progress is made on each Key Result, progress on the **Objective progresses on a scale of 0 to 100% or 1 to 10**. Each Key Result is also supported on a day-to-day basis by weekly activities and **initiatives** that employees take to advance progress on a goal. Initiative should be created every week and be linked to the achievement of Key Results, which as they are completed contribute to the achievement of the team goal [Doerr, 2018].

As a rule, it is good to limit annual goals (maximum 5) per OKR cycle. Too many OKRs tend to dissipate people's efforts and concentration. In addition, remember to keep 3-5 key achievements per level to make sure you stay focused on what matters.

The structure proposed in **Figure 4** shows that the OKR methodology does not want to deal with objectives in isolation but follows an organisational and time hierarchy (the higher the objective, the longer it takes to achieve it). It shows that planning and goal setting guide work performance by following the alignment of individuals in the same global direction dictated by the corporate Vision. The material for deciding high-level objectives can be found in the organisation's mission statement, in the current strategic plan or in a broad theme chosen by the leadership. In the illustration we see, under the Vision, annual high-level objectives that link to Quarterly Objectives that can be implemented at team and individual levels. Only once these have been achieved can the annual objective be called complete. The Quarterly Objectives are, in turn, linked to quantifiable and attainable Key Results, thus leading to the evaluation of the progress achieved and representing a challenge to achieve the objectives.



Figure 4: Typical OKR process [Sowkasem and Kirawanich, 2021]

Finally, the division of work into Initiatives (weekly plans) is necessary to guide progress towards the achievement of Key Results [Sowkasem and Kirawanich, 2021]. This describes an action plan for each objective and key result in the OKR framework applied in the company.

2.4.2 OKRs hierarchical levels

The entire organisation must support goals: remember that to achieve their goals, companies must set measurable targets and monitor their progress.

Previously it was explained that for analysing OKR methodology in complex business systems only three business levels were considered. Only in this paragraph, this assumption is dissolved to go into detail. It is useful to study in deep of the **OKR hierarchy** at the respective **company levels** because knowing the meaning of OKR for different organisational levels will help proper implementation and adoption rates within the company.

How OKRs are implemented (which can be done through tools, software or spreadsheets) depends on the structure and needs of each specific company. The meaning of OKRs is different depending on the company level on which you set them [Hughes, 2020].

The 5 business levels that one could have in an organization are company, department, teams, personal and cross-functional teams. This is a generalization: every company is different and, depending on size, organization and other factors, company structures can be made up of more or fewer levels.

In short, the OKR hierarchy is a specific representation that aims to illustrate how Objectives fit into an alignment, that goes from the corporate level up to the teams. This visualization allows teams to understand how their contribution fits into the overall scope and how it connects to other teams. Company-wide alignment is one of the key benefits of adopting OKRs.

Below are the different hierarchical levels of OKRs in a generic organization:

1) Company Objective: the significance of OKRs for the company is to achieve accurate alignment with the organisation's overall objectives. When referring to a 'company OKR', it is important to note that only the objective is defined at the corporate level, while the key results are derived from the objectives of the levels below, such as departments, teams, and individuals. Departments and teams must establish their OKRs, as this helps to create a sense

of ownership and responsibility for the success of the company. A company objective should be broad enough to encompass the entire organisation, but at the same time specific enough to allow flexibility and adaptation to current needs. For greater clarity, reference can be made to the example in **Figure 6**, where the Company Objective is to "simplify and clarify the new product, messaging and overall presentation".

2) Department OKR: the meaning lies in involving multiple teams towards achieving a common goal. Companies can aggregate several teams under a single department, for example, the design, product and engineering teams can be grouped to make up the Product Management Department. It is important that for department Key Results the responsible team that takes care of it is indicated (e.g., the design team). Departments are functional for those teams that regularly work together to achieve a common goal. Of course, teams within the department can also define their OKRs, if they can manage the associated workload. Take the example in Figure 5, the Growth and Innovation Department includes the Sales and Product Marketing teams.



Figure 5: Example of OKR hierarchy and company levels

The sales team has its own individual OKR linked to the department-level objective (the sales team OKR contributes to the completion of the department objective).

- 3) Team OKR: the significance of OKRs for teams is to maintain focus, collaborate and contribute to their team's area of need. OKRs are commonly defined at the team level, involving established business teams such as Marketing, Customer Service, Sales, and so on. Team OKRs ensure that every individual is involved in the process and that no member is isolated from contributing.
- 4) Personal OKR: the significance of personal OKRs lies in taking responsibility for completing tasks and self-assessment. However, although it is possible to define personal OKRs for specific situations, one usually tries to avoid them. This is because there is a risk of impairing employee motivation and diverting attention from the objectives set by the company.
- **5) Cross-functional OKR:** the meaning of OKRs lies in the commitment and use of individual skills to benefit a shared goal during the quarter. OKRs are set for the new team created by individuals from different teams, to respond to a cross-cutting need or project. The team can disband once the objective is achieved [Maasik, 2022].

2.5 The alignment of OKRs

As expressed previously a "superpower", as Doerr defines it, of OKRs is **alignment**. This paragraph explores the concept in depth.

OKR alignment is necessary in the process described above to unify the company and keep teams moving in the same direction.

OKR alignment requires real familiarity with the company's structure and levels of goal setting. As we have seen, Objectives can be set at three levels: company level (for overall directional objectives), team level (for achievable objectives and key results) and individual level where employees link their personal plans and key results to their teams.

Alignment in the company can happen in 3 ways:

• top-down, where objectives are assigned by leaders and top-level managers downwards.

- From bottom to top employees are asked to provide suggestions for their next quarter's activities.
- To combine top-down and bottom-up approaches.

This last option is the one that the OKR methodology wants to pursue because it is the best and most successful way to align objectives.

Generally, one proceeds in this order: top management first establishes the OKRs of a company at a high level. This is where the annual plan is defined, which will guide the company's direction in the following months. At this point, lower-level management sets its OKRs. Departmental OKRs must be aligned with the OKRs of the company and individual OKRs must be aligned with departmental OKRs [Rompho N.,2023]. Only in this way do managers see the objectives were aligned throughout the organisation.

Once the business objective has been defined, it is essential to share it with all teams for initial alignment. In addition to communicating the content of the objective, management should spend time explaining why it is important and the reasons that led to this direction. This step should not be underestimated, as it is difficult to achieve alignment between teams and individuals when they do not understand or agree with the overall goal. For example (**Figure 6**), consider a software company that struggles every year to reach an acceptable revenue goal. After a careful analysis of the problem by the top management, it was concluded that the revenue is low due to the high customer churn rate. From here the **company's annual objective is established**: improve customer retention to drive up revenue.

Once all teams and management have agreed on the company goals, it's time for each team to establish their OKRs. Each team needs to think about how it can contribute to achieving the company's goals, involving the entire team in the process rather than leaving it only to team leaders. For example, in the case of the software company, for the product team, the objective is to improve customer retention to drive up revenue.

The last step is to share the team's OKRs with others and connect them to the business goal. So, Management should have an overview of all OKRs set.

In summary, teams that can contribute to the business goal should set, agree, add and connect their goals. **Business goal progress advances when teams report progress on key results.** This means that success for teams translates into success for the company.



Figure 6: OKR cycle for a software company

2.5.1 The most common alignment errors

The alignment errors that companies often make are the following:

- 1) **Transferring OKRs hierarchically from top management to teams**: this is a mistake because when management imposes OKRs on teams, they are likely to be KPIs and not real OKRs. It is preferable to allow teams, who are experts in their respective functions, to identify the areas that need improvement and on which to focus to contribute to the achievement of the corporate goal. Only through this approach can teams improve.
- 2) Teams often do not take full responsibility for their results, as management tends not to trust teams in setting their OKRs. This mistrust may be due to the lack of confidence of staff in their ability and competence to make good decisions. In fact, according to Wehde, who conducted a study by interviewing leaders of various organizations, it was learned that one of the main obstacles in creating autonomous teams is the lack of confidence that staff have the necessary skills. Cagan emphasizes that it's not the employees' fault, but rather a gap that can be filled through effective coaching and mentoring [Wehde, 2022].
- 3) Many companies neglect to set appropriate corporate goals or skip them altogether. When each team sets their OKRs separately, they may end up working competitively instead of collaboratively, as there is no clear corporate goal that unites them.

2.6 Managing Dependencies in OKR Framework

In large organizations, there are often many teams involved in a project and they have dependencies between them. "A dependency occurs when the progress of one activity, such as a development task, is dependent on the output of a previous activity. The more dependencies, the greater the coordination effort is required" [Vedal H and others, 2021]. Usually, it is the various teams involved (for example, product team, HR, information security, etc.) that manage dependencies both within teams and between teams.

Dependencies, according to Strode, there are three types:

- 1) **Knowledge dependencies** arise when there is a need for a specific type of information to advance a project and include four distinct categories: skills, requirements, task assignment and history.
- Process dependencies are defined through two main categories, namely activities and business processes. These arise when a certain activity must be completed before another activity can begin.
- 3) **Resource dependencies** encompass entities and techniques, indicating when a certain element or approach is needed to advance a project. For example, entity dependency occurs when a key person is unavailable, and this affects the progress of the project [Strode 2016].

According to a study in 2021, where semi-structured interviews are conducted with employees of various teams involved in a project, OKRs help teams to have a clear understanding of the progress of the project and support the coordination of dependencies. The interviewed members stated how OKRs provided greater transparency, predictability, shared goals and a greater sense of ownership of what was produced in the project. Additionally, the agency employed an **OKR tracking tool**, which allowed each team to monitor the progress of other teams. According to several team members, one of the most challenging tasks in using OKRs was translating objectives into measurable key results and selecting the appropriate words.

One of the findings from the research suggests that large projects could benefit from having a dedicated "**OKR manager**" to facilitate and follow the OKR process. Indeed, the presence of an expert who guides employees in following the best practices, organizes team training and assists the entire company in implementing OKRs in a way tailored to specific business needs will help to

simplify and optimize the experience with OKRs. The role and goal of an OKR manager are to guide teams towards greater alignment and productivity, as well as to set meaningful and ambitious goals. Additional future studies should examine in detail how OKRs can be leveraged to align teams in large-scale distributed setups [Vedal H and others, 2021].

2.7 Methodology and method

Learning and implementing OKRs requires time, patience and a change in the corporate culture. Managers and companies sometimes give the impression that they are stuck in their old habits. Many people want to use popular new methodologies but are not ready to commit to change and adapt to new methods.

It all depends on the willingness to change the way things are done and the understanding that implementing OKRs requires more than just implementing the methodology.

We need to be clear about terminology: a methodology is not a method. A methodology is a way of learning something, but to be able to apply it you need a method. Much of the material on OKRs is intended to teach everything you need to know about the methodology and best practices to follow without helping people understand the method they need to implement OKRs.

It is therefore important to understand the methodology in detail and finding a method that works for you and your specific company is often what determines a successful implementation.

The current situation is that, although the methodology is gaining more and more fame, **academic literature on OKR is scarce**. To demonstrate this, Roberto Silva and Gleison Santos, conducted a systematic analysis by reviewing databases and articles, identifying 30 studies that deal with OKRs and their use. Most of these (23 out of 30) were published after 2020. In general, the use of OKRs is poorly documented from a theoretical point of view. Most of the studies identified by Silva and Santos offer little or no information on why or how OKR was used [Silva and Santos, 2023].

As a result, there is a lack of detail regarding the implementation of OKRs, i.e., the method or process mentioned above.

Referring to two pivotal books on the subject: *Doerr's Measures What Matters* and Wodke's *Radical Focus*, the following paragraphs aim to **propose a method for applying the OKR methodology**, **how to execute it and a monitoring and evaluation process**.

It is important to provide a model that helps to apply the methodology in companies because, as Wodke says, "OKRs are great for setting goals, but without a system to achieve them, they are as likely to fail as any other fashion process" [Wodke, 2016]. Companies that want to adopt OKRs must engage all teams and people involved to achieve a shared future.

2.7.1 The OKR method

Viktoria Stray and other researchers, after a study carried out on the topic, agreed that the study is the introduction of OKR is not easy and direct. Interviews conducted with employees of some companies using OKRs show that it usually takes about six months to become familiar with the structure and to adapt to a new daily work routine. Furthermore, teams must attend training sessions at least once a year to improve their understanding of the process. It should also be considered that OKRs are a long-term method, so teams need support over an extended period, and it takes time for the benefits to become apparent. If applied correctly, the "OKR provides benefits such as focus and frequent priority setting, and implementing OKR instils inter-team transparency, allowing teams to cross-functionally align and create better products" [Stray and others, 2022].

Before going into the specifics and how to set up good OKRs, here is the basic method to start introducing them into a company. The basic structure of OKRs is quite simple. It is possible to define OKRs with a spreadsheet or with a specific tool. These 5 steps, were obtained from reading Doerr's book *Measures What Matters* and from studying the case studies reported there:

- Set Objectives. When top management begins to establish an OKR, start by defining a single objective for the company. As the organisation becomes more comfortable using OKRs, it can add more Company Objectives, but they should never be more than 5. Communicate and explain this objective to functional teams (e.g., product development, marketing, sales) and ask teams to set their Objectives aligned with the Company one. Each team should think about how they can help advance the Company Objective. Remember that the Team Objective must be ambitious, qualitative and achievable in a quarter.
- 2. **Define Key Results**. For each objective, 3-4 measurable Key Results must be defined. The job of the Key Results is to measure how close you are to achieving the goal. Key Results can be written in different ways:
 - Increase *a value* from X to Y
 - Reduce ex. *Pollution* by X%
 - Reach X amount of *a number*.
Updating the Key Results scale closer to 100 % (assume the scale goes from 0 to 100 %) indicates that you are making progress towards the goal. Key Results can be based on things like growth, performance or revenue.

- 3. Update OKRs. Once OKRs are set, it is essential to review them weekly. This will ensure that everyone remains aligned with the established objective and that feedback is given to each team member if necessary.
- 4. **Plan weekly initiatives and check-ins**. It is important to integrate OKRs into weekly activities. Each week, teams reflect on the projects and plans they need to focus on to achieve those objectives and write them down. This allows them to visualize how their daily efforts contribute to achieving their goals. It is highly beneficial to have the team meet weekly to evaluate the progress of the OKRs.
- 5. Review OKRs. At the end of the quarter, each team should take time to evaluate their results. Examining the positive aspects and where improvements can be made is crucial. Writing down what has been learnt is of great importance. Even if a team did not completely achieve its objective, it may have acquired valuable new skills.

With this method, one can start planning the team's OKRs for the coming semester.

2.7.2 How to define good OKRs.

Writing quality objectives and defining their key results requires time, experience and careful critical thinking. However, it is important to tailor the **Objectives** so that they meet the **specific needs of the company's production system**, and **Key Results** must be translated into quantifiable indicators. OKRs should be formulated according to the maturity and awareness level of the company and its employees [Van Erp and others, 2021].

2.7.3 How to define Company Objectives

A Company Objective represents a high-level area of improvement to which various teams can contribute through their daily work and long-term projects. It is assumed in this literature review that it has a duration of one year. It should be worded broadly, allowing teams to explore different possibilities for team OKRs, but at the same time be specific enough to provide clear direction for the current quarter. Before concluding high-level goal setting, leadership needs to engage teams to obtain feedback and set expectations.

2.7.4 How to define Team Objectives

The Team Objectives constitute challenges that are aligned with the company's overall strategy. They must instil the team with purpose, a sense of urgency and focus. The team, before writing the objective, should ask itself what role it can have in carrying out the company objective. Team Objectives should not be confused with specific projects; rather, they represent significant problems to be resolved or improvement opportunities that the team must pursue within a quarter. It is assumed in this literature review that it has a duration of a quarter.

