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Data Analysis for Operational Strategy: Developing a Management Control System for an Italian Cooperative operating in the ICT Sector

Supervisor:
Francesca Montagna

Candidate:
Camilla Cecchini Saulini

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ABSTRACT

Continuous technological advancements and ever-evolving consumer demands for goods and services in the ICT sector are compelling organizations to adopt new strategies to monitor their performances and enhance their competitiveness. In this pursuit, even cooperatives, and other businesses that previously didn't consider the implementation of a robust and well-structured Management Control system as a core priority, have come to recognize its importance. Management Control systems are indeed emerging as critical assets across all business structures, equipping managers with the necessary tools to make informed decisions, foresee potential challenges, and effectively handle crises as they arise.

This thesis, written under the guidance of Professor Francesca Montagna, is part of a broader consultancy initiative led by the Department of Engineering and Production Management of Politecnico di Torino (DIGEP) in collaboration with Emisfera, a cooperative operating in the digital sector. The overarching objective of this project is to guide Emisfera in redefining its operational, organizational, and business frameworks, while exploring avenues for innovation.

Drawing upon a multifaceted approach, this study foresaw the conduction of interviews with Emisfera's business unit managers, the analysis of industry and market trends across all business units, and the development and scrutiny of a comprehensive database encompassing the past five years of Emisfera's operations. This rigorous data-driven approach has led to the development of a Management Control system proposal that addresses the key challenges and opportunities unveiled during the analysis phase and empowers managers with actionable insights for pricing strategies and strategic decision-making.

The proposed system can help Emisfera improve its efficiency, effectiveness, and profitability, as well as foster a culture of innovation, collaboration, and learning within the organization. Furthermore, it can serve as a valuable reference and benchmark for other researchers and practitioners interested in studying and designing management control systems for cooperatives.

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Introduction

In an era marked by rapid technological advancements and ever-evolving consumer preferences, maintaining a competitive edge has become increasingly challenging.

This is particularly true for organizations within the digital sector, which face a series of disruptions that originate from within and beyond the industry's boundaries. Internally, the sector is caught in a relentless cycle where products and services swiftly move from being cutting-edge to outdated. Externally, the landscape is equally tumultuous, with COVID-19 causing significant shifts in the demand, geopolitical conflicts driving up energy costs, and international tensions disrupting supply chains. Such hyper-complex environment, characterized by growing external pressures and internal challenges, has been compelling organizations to adopt new strategies to monitor their performances and enhance their competitiveness. In this pursuit, even cooperatives, which previously did not consider this a core priority, have come to recognize its importance.

With its five business units (BUs) —Digima, Netycom Workare, Networking, and Progetti—each specializing in the various facets of digital technology, Emisfera Società Cooperativa embodies a microcosm of the broader industry's challenges and opportunities. From Software Development to Digital Marketing, and from cinema-purposed Digital Services to Cloud Computing, Emisfera's BUs collectively underscore the need for an evolutionary leap in organizational, operational, and business models.

In light of these considerations, the role of a Management Control System emerges as paramount. These systems, in fact, evolving beyond traditional confines, are now recognized as critical in equipping managers with the insights needed to navigate complexities, anticipate challenges, and seize opportunities for innovation and growth.

This thesis aims to chart a path for this transformation describing the process followed to design the Management Control System for Emisfera.

Integrating an extensive examination of market dynamics and industry trends, along with targeted interviews with business unit managers and a thorough review of Emisfera's operations over the past five years, a management control system was in fact designed to address the key challenges and opportunities unveiled during the analysis phase, empowering managers with actionable insights for strategic decision-making.

From a methodological point of view, the study draws upon the robust frameworks of Project Portfolio Management and Management Control. It employs Porter's Five Forces model, BCG matrices, and SWOT analyses to map out the competitive landscape of each BU.

The evidence acquired weren't just aimed at presenting Emisfera's past performances, our main goal was to underscore the significance of data-driven decision-making and highlight the critical role of systematic data collection in shaping strategic choices. This approach prompted a discussion on the optimal granularity of data collection, advocating for management to strike a balance between costs and benefits.