The team, made up of individuals who collaborate to achieve shared results, is responsible for defining their objectives. Furthermore, it is important to set increasingly ambitious goals in subsequent quarters. If a goal is achieved well before the deadline, it could be a sign that you weren't thinking big enough. On the other hand, reaching 65-70% of an ambitious goal is considered a significant achievement. John Doerr, known for introducing OKRs to Google, suggests that the ideal average is 70%. The goal is not to get a perfect score but to drive continuous improvement among the team and company members. It is crucial to keep in mind that objectives are not secondary operational activities but rather represent ambitious goals. These are not one-off tasks. For example, let's consider a product team. A good goal to increase sales could be formulated as "increase product penetration in Germany by the 3rd quarter". This type of goal is effective because it is ambitious, time-bound, and contributes to the company", as it lacks a time element, stimuli, and future vision. Objectives must be qualitative and should describe the desired outcome.

2.7.5 How to define Key Results

Key Results are measurable results that reflect a significant change in business performance, providing an assessment of progress towards achieving the objective. Under each objective, a team will establish at least 3, but no more than 5 Key Results.

It is essential to ensure that key results are time-bound, usually with a quarterly reference, and that you have concrete ideas and actions to manage them every week (Initiatives). If, once you have established a Key Result, you cannot identify initiatives or action plans to achieve it, this may indicate that the objective is not defined appropriately. It is crucial to remember that a key result is not a KPI but should define the success of the objective.

KRs can be financial (ROI, cost efficiency, ...), outcomes in terms of efficiency (page load speed, average response speed, customer satisfaction score, ...), to give a few examples.

Finally, we need to clarify the terminology: the key results are not the completed activities (outputs); rather, they are the results of those activities (outcomes). This is a necessary clarification because many companies establish a list of action-based results, instead of defining key results as measurable outcomes. This goes against the whole OKR process. An output is an action that is taken towards a goal and is certainly not measurable. For example, writing and delivering a new marketing plan does not mean that the new plan is good and will bring many new customers Outcomes are measurable results that you hope to achieve after completing your outputs. For example, with the execution of the new marketing plan increase inbound leads from 4000 to 5500 per quarter. The example in **Figure** 7 sheds light on the latter concepts.





2.8 How to implement the OKRs method for the first time.

When top managers first implement OKRs, they want to plan and provide employee training. Christina Wodtke in the book Radical Focus, says that they will probably fail at first. But they can recover from failure by implementing OKRs following one of these strategies:

 Implement OKRs in a single team, a Pilot Team. Before introducing OKRs in a business, it is better to choose an independent, capable, high-performing team. Throughout a few cycles, this team must be supported for it to be successful. By focusing on just one team, you can resolve any workflow issues before presenting the new goal-setting framework to everyone. If, for example, a company has a functional team (like business development, growth, etc.) with a growth mindset and willingness to try new things, that group of people should be a good fit. This team will learn the methodology and teach it to colleagues in the company. Although implementing the OKR via a Pilot Team is probably the most effective approach, it will take longer to introduce the methodology to the rest of the company. This should be an ideal approach for large companies.

 Implement OKRs with everyone. Keeping things simple sets a company-wide OKR. The management team will work to higher standards and employees will see the effects of the OKR methodology by developing OKR teams themselves.

Implementing OKRs for everyone at the same time can be difficult for large companies with hierarchical work organization.

The advantage of making the methodology known to everyone together means seeing the results sooner, after 2-3 quarters. But if you're onboarding everyone at the same time, you need to communicate with your employees because they'll need someone to guide them. Offering support during the implementation phase is essential. Additionally, it is necessary to have full buy-in from leadership and some people who are experts in the framework to become OKR managers. Companies with more than 20 employees would need an "OKR manager" (internal or external) to guide them through the process and make sure everyone follows it.

3) Apply OKRs to team leaders to train them to have an Objective-Result mentality regarding every project. they thus have in mind the goal of a particular project and the metrics for what constitutes impact and success. By initiating OKRs only with team leaders, the company solves goal alignment challenges, because team leaders quickly see how team-level OKRs connect to overall company goals. The advantage of this approach is that it triggers a change of mentality, defining the success of the objectives based on the Key results and not based on the outputs. This is a huge change for organizations, and if team leaders are properly onboarded, everyone else will see how the framework works.

This approach works well for many companies, regardless of their size. Provided, however, that the team leaders involved are equally motivated to ensure the success of OKRs in the company [Wodke, Radical Focus, 2016].

 Table 3 summarizes the pros and cons of the three strategies.

 Table 3: Pros and cons of OKR implementation strategies

	Pros	Cons
Pilot Team	Help to ensure internal buy-in and resolve all potential workflow issues.	Takes longer to roll out the rest of the organization.
Everyone	Helps to improve internal communication, onboard everyone sooner, and work on issues on the go.	Require huge time and effort resources from leaders and «OKR managers».
Team Leaders	Helps to work out alignment issues and establish a step-by-step goal-setting process for all levels.	If Team Leader is not receptive to new things, the whole team will push back on the OKRs.

2.9 Execute an OKR Cycle

Following what Doerr says in Measure What Matter, let's assume that you are setting OKRs at the company, team and employee levels. This is a simplification: larger companies can have additional levels. In the previous paragraphs, the OKR methodology and the steps that make up the method have been explored in depth. You now see the OKR cycle: the process of applying OKRs in practice.

Suppose that the quarter is the time horizon within which the process develops. Furthermore, let's assume that we must define the Company Objectives for the beginning of the year because the first half of the year must begin. The higher-level **annual Objectives** are the longer-term ones that drive the company's quarterly Objectives.

The company decides to set 1 to 3 **quarterly Company Objectives**, in addition to the **annual Company Objective** (to make the cycle complete and more realistic). These should be discussed with managers, team leaders and anyone else involved in leadership so that everyone agrees on the most important goals for the company.

These objectives should be discussed with managers, team leaders and anyone else involved in leadership so that everyone agrees on the most critical objectives for the company. This will also allow you to collect feedback on business objectives, helping to validate them from an executive and feasibility point of view. If a goal is found to be unreasonable or unachievable for the current quarter,

employee comments will be an indicator. To better clarify the concept of Quarterly Corporate Objective, here is an example, see Figure 8.



Figure 8: Example of aligning annual and quarterly Objectives

The OKR cycle will be structured as follows:

- ➤ 4-6 weeks before the start of Q1 → Brainstorm Annual and Q1 OKRs for the Company. Senior executives and top managers start generating ideas for company OKRs at a high level. Since they're planning OKRs for the first quarter, this is also a good time to lay out your annual plan, which will help set the company's direction for the year.
- ➤ <u>Two weeks before the Quarter</u> → Communicate Company-wide OKRs for the Upcoming Year and Q1 and decide OKR team. Complete the definition of company OKRs and share them with everyone.

At the team level, their team members consult each other to decide on important Objectives for the team, while team leaders should ensure that these goals are aligned with company Objectives. Writing team goals is an exercise in critical thinking and will involve a lot of discussions, so allow enough time.

Each team goal should have 3-5 key results to measure the success or failure of this goal. In the process of writing an OKR, writing the key results takes up most of the time. Examples of KRs, if we consider the situation in which an event is being organised, are: increasing ticket sales from 1,500 (last event) to 2,500; and getting a 4.5/5 rating from TripAdvisor. Before finalizing company and team OKRs, the last step is the feedback loop where you can add, delete, or modify objectives and key results.

Start of the Quarter → Communicate Team Q1 OKRs. Based on the company's OKRs, teams finalize their OKRs and share them at their convenience in meetings. At this point, it is

necessary to work out cross-functional dependencies, if any, with other teams and agree on the rational use of resources.

- ➤ <u>1 week after Start of Quarter</u> → Employees Share Q1 OKRs. A week after communicating team OKRs, team members shared their OKRs. This stage might involve negotiation between team members and their managers, usually in one-on-one meetings.
- ➤ <u>Throughout the Quarter</u>→ Employees Track Progress and Check-in. During the quarter, employees constantly monitor and communicate their progress, holding regular meetings with the team and their managers. During the quarter, participants regularly evaluate the likelihood of fully achieving their OKRs. If they seem unlikely to achieve those goals, you may need to make adjustments or recalibrate the OKRs.
 - Weekly check-in: teams should perform weekly alignment follow-ups to see how their goals (objectives) are progressing and why OKRs require an ongoing evaluation process. Furthermore, without regular monitoring, there is a risk that OKRs will be forgotten, frustrating the hard work put into defining them. In the continuous evaluation process, three types of meetings can help make progress:
 - Execution meetings: Also known as sprint planning meetings, these take place every two weeks. During these meetings, teams share major plans for the next two weeks and then discuss whether they have been achieved or whether there are obstacles that have prevented their completion. This process holds people accountable and creates an opportunity for other teams to express ideas or raise other discussion points.
 - 2) Update on OKR progress: in the second week (and every week thereafter), all teams should meet to share updates on OKRs. In these meetings, teams provide an accurate assessment of why things are progressing or encountering obstacles.
 - 3) Team OKR Check-Ins are held weekly and are short, 15–20-minute meetings where teams reflect on the progress of their OKRs and set new priorities for the following week. During this meeting, the progress of the weekly plans, the results obtained, and the lessons learned are discussed.
 - Once a month be sure to hold monthly OKR review team meetings to summarize lessons learned and tailor tactical approaches to the objective. The purpose of these meetings is to identify problems and brainstorm ways to solve them. Team managers should present these lessons learned during a company-wide monthly OKR review. A company-wide cross-functional OKR review is a great way to stay aligned and ensure better collaboration between teams.

➤ <u>Near the end of the Quarter</u> → Employees Reflect and Score Q1 OKRs. The entire company should review company objectives to see progress towards them at every level. Employees score their OKRs, perform a self-assessment, and reflect on what they have accomplished. It's a good idea to gather some input on this quarter's OKRs and ideas for the next quarter, contributors score their OKRs, do a self-assessment and reflect on what they have accomplished [Doerr, 2018]. The purpose of the company-wide quarterly OKR review is to examine everyone's progress from an overall perspective and gather important learnings to establish better OKRs for the following quarter.

The subsequent quarters are managed with the same cycle, as can be seen in **Figure 9**. Here we see it applied in a time frame of six months.



Figure 9: Typical OKR cycle over the months [Doerr, 2018]

A typical OKR cycle is shown in **Appendix 1** collected in a table and adequately commented with all the information necessary to be able to repeat it in specific companies.

2.9.1 The OKR Weekly Check-In of the Team.

In Radical Focus, Christina Wodtke argues that the regularity of meetings results in progress and achievement of the OKR. She elaborates here on the importance of carrying out weekly check-ins in teams. It is necessary to actively work towards OKRs, discuss them, check progress and plan which ideas the team could execute. In addition, OKRs require a continuous evaluation process. The best way to do this is through a weekly OKR check-in of the team [Wodke, Radical Focus,2016].

It is a good idea to prepare weekly team check-ins as follows:

- Review and be clear about the team's objectives.
- Update any progress made on the OKRs and whether they are satisfactory.
- See if there are any issues to be addressed.
- Note any additional insights and leave comments under the specific OKR to keep track.

 Table 4 shows good practices for weekly OKR check-ins of teams.





Finally, it is essential to maintain a consistent structure during weekly OKR check-ins so that participants can get used to the workflow and know what to expect. However, meeting agenda items may vary based on overall performance and the goals you need to focus on [Panchadsaram and Dunne, 2020 &. Prince, 2021].

2.9.2 Improve weekly status emails with OKRs.

A widely used tool in companies to communicate between employees, teams and managers is emails. In the book "Radical Focus," Christina Wodtke presents a simple model for powering your weekly update emails using OKRs:

- Use the OKRs of your team as a guide and communicate the degree of trust. Enumerate OKRs in e-mails to reinforce the purpose of actions. Provide an assessment of your confidence in achieving OKRs this quarter to facilitate monitoring of progress and course corrections if necessary.
- 2) Summarise priority tasks from the previous week and indicate whether they were completed. If any tasks remained incomplete, give a brief explanation of the reasons why.
- 3) List the top priorities for the coming week. Limit the list to three main priorities, which may include different steps and possible initiatives.
- 4) Indicate any risks or obstacles. State anything for which you may need assistance.
- 5) Add notes. Use this space to cover any topics not included in the previous categories [Wodke, Radical Focus, 2026].

2.10 OKRs Monitoring Systems

In this section, the focus is on the weekly and quarter-end monitoring and review of the OKR method. Indeed, without a strong monitoring and scoring strategy for objectives and key results (OKRs), it can be difficult to assess performance and make progress towards long-term goals. Christina Wodtke indicates that OKRs can be assessed three times in a quarter; that is, once a month during the team's monthly reviews. Or about two weeks before the end of the quarter. The choice is up to the company according to need, but in general, assessing the OKR score during the monthly review makes the OKR cycle work better. This gives teams time to understand what works and what does not and make the necessary improvements.

The three common systems for evaluating OKRS are:

1. Grading System: a quarterly scoring system used for larger organizations that grade Key Results of teams and individuals from 0.0 (failure) to 1.0 (success) with a target range of 0.6 to 0.7. A value below 0.6 suggests that the organization is performing below its capabilities, while a value above 0.7 indicates that the objective may not have been ambitious enough. Throughout the quarter, it's a good idea to present progress graphs and conduct regular check-ins to view progress, encourage communication, and establish accountability. At the end of

the quarter, the OKRs should be subject to a public evaluation and review. Employees give scores on a subjective basis [Wodke, Radical Focus, 2016]. Using this OKR Grading System, **the averages of the individual Key Results are used to evaluate the Objective** by applying the formula of OKR evaluation:

$$\tilde{x} = \frac{\sum_{i=1}^{n} x_i}{n}$$

where x and *n* represent the mean OKR score and the total number of Key results, respectively [Sowkasem, C., Kirawanich, P., 2021].

Progress in this scoring system is color-coded, as in Table 5 below.

 Table 5: The scale of Grading system

C).0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	0.10
Failure to make meaningful progress		Made failed	e progre I to com	ss but Iplete	N	lada pro compl	gress ai ete KR	nd			

To see this system applied let's take an example. Imagine there is a recruiter for a football team. An Objective for the quarter could be to recruit three new players.

The KRs are as follows:

- KR 1: Attend 25 games to scout out potential recruits.
- KR2: Approach 30 players throughout these games.
- KR3: Contact the agents of 10 potential recruits.

Table 6 applies the Grading System to the example [Prince, 2021].

Table 6: Example of Grading system

KRs grading	KRs	Scoring criteria
1.0	Approach 30 players throughout these games	The recruiter approached 30 players, it's a perfect 1.0
0.8	Attend 25 games to scout out potential recruits.	The recruiter only manages to go to 20 games, so 0.8, an admirable score.
0.6	Contact the agents of 10 potential recruits.	The recruiter was only able to connect with 6 agents, it's a 0.6, between yellow and green.

 Confidence Rating System: Indicates the level of confidence in achieving an OKR to assess whether Key Results are on track. Typically, an OKR is considered "achieved" when at least 70% progress is made.

Teams using this predictive system decide their confidence levels on a scale of 1 to 10, represented as a percentage. At the beginning of the quarter, the team sets the score representing the confidence level (which is usually set at 50%). During weekly check-ins, this score is reviewed to see whether confidence levels have increased (if everything is going well), stayed the same, or decreased (barriers have increased). While confidence levels may vary at the start of the quarter, they should ideally be agreed upon and set before the end of the first month.

It is a scoring system used for small and startup organizations that set difficult benchmarks with approximately 50% confidence in achieving. About two weeks before the end of the quarter, you should know whether the objective will be achieved by achieving at least two of the three key results. An OKR is considered at risk if, according to the confidence rating system, it is difficult to reach even 70% progress. It is important to note that scoring can be subjective as confidence levels are set by individuals [Doerr, 2018].

3. Result Rating System: the score is based on the value of key results allows you to easily measure the results of successful activities. The premise of this scoring method is non-binary. Record success and failure through the value provided by individual key results. This system provides clear and measurable KRs with a specific reference against which to take measurements, avoiding subjective interpretations. The Result Rating System tends to be used by companies with an open culture where feedback and reviews are discussed. To give an example, let's consider a company that has the Objective: *make its online store the easiest platform for buying its products.* The quantitative and measurable Key Result can be *a reduction of infrastructure costs from 10,000 to 3,000.* The scoring system focuses on the value that a key result can offer, in the example this is reduced to 5,700. The KR is on the right track [Wodke, Radical Focus, 2016].

To conclude, **OKR monitoring Systems** should be an indicator of areas for improvement to help work towards achieving objectives. When deciding how to track key results, clearly define the metrics and criteria you will use to evaluate OKRs. Many companies today use OKR software to ensure their OKRs are set, monitored and measured accurately.

2.11 OKR tools

There are many OKR tools, both very sophisticated software and simple tools such as:

- Whiteboard: where individuals can write down ideas about what their future goals will be.
- Sticky Notes: Help teams brainstorm good KRs.
- PowerPoint: to monitor confidence and activities towards objectives. PowerPoint presentations help the company's alignment process.
- Email: to communicate and inform the progress of OKRs.
- Excel: offers useful spreadsheets if you want to carry out a formal evaluation

Each company, based on its specific characteristics, chooses the tool and software to implement OKRs effectively.

2.12 Criticisms and Challenges

The critical aspects of the OKR framework are examined here, many of which were cited during the literature analysis and are reported in the book *Measure What Matters*.

- The goal is too or too little challenging. Achieving 100% of the Objective is not always a
 positive thing, as it may indicate that goals are too easy to achieve. Objectives should be
 ambitious, but not overly difficult, to push employees to do their best without feeling
 overwhelmed. If you set sufficiently ambitious goals, achieving 70-80% of them can already
 represent a notable success.
- 2) Set and forget your OKRs. It is essential to regularly update the progress of Key Results. OKRs should be discussed and reviewed every week. Creating a weekly ritual around OKRs, during which they are reviewed with the team, is essential to avoid discovering at the end of the quarter that you are off track.
- 3) Having too many objectives or key results. This can lead to a dispersion of priorities. For example, having too many team-level or personal OKRs can cause employees to overfocus on their work without considering long-term goals [Rompho, 2023]. Teams should limit themselves to a maximum of 3 objectives per quarter, with a maximum of 3-to 5 key results for each objective. This way, the amount of work will be much more manageable and less confusing.
- 4) Set non-measurable Key Results. Key Results (KRs) must be quantifiable. They are what allow the company to monitor your progress towards achieving its goal. KRs are not simply directions but represent how you define the success of the Objective. It is important to keep

in mind that Objectives represent ambitious goals, key results (Outcomes) measure the achievement of an objective and initiatives (Outputs) are the daily actions taken to achieve the objectives.

5) Workers do not have an overview. This problem emerges when team goals are not in tune with company goals or when individual weekly plans do not contribute to the achievement of team goals. Management should work with team leaders to explain the role each team plays in the overall context, and employees should understand how their activities contribute to the achievement of team and company goals. Establishing effective meetings during the creation of OKRs is crucial to ensure proper alignment.

To conclude, one of the biggest current critical issues is undoubtedly the gaps in the existing OKR implementation frameworks from both a practical and theoretical perspective [Herkenrath and others, 2023]. These make it difficult for companies to adopt the OKR method and the tendency is to abandon it after a few months.

2.13 Benefits of OKRs

OKRs make it possible to establish and communicate the most relevant objectives within the organisation in a structured, targeted and transparent manner. They are suitable for companies of all sizes, regardless of their starting situation. The main benefit of adopting OKRs is the creation of a cohesive company in which each team member knows their tasks and feels motivated to achieve them.

John Doerr has identified several benefits of OKRs:

- 1) **Real-time monitoring**: OKRs provide real-time information on activities and progress within teams and the company. They put goals at the centre of attention, improving visibility.
- 2) Focus on crucial goals: OKRs enable everyone to have a clear view of what needs to be achieved on a weekly and quarterly basis. This promotes focus on the ambitious goals of the company and the team, allowing each individual to plan their week with the big picture in mind, thus ensuring alignment.
- 3) Engagement and inspiration: by setting clear priorities and focusing on goals, OKRs engage and inspire employees. They improve productivity and push employees to take initiative in their roles.

- **4) Informed decisions**: OKRs facilitate evidence-based decision-making. By monitoring progress on team objectives, it is possible to intervene and take preventive action before problems arise.
- **5)** Alignment and organisation: OKRs promote consistency and alignment within the company. As initiatives are based on company and team goals, everyone's work is geared towards achieving the agreed results.

2.14 Conclusion

The analysis of the literature on the OKR methodology aims to provide the most complete picture possible of the theory, method, process of defining Objectives and Key results and their monitoring. The methodology analysed here will be subsequently applied to a specific Case Study to evaluate the effectiveness of its current management and propose implementations. Nowadays, despite the OKR framework gaining more and more popularity, academic literature on the topic remains scarce. For this reason, its practical application is becoming increasingly relevant for research.

3. Research Methodology

The thesis project follows the deductive methodology: from studying the theory of OKR methodology to the observation of a particular case.

It was decided to bring in a case study as it is a suitable empirical research approach for analysing the current OKR methodology. But also, because the aim is to contribute to research on the OKR topic by presenting a possible practical application of the methodology.

The case study examined in this thesis project is an Intesa Sanpaolo project, called Digital Sales, aimed at implementing the digitisation of insurance products.

The deductive methodology followed consists of four phases. In the first phase, the study and analysis of the academic publications on the OKR methodology took place. The analysis carried out on the literature gave an idea of the state of progress of the research.

In the second phase, the Case Study examined is presented, presenting the project and the methodology applied for its management.

In the third phase, the management of the Case study is analysed by applying the OKR theory that was studied in the first phase.

Finally, in the fourth phase, the study moves from the specific case to a generalization regarding large companies with complex business systems.

3.1 Literature Analysis

The purpose of the literature analysis is to provide the most complete picture possible of the methodology for OKR objectives.

A definition is provided, indicating how to correctly establish Objectives and Key Results and the hierarchical structure that the OKR framework has in companies. However, it was realized that the academic literature on the topic is scarce. Both the use of OKRs and a practical implementation method are poorly documented from a theoretical point of view.

It was carried out by examining articles, magazines, books and scientific publications on the topic.

The databases used are shown in the following Table 7, alongside the keywords entered for the search.

Database	Keywords
SCOPUS	"objectives and key results" AND "implementation" AND "methods"
WEB of SCIENCE	"objectives and key results" AND implementation AND methods AND framework
GOOGLE SCHOLAR	Scholar "objectives and key results" AND "implementation" AND "methods" AND "framework"

 Table 7: Database and Ky Words used for literature analysis

3.2 Presentation of the project and the methodology adopted

The Case Study is described in all its parts: how the product to be created is structured, the methodology applied and the management and division of roles. Emphasis is then placed on the monitoring systems and the critical issues present.

For completeness, it is appropriate to delve deeper into the area in which the Digital Sales project fits, which will be presented and analysed in the next chapter.

The topic in question is the digitisation that is affecting the insurance sector. Digital Sales is, in fact, a project that aims to implement a new digital sales process for the sale on Self channels of a smartphone protection insurance product.

The insurance sector is experiencing a radical transformation in the market. According to a research trend from the Italian Insurtech Association (IIA), the bancassurance market will reach a global value of 2 trillion euros by 2026, thanks to the numerous digital strategies adopted by banking institutions. By the end of 2023, it is estimated that around 50% of banks will use digital tools to sell insurance policies, and in Italy, by 2030, 90% of Italian banks will offer digital insurance.

The survey conducted by the IIA highlights that currently 80% of the banking target is digital, but the digital insurance offer is still limited; in 2022, only 20% of Italian banks distributed insurance products online, a number expected to grow. An expansion of the insurance market is therefore expected, with an expected increase in the number of products offered through the digital channel [Foti M., 2023].

To demonstrate this, you can look at the graph below: if globally in 2020 digital policies represented only 23% of the total (including insurance sold by companies that operate only online, phigital policies, i.e. policies sold both online and in person, and policies traditional proposals through digital

platforms), it is estimated that in 2030 they will reach 80%, with an average annual percentage growth of 22%. These data emerge from the survey on the Insurtech market and the penetration of digital policies by 2030, conducted by IIA, the association that brings together over 200 players in the Italian insurance sector, in collaboration with the Global Insurtech Alliance and involving 155 protagonists of the sector in seven European markets, including Italy, Spain, Germany, Austria, France, Holland and Poland.



Chart 2: Evolution of digital and analogue policies from 2020 to 2023 [Italian Insurtech Association research]

The factor that will contribute most of all to making the market grow faster by 2030 will be embedded insurance, i.e., insurance coverage offered as an additional service together with the purchase of a product or service (worth 730 billion dollars). The Intesa Sanpaolo project also fits into this category.

3. 3 Analysis of the Digital Sales Project

The analysis carried out on the Digital sales project is divided into two parts. Before continuing, it is important to specify that the evaluations of the aspects considered in the tables are **qualitative**, as they cannot use company data. Furthermore, the values assigned in each row of the two tables were established by me, considering my knowledge of the DS project analysed in light of OKR theory.

The first is an analysis of the Digital Sales project's compliance with the OKR methodology. The OKR theory presented in Chapter 2 is applied here to analyse project management.

The analysis was carried out using a table structured as follows:

• The first column lists the features of Digital Sales project management.

In the second column evaluate each aspect of the project, based on compliance with the OKR framework. The colours have these meanings:

- Green: Digital Sales project respects the OKR methodology.

Yellow: Digital Sales project PARTIALLY respects the OKR methodology.

Red: Digital Sales project does NOT respect the OKR methodology at all.

• The third column reports my observations on this classification.

In each row of the table, an aspect of the Digital Sales project has been analysed and the more this respected the OKR methodology the more positively it is evaluated, being aspects that have positively contributed to the success of the project. 14 aspects that characterized the management of the project were examined. The OKR methodology was used here on a practical level to analyse the management of the Digital Sales project. The results of this first analysis are then summarized in a pie chart. From here the analysis continues by examining the success factors and the aspects that did not prove effective in managing the project. Finally, the methodology applied by Intesa San Paolo on the project was assessed as adequate and feasible implementations were proposed for the aspects identified as "less efficient".

The second is an analysis of the level of correspondence between the typical aspects of the OKR method and the respective aspects applied to the Digital Sales project. Also, in this case, the analysis is carried out using a table structured as follows:

- The first column lists the characterizing aspects of OKR theory, described in the Literature Analysis (reported with the terminology used in Chapter 2).
- The second column presents the aspects of DS project management that are closest to the points of the OKR methodology listed in the first column. Each OKR principle is associated with the most compliant Digital Sales aspects.
- In the third column, the aspects of DS project management are evaluated on a numerical scale. The numerical scale goes from 0 to 5:
 - 0 = The DS aspect does not comply with the OKR methodology at all.
 - 5 = The DS aspect is fully compliant with the OKR methodology.

• The fourth column contains my observations on this classification.

In the table row, each practice of the OKR theory has been associated with one or more aspects of DS project management that are closest to the theory. The aspects are then evaluated on a scale of 1 to 5; the higher the rating of the DS aspect, the more it complies with the corresponding OKR practice. Eleven aspects of DS were assessed. The OKR methodology has been used here on a practical level to demonstrate that there is a low level of correspondence between the identified aspects of DS and the OKR methodology. The results of this second analysis are then summarized in a graph. From here, the barriers in DS that prevent the practical adoption of the OKR method in the project are evaluated, arriving at showing that it is not convenient for the Digital Sales project and for the ISP to apply the OKR methodology. This is because enormous actions must be implemented to overcome them, and it is not convenient to do so.

3.4 General case study

The study undertaken finally moves from the fish case to generalization: large companies are considered which, like Intesa Sanpaolo, have complex business systems. The reasons why the OKR method is not adopted in large companies are analysed here, dealing with the reasons in the following order.

- 1 First, a company that wants to implement the OKR method for the first time is examined. From the theory, the three possible implementation strategies are considered and analysed with the help of a table that highlights the risks and benefits for the company. It turns out, however, that none of the three strategies is feasible in practice.
- 2 Secondly, the company characteristics that favour the implementation of the OKR are reported.
- 3 Continuing, the benefits that are obtained by applying when the OKR methodology becomes part of the company culture are listed (highlighting a large gap between OKR theory and the practical reality where companies operate).
- 4 Finally, what are considered barriers to the adoption of the OKR methodology by large companies with complex business systems are explored in depth. A brief rationale is also provided as to why they are so classified.

The differences between OKR theory and the reality in which companies operate are large.

4. Project presentation and analysis of how the OKR framework is applied.

Digital Sales is a project that aims to implement a new digital sales process for the sale on Self channels of a new insurance product for smartphone protection. The policy in question will therefore only be saleable in Self⁷ from the **Internet Banking and ISP Mobile App channels** (sales from physical branches or digital branches are not considered). This project contributes to achieving one of Intesa Sanpaolo's ambitions in recent years, which is to position itself well compared to competitors such as Digital Player in the insurance context by increasingly creating digital offers. The methodology followed for Digital Sales is mainly Waterfall with the Discovery part (first phase of the project) and demos in Agile.

Subsequently, the chapter proceeds with a description of the project and delves into the applied methodology.

All the data reported here was collected during the internship I carried out at Intesa Sanpaolo.

The second part of the chapter aims to analyse typical aspects of the OKR methodology that were applied to the Digital Sales project.

4.1 Project presentation

In Intesa San Paolo, to start any project, there must be approval from the Business Owner (who "commissions" it), because in doing so he formally authorizes its existence and provides the Project Manager (PM) with the mandate to engage internal contributors and external suppliers to achieve the project objective.

Intesa Sanpaolo (ISP) is a company characterised by complex business systems, comprising numerous factories, suppliers and employees. *The Digital Sales: Device policy* project aims to create a digital insurance product that covers the risk of breakage due to accidental damage (for example screen breakage) of a **smartphone.** This insurance can be purchased on the ISP's "Zero Rate Partner Products" marketplace. It is a complex project with more than 50 development factories involved (branches, claims management functionalities, and numerous impacts on contributors). It involves

⁷ **Self-channels**: applications and sites that allow customers to independently carry out multiple activities, for example making bank transfers, consulting their accounts, etc. Intesa San Paolo's Self channels are Internet Banking and ISP Mobile App.

managing a sales Customer Journey (CJ)⁸ under different owners (merchants), this is because some CJs are managed by merchants external to the ISP, while others are managed internally.

The general context of the project (Objectives, needs, goals and deliverables) is summarized in **Table** 8.

Table 8: Project context



For a better understanding of the project, it is important to specify that the Device policy has two different distribution channels, as seen in **Figure 10**:



Figure 10: Distribution channels of the Device policy

⁸ Costumer Journey (CJ) refers to the purchasing experience that customers make on Intesa Sanpaolo's Self channels, which are Internet Banking and ISP Mobile app.

The project took shape because ISP Mobile apps currently sell no insurance product for devices and there is no product in the catalogue to cover smartphones sold by the Intesa Sanpaolo Marketplace from accidental damage.

Next, the main features of the product are as follows:

• **Reimbursement/repair of the smartphone** in the event of accidental damage, i.e., in the event of breakage or failure of the insured smartphone caused by an unforeseeable and unintentional event as a result of its use (e.g., falling to the ground with screen breakage or contact with liquids) or due to an external event (e.g., extreme environmental or weather conditions), such that its normal use is impaired.

• Annual cover, valid until the first claim, whether it covers partial damage (i.e., damage that does not completely impair the operation of the smartphone) or total damage (i.e. damage that prevents the device from functioning completely). The policy expires once the claim has been paid.

• Once the policy year has expired, there is no renewal.

In practice, the project aims to include within the sales and after-sales channels (both Apps and IB) new CJs that allow the purchase and consultation of policies. The customer can only buy these together with a smartphone on the dedicated Marketplace on the ISP Mobile App and IB. The same smartphone can be purchased in instalments (at zero interest) or by bank transfer to sign up and pay for the Device Policy.