In this sense, the Management Control System we proposed was designed not only to boost operational efficiency and profitability, but also to foster a culture of innovation, collaboration, and continuous learning within Emisfera.

Through a blend of theoretical exploration and practical application, the document unfolds across eight interconnected chapters, each delving into different facets of the project.

The first chapter sets the stage by exploring the historical, economic, and regulatory landscapes of cooperatives, with a spotlight on the trajectory and performance of Italian cooperatives. Progressing to the second chapter, the narrative shifts to Emisfera, the cooperative at the heart of this investigation, unraveling its historical evolution, present structure, and delineating the consultancy project's objectives and organization.

Building on this foundation, the third chapter ventures into a comprehensive analysis of the industry and market dynamics pertinent to each of Emisfera's business units, laying the groundwork for the subsequent in-depth 5-year performance review of each BU (detailed in the fourth chapter). The fifth chapter is dedicated to the construction of the framework for monitoring and strategic data analysis and culminates in a critical evaluation of the existing management control system's challenges and limitations.

The discussion then takes a theoretical turn in the sixth chapter, offering a deep dive into the realm of management control models. This section not only clarifies the concept but also dissects its components and operational mechanics in detail. This theoretical backdrop leads to the seventh chapter, which presents the management control model specifically designed for Emisfera. The final chapter, eighth in sequence, critically assesses the operational benefits and strategic implications of deploying this novel management control model, reflecting on its transformative potential and pondering the future trajectory for translating the theoretical constructs into practical applications.

This structured approach, seamlessly blending theoretical insights with practical findings, fosters a thorough investigation of the project, which not only aims to assist Emisfera in its strategic repositioning but also endeavors to supply actionable insights and robust frameworks that could serve as valuable resources for other cooperatives encountering similar challenges.

1 Cooperatives

Cooperatives (also known as "co-ops") are enterprises active in almost every sector of the global economy that are owned and operated by a group of individuals with a common interest. Unlike traditional corporations, where ownership is typically held by the shareholders who invest capital, cooperatives are owned and controlled by their members, which may include employees, suppliers, and customers. This is one of the reasons why they are considered people-centered enterprises. By reinvesting in their communities and caring for the well-being of people, cooperatives foster a long-term vision for sustainable economic growth, social development, and environmental responsibility helping counterbalance the growth of inequality and its detrimental implications on the world.

To preserve and promote their distinctive identity and values, these types of enterprises follow a set of principles that have been developed and refined over more than a century of practice.

In this chapter, we will examine the general features of cooperatives, their historical evolution, and legal framework, and perform a comparison with capitalistic enterprises. We will then delve into the Italian context, where cooperatives play a significant role and have a long and rich history.

1.1 General Features

The way in which cooperatives operate is much closer to traditional businesses than non-profits, they undertake similar operational activities, adhere to standard business protocols, follow specific legal requirements, elect a board of directors, etc. What truly sets them apart from traditional businesses are the underlying purposes, the unique ownership and governance structure, and the way in which benefits are distributed among members.

Definition

Despite numerous efforts over time, achieving worldwide consensus on a clear and concise definition of such a multifaceted business structure proved elusive until 1995, when the International Cooperative Alliance (a global organization that works to promote, unite, and represent cooperative organizations across various sectors and countries) adopted the revised *Statement on the Cooperative Identity.* According to this statement

> *"A co-operative is an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise. (ICA, 1995)*

Values

The same document also lists the core values on which cooperatives should base their activities: "*self-help, self-responsibility, democracy, equality, equity, and solidarity*" (ICA, 1995). Indeed, according

to the ICA, cooperative members should believe in the ethical values of honesty, openness, social responsibility and caring for others.

Fundamental Principles

Cooperatives around the world operate according to the same set of core principles, known as the "7 Cooperative Principles," established by the International Co-operative Alliance. These principles serve guidelines for co-ops to put their values into practice:

1. ***Voluntary and Open Membership***
   Cooperatives are voluntary organizations, open to everyone who is able to use their services and willing to accept the responsibilities of membership, without gender, social, racial, political, or religious discrimination.