4.1.1 Sales and after-sales process

It has already been mentioned in the previous paragraph that the purchasing process of the Device Policy is composed of two phases: the sales and post-sales phases. The first wants to offer the customer a simple experience (i.e., contextual purchase of the policy and smartphone with a simple electronic signature on the policy), without the addition of the policy to the CJ causing bottlenecks in the purchase of the smartphone. It is also a potentially reusable CJ for other products. Post-sales are limited to activities required by current legislation, which provides a period in which you have the right to withdraw (within 14 days from the date of purchase) or cancellation of the policy. The requirements in the two processes are well represented in **Table 9**.

For completeness, I add that visibility is guaranteed (without any operations) to Branch Managers on products purchased by the customer.

 Table 9: High-level sales and after-sales requirements



4.1.2 Device Policy Sales Process on Self-channels

The process of purchasing the smartphone and policy is well expressed in **Figure 11**. It is clear how the customer sales journey is managed by three different CJs, each with its own workflow. The **CJ Polizze** is the new one, which is being developed with the Digital Sales project.

You can see from the image that it has its workflow which will have to communicate in real-time with the workflow that currently serves the sales CJ of the Shopping basket managed by the merchant and the CJ Prestiti.



Remote technical assistance (e.g. Online Branch) will be available during the process

Figure 11: Device policy sales process on Self channels

4.1.3 Post-sales process on Self channels

As regards the post-sales process, the customer can independently carry out 3 post-sales activities (activity 1,2,4), as seen in **Table 10**.

Furthermore, the following after-sales activities are not foreseen:

- The insured property cannot be changed.
- Transfer of the asset does not imply the transfer of the policy: the change of policyholder and/or the return of the unused premium is not foreseen.

Table 10: After-sales process



4.2 Methodology applied and Digital Sales project management.

For the Digital Sales project, the **Waterfall methodology** was applied which involves the implementation of the project based on a sequential step model. Each step is dedicated to an activity and the steps follow one another temporally: analysis, design, development, test, and release.

Before the analysis there is the **'Project Startup'** phase includes the activities necessary for the startup of a project, i.e., the mapping and sharing of the main characteristics of the project: stakeholders, objectives, macro requirements, costs, constraints and risks. Furthermore, before starting each project it is advisable to establish the most appropriate sourcing strategy, an operation which consists of defining the method of choosing the external supplies necessary for the creation of the project's IT solution. It is therefore a question of deciding whether to choose the make or buy mode (custom solutions or market solutions).

The 'Planning and Monitoring' phase starts immediately after the start of the project and includes the activities for defining the scope of the project, the project management strategy, the temporal programming of the activities and in general the project governance activities. It is a phase that follows all the steps that make up the Waterfall methodology.

The activities of this phase take place throughout the entire life span of the project and concern the governance of the entire project, starting from the three main drivers: time, costs, and scope.

In Intesa Sanpaolo, it is usually the Project Manager (PM), who, starting from the objectives shared in the project start phase, defines the detailed planning of the activities relating to the project group or Project Team (PT). To this end, it liaises with the representatives of the construction sites identified during the estimate phase to verify the availability of people, agree on the timing of contributions, and define a shared work plan.

The PM also manages and plans the contributions of suppliers and all company structures necessary to achieve the project objectives (e.g., Security, Architecture, Infrastructure).

The consolidated project plan shared with all stakeholders therefore becomes the reference baseline for verifying the progress of activities during the monitoring phases of the project.

Returning to the case study examined, it is a Waterfall project with some peculiarities. This methodology offers a design model that allows the creation of products with stable requirements, initially defined in predictive mode and developed through a single release cycle. In Digital Sales, there are also Agile practices: the **discovery HUBs** and **two product Demos**. A Demo is a demonstration version of the Sales and After-Sales process. It was presented to the contributing factories and Business Owners (BO) before the UAT phase⁹. It is useful to understand if there are adjustments to be made and above all if the version developed so far complies with the project requirements.

Let's now analyse the Discovery HUBs that contributed to the definition of the high-level requirements. If the Waterfall methodology were strictly followed, it would only be the **Product Development office** that defines the macro-requirements of a project in its initial phase. The risk, however, is that they are often unrealistic and difficult to implement because it is difficult to pursue at an IT (Information Technology¹⁰) level which deals with programming.

⁹ **UAT (User Acceptance Testing):** the UAT phase is conducted at the end of the entire software testing process (software quality assurance) when the product is ready for delivery to the customer UAT is a formal test performed to find out whether a software system meets its acceptance criteria specifications and customer needs.

¹⁰ **Information Technology (IT)** deals with the creation and management of technological infrastructures the latter being servers cloud databases and the network.

Instead for Digital Sales, the macro-requirements (at a very high level) were determined and written in HUB "tables": to combine what the Product Development office wanted with what is feasible from an IT point of view. The HUBs were held during the start-up phase of the project, between November 2022 and the end of January 2023. The latter are Agile working tables that brought together all the souls involved in the Digital Sales project: Device Policy; first all: IT, Product Development office (or Business) and marketing. Therefore, in addition to Top Managers, Project Leaders, stakeholders and PMs; also, representatives of offices at a lower hierarchical level sat at these HUB tables. The latter would not have been involved if a "full" Waterfall methodology had been followed.

This led to interactions in the design phase that allowed the teams involved to develop ideas and solutions that made it possible to save a lot in terms of costs and establish respectable deadlines. The HUB tables were 2-3 weekly meetings aimed at developing the shared project macro-requirements. Therefore, applying this Agile tool brought benefits to the project.

From here we return to the Waterfall methodology and the **Business Requirement Books (BRB)** were then developed: which are detailed requirements. Each contributor or factory involved in the project must produce the parts for which it is responsible (e.g., the BRB describing the sales process is drawn up by the ISP Canali factory).



Figure 12: Digital Sales's masterplan and milestones

In **Figure 12** you can see all the phases of the applied methodologies and the milestones carried out for each of them. The explanation of the milestones can be found below.

4.2.1 Project constraints and milestones

The BRBs must take into account the macro-requirements decided in the HUBs and the constraints (features that must be part of the Device product), established by the project leader and the stakeholders forming the Steering Committee.

The project constraints established at a high level are:

- **Time constraints**: release of the product on the various channels (IB and App) no later than 2023. These deliverables are to be met. **The date is fixed**. If there were to be major delays, it would be essential to come out with a 'light' version of the product anyway.
- Economic constraints: budget already defined for the entire project time-frame, which is just under 3 million €. This is the budget available for the Device product. Based on the work to be carried out, the various offices and contributors ask to use the budget, providing detailed estimates in time (i.e., the scope of the actions to be undertaken and the cost of each). If the estimate provided is approved, the budget requested by the individual office is released to pay for the work. The budget release to allow work to start was carried out in mid-March to cover the prevailing factories and prevent them from working in derogation.
- Technological Constraints: CJ Sales must have a native Front-End (interface) on the App ISP Mobile channel to reduce waiting times in the transition between CJ Merchant-Polizze-Prestiti (performance constraint). In addition, the digital process of 'simple signature' and contract archiving must be in line with the current ISP security standards and levels (e.g., logging, regulation-compliant archiving).
- Organisational constraints: double governance as the PM of IT Divisione Insurance cannot manage Group Technology ¹¹factories, therefore, a GT PM (bank) was identified to manage the project on PNOW (stands for Project NOW, the tool used to manage project milestones and budget). This is a distortion, that of having two PMs, due precisely to how PNOW is structured and works. Ideally, IT governance should always be single, and the actual owner of the Digital Sales project is the IT Divisione. Unfortunately, however, IT Divisione colleagues do not have access to PNOW as a tool, so all Divisione bureaucratic activities have to be delegated to a GT contact person. This is because there are two separate IT departments:

¹¹ **Group Technology** (GT) is the technological chain of management and implementation of information processes, also includes IT.

IT Bank or GT and IT Divisione. The latter is not yet authorised to use all automated tools: the employees of the IT Divisione exchange data and information mainly by e-mail, which makes everything slow, and a lot of information is lost.

Instead, the Milestones to be respected are the following, also shown in the Gantt in **Figure 13** and that follow the Waterfall methodology:

- **Delivery of validated BRBs** respecting the established date: BRBs are more detailed requirements defined for each aspect of the project; there is a sales BRB, an after-sales BRB, a claims management BRB, a home insurance BRB, accessibility requirements, etc.
- Delivery of AFU (functional analyses). AFUs describe the basic functional requirements that users should experience. They must be delivered and validated by early May. Without the AFU we cannot start with IT developments, and this hurts meeting deadlines.
- **Delivery of ATE** (technical analysis). All the elements emerging from the 'Design' (or planning) step flow into the technical analysis document (ATE). It is the phase in which the requirements identified in the 'Analysis' phase are translated into an organic application and technical solution, evaluating the static and dynamic behaviour necessary for the design of the test cases.
- Start and end of System Tests¹².
- Start and end of UAT (acronym for User Acceptance Testing), is the final phase of the software development process. At this stage of the process, the final product is compiled and sent to a set of real software users and customers for feedback.

In pure Waterfall, being rigid, and passing the work from one team to another, the delay on one of these dates should rigidly move the plan accordingly (3 days of delay, causes 3 days on the entire supply chain). However, since there are final dates defined from the beginning by the releases of the year, it is easy for a short delay to be absorbed in the next phase. In general, these projects have contingency on the times which are very extended also to be able to manage any delays in the development or testing phase. However, it is important to remember that Intesa Sanpaolo's IT systems are linked to the rest of the systems of the entire bank, which is why the times cannot be extended and it is necessary **to stick to pre-established release dates** that are

¹² System Test is the test environment on the ntesa Sanpaolo software where the application is tested within its infrastructure.

the same for all which do not allow slippages of a few days, but the evaluation is made only in the event of delays that cause the obligation to postpone to the following month's release.



ISP App Release, Insurance App (December)

Figure 13: Digital Sales detailed Gantt¹³

4.2.2 Change Request

It was said before that the Waterfall methodology guarantees stable requirements developed in a single release cycle. In the pure and true Waterfall at the time of delivery of the requirements and mainly at the confirmation of the AFU what is defined is stable and should no longer be touched in terms of times and costs. Any possible **rework** (that may be necessary during the development of the project) or **new requirement due to feedback** must be managed with a parallel project which is the Change Request (CR) which could be reabsorbed in terms of time and costs, a new project is not being opened. For the sake of completeness, it is worth specifying that the feedback and observations

¹³ **POG**, rules of the aforementioned POG Delegated Regulation (present in the Gantt), concern not only the production phase, but also the verification of the conformity of the product once placed on the market.

on BRB and AFU come from the factories involved and from the Compliance and Legale Banca offices during the validation phase, i.e., before the final delivery of requirements and AFU.

Previously, we saw that one of the constraints of the project is that the budget is decided at the beginning of the year for the entire project. However, if you were to present a non-absorbable CR that requires a high level of extra budget, it should contact the Cost team to understand how to recover\manage the extra budget. Furthermore, there is a mid-year phase called Forecast, in which the budget is increased\ decreased based on the needs that emerge in the current year. If it is possible to obtain the extra budget, the CR is approved and developed (either as phase 2 of the project or within the timeframe of the same with only the extra budget to be able to put in place the following year. This happens because the requirements validated in the first phase are expected to be stable in any case and the new requirement in CR is not mandatory (otherwise it would have been in the first phase of requirements); if it were a mandatory requirement, one could proceed only with the extra budget. But it always depends on the size of the extra budget about the initial budget.

In Agile this type of situation should not be created, because at the beginning of the year, for example, you have several development hours available that cover the entire project duration. The requirements are counted to cover that number of development hours. If you have an extra, it means that either you have to increase the hours in the year or you have to continue with the team for the next period.

4.2.3 Project Organization chart and role of the PM IT Divisione

At the beginning of the chapter, it was said that Intesa Sanpaolo has complex business systems. To get an idea of this complexity, just look at **Figure 14**. The organisation of the Digital Sales project is articulated: there are many contributing factories involved and each of them is called to do the part of their competence for the realization of the project, e.g., in the drafting of the various BRBs, AFUs and their validation. It is important to emphasise that the project mainly follows a Waterfall methodology, but factories internally can adopt the method they prefer. It may be that some factories have self-organised with agile methodologies.

Two other risks related to what has been described so far are the following:

 High planning complexity due to a high number of contributors: high impact on the application chain Insurance Division and GT (about 50 contributing factories) requires very careful project governance to check the achievement of milestones and adherence to plans. High implementation complexity: since there is a high implementation complexity due to the number of impacted contributors and channels, very careful project governance is required to verify the achievement of milestones and compliance with plans.

However, there is an important **organisational constraint**, explained first: project governance is shared between the IT Insurance Divisione and GT. Dual project management between **PM IT Insurance Divisione** and **PM GT** requires very careful project governance with the prior definition of roles and responsibilities because, if this attention is lacking, it is very easy to run into problems and delays.



Figure 14: Digital Sales Organization chart

The figure of the PM of IT Divisione is now analysed. The **PM IT Divisione** plays a very responsible role. To keep track of items to be achieved at a high level, he uses an Excel spreadsheet that he shares on Teams with a small group of the PM team.

He then uses the Tasks function of Teams (see **Figure 15**) to track the deadlines of the various contributors, the various open points, what to prioritise and the owners dealing with them.

For the advancement of milestones, until July, weekly SALs (in Italian Stato Avanzamento Lavori) and **offline alignments via e-mail** organised with the various contributors were sufficient. For clarity, SALs are meetings that take place on the Teams platform.

From July onwards, with System Tests and UATs, there were daily SALs to monitor the progress of the tests: here, as KPIs, the expected versus the actual progress was looked at.

Finally, the PM of the IT Divisione maintains a change request register and tracks on the ISSUE LOG¹⁴ all critical issues to be handled. Also on the ISSUE LOG, he keeps track of all changes requested by users concerning the initial perimeter and keeps a risk register (where the highest priority risks are recorded).

Of course, the PM of the IT Division must also keep a direct line with the Business Owners of the Company and the Bank by participating in the various SALs organised by the users.



Figure 15: Tasks function of Teams

¹⁴ ISSUE LOG: it can be a local file or be managed by some tool, but it is a list of project risks and problems that are gradually outlined and addressed. It is used to outline what needs to be carried forward and concluded.

4.2.4 The Role of PMO

The role of the PMO (Project Management Office) in the Digital Sales project is covered both internally by an office called PMO & Coordination and by McKinsey as external consultants. In particular, McKinsey has started consultancy activities directly upon engagement of the Project leader and, at other levels, upon direct engagement of the CEO and the board of directors. McKinsey is a strategic consultancy company; it was brought on board because it helps to concentrate efforts on the business plan, which wants to move towards ever-greater digitalisation. McKinsey carried out an accurate market analysis, performed benchmarks and it was the latter that proposed the Device Product. However, it does not provide support during the System test phase.

In its PMO role, McKinsey has a strong focus on deliverables and due dates.

4.2.5 Meeting and communication between contributors.

The communication of the Digital Sales project is structured as follows:

- Steering Committee meeting: involves all project leaders and usually takes place once a month. on these occasions, the managers of the various contributing factories and suppliers present the project and the current state of the art.

- **Project SAL**: where the status is discussed (e.g., where we are with the BRB delivery), the next steps and we make sure we are in line with the timing. These are meetings held on Teams to share the status of the project, to allow effective management of communication and the progress of project work. The Project Managers (which are two here: the PM of IT Divisione and the PM of GT), organize periodic meetings to share with all the stakeholders involved (for example, the representatives of the factories involved or the supporting structures), the progress of the works and an overall vision of the status of the project, in deadline, costs and scope of the project. The planning of meetings must have a schedule consistent with the activities and times of the project. for the Digital Sales project, the deadline was fortnightly.

PMs and Project Team (PT) are regular participants in the meeting. It is the PM's responsibility to involve additional stakeholders based on the time frame of the project and any existing issues or change requests.

In addition to sharing information, the meeting has the objective of defining or consolidating subsequent activities and identifying, where necessary, corrective actions. In fact, if problems arise, they are reported and the factory competent to manage them is identified. All the actors involved are

therefore aligned. In anticipation of the SAL meeting, the PM collects updates relating to activities, issues, risks and tests which will contribute to the completion of the SAL Document used to support the meeting.

- **SAL IT**: takes place every week and is an alignment meeting that looks at the progress of the works for BRB delivery, collection of estimates from the various bank and company factories, AFU delivery and Change Request management.

- **Team progress SAL**: each team generally does weekly check-ins where they update each other on individual tasks and the work to be done during the week.

All these meetings in Intesa San Paolo take place on the Teams platform. However, as regards the exchange of information and offline alignment between employees, great use is made of **emails**. To communicate effectively, it is essential to know how to write clear emails and concise and understandable meeting recaps.
4.2.6 High level risks on the Device project

During the '**Project Startup**' phase, the parties involved (for example, IT and Business) evaluate whether the project initiative falls within the scope of the risk analysis and, if so, carry out a preliminary assessment of the potential risks. The risk assessment table carried out by the parties involved is shown below.

Table 11: High level risks

Descri	Risk Level*	
	Complexity	HIGH
TECHNICAL FACTORS	Technology	LOW
	Suppliers	MEDIUM
EXTERNAL FACTORS	Regulations	LOW
	Market	MEDIUM
	Budget	MEDIUM
ORGANIZATIONAL	Dependencies	LOW
FACTORS	Requirements and Priorities	MEDIUM
	Resources	MEDIUM
	Budget Estimates	MEDIUM
PROJECT MANAGEMENT	Planning	LOW
	Communication	MEDIUM

* Indicate one of the following values for each Factor: HIGH MEDIUM LOW N/A

To create **Table 12**, stakeholders answered the questions listed below, for several risk factors. Only after answering the questions were, you able to understand the extent of the risk and how to classify it (high, medium, low).

Table 12:	Questions	to	analyse	risk	factors
					/

Risk Level		Guiding questions for the macro-assessment of the Risk Level				
TECHNICAL	Complexity	 How complex and numerous are the interfaces to be created? Are there particularly stringent requirements on the quality of the software that must be produced How complex is the product/service to be created? Are the volumes of data to be processed, the concurrent and total users, and the expected performances clear? Are there any constraints or special needs for the release strategy? 				
FACTORS	Technology	 Does the chosen technological platform comply with architectural standards? Is it already present in the company or completely new? Is it custom or is it a market package? Will any particularly innovative technology be used? Does the chosen technology have all the features and functions necessary to meet the requirements? 				
	Suppliers	 Are the quality and cost of the chosen suppliers adequate to achieve the project objectives? Have they already been used for projects of similar complexity? Are they monopolists/oligopolists in their market segment? 				
EXTERNAL FACTORS	Regulations	 Are the design requirements linked to regulations? If so, how stable are they in terms of content and release times? Is the regulatory model to which we must adapt completely different from the one adopted so 				
	Market	 Are market influences or changes in market conditions expected during the project? (e.g. uncertainty of success of the product/service (if new), or if other competitors can create the product/service before us) 				
	Budget	Is the budget contingency adequate?				
	Dependencies	Does the project depend on other projects, or do other projects depend on this one?				
	Requirements and Priorities	 What is the level of completeness and stability of the requirements? Is the priority of the project clear compared to others that impact the same application areas or the same resources? 				
FACTORS	Resources	 Is the project team properly staffed? Are the resources adequately skilled? Is the capacity contingency adequate? Are non-standard resources (logistics, hardware) required to conduct the project? 				
	Estimates	How reliable and complete are the estimates made?				
PROJECT	Planning	Is the timing contingency adequate?Are there any fixed dates?				
MANAGEMENI	Communication	 Are communication difficulties with stakeholders expected? And between them? Are changes expected to the organizational structure of the stakeholders? 				

Taking the **technical factor** as an example, the complexity risk level was classified as high as the interfaces to be created for the Apps and IB are numerous, secondly, with this project the concept of "simple signature" is introduced for the first time: the customer makes a single simple electronic signature on the policy. Sales CJ with "simple signature" has no best practices to refer to on projects with comparable complexity and will therefore be reusable for other products. As far as technology is concerned, the level of risk is low because CJs are inserted into already existing platforms.

Regarding Project Management it can be said that:

1. The **estimates** that the factories must provide are not always reliable because they sometimes undergo variations (both over and under); furthermore, there are many contributing factories that have to be expensed. For these reasons the risk level is medium.

- 2. For planning, the risk is low because the time contingency is adequate and the binding dates are few (release, BRB validation by March 2023, delivery of the AFU).
- 3. **Communication** has a medium risk level because there are many actors involved and this makes communication between the parties complex, even with the stakeholders.

4.2.7 Flexibility of Digital Sales project objectives

This paragraph analyses the flexibility of the three main objectives of the Digital Sales project, which are: times, costs and scope/perimeter.



FLEXIBILITY OF OBJECTIVES

Timing	0	Scale from 0 to 5 :
Costs/budget	0	0 = target set (constraint)
Perimeter	2	5 = objective not yet determined

From **Table 13**, the **project timetable** and **costs** are established and to be regarded as constraints that must be adhered to. It means that the established project Gantt must be adhered to, the delivery of the requirements, the AFU, the start of the System Tests, the start of the UATs and the releases in November and December.

As far as costs are concerned, it has been known since the beginning of the year that the already defined budget for the entire project is just under €3 million. The cost of Digital Sales must not touch this threshold. For problems or Change Requests involving extra budgets, there are two ways forward:

- Either the amount needed is small and can be reabsorbed into the project budget (since you have a bit of contingency) or you can recover it from Digital Sales contributing factories that did not use all the budget they had budgeted for their work (it happened that some factories spent less than they had budgeted). In this case, the CR is approved and developed either as phase 2 of the project or on time with the extra budget only.
- If the amount to carry out the CR is large and the cost cannot be covered, the CR is not confirmed and the new requirement awaits, probably the Capital Budget to be put in place the

following year. This is the case if the change to be implemented is not considered mandatory to achieve the project objectives, which is the case in most cases.

If it turned out to be a mandatory requirement, it would have been a mistake in the initial Planning and Analysis phase of the project not to include it in the BRB and spend it. In the latter case, of course, one could only proceed with the extra budget.

In both cases, especially if the CRs are numerous, you end up spending more than the budgeted budget. It must be borne in mind that CRs are parallel projects due to possible rework, which becomes necessary during the project development phases, or new requirements due to feedback and observations on BRBs and AFUs during the validation phase, before their final delivery.

Finally, the perimeter is the scope within which the project fits. It was put 2 as a value in the table because, although it is well defined, it remains a wide perimeter that includes both Bank and Divisione and because it is part of a high-level objective for ISP: the development of new digital insurance business on Intesa Sanpaolo Self-channels.

4.2.8 Monitoring systems

During the implementation of the Digital Sales project, monitoring was carried out daily, the systems used are summarized in the list:

- Comparison between the progress of the expected compared to the actual one: how well the planning and the detailed Gantt are respected. If the delivery dates of the final BRBs, AFUs etc., decided at an initial stage, are not respected a **delay status** is reported. It is a wakeup call for the correct development of the project given that, as was explained in the *Project constraints and milestones* paragraph, Intesa Sanpaolo's information systems are connected to the rest of the systems of the entire bank, for this reason the times cannot be dilated, and it is necessary to stick to pre-established release dates that are the same for everyone. A delay in delivery, if not resorbable could have consequences not only on the project but also on many contributing factories.
- Monitoring of McKinsey consultants (acting as PMOs) who control project deadlines.
- The economic constraint: one knows from the outset what the available budget is and this ensures that spending is monitored; care must be taken not to exceed the threshold but also not to spend too little (this can be an indication of poor product quality).

- Feedback and comments are made by the stakeholders on the high-level requirements, BRBs and AFUs before final delivery. This validation step monitors the work done by the contributors.
- The amount of **budget released to pay** the various factories indicates the status of the spending and the level of progress.
- Recaps sent by e-mail and SALs on Teams help to align the parties involved and make everyone aware of the progress of the project.
- The presence of technological constraints guiding the drafting of requirements. These constraints are the digital process of "simple signature" and archiving of the contract that must be in line with the security standards and levels currently provided in ISP; having a native CJ Sales front-end on the ISP Mobile App channel to reduce the waiting time in the transition between CJ Merchant- Policies Prestiti (performance constraint).
- Incident and problem resolution time: if problems are encountered with tools and software used daily by teams to work on Digital Sales, a ticket to the Intesa Sanpaolo Help Desk is opened.
- The use of PNOW (stands for Project Now), a project life management portal used by ISP. It allows the management of Capital Budget estimates arriving from contributors, requirements, capacity (production over time), tasks of the various offices and the detailed Gantt. Over the months, as there is progress in the areas listed above, this is immediately reported on PNOW. It is therefore a software that aids proper project management.
- The number and management of defects that are found and resolved during the System Test.
- The development and presentation to users and customers of two **Demos of the product**: they allowed observations and feedback to be gathered to improve the product before the final release.

They are monitoring methods that follow employees throughout the project lifecycle and help the project governance (the two PMs) verify the achievement of milestones and adherence to plans. They are also very useful because they foster communication between the offices involved and good alignment.

4.2.9 Comparing methodologies: Agile and Waterfall

Two project management modes have been formalised in Intesa Sanpaolo: **Agile** and **Waterfall**. For the Agile mode, the ISP has defined a specific model tailored to its context and called **Agile ISP Way**. The model envisages a 'Full Agile' option in which all developments are realised in an iterative and incremental logic with self-consistent and frequent releases and with an internal structuring in small self-organised teams, or an Agile option with Waterfall stream in which the most significant developments are realised in 'Agile' but there are contributions managed with a waterfall methodology that may eventually adopt agile practices (design thinking, retrospective, etc.); in the Agile option with Waterfall stream the overall plan is always guided by the agile component. To summarise, we could say that the key to Agile is that to meet articulated needs promptly and to produce better, innovative, and up-to-date products, it is necessary to create small, self-organised teams with all the necessary skills; just imagine the same table, whether physical or virtual, around which everyone works together works together iteratively and incrementally. A joint team between those who have the business vision of the product and those who can realise it, a team that interacts with decision-making delegation, transparency and trust, without barriers, with a common language and capable of adapting.

Agile seems to be very effective in projects related to digital transformation, where greater flexibility is necessary given the increasingly volatile environment. Increasingly, professional archetypes will be based on work by objectives, delegation, and self-organisation; the 'agile' methodology is strongly correlated with the spread of collaboration tools, which are indispensable for fostering the generation of ideas in so-called agile rooms, whether in presence or virtual. These concepts are also very much in line with the OKR methodology.

The bank, in recent years, has been increasingly pushing the dissemination of the mindset and principles of the 'agile' methodology, which contributes and will contribute to a new way of working, in synergy with many other initiatives already underway.

Regarding **Waterfall**, the portfolio of methodologies includes, in addition to the adoption of the traditional pure predictive methodology, the possibility of directing the execution of certain project deliverables using agile practices. These methodologies are defined in relation to project initiatives or streams. On the other hand, broader project streams comprising several components may adopt a fully Waterfall or fully Agile methodology, or be mixed, that is, with project initiatives adopting different methodologies.

4.2.10 Why Waterfall and not Agile in Digital Sales

For Digital Sales, the Product Development office (or Business) did not like the agile approach very much because it has high costs, especially in terms of the capacity of the business itself on the requirements drafting tables. In this case, the Organization prefers Waterfall plans for this reason and to have less impact on the BO.

It is important to remember that the factories involved internally can work with different methodologies: it may be that some factories have self-organized with agile methodologies. Certainly, for this project with the Business, the HUB tables were held with IT and other actors on board in the requirements drafting phase and the Demos presented to the BOs are examples of Agile practice, applied to a project that is not agile. The Demos helped to understand if the available times are respected and respectable, so as not to miss releases.

The Agile methodology would have brought benefits to the product, but it is true that to apply it effectively the people in the teams must be competent, quick in making decisions and responsible. Added to this is the difficulty that the users involved are numerous and different from each other: applying agile in a complex organization such as that of the project can be complex. On the other hand, the Waterfall (with the use of Agile practices) was done well: the IT analyses were not carried out only after the delivery of the requirements, but many interactions during the design phase which allowed us to bring out ideas and solutions to problems, also saving time.

4.3 Critical issues

To conclude this section of the description of the Digital Sales project and the methodology that has been applied, in the presentation that has been made so far, some critical points have emerged on how the project has been carried out to date. Critical issues that I have personally identified having followed the process during my internship at Intesa Sanpaolo. They are listed below:

- Involvement of external merchants for activities that involve current flows with the Bank (for example smartphone delivery date): it is important to be able to communicate with merchants in good time. The Gantt of the activities was provided to them to ensure their commitment on the evolutions required concerning the project milestones (for example for the IT development and system test part). Communication with them was not always easy.
- 2. Excessive parallelism in the planning of the initial phase led to some delays: to mitigate the risk, preliminary sharing of requirements in HUB mode and draft delivery of the priority BRBs was requested by February 2023.

- 3. Shared project governance between IT Insurance Division and GT: the dual management of the project between PM IT Insurance Division and PM GT adds complexity, requiring very careful project governance with a preliminary definition of roles and responsibilities to avoid the risk of overlapping roles and carrying out two activities times.
- 4. High planning complexity due to a high number of contributions: high impact on the application chain Insurance and GT Division (around 50 contributing factories) requires very careful project governance to verify the achievement of milestones and compliance with plans. Various Teams tools were used to track milestones, such as shared folders and the Task function of Teams. PowerPoint presentations are also very useful for this purpose.
- 5. **High implementation complexity**: since there is a high implementation complexity due to the number of contributors and channels impacted, very careful project management is required to verify the achievement of milestones and compliance with plans. Hence the need to carry out frequent SALs using PowerPoint presentations as support.
- 6. Any **instability of requirements** linked to numerous user and validator structures could lead to many Change Requests. Since the budget was decided at the beginning of the year based on the known requirements, the latter should be stable because changing during the course involves the request for an extra budget to cover the CRs. To reduce them to a minimum, we should try to anticipate requests as much as possible with periodic SALs, carefully evaluate their contents and prioritize them (some can be carried out subsequently with a separate project).

The relevant CRs were the request for the English translation of Front-end texts in ISP Mobile apps and the modification of the interfaces to comply with accessibility regulations.

7. Dependencies on other projects relevant to the Bank (e.g., Isybank, ISS): constantly verify the alignment between the plans of the various construction sites and the dependent projects. For example, System environments serve multiple projects simultaneously. To avoid overlap, priority is given to flagship projects for the bank, such as Isybank. This can lead to further delays due to waiting for the System Test environment to free up.

In summary, given how the project is currently structured, the major critical issues are:

• Certainly, the **accumulation of delays on project planning** risks causing the various deadlines to be postponed with possible impacts on the budget and the releases of the final product on IB and App which absolutely cannot be missed. A contingency has been foreseen in the planning phase: the final releases will probably be respected but there could be impacts on the budget as well as delays in the deliverables of the intermediate milestones (as happened with the AFU)

• The **presence of Change Requests** following the requirements validation phase which may lead to the request for extra budget, not foreseen by the budget established and set at the beginning of the project.

The Digital Sales project was presented, together with the methodology followed, to give a complete picture first of the project and then of its management, trying to convey the organizational complexity behind it. Taking into consideration the critical issues reported here, in the second part of chapter 3, the typical aspects of the OKR methodology present in the Digital Sales project are analysed.

4.4 Analysis of the Digital Sales case study

It is known, from the analysis of the literature, that OKR is a management methodology based on objectives that is applied at a company level. This does **not** happen in Intesa Sanpaolo and the methodology is not even applied in the management of the Digital Sales (DS) project. The latter, however, presents aspects specific to OKRs and others that recall them. The OKR theory presented in Chapter 2 is now applied to analyse DS project management, via two tables.

It is important to specify that the evaluations of the aspects considered in the tables are **qualitative**, as company data cannot be used. Furthermore, the values assigned in each row of the two tables were established by me, in the light of my knowledge of the DS project analysed in the light of OKR theory.

4.4.1 Analysis of Digital Sales project compliance with OKR methodology

The case study is now analysed using the **Table 14** below. To complete the table, the OKR methodology and method were applied, together with the information on DS reported in the first part of the chapter and my knowledge of the topic (acquired during the internship in ISP).