2. ***Democratic Member Control***
   Cooperatives are democratic organizations controlled by their members, who actively participate in setting policies and making decisions. Representatives (directors/trustees) are elected among the membership and are accountable to them. In primary cooperatives, members have equal voting rights (one member, one vote); cooperatives at other levels are organized in a democratic manner.

3. ***Member Economic Participation***
   Members contribute equitably to, and democratically control, the capital of their cooperative. At least part of that capital is usually the common property of the cooperative. Members usually receive limited compensation, if any, on capital subscribed as a condition of membership. Members allocate surpluses for any or all of the following purposes: developing their cooperative, possibly by setting up reserves, part of which at least would be indivisible; benefiting members in proportion to their transactions with the cooperative; and supporting other activities approved by the membership.

4. ***Autonomy and Independence***
   Cooperatives are autonomous, self-help organizations controlled by their members. If they enter into agreements with other organizations, including governments, or raise capital from external sources, they do so on terms that ensure democratic control by their members and maintain their cooperative autonomy.

5. ***Education, Training, and Informatio***
   Cooperatives provide education and training for their members, elected representatives, managers, and employees so they can contribute effectively to the development of their co-operatives. They inform the general public - particularly young people and opinion leaders - about the nature and benefits of co-operation.

6. ***Cooperation among Cooperatives***
   Cooperatives serve their members most effectively and strengthen the cooperative movement by working together through local, national, regional and international structures.

7. ***Concern for Communit***
   Cooperatives work for the sustainable development of their communities through policies approved by their members.

1.2 Historical Evolution

The Origins of Cooperatives

The organized cooperative movement, rooted in the voluntary and democratic aggregation of people with shared ideals, traces back to the early 19th century. An era marked by the transformative force of the Industrial Revolution that, while birthing significant technological advancements, also led to the ruin of numerous artisans and obliged women and children work in harsh conditions with minimal compensation. During that period, many foresaw the resurgence of slavery-like conditions, as workers in certain regions endured inhumane exploitation.

Some enlightened entrepreneurs slowly started adopting more humane practices, refraining from employing children under ten years of age and providing housing, food, clothing, and education for orphaned youth up to the age of eighteen. One of these luminaries was Robert Owen, who notably introduced the term "cooperation" in opposition to competition. Owen established a model village in New Lanark, south of Glasgow, encompassing a factory, a school, a library, residences, a church, and a shop.

Some intellectuals also established voluntary associations to provide education and assistance to workers, trying to re-build some functions of the corporations dismantled by Napoleon and rendered obsolete by the Industrial Revolution.

The most educated and courageous workers then started forming labor societies or “mutual aid societies”, wherein members contributed weekly dues for mutual assistance in cases of illness, injury, or death. These experiences paved the way for cooperatives to procure essential goods at affordable prices, organize cooperative production, and build decent housing at accessible rents.

It’s around mid-19th century that the cooperative movement took on its modern form and established some of its enduring principles. This period, known as the "Hungry Forties," was characterized by unemployment and poverty, primarily stemming from the mechanization of the cotton industry and the embargo on English cotton exports to the United States.

In 1833, a first cooperative store was opened in Rochdale, which, however, failed in 1835.

The lessons learned from this failure enabled a group of twenty-eight Rochdale textile workers and artisans who merged their savings (averaging one pound each), to revive the initiative. The Rochdale Pioneers' store on Toad Lane opened on the evening of December 21, 1844, to accommodate members' daytime work schedules and ensure accessibility.

Figure 1.1 Rochdale Pioneers' Headquarter (1844), in a 19th century engraving.

While it wasn't the first consumer cooperative, the Rochdale Pioneers' enterprise was the first to withstand the constant challenges of the market economy.

Figure 1.2 Picture of some of the 28 Rochdale Pioneers.

In the past, consumer cooperatives sold goods at cost, but this meant they lacked a measure of efficiency and room for investment, innovation, and expansion. Consequently, they were sooner or later forced to close. From Rochdale onwards, cooperatives began selling at market prices, or rather at the best prices available on the market (prices not burdened by speculative and monopolistic rents). At year-end, the "management surplus" (i.e., what remains after deducting all costs) is partly set aside for collective benefits, and the remainder is distributed among members not in proportion to their shareholding (as in capital-based societies), but in proportion to their purchases at the cooperative. This distribution represents a refund of the surplus each member paid beyond the pure cost, or rather a reward for the "loyalty" shown to the cooperative.

The Rochdale Pioneers' enduring legacy lies in codifying foundational principles within their statutes, principles that continue to inspire the broader cooperative movement. These tenets include shared values and interests among members, internal democratic processes (guided by the "one member, one vote" principle), religious inclusivity, educational rights, gender parity (beginning with the recognition of women's property rights, a progressive stance for the time), and solidarity.

From the modest Toad Lane shop emerged initiatives in a myriad of directions: the mill, the cotton factory, the tobacco factory, the first wholesale cooperative warehouse, cooperative housing, cooperative newspapers, cooperative insurance societies, and welfare and pension societies, not only in England but across Europe and beyond.

In Germany, the pioneering Schultze-Delitsch credit cooperatives (in urban areas) and the Raiffeisen cooperatives (in rural regions) emerged. These institutions were established to combat usury and provide support to farmers, craftsmen, and small traders. Their primary aim was to facilitate access to credit for artisans and farmers by pooling savings within their communities.

Simultaneously, in France, the first worker cooperatives were established to address unemployment and demonstrate the viability of working without a master.

Inspired by the Danish farmers, agricultural producers across Europe responded to the gradually worsening crisis by forming cooperatives to manage dairies, wineries, or mills, thereby safeguarding the fruits of their labor.

These transformative initiatives rapidly gained momentum, proliferating across Europe and diversifying in scope and scale.

The Italian Cooperative Movement

The origins of the cooperative movement in Italy can be traced back to 1853, when Turin's General Association of Workers inaugurated the first "Magazzino di Previdenza," a provisioning store for essential goods, embodying early cooperative features. This pioneering concept quickly expanded in cities like Alessandria, Biella, and Vigevano.

By 1855, the cooperative ethos took a more formal shape with the creation of the first Mutual Aid Society among typographers in Modena. Typographers and type founders of this era distinguished themselves as forward-thinking and meticulously organized. Their pioneering efforts catalyzed the spread of cooperative initiatives throughout the urban centers of north-central Italy in the 1860s and 1870s, laying the groundwork for a more collaborative and equitable approach to work and production.

The nascent mutual aid movement branched into five key areas: credit, agricultural services, consumer goods, labor, and mutual aid, aiming to provide economic support and empowerment to workers and small-town bourgeoisie amidst the social and economic transformations following Italy's unification. This period was marked by rapid industrial growth and urban expansion but also heightened vulnerability among the population's most fragile segments.

Luminaries such as Luigi Luzzatti, Fedele Lampertico, and Leone Wollemborg were key in redefining cooperation as an essential ingredient to create a society characterized by engaged and responsible citizens. They envisioned cooperatives not just as engines of economic prosperity but as platforms for both material and moral advancement.

The cooperative model received its initial, albeit partial, legal endorsement with the 1882 Commercial Code. However, the real catalyst for the growth of mutual aid associations came with the supportive measures of Giolitti's government.

From October 10 to 13, 1886, in Milan, 100 delegates representing 248 societies and 70,000 members convened to establish a cohesive organizational structure aimed at fostering and coordinating the flourishing cooperative movement. This congress led to the creation of the National Federation of Cooperatives, which evolved into "Lega delle Cooperative" in 1893. This body, later known as "Legacoop" and affiliated with the International Cooperative Alliance, undertook multiple roles:

- Championing the interests of its member cooperatives in dialogues with governmental bodies and key economic/social entities.
- Offering a broad spectrum of services to its members, ranging from tax advice and legal support in labor matters to financial assistance.

- Encouraging the inception of new cooperatives in a variety of sectors, thus diversifying the cooperative landscape.
- Cultivating and disseminating the core values and distinct identity of the cooperative movement.
- Building economic partnerships and collaborative projects among cooperatives, enhancing community integration and mutual support within the cooperative network.
- Performing regulatory checks and balances for member cooperatives, acting as an intermediary with the Ministry of Economic Development to ensure compliance and best practices.