The first column lists the features of Digital Sales project management. In the second column, each aspect of the project is evaluated, based on compliance with the OKR framework. The colours have these meanings:

Green: Digital Sales project respects the OKR methodology.

Yellow: Digital Sales project PARTIALLY respects the OKR methodology.

Red: Digital Sales project does NOT respect the OKR methodology at all.

Finally, my observations on this classification are provided in the last column.

Digital Sales Project management	OKR methodology is respected	Comments	
1. Project time frame: one year	\bigcirc	Appropriate time frame for an OKR cycle, to establish ISP objective and annual plan that will guide the company's management in the following months.	
2. Project Objective	\bigcirc	Digital Sales' goal, established at a high level, guided the direction and management of the project. The goal is shared with all teams involved in the project.	
3. Waterfall Methodology		OKR system fully embraces the Agile philosophy. On the contrary, the Waterfall methodology provides for sequential and rigid management of the project phases.	
4. TOP-DOWN approach	\bigcirc	There is no involvement of the teams and contributors : objective, costs, constraints and work to be done are decided by the Steering Committee and the PMs; then communicated in a hierarchical manner to the lower levels. The OKR approach is bidirectional (TOP-DOWN and BOTTOM-UP).	
5.Discovery HUBs		The Discovery HUB is an Agile practice. They are working tables where, for Digital Sales, the macro-requirements (high level which comes immediately after establishing the Objective of the project) have been determined and written. Top managers and representatives of the offices involved took part. It is a typical OKR aspect and example of a two-way approach.	
6. DEMOS		The presentation of a Demo is an Agile practice of interactive and bidirectional release: it is shown to users and customers who share any feedback and observations. In light of the feedback, changes were made to the CJs (which were either minimal or treated as CRs). In DS there were two of them and they are a sort of MVP, prototypes of the CJs developed.	
7. Steering Commitee & SAL		The OKR method is respected, as teams track progress and communicate on Teams with the following frequency: once a month with Steering Committee meetings; once/twice a week (based on needs) with Project SAL, SAL IT and team progress SAL.	
8. Email	\bigcirc	Emails are widely used by employees for exchanging information, presentations and offline alignment; but above all to send meeting recaps. Outlook, a Microsoft Office program, is used. Emails are, however, often unclear and not very effective in expressing concepts.	

Table 14: Assessment of how and to how much the DS project respects the OKR methodology

9.BRB & AFU		They are Requirements and Functional Analyzes which, once validated, are stable. The feedback collection process occurs only in the validation phase, once it is confirmed by the various validating bodies, it can no longer be modified. Each contributing factory draws up the documents for which it is responsible. This goes against the OKR methodology, which is flexible because it provides for reviews and changes over time of objectives and actions carried out to achieve them.
10. Change Request		There are requests to change parts of requirements in light of feedback and rework. The more a requirement satisfies a user, the less CRs will be needed, and since DS is managed in Waterfall it would be the ideal situation. Requesting and having a CR approved is a long and cumbersome process and does not respect the OKR framework; where making on-the-fly changes to objectives, key results and activities is more immediate if these are no longer deemed suitable.
11. PMO		McKinsey PMO for DS has a strong focus on deliverables and deadlines, to be achieved 100%. Opposite approach to that of OKR, which instead focuses on measuring the importance of what is being done and which can be adapted, if necessary. An objective is considered completed if the completion percentage is 70-75%.
12. Planning (Gantt)		Product release dates on IB and App must be met, this has priority. But all the deliverables indicated in the detailed Gantt must also be respected as much as possible. It is a very rigid planning that must take into account dependencies with other projects and sequential phases of the project (for System Test environments). The OKR philosophy has an opposite approach because, if the objective set is challenging, it is considered completed and reaches a percentage of 70% or more.
13.Economic constraint		Budget already defined for the entire time span of the project: it should neither be exceeded nor kept too below. This ensures spending monitoring. The agile methodology (and OKR) requires the budget to be used from time to time as the project continues. It is not stable at the beginning.
14. Monitoring systems	\bigcirc	For DS there are multiple monitoring systems and they are used daily to check the progress. Each team can use different monitoring systems, such as budget; but not everyone has access to the same tools (PNOW cannot be used by Divisione, for example). DS partly respects the OKR methodology because, although monitoring is constant, the team's "self- evaluation" part is missing: each team evaluates the Objectives and Key Results it has chosen. It helps to understand if you are working well.

I would like to point out that the **technological and organizational constraints** of the Digital Sales project have not been analysed in **Table 14** because the first is a very precise constraint of the specific project examined, and this is why it is difficult to study it by applying the OKR methodology. The second is due to a reorganization of Intesa Sanpaolo after the arrival of the Insurance Divisione, which separated IT into IT Banca (or GT) and IT Divisione. This also led to two separate budgets and a division of responsibility. This is to say that, if governance is divided into two and there is this organizational constraint, it is due to the internal issue within the bank just described.

Below is an in-depth analysis of some rows of the Table 14:

- 1. **Digital Sales' project objective** is the "development of the new digital insurance business on Intesa Sanpaolo self-channels". The latter is part of the broader company Vision which aims to achieve the digitalisation of the insurance sector. A Business Objective, citing the literature review, *"represents a high-level area of improvement to which different teams can contribute through their daily work and long-term projects"*. The ISP Project objective is decided by top managers at high levels and communicated to all parties involved. It is a very important alignment that is also foreseen by the OKR methodology.
- 2. The **Waterfall methodology** applied for Digital Sales, by definition, involves very sequential management of the project. The start of a step depends on the output of the previous one: the more dependencies there are, the greater the coordination effort required. For example, if the AFU (Analysis phase) are not delivered and validated on time, the IT developments (Development phase) cannot be started. For Digital Sales there are also dependencies with other existing projects. Parallelisms of releases and phases are present, for example in the planning phase, but are reported as critical issues as the pure Waterfall methodology does not provide them.
- 3. The objective of the project, the costs, the constraints, the risks, understanding which factories to hire and for which tasks: all this is decided by those who make up the steering committee and the two PMs (from the IT and GT). Everything is subsequently communicated hierarchically to the lower levels. In doing so, employees and teams are not involved in deciding objectives but must understand how to achieve the requirements decided by Top Managers on time and respect established deadlines and budgets. By doing so, people are not given the responsibility to make decisions. This does not respect the OKR methodology, which sees the BOTTOM-UP approach as predominant. Teams and individuals, in defining OKRs, consult with managers who establish only the company-wide objective (TOP-DOWN aspect), designed for the long term (one year). It is therefore a two-way process. In the table

the point partially respects the OKR framework because, despite the reasons indicated above, there are Agile aspects (such as HUBs and Demos) that also have a BOTTOM-UP approach. This also presupposes good communication between the different hierarchical levels of the teams involved in the project.

4. **Discovery HUBs** contributed to the definition of high-level requirements and, from a hierarchical point of view, are located immediately below the Project objective. After the HUBs, the annual plan is defined which will guide the direction of the project in the following months.

They are Agile working groups where, in the initial phase of the project, what the Product Development office wanted was combined with what is feasible from an IT point of view. Therefore, all the parties involved (Steering Committee and office managers who would not have been involved in "full" Waterfall) were brought together in the Digital Sales: Device Policy project; first: IT, Product Development (or Business) and marketing office. It is marked in green because it respects the OKR methodology: employees have brought ideas and innovations to the HUB tables; and it is an efficient way to align all departments of the decisions made.

- 5. A **Demo** is a demonstration version of the Sales and Post-Sales process. It was presented to participating factories and entrepreneurs (BOs) before the UAT phase. It is useful to understand if there are adjustments to be made and above all if the version developed so far complies with the project requirements. In DS the changes made were minimal or were treated as Change Requests, then reabsorbed into the project budget. The two Demos were presented on June 15 and June 29, 2023. They well reflect the team-level objective definition of the OKR methodology. It is also an indication of transparency in project management and good alignment between the parties.
- 6. The regularity of meetings translates into progress, achievement of objectives and completion of the various project phases. During SALs it is important to check progress and plan the team's tasks for the week. Furthermore, if problems arise you understand how to deal with them. ISP maintains a consistent structure during weekly check-ins so participants can get used to the workflow and know what to expect. However, meeting agenda items may vary based on overall performance, objectives or issues that need to be focused on.
- 7. The OKR methodology indicates **emails** as a tool to be used in companies to communicate between employees, teams and managers. The table indicates that they partially respect the OKR methodology because they are often not very effective. Each employee receives a large volume, an average of around 150 per day, of emails every day and it is complex to read them

all in good time as well as the risk of losing information and data that are important for the project. Not to mention that the concepts are often written in an unclear and verbose way. As they are used now, they risk being time-consuming. A possible implementation is proposed below.

- 11. Having **two PMOs**, an internal office and McKinsey consultants is not an added value for the budget.
- 12. The detailed Gantt shows all milestones and their respective deliverables. Over the months, however, there was a delay in the validation phase of the AFU of ISP Mobile. The latter described the functional requirements that the customer had to find in the sales CJ in the ISP Mobile app. Although the AFU document was already there and only the validation was missing (which takes place after the collection of feedback and the possible modification of parts of the AFU), the validation remains an important step before starting the System Test. It was scheduled to be delivered on 28 April. Validation took place on 13 June, 44 days late. In order not to risk delaying the development of Systems, UATs and, even more serious, releases, IT developments started on the non-validated version. In addition, for ISP Mobile, developments started as late as possible, giving priority to other IT developments (e.g., App Assicurazioni development). This limited the damage of the delay. The incident makes it clear that the PMs and BOs are willing to go to any lengths to meet the two key releases of the project: the 17 November release of the Device product on Internet Banking and in December release, on the app stores, of the product on ISP Mobile and Insurance App for the after-sales part.

Considering the analysis carried out, it can be stated that the OKR methodology can be used on a practical level to analyse the management of the Digital Sales project. Here it was done through a table.

The pie chart summarizes the results of the analysis.



Chart 3: Results of the analysis of the Table 14

From the graph, as many as 36% of the aspects that characterize the management of the DS project are practices that fall within the OKR philosophy and are all aspects that positively marked the success of the project. Starting from the above analysis, we now proceed to evaluate the methodology adopted: Waterfall with typical Agile elements.

4.4.2 Evaluation of the Digital Sales project methodology

Before continuing with the evaluation of the methodology, it is good to say that the project was completed on time and with the requirements requested by the Stakeholders and Steering Committee.

Despite the design constraints established at another level, the product was released on IB and in December 2023 also on apps. The fixed project dates were respected.

Although there were delays in the deliveries and validations of some milestones, for example, the validation of the AFU of ISP Mobile, these were resolved throughout the project time.

Let's now focus on the **success factors** of DS project management, revealed by the analysis of the **Table 14**:

 Have a clear project objective that is well-shared with all interested parties. It allows employees to have a clear understanding of the direction of the project and its purpose. Understanding the reason for the project makes people feel more involved and motivated in their work and, consequently, more productive.

- 2) Have a set project time of one year. Knowing that the project developed over a year and no delays for the final releases were allowed all forces in the field to come together to achieve the goal. And so, it was.
- 3) Have a well-made detailed Gantt and a shared work plan. Both were established at high levels, without the help of the corporate structures involved in the project; but at the same time, they provided guidance. The teams knew what stage of the project they were in, the next steps to take and what actions to take to get there.
- 4) Discovery HUBs have allowed us to save time during AFU and IT developments, as well as reduce Change Requests. In fact, the interactions during the macro-requirements definition phase allowed ideas and solutions to problems to emerge already at this stage. We started with the Analysis phase already having achievable macro requirements, which allowed us not to have to rework them at subsequent times. The planning phase (of the Waterfall methodology) was given great care.
- 5) The two Demos presented to the Business Owner and all the parties involved are examples of Agile practice. They helped to understand if the times available are respected and respectable, so as not to miss the exits. Furthermore, they allowed us to verify the work that had been carried out up to now.
- 6) Monitoring and control by the IT Divisione PM were very careful to verify the achievement of the fundamental milestones and compliance with the plans. He gradually managed the various open points, what to prioritize and which team or office should take care of it. She also kept track of contributors' various deadlines.
- 7) Project SAL and Team progress SAL promoted good alignment by checking progress and planning the tasks to be carried out during the week. They are organized and carried out respecting the same schedule: this helps colleagues to create a habit and to know what and how to prepare for meetings.

The **bolded** parts listed above were all the discriminated that contributed most to the success of the project with the current methodology.

It is now analysed the factors which, on the contrary, proved not to be effective for the project:

1. The budget set at the beginning of the project certainly helps to monitor spending but makes the management of CRs inflexible. Requesting and having a CR approved is a long and nonuser-friendly action. In addition to the risk of having extra budgets, it can lead to an increase in project times. In fact, a CR can be approved and developed as phase 2 of the project or with an extra budget trying to stay on time.

- 2. The factories involved in the project can work internally with different methodologies: it may be that some factories are self-organized with agile methodologies. This makes contributors' planning even more complex and project governance difficult.
- **3.** A significant delay in deliveries would be a critical issue to manage because Intesa Sanpaolo's information systems are connected to the rest of the entire bank's systems. This is the main reason why the times cannot be extended; and it is necessary to stick to pre-established release dates that are the same for everyone. If this is not the case, you will face an extra budget and non-absorbable delays which would lead to a postponement of the release. Fortunately, this case has never arisen in DS, but represents a real critical issue for the methodology followed to date.
- **4.** Teams are not very involved in the planning phase. The Top-down process, except for HUBs, does not give teams the responsibility to make decisions.

To conclude this paragraph, the Agile method, on paper, appears to be the most suitable methodology for the Digital Sales project. This is because it often proves to be very effective in projects related to digital transformation, where greater flexibility is needed given the increasingly volatile environment.

Agile is used in projects to promptly satisfy complex needs and produce better, innovative and up-todate products. To achieve these results, it is necessary to create small self-organized teams with all the necessary skills.

All this is true, but it is also clear from the evaluation just made that the Waterfall approach, with the execution of certain project deliverables with Agile practices, has proven to be the most suitable. In fact, it was assessed that having stable requirements, strict sequencing between phases, and a detailed Gantt to follow, proved to be success factors for the success of the project. The DS methodology, structured in this way, allows the complexity of the project to be better managed. DS is, in fact, a difficult project at the planning level, at the implementation level (due to the large number of collaborators and channels impacted) and at the organisational level. One only must think of the complicated management of the 50 or so contributing factories.

In conclusion, the Waterfall with typical Agile elements methodology applied allowed for a good timing of the project and a focus on the results to be achieved. It proved to be suitable for handling the complexity of the project and its organisation effectively.

4.4.3 Implementation proposals for project management

The Waterfall methodology with some Agile practices proved following the analysis carried out, suitable for project management. But there are less than functional aspects that remain. In this paragraph, improvements are proposed that aim to propose a solution for these aspects. If the implementations described below were applied, they would make the DS project methodology more effective.

- 1) First implementation: reduce CRs as much as possible by applying two sequential steps:
 - The first proposes to consider, in the planning phase, a longer drafting and validation phase of the BRB and AFU before final delivery. The idea is to reduce CR to a minimum after the requirements have been validated, putting as much effort as possible into the analysis phase.
 - The second step in case a CR arises (even after the analysis phase), involves developing it as phase 2 of the project (i.e., starting a parallel project); and trying to recover the budget from factories that have an unused contingency.

This proposal aims to limit, together with the CRs, extra-budget requests and try in every way to be in line with the project.

During the development of DS, there were two CRs worthy of note:

- Front-end text translation on ISP Mobile and IB apps. The CR was small, it was performed within the project time (not as a parallel project) and the budget was recovered from another structure that had a contingency.
- **Compliance with accessibility standards**, to make software usable by people with disabilities. Being a large CR, it has been divided into two parts. The part of the Change Request that is strictly indispensable for DS to be included in the November and December releases has always been included in the project asking for extra budget. The second, more substantial part will be treated as a parallel project: a requirement will be drawn up and the budget for the following year will be made available. Developing this project CR will take time.
- Second implementation: Emails on Outlook are widely used by employees for exchanging information, presentations and offline alignment; but above all to send reports of the meetings. However, they are often written unclearly.