The Cooperative drive in the Giolittian Era

The governmental policies of Crispi and his successors plunged Italy into a deep economic downturn, culminating in violent public clashes and setting the stage for Giovanni Giolitti's ascendancy. Under favorable international conditions, banking reform, public infrastructure initiatives, and a new industrial strategy led by the liberal elite, the Italian economy began to show promising signs of dynamism. Giolitti channeled significant funding into public initiatives like land reclamation, water regulation, and the development of infrastructure, entrusting these projects to cooperatives (Regio Decreto 278 of 1911). His strategy aimed to harmonize the aspirations of workers from both Catholic and socialist backgrounds with the principles of the liberal establishment, easing tensions between capital and labor as well as reducing friction between government institutions and political dissenters.

In 1901, significant developments unfolded with the establishment of the “Federazione Italiana delle Società di Mutuo Soccorso” and the General Confederation of Labor, laying the groundwork for a robust "Triple Alliance" in the labor sector. This alliance represented a strategic collaboration of the era's leading figures from cooperative, mutual aid, and labor union circles. From 1904 to 1910, a series of twelve legislative initiatives were introduced, each playing a pivotal role in catalyzing the growth and development of the cooperative movement. The involvement of the “Lega Nazionale delle Cooperative” in key national advisory bodies, including councils on Labor, Welfare, Emigration, and the Cooperative Commission, alongside its international representation in the International Cooperative Alliance, showcased the critical position and influence of the Italian cooperative movement on both domestic and international stages. This era of legislative support and organizational synergy resulted in a notable expansion of the cooperative network, with the number of societies rising from 3,800 in 1902 to 5,065 by 1910, marking a significant period of growth and influence for the cooperative movement.

The Cooperative Movement During and After the First World War

The outbreak of World War I inevitably complicated the life of cooperatives, which faced challenges from rising costs and a stagnation in consumer goods. But immediately after the end of the war, between 1919 and 1920, Italy experienced a significant surge in cooperative activity, partly driven by severe unemployment and skyrocketing prices. By 1921, the number of cooperatives had leaped to 25,000, boasting over two million members (while at the outbreak of the war there were “only” 7,429 cooperatives with 1.8 million members).

The Cooperative Movement Under Fascism

The period between 1919 and 1924, marked by intense national disillusionment and strife, saw Fascism aggressively target the cooperative movement to curb the rising influence of socialist and Catholic groups. It was only in 1923 that Mussolini's regime began a process aimed at normalizing the situation, leading to a systematic review and restructuring of cooperative affairs by the Fascist Party. The years 1925 to 1927 marked a significant phase as the regime disbanded the Confederation and initiated a thorough reorganization of the cooperative sector, culminating in the establishment of the National Fascist Entity for Cooperation headquartered in Rome, and the integration of cooperatives into the state's corporatist framework.

In the days following September 8, 1943, Fascism sought to leverage the cooperative movement through the “Manifesto di Verona”, but Italy's fate was about to shift. The anti-fascist forces, laid the groundwork for the rebuilding of free and democratic cooperatives, signaling a new chapter in the nation's history.

The Post-War Era: the Cooperative Movement from the Cold War to the Economic Miracle

The arrival of the Allied forces, notably during the centenary celebrations of the Rochdale Pioneers in November 1944, heralded significant signals of change. By May 15, 1945, a group of Catholic cooperators had reestablished the Italian Cooperative Confederation, and a few months later, the National League of Cooperatives and Mutuals came back to life. This momentum culminated in the Basevi Law, passed on September 14, 1947, introducing the "Provvedimenti per la cooperazione” (provisions for cooperation) that reaffirmed the cooperative sector's commitment to the principles of solidarity and democracy, while also detailing regulations to ensure adherence to the constitutional mandate of mutuality.

However, the onset of the Cold War and the global divide into two ideological blocs quickly dampened aspirations for social reform. Amidst this backdrop, De Gasperi's governance guided a nation still reeling from war and civil unrest towards stability and democratic governance, with a focus on labor rights and social welfare Despite these strides towards normalization, the

cooperative movement encountered considerable obstacles, often facing discrimination from the government and experiencing a degree of ostracism. The movement sought to reclaim its position and address grievances through the “Carta rivendicativa della cooperazione”, issued on December 16, 1953, that articulated key demands including the return of expropriated assets, the end of commissioner management, a definitive cooperative statute, fiscal and financial parity, the abolition of the sugar manufacturing tax, and the full implementation of the consolidated housing construction text.

The tumultuous 1950s and economic reassessments marked the end of a historical phase for cooperativism, paving the way for the rise of significant national consortia. Notably, the “Consorzio Nazionale Dettaglianti” (Conad) was established in Bologna in 1962 to coordinate the collective procurement of food, beverages, and consumer goods. The following year saw the inception of UNIPOL, further solidifying the movement.

The Cooperative Movement from the 70s to the 90s

In the early 70s, the imperative to revise the Basevi Law became apparent, culminating in the 1971 introduction of Law 127. This legislation revitalized cooperative operations and brought substantial tax advantages. That same year, the National Union of Italian Cooperatives (U.N.C.I.) was founded, driven by a Catholic-inspired group. The resurgence of the cooperative movement was already evident, but it further gaining momentum with the 1975 elections that leaned heavily towards the left, favoring the Italian Communist Party, that reinvigorated the cooperative movement's significance. During the late 1970s, the cooperative movement flourished, overcoming economic adversities and setting a solid foundation for its future evolution.

The 80s posed new challenges as the movement navigated significant market shifts without compromising its core values of solidarity and mutual aid. The crisis peaked with the resignation of the Confederation's president but began to wane from 1984 onwards, with the cooperative movement tackling key national issues like employment and small business support at the third National Congress in Rome. To meet these challenges, the movement sought substantial capital, balancing between accessing capital markets and increasing self-financing, highlighted by the establishment of “Banec” in Bologna and Unipol's stock market debut. The Marcora Law of 1985 and subsequent initiatives like FINEC fostered economic growth within the movement, further accelerated by legislative changes in 1992 that introduced a new financing model for cooperatives.

The 90s marked a significant expansion of social cooperation, filling the void left by the state in welfare services. The legal recognition of social cooperatives in 1991 and the acknowledgment of the cooperative movement's economic contributions by Prime Minister Carlo Azeglio Ciampi in 1993 underscored its growing importance.

In retrospect, the history of cooperation is a mix of setbacks and achievements. A nuanced understanding of both is vital, especially during moments of change, to eventually readapt the goals and objectives. As underscored by Mises, history is essential for those who aspire to build a better world.

1.3 Economic perspective

Cooperatives Through the Lenses of Economists

Economists and jurists have played a significant role in shaping the development of cooperative-related legislation and public perception, acting as both advisors and opinion makers.

In this brief chapter, we will retrace some key milestones of this process following the division into three historical phases proposed by Antonio Magliulo in "The Economists and Cooperation".

The Perspective of Classical Economists (1797-1874)

At the very beginning, when cooperation was presented as a "poor relief", an alternative to the existing "poor laws," classical economists, notably Malthus and Ricardo, criticized it as they criticized any form of assistance that could divert existing capital from the most productive uses.

As cooperatives evolved into a network of self-sustaining villages offering an alternative to the conventional market, the criticism from classical economists became even more severe. They argued that an economy lacking private property, differentiated wages, gold currency, and market prices was unfeasible and doomed to failure. These cooperative villages were seen as a regression to a subsistence economy, where use-values are produced and each community, regardless of its size, consumes only what it produces.

The turning point came with the Rochdale pioneers, as cooperation morphed into a network of democratic enterprises functioning within the market, producing and distributing essential goods. This shift prompted a significant shift in the classical economists' perspective, who began to view cooperation more favorably. The cooperative model, now akin to a business enterprise, was seen as enhancing labor productivity and attracting workers' savings, thereby increasing the wage pool and elevating the poor's standard of living. Marx heralded cooperation as a "new way of producing," a method that the later classical economists acknowledged had finally aligned with the capitalist economy's norms and structures, marking a significant evolution in cooperative endeavors.