Each employee receives an average of around 150 emails a day and writes around 30 of them. It is complex to read and write them all in good time. Not to mention that you risk losing important information and data for projects if they are not read and understood.

To make the tool more efficient, emails could be separated into specific folders based on the topic or project. To divide them neatly and not lose them. Furthermore, as an implementation to reduce the time for reading and writing emails, pre-set templates could be set, which vary based on use. For example, a delivery email will have a different template from the email to send to colleagues to schedule a meeting.

Let's take the delivery email, you can prepare a pre-set template with:

- introduction;
- topic on the agenda;
- topics (present with a list);
- critical issues;
- next steps;
- colleagues present at the meeting.

By setting predefined templates for the various types of emails, writing time will be significantly reduced and reading will also be clearer and more immediate.

3) Third implementation: To introduce, as the OKR method teaches, self-evaluation of team and individual tasks. You could introduce the self-evaluation process into weekly team meetings. It is possible to use, for example, a 10-minute slot at the end of the meeting to evaluate the work done the week before and give a subjective score (high if you think you can achieve it easily, low if it is a particularly challenging task). They are evaluation systems that help you find areas for improvement and help you work towards achieving your objectives. Self-evaluation is a great way to stay aligned and ensure better collaboration between teams, as well as leading to greater involvement and awareness among individual employees.

The proposed implementations are realistic and easily applicable to the project DS without "upsetting" the applied methodology. The difference between carrying out these implementations and not doing so is very high. In fact, they bring numerous advantages.

4.4.4 Analysis of the level of correspondence between the typical aspects of the OKR method and the respective aspects applied on the Digital Sales project.

For completeness, the Case Study analysis is performed through a second table. This table starts from the OKR theory, reporting the characterizing aspects, described in the literature analysis. In the first column, there is a list of characterizing aspects of the OKRs (reported with the terminology used in Chapter 2).

For each point of the OKR methodology reported, the aspects of DS project management that come closest to us are identified in the second column.

In the third column, the aspect that characterized the management of the DS project is evaluated on a numerical scale. The higher the rating, the more it complies with the corresponding OKR framework, indicated in the first column. The numerical scale goes from 0 to 5:

0 = DS aspect is not at all compliant with the OKR methodology.

5 = DS aspect is fully compliant with the OKR methodology.

Finally, my observations on this classification are provided in the last column.

Table 15: Assessment of the level of correspondence between typical aspects of the OKR theory andthe respective aspects applied to the DS project

	OKR methodology aspects	Corresponding aspects of the Digital Sales project	EVALUATION: how much DS complies with OKR	Comments
1	Company Vision	ISP vision	5	The Bank's vision is to achieve a good level of digitalisation in the insurance sector to remain competitive on the market. The company vision complies with OKR theory as it is a broad vision, which dictates the overall direction of the work.
2	Company Objective	Project Objective	5	The objective of the project is "development of the new digital insurance business on Intesa Sanpaolo's self-service channels", developing CJ for the sale and after-sales of insurance coverage for smartphones. Respect the OKR theory as it is a long-term, ambitious and clear business objective. It is decided by Top Managers and correctly communicated to all parties involved. Progress and milestones achieved throughout the year are tracked.

З	Team OKRs	Contributors' tasks (BRB, AFU, IT Develpmnet,)	0	The project PMs decide which factories, suppliers and company structures are needed to implement the project plan. PMs then agree on schedules and provide a shared work plan. The teams involved execute what is set out in the plan (decided at higher levels) and are not actively involved or authorized in the decision-making process, as the OKR methodology requires.
4	OKR alignment & transparency	Discovery HUBs, Demos, SAL, emails	3	The dissemination of information and alignment between the parties involved presupposes a certain familiarity with the company hierarchies and with the project. In DS there are several aspects that facilitate communication and alignment, which is why the rating is 3. But information, with the exception of the bidirectional approaches of HUB and Demos, is often transferred hierarchically from top managers to the team. Each project hierarchical level has access only to specific information useful for the work it must carry out; this leads employees and teams to lose an overall vision of the project.
5	Bidirectional approach (TOP- DOWN, BOTTOM- UP)	Waterfall methodology with the Discovery part (HUBs) and demo in Agile	1	The rating is 1 thanks to the presence of Agile elements such as HUBs and Demos, which allow a bidirectional approach in two distinct phases of the project (phases indicated in the masterplan in paragraph 3.2). In fact, with the exception of the drafting of the macrorequirements and the presentation of two CJ prototypes, the project applies the Waterfall methodology. Objective, costs, constraints and work to be carried out were decided by the Steering Committee and the PMs; then communicated in a hierarchical manner to the lower levels (TOP-DOWN).
6	Employee engagement and inspiration	HUBs, Demos, BRB and AFU validation, ISP employee training	2	The OKR methodology involves great involvement and aims to combine employee development with company growth. In fact, employees can continuously bring ideas and innovations on how to develop a project managed with the OKR method. On DS this aspect is rated 2 because there are few moments in which employees can express themselves at a planning level outside of ordinary work.
7	OKR does not focus on performance but on the Objectives	Digital Sales' detailed Gantt and Masterplan	0	In DS, the established detailed Gantts must be respected 100%: in particular the delivery dates of the requirements, the AFU, the start of the System Tests, the start of the UAT and the November and December releases. On top of this there is also the budget constraint, which must not be exceeded. While for the OKR methodology an objective is considered completed if the completion percentage is 70-75%. For this large difference the score is equal to 0.

8	OKR manager	PM IT Insurance Divisione e PM GT	0	The person with the task of "OKR manager" is responsible for facilitating the teams in following the OKR process. The role and goal of an OKR manager is to guide teams towards greater alignment and productivity, as well as help them set meaningful and ambitious goals. In DS a figure of this type does not exist. There are the two PMs who, following the Waterfall methodology, plan and monitor the project.
9	OKR Monitoring Systems	DS Monitoring System.	2	Monitoring, both for OKR and DS, is constant and this allows you to control the progress of the work in real time. The big difference is that in the OKR methodology, the objectives and Key Results are established by the team and individuals as well as the systems for evaluation (teams and individuals self-evaluate the OKRs). Metrics and monitoring criteria are established and applied to all OKRs of the same type. For DS, however, the monitoring systems are different depending on the structure in which they operate and are not decided by the teams or workers. They follow employees throughout the project life cycle and help the project governance (the two PMs) to verify the achievement of key milestones and compliance with plans. For these reasons the appearance was rated 2.
10	OKR Cycle	Detailed Gantt	0	The OKR cycle is not applicable to the DS project because there are no OKRs at the project, team or individual level. Furthermore, the cycle develops from quarter to quarter and is adaptable. At the end of each quarter, the OKRs are then examined and what worked and what didn't is analyzed. DS, on the other hand, has a delivery and deliverable schedule that covers the entire year. Once established, the detailed Gantt used for the project cannot be changed. Planning is linear and sequential: once a delivery is reached, we move on to the next one, just as once the problem is overcome we move on to the next one.
11	OKR tools	PowerPoint, Excel, emails, Teams	3	They are tools used in ISP for project management which are also indicated by the OKR methodology and recall it (especially PowerPoint presentations, used to align those present during the SALs and monitor DS progress).

Below is an in-depth analysis of some rows of the Table 15:

4) The information, as mentioned in the table, varies based on the hierarchical level of the project: the further down the hierarchy you go, the more detailed the information is and the less you have a global vision of the project. Therefore, only information useful to the

respective company structures tends to be conveyed. Except for plenary meetings, strategic/organizational emails, HUB tables and Demos involving all interested parties.

To better understand the concept, just look at the structure of the SALs for DS. SALs are very useful for alignment, but it is shown here that they are organized according to the hierarchical project logic. They are listed below in descending order, starting from the highest-level SAL:

- The Steering Committee meets once a month. All project leaders and representatives of the working groups and contributing factories involved participated. Serve to align the Steering Committee and BOs on the state of the art of the Digital Sales project.
- The project SAL occurs on a fortnightly basis. They are organized by PMs and all parties involved (teams, suppliers, consultants, etc.) participate. The aim is to verify the progress of the works and have an overall view of the status of the project, in terms of deadline, costs and capacity. It's important to make sure you're on track.
- **SAL IT takes place on a weekly basis** and checks the progress of the work by monitoring detailed Gantt and all deliveries (BRB, AFU,).
- The team progress SAL occurs on a weekly basis. It is a meeting that every working group involved has. During these SALs, the situation is taken stock and the work to be done during the week is defined, as well as the individual tasks.
- 6) To better specify the point, in the DS project the personnel involved can express themselves at the project level in the HUBs, in the evaluation of BRB and AFU and in the presentation of the DEMOs. Apart from these moments, they carry out the daily tasks assigned to them. The rating 2 was also given because in ISP weight is given **to employee training**. Refresher courses are periodically organized in various areas (e.g., Cybersecurity, English, etc.).
- 8) The presence of an experienced "OKR manager" in a company who knows how to apply the methodology can bring many advantages. This figure, in fact, guides employees in following best practices, organizes team training and assists the entire company in implementing OKRs in a way adapted to specific business needs. It therefore helps simplify and optimize the experience with OKRs. In ISP such a role does not exist as the OKR methodology is not applied.
- **9)** Monitoring systems, both for OKR and DS, are very useful because they promote communication between the offices involved and good alignment. Careful monitoring allows you to evaluate performance and make progress.
- 11) ISP uses tools that are presented in the Literature Analysis as "OKR tools", they are:

- <u>PowerPoint</u>: widely used to prepare presentation slides to support SALs. They are slides that usually show the progress of the project, describe the next steps and delays.
- <u>Email</u>: widely used for offline communication between employees. Emails are used to send contact details, request information, notify or organize future meetings, etc.
- <u>Excel</u>: used by the IT Division PM to track high-level objectives to be achieved. The Excel spreadsheet, with the objectives indicated, is then shared on Teams with a small group of the PM team.

It can be noted, observing **Table 15**, that apart from the first two points, there is never a perfect correspondence between the OKR theory and the corresponding aspects of Digital Sales management. On the contrary, the values assigned, which evaluate how much some aspects of the DS project comply with the OKR theory, are generally very low: **between 0 and 2**. The OKR *Alignment & transparency* point was rated with 3 (as it is quite consistent with the theory), for the reasons explained above.

The following graph summarizes the results of the table just analysed. It is possible to clearly see how the OKR practices correspond to the practices adopted for managing the Digital Sales project.



Chart 4: Results of the analysis of the Table 15

Starting from the analysis of the second table, the study proceeds by evaluating the practical nonapplicability of the OKR methodology to the Digital Sales project.

4.4.5 Evaluation of the practical applicability of the OKR methodology to the DS project.

Considering the analysis carried out above, on 11 crucial aspects that characterize the OKR methodology, the Digital Sales project demonstrates that it fully respects only two of them.

The aspect of alignment and transparency, which was rated 3, is quite good because a good level of communication between the parties was found. However, it is not totally compliant with the OKR methodology because the information that teams and employees have access to changes based on the hierarchical level they are in and the work they must do. Consequently, the lower a team is in the hierarchy, the less it will have an overall vision of the project.

In the remaining 8 points analysed, DS demonstrates that it applies project management solutions are little or not at all compliant with the OKR methodology presented in Chapter 2.

Furthermore, these represent barriers to the practical adoption of the OKR method in the project. The main reasons are explained below:

- The biggest barrier to the effective adoption of OKRs on the project is certainly the Waterfall with typical Agile elements methodology adopted by Digital Sales. The rigidity and sequentiality that characterized project management are totally in contrast with the OKR method, which instead embraces the Agile philosophy. The project should therefore completely change its methodology and use Agile. Small self-organized teams with all the necessary skills are then created and work together iteratively and incrementally. Each team proceeds to create their quarterly goals and respective OKRs and the cycle, described in the literature review, can begin. All of this is very unlikely to happen on DS because completely changing the approach to the project is very expensive and we know that DS has a limited budget available. Secondly, it is counterproductive for the project, as well as for the company itself, to change the existing methodology given that it is proving to be effective and right for the project. As previously mentioned, the DS methodology, structured in this way, allows you to better manage the evident complexity of the project.
- Following the Waterfall philosophy, another obstacle to the adoption of OKRs is the fact that
 objectives, costs, constraints and work to be done are decided by the Steering Committee and
 PMs; then communicated in a hierarchical manner to the lower levels (TOP-DOWN). A twoway approach across the entire project cannot be applied without first undergoing a long
 and expensive reorganization that introduces Agile practices.

- The role and responsibilities of the two PMs in the project are another barrier to the adoption of the OKR methodology. They decide which factories, suppliers and company facilities are needed to implement the project plan. In addition to this, they agree on time schedules and help determine the detailed Gantt. In addition to this, they ensure that all information reaches the lower levels, where the hired teams execute what is set out in the plan. The role of the PM does not allow the engaged teams to take part in the decision-making process, as the OKR methodology requires. The objectives and actions to be taken by the teams are set for them by the PMs. They cannot, therefore, independently establish their OKRs. Another major shortcoming of the OKR methodology, which again can only be overcome by reorganisation.
- Another limit to the practical adoption of OKRs in the project, and more generally in ISP, is the **mentality**: focused on results and deliverables. In DS, the established detailed Gantt must be respected 100% in all deadlines and releases indicated. Failure is not accepted. While for OKRs, reaching 70% of an objective can still be a good result, especially if the goal set is ambitious. Furthermore, the OKR methodology embraces the **culture of failure**: OKRs focus more on how you try to reach an objective than on achieving it. Workers should learn to accept the mistake and appreciate the process. **Overcoming this limitation and implementing OKRs requires time, patience, and a change in company culture**, breaking away from old habits. The only way to "embrace" the OKR culture is to implement it over time as a company and consider it a Vision. This will not happen because Intesa Sanpaolo has no intention of adopting the OKR methodology as a company soon.
- A final barrier that should not be underestimated is that of **training** and an "**OKR manager**". In the previous paragraph, the importance of having an "OKR manager" in the company was highlighted. This is an OKR expert who can guide employees in adopting best practices, coordinate team training and provide support to the entire organization in effectively implementing OKRs, customizing them based on the needs of the company. However, this must be added to **training sessions for employees on the methodology and practices to be adopted**, also providing **refresher sessions every six months**. It is a problem not contemplated for DS because, upstream, the OKR methodology is not applied either at the project or company level.

Having analysed the barriers that prevent a practical application of the OKR methodology for the project and the huge actions to be implemented to overcome them (in terms of time, money and

different corporate mentality), the practical non-applicability of the OKRs to the Digital Sales project is evident.

4.4. 6 Conclusions of the analysis

To conclude the analysis carried out on this Case Study, we report below the main evidence that has been found.

- It has been demonstrated that it is possible to use the model and typical aspects of the OKR methodology as a tool for analysing other non-OKR project management methods. This is what was done with the Digital sales project. The theory studied in the *Literature Analysis* was used for the analysis of a practical case study, complex and non-linear in structure and organization (see paragraph 4.4.1).
- Starting from the analysis of the Case study carried out by applying the OKR theory, the management methodology of the Digital Sales project was evaluated. The methodology followed for Digital Sales is Waterfall with typical Agile elements. The success factors and the factors that proved not to be effective for the success of the project were highlighted. The evaluation revealed that the methodology used was suitable for effectively managing the complexity of the project and its organization (see paragraph 4.4.2). This is also demonstrated by the fact that the Device product was released on time and with the required requirements.
- Implementations are proposed, always in line with the OKR philosophy, to improve the less efficient aspects of the project. The proposed improvements are easily applicable to the project DS without "upsetting" the applied methodology and the advantages they bring are notable (see paragraph 4.4.3).
- It has been shown that it is not convenient for the Digital Sales project and for the ISP to apply the OKR methodology in its entirety in practice (see paragraph 4.4.5). However, it is clear that some practices that adhere to the OKR methodology were used and contributed to the success of the project.