The Perspective of Neoclassical Economists (1875-1944)

From 1875 to 1944, cooperatives, backed by governmental support, played a pivotal role in alleviating societal hardships. They emerged as a collective response to the market failures,

providing access to essential goods and services—from affordable consumer goods to credit, housing, and job opportunities—that were otherwise inaccessible. The state, recognizing the cooperatives' significant societal contribution, supported them for their non-profit-driven, community-focused approach, a principle enshrined in the 1942 Code as the "mutualistic purpose."

The unique position of cooperatives, in contrast to capitalist enterprises, attracted the interest of neoclassical economists who debated their distinct nature, the value of these differences, and their eligibility for state support. This debate revealed a range of perspectives.

In general, among Italian economists there seems to be a consensus that cooperatives can only fulfill a social function if they operate as democratic enterprises with a mutualistic goal, particularly within imperfect markets and without state assistance. The rationale for focusing on imperfect markets is that it's in these settings where cooperatives can earn additional profits to offset their inherent competitive disadvantages. The argument against state aid is twofold: firstly, the market itself provides a form of subsidy through these extra profits, and secondly, public assistance can skew competition and encourage the rise of so-called 'false cooperatives.'

This perspective represents a conditional endorsement from neoclassical economists. However, a critical point remains unaddressed: if the social objective of cooperatives is to diminish these extra profits without state help, why limit their benefits solely to their members? Why shouldn't the advantages of cooperation be extended to everyone? The idea is that mutualistic obligations should only be enforced in exchange for tax breaks, effectively limiting the community-derived benefits to cooperative members. Yet, this potential contradiction, real or perceived, has not been thoroughly explored in economic discussions.

The Perspective of Orthodox and Heterodox Economists (from 1945 onward)

Since 1945, cooperatives have played a crucial role in shaping a more substantial democracy by initially providing goods and services exclusively to their members (internal mutualism), and later extending these benefits to broader user groups (external mutualism), filling gaps left by the market and the state.

Mainstream or orthodox economists view cooperative enterprises as less efficient compared to capitalist firms, arguing that they can only thrive in scenarios where market and government failures occur. In contrast, heterodox economists see cooperatives as having a distinct social function that goes beyond merely stepping in where markets fail. However, they also implicitly support public backing to address specific market failures, such as the positive externalities generated by cooperatives.

During the 1970s and 1980s, Italian economists primarily engaged with the theories of Ward, Vanek, and Meade, who are considered orthodox.

In the 90s, the new –heterodox– perspective gained momentum in Italy with leading exponents like Jossa and Zamagni. Their central concern revolves around defining the core identity of cooperative enterprises and distinguishing them from their capitalist counterparts.

Jossa, in his 2005 work, defines the ideal cooperative as a democratic entity focused on production that eliminates the concept of wage labor, and strives to optimize the collective income of its members. He articulates this shift in power dynamics as a fundamental inversion of traditional capitalist relationships: "unlike in capitalism where the capitalist wields control over the worker, in a cooperative setting the worker governs the deployment of capital."

He critiques the traditional legalistic interpretation of mutualism as limited and labels such cooperatives as "cooperatives of the lawyers." According to Jossa, the true societal contribution of cooperatives transcends mutualistic aims; it lies in their potential to dismantle wage labor and, consequently, the class structure that divides society.

Jossa refers to a specific type of cooperative, which he calls "economists' cooperatives," characterized by a few core principles. Firstly, labor hires capital, meaning it pays capital a minimum market interest rate. Secondly, labor combined with capital cannot hire wage labor, except within strict limits. Thirdly, the cooperative aims to maximize the average income of its member workers, who also act as capitalists. Lastly, the enterprise operates democratically.
Jossa extensively discusses the numerous positive externalities generated by what he considers the true cooperative enterprise: the expansion of democracy, reduction in unemployment (both classical and Keynesian), containment of cost-push inflation, and improvements in income distribution. These externalities are seen as public goods that justify the state’s compensation from to producers.
While Jossa's ideas resonate with the Mazzinian tradition, Zamagni's approach appears to align more closely with Rabbeno's perspective. For Zamagni, the true cooperative is a democratic enterprise that pursues a common goal among its members, broadly defined as a mutualistic purpose.