It is worth remembering that the analyses and evaluations carried out in this chapter took place on a complicated project, inserted in a company that has very complex corporate systems and organizational charts. I highlight that complex systems are an area where academic research on OKRs is lacking.

5. Large companies with complex business systems and OKR methodology.

From the specific case, the study undertaken now moves to generalization: **large companies** are considered which, like Intesa Sanpaolo, have **complex business systems**.

From the analysis of the management methodology of the Intesa San Paolo Case Study, it emerged that 36% of the aspects analysed are practices that fall within the OKR philosophy. They positively marked the success of the project.

This demonstrates the fact that ideally every company, if it could, would adopt the OKR methodology. It is undeniable that it presents very positive practices to encourage communication, business and personal growth, transparency and motivation. If these practices were applied globally in the management of a company, they would lead to a significant competitive advantage in the long term.

Despite this premise, it must be underlined that in large companies with complex business systems, such as Intesa Sanpaolo, the OKR methodology is hardly adopted in practice and project management. This is because there are many differences between OKR theory and the reality in which companies operate.

Here we want to analyse, on a general level, the reasons for these differences.

5.1 Implementing the OKR methodology for the first time.

Consider now a generic company characterised by complex organisational systems and organisational charts, which wants **to implement the OKR method for the first time**. Applying the *Literature Analysis*, the company can implement OKR by following one of these three strategies:

- 1) **Implement OKRs in one team: a pilot team**. Before introducing OKRs company-wide, choose an independent team with capable and responsible people. The 'pilot' team will try out the methodology and run a few quarterly cycles. During the trial period, the team must be adequately supported and the method successful. Only later will the team, having learnt the methodology, teach it to other teams; with the aim of implementing OKRs at the company level.
- 2) **Apply OKRs to Team Leaders** to accustom them to adopting an Objective-Result mentality regarding each project.

Team leaders are clear about the objective of a specific project and the metrics that define its impact and success. Implementing the methodology with team leaders solves the challenges of goal alignment, as they quickly see how OKRs at the team level are linked to overall company goals.

3) **Implement OKRs with everyone**. Make sure OKRs are set up company-wide. The management team will operate according to higher standards, and employees will feel the benefits of the OKR methodology as they develop the team OKRs themselves. Applying a new methodology to the entire company right away requires good communication between the parties because employees will need support.

The risks and benefits of the three strategies for the generic company considered are analysed below in **Table 16**.

	BENEFITS	RISKS
PILOT TEAM	 The chosen team has a growth mindset and a willingness to try new things. Greater efficiency in solving potential workflow problems. 	 It takes a long time for the entire company to implement OKRs (benefits are not seen for many months). Risk of abandoning the process because it is too long and expensive.
TEAM LEADERS	 Facilitates the adoption of the "OKR mentality": attention to the definition of Objectives, Key Results and their monitoring Good alignment with company objective and between teams. 	 Team leaders must all be motivated and receptive to new methods The team leader must not focus on performance Risk of abandoning the OKR method after a failure or a result below expectations.
EVERYONE	 It takes the entire company less time to implement OKRs (the benefits are seen more in the short term, 2-3 months). Leaders and Top Managers agree with the implementation (shared vision). Good internal communication between company levels 	 Difficult to achieve for companies with rigid and hierarchical structures. It is essential to guarantee full support on the methodology: presence of an OKR manager and training courses. These are expensive aspects. There is less efficiency in resolving potential workflow issues.

Table 16: Strategies for implementing OKRs in large companies with complex business systems

Looking at the table, risks and benefits are present in all three strategies. Analysing the three possible implementations, from a theoretical point of view, it is difficult for the CEO of a company to decide to undertake any of these strategies. There must be a strong motivation to implement the OKR methodology for the first time, especially if the company is already large and well-structured. **The benefits of implementation are as many as the risks**. Adoption times, except for the last strategy, are long and employees need to be thoroughly trained.

Furthermore, to make the OKR method more effective, simple tools (Excel, PowerPoint, mail,...) and suitable software are needed to implement the new methodology. If the management software is developed internally, the time and cost of its implementation must be considered; if it is purchased externally, the expense must be evaluated.

Although the theory on the subject is clear and simple, the practical application in complex business realities is difficult and the entry barriers are high.

5.1.2 Company characteristics that favour OKR implementation.

From the analysis of the Case Study in the previous chapter, the following characteristics were obtained that a generic company should have in its corporate management to facilitate the implementation of OKRs:

- The company must not adopt a rigid methodology but apply **Agile or its variations**. It should be organized into small, self-managing teams with individuals with the necessary skills on board. Where employees work together iteratively and incrementally. Each group can thus easily introduce the quarterly OKRs and their respective OKRs and cycle.
- Have a good communication system between parties and hierarchical levels. This ensures that a good level of consistency is maintained between employee performance and that of the company. It allows for clarity and all parties involved move in the same direction. Ultimately, it enables employees to make informed decisions.
- Have a Vision and company Objectives known and shared by all employees: all workers must have an overall vision.
- **Don't have a mentality focused only on performance and results**, but also on the growth of the company and individuals.

If the company already had some of these characteristics within it, the implementation of the OKR methodology would require less time and less cost.

Otherwise, if the company has characteristics opposite to those indicated, the entry barriers for the correct adoption of OKRs become higher and more difficult to overcome.

These are all generalizations, but in general large companies competitive in the market are not interested in changing the existing strategy, especially if it proves advantageous. Furthermore, large companies with complex structures prefer more rigid methodologies (such as Waterfall), where hierarchies are respected (TOP-DOWN approach).

5.2 Benefits of applying the OKR methodology

When the OKR methodology becomes part of the company culture, a series of significant advantages are achieved for both employees and the organization:

- **Greater attention to macro-objectives**: they are known and shared by all collaborators. The team objectives are established in compliance with the company macro-objective. OKRs bring focus to the direction to take.
- **Encourage independence**: OKRs allow the individual collaborator to propose the key actions necessary to achieve the agreed objective, rather than imposing it.
- Encourage teamwork: implementing OKRs requires transparency and collaboration. Visibility of OKRs at all levels promotes clarity, allowing each employee to know the work of their colleagues and understand the reason for their activities. This total involvement contributes to achieving the company's macro-objective.
- **Increased responsiveness**: thanks to their flexibility and quarterly cycle, OKRs easily adapt to ongoing changes in the world of work. They enable companies to address new challenges and goals in a timely manner.

Considering these aspects and imagining how a large company is normally managed, the gap between theory and practice is evident.

5.3 Limits and barriers to the practical application of OKRs.

The typical aspects of OKRs are reported here which, for large companies, characterized by complex business systems, represent **limits and barriers to the adoption of the methodology**. A brief rationale is given next to each point as to why they are seen as limitations.

- Ensure **constant coaching** and **refresher sessions on methodology practices**. It is difficult in a large company to regularly organize training sessions for everyone. Online courses could be organized that only include a few face-to-face lessons with the OKR manager, but ensuring everyone's participation is not easy. The fact remains that employee training is one of the cornerstones for the success of the methodology.
- The adoption times of the OKR methodology are long and the benefits are visible after months. This can lead some companies to abandon the OKR process because the results or benefits are not visible in the short term. It is a methodology that the company must internalize and make its own; for this reason, it must be learned well and implementation requires time, patience and a change in company culture.

- Do not follow rigid business and project management practices (such as the Waterfall methodology) but adopt Agile practices. As seen in the Case Study, rigid and sequential practices help better control teams and projects in large companies, but do not facilitate OKR adoption.
- Ability to establish challenging Objectives and be able to indicate the direction to follow, which must be shared transparently with all workers. This leads to an overall vision. Goals, according to the OKR methodology, should be ambitious, but not overly difficult, to push employees to do their best without feeling overwhelmed. If you set sufficiently ambitious goals, reaching 70-80% of them can already represent a notable success. While large companies consider it a failure not to reach 100%.
- Have individual and company growth as the focus, and not economic incentives or results. Large companies focus on this last aspect.
- Determine easily **measurable parameters for the Key Results** because they represent how the success of the Objective is defined. Companies often confuse key results (Outcomes) which measure the achievement of an objective with initiatives (Outputs) which are the daily actions undertaken to achieve the objectives. For this reason, they risk not setting measurable KRs.

Analysing these points, it can be stated that the complete adoption of the OKR methodology fails in large companies because they still use rigid work models and TOP-DOWN approaches. The observed trend is that large companies would like to use new popular methodologies but are not yet ready to commit to change and adapt to new methods. OKRs, to date, are probably no more effective than the management methods currently in place in complex organizations. Given that barriers and limitations prevail, in companies of this size, OKR is a methodology that tends not to be adopted.

5.4 Conclusions of the general case

It is known that OKRs can uniquely improve business processes. Just as it is true that implementing OKRs requires time, efforts and a change in company culture, moving away from old habits.

In this chapter companies with complex business systems do not have a strong motivation to adopt OKRs and change their current strategy. This is mainly because OKRs have not proven to be more effective than the management methods currently used. The introductory phase of the methodology is not easy, and this discourages its adoption. Secondly, there is a lot of difference between OKR theory and the reality in which companies operate. To effectively apply OKRs, organizations should abandon established management systems.

In conclusion, it is assumed that the methodology is little applied by complex organizations because it is very complete and articulated and, as such, requires widespread effort and change.

In general, in large companies with complex structures, the OKR methodology is not applicable in its entirety. The fact remains that some individual OKR parts, such as meeting management, if adopted bring clear advantages to the company.

6. Conclusions

The objective of this thesis project is to provide a practical application of the OKR methodology that contributes to academic research on the topic. In the analysis of the literature, it was found that the academic studies carried out on the topic are scarce and offer little information on how to apply and implement OKRs in companies. Specifically, research is particularly lacking on the use of OKRs in large companies characterized by complex business systems.

To make up for this lack, the thesis follows a deductive methodology: starting from the OKR theory we proceed with the analysis of a particular case. The case study analysed is a difficult project that I personally followed during an internship period in Intesa Sanpaolo (a company with complex organizational charts and business systems). It therefore falls within the "shadow cone" of academic research.

The analysis carried out on the draft agreement led to important results. First, it was demonstrated that it is possible to use the model and the typical aspects of the OKR methodology as a tool for the analysis and evaluation of other "non-OKR" management strategies. In particular, the management evaluation carried out on the Case study, applying the OKR theory, indicated its efficiency and, secondly, allowed me to propose implementations to improve the less functional aspects.

Generalizing, it can be stated that, considering the analysis carried out, the practical feasibility of using OKRs as an analysis and evaluation tool on large corporate entities has been confirmed. From this it can be seen that it is easily usable, as a tool for analysing and evaluating company and project management, even by small-medium enterprises.

The second result obtained from the study demonstrates the practical non-applicability of the OKR management methodology in its entirety: this outcome is valid only for large companies that have been on the market for some time, are profitable and are characterized by complex business systems. The adoption of OKR management requires a change in corporate culture. However, managers and companies give the impression of being anchored to their old habits. What is missing is the motivation on the part of CEOs and top managers to commit to change: as adopting the OKR in its entirety presupposes important changes in existing strategies. Large companies continue to follow rigid management methods, focused on earnings and performance and not focusing on HOW to achieve a goal and on the growth of the company and employees. The latter are key aspects of OKR theory.

To date, for large companies, the barriers and limits of the OKR methodology are more than the benefits. For this reason, it tends not to be adopted in company management. The time is not yet "ripe".

What makes the adoption of OKRs in large organizations even more complicated is the lack, in the literature, of a universally applicable model capable of guiding companies in the adoption and implementation of OKRs.

Although it has been shown that in large companies the OKR methodology is not applicable in its entirety. However, it is true that some individual parts of the OKR, if adopted, bring clear organizational advantages and benefits.

To conclude, I report some of my observations. It is undeniable that the OKR methodology is truly effective if correctly applied in its entirety within a company. In fact, it is by definition OKR is an objective-based management methodology that is applied at the company level; then it is expressed in individual projects, teams, etc.

Its adoption determines an undeniable competitive advantage in the medium-long term. The real and significant benefits are seen, as already mentioned, only if the OKR model is adopted in full: used individually, good OKR practices lead to advantages in limited areas of the company. To give an example, the correct setting of meetings in a department promotes alignment and allows for achieving a better level of communication between teams. The advantage falls on the communication of the department, it does not bring benefits to the entire organization.

To date, however, the complete adoption of OKR management has not proven effective for large companies that have been on the market for some time and with complex organizational structures. From all this, it can be deduced that the complete OKR model can be applied more successfully in small or newly created companies.

Many large companies, including Google, Netflix, Amazon, and others, are known to use OKRs to set their goals. Speaking of Google, but it is also a shared discussion for other companies, let's not forget that the OKR methodology was adopted before Google launched the flagship Chrome browser, when it was still a small-medium sized company. Since then, the OKR model has become Google's favourite management tool. Over the years it has become the powerhouse we know and has continued to use the methodology because it is part of the company culture.

This clarification supports the thesis that it is very difficult to completely adopt the OKR method in large, long-existing and very profitable organizations.

This thesis project has contributed to the advancement of ongoing academic studies on OKRs, providing a practical and concrete application of the OKR method as a tool for the analysis and evaluation of non-OKR corporate management. He also explored, from a theoretical point of view, the main limits and barriers to the practical application of the OKR model in large companies.

The limitations of this study are mainly two:

- The analyses present in the thesis are qualitative.
- Does not contribute to the definition of a universally applicable model capable of guiding companies in the adoption and implementation of OKRs.

Research on OKRs remains scarce, especially on the details relating to their implementation in corporate realities. This remains an important point to focus on in future research.

The first step for the correct adoption and implementation of OKRs in business management is undoubtedly establishing good OKRs. This first involves setting company goals that indicate a direction or represent a high-level area for improvement, to which different teams can contribute through their daily work. From here each team then defines its own Objectives and respective measurable Key Results. Focusing and setting the right goals that both guide your work and are ambitious isn't easy. Also, focusing on an objective that later turns out to be wrong wastes time and resources for the company.

Having said that, the next point that is worth investigating in future research on the topic is finding a solution that helps managers and teams establish their OKRs.

One idea could be to use other methods that can help in this sense, such as the GQM (Goal, Question, Metric) approach. GMQ is a model that relates pre-established objectives, where to focus to achieve them and proposes measurement initiatives. The approach completes what OKRs lack: a practical procedure for how to gather contextual information and transform a quality objective into a measurable objective for a key result. From this, it can be deduced that GQM and OKR can be used together. This is just an example, but it would be interesting to contribute to academic research on the topic by proposing tools and solutions that can facilitate the practical application of OKRs.
Appendix

Appendix 1 considers the general case of setting OKRs at company, team and individual collaborator levels.

Appendix 1: A typical OKR cycle [Doerr, 2018]

When in the Quarter	What to do
4–6 weeks before Quarter	Brainstorm Annual and Q1 OKRs for the Company. Senior executives and top managers begin brainstorming the company's highest- level OKRs. When defining OKRs for the first quarter, it's also time to plan the annual objectives, which can provide strategic guidance for the company.
2 weeks before Quarter	Communicate Company-wide OKRs for the Upcoming Year and Q1. Finalize the definition of company OKRs and share them with all members of the organization.
Start of Quarter	Communicate Team Q1 OKRs. Based on the company's OKRs, teams develop their OKRs and share them during meetings.
1 week after the Start of the Quarter	Share Employee Q1 OKRs. A week after communicating team OKRs, team members shared their OKRs. This stage might involve negotiation between team members and their managers, usually in one-on-one meetings.
Throughout Quarter	Employees Track Progress and Check-in. During the quarter, employees constantly monitor and communicate their progress, holding regular meetings with the team and their managers. During the quarter, participants regularly evaluate the likelihood of fully achieving their OKRs (team and personal). If they seem unlikely to achieve those goals, you may need to make adjustments or recalibrate the OKRs.
Near the end of the Quarter	Employees Reflect and Score Q1 OKRs. Toward the end of the quarter, contributors evaluate their OKRs and Team OKRs, conduct a self-assessment, and reflect on what they accomplished.

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