Comparison between Cooperatives and Capitalistic Enterprises

According to the neoclassical model, a capitalist enterprise is founded by an entrepreneur who contributes capital, organizes production means, hires workers, and ultimately enjoys the profits after compensating all factors of production.

In a cooperative enterprise, workers are often also members, they contribute to the productive factors (primarily labor) and collectively make management and operational decisions. The emergence of a cooperative is often linked to some degree of inequality in resource distribution (especially capital) or to financial market imperfections. This occurs when individuals holding an entrepreneurial vision lack the financial resources to implement it independently, and the banking system is not perfectly equipped to identify businesses worthy of funding.

Forming a cooperative is also logical for strategic reasons, especially when the enterprise critically depends on a large number of "indispensable" individuals. In such scenarios, it's efficient to grant all these individuals the residual right to control, as Hart and Moore suggested in 1990. Their study indicates a tendency for cooperatives to thrive in sectors with a low capital-to-labor ratio, where the specific skills of individual workers (=members) are crucial for the product's success, a trait commonly seen in certain service industries.

However, these factors alone don't fully account for the formation of cooperatives. It's essential for workers to find it more advantageous to establish a cooperative rather than work as salaried employees in capitalist enterprises. This requires a certain level of heterogeneity within the labor force, explaining why some prefer to be employed by capital firms while others opt to become cooperative members. Given that a significant portion of cooperative workers are also members, cooperatives cannot reduce their workforce as much as capitalist enterprises in response to negative shocks; therefore, the only variable they can adjust is wages. This implies that wages in cooperatives are more volatile than in capitalist enterprises, a finding supported by Pencavel, Pistaferri, and Schivardi (2006) using INPS (Italian Social Security Institute) wage data.

Another aspect that contributes to labor force heterogeneity is the degree of risk aversion, which has two dimensions: the variability of returns in a cooperative enterprise and the likelihood of job loss. The former suggests that cooperative members might be workers who are more averse to the risk of dismissal, hence accepting higher wage volatility in exchange for a lower likelihood of losing their job. The latter could trigger a sorting process, leading to generally lower wages in cooperatives, as they would also incorporate an insurance component against the risk of job loss. In this scenario, risk aversion is also tied to the fear of unemployment. Another explanation could be that, regardless of risk aversion, cooperatives tend to be formed predominantly by workers who face greater challenges in securing employment after a period of unemployment.

In practical terms, the main differences between cooperatives and other types of organizations are encapsulated in the "7 Cooperative Principles." A fundamental difference is the democratic governance of cooperatives, where each member has an equal vote, adhering to the "one member, one vote" principle, unlike in capitalist businesses where influence is typically tied to the size of one's

capital investment. The core purpose of the organizations also diverge; capitalist entities are driven by profit maximization, while cooperatives focus on mutual benefit. Specifically, while capitalist enterprises distribute profits among shareholders based on their capital shares, cooperatives typically reinvest their profits back into the cooperative's development and in strengthening the cooperative's assets, known as "indivisible reserves". In the event of dissolution, a cooperative's assets must be donated to cooperative promotion funds, which support the creation and development of new cooperatives.

This setup implies that while shareholders in traditional enterprises are the actual owners of the company, members of cooperatives are simply stewards of assets deeply connected to a community and intended to be passed down to future generations. Therefore, it is said that cooperatives prioritize people over profit and labor over capital.

The implications for productivity and efficiency are nuanced and highly context-dependent. From a technical-economic standpoint, the theories of incomplete contracts and transaction costs largely explain why cooperatives were born and continue to exist, while agency and property rights theories shed light on some of the challenges inherent in this organizational model. Below, a brief selection of approaches found in literature that explain some key problems faced by cooperatives:

Cook, 1995: ***Vaguely defined property rights***	*Fulton, 1995:* ***Property rights theory***
Driving Forces: The necessity for large-scale operations may lead to free-riding and disinterest among members. ***Possible Outcomes:*** Possible exit of members, conversion of cooperatives into investor-owned firms (IOFs), or a shift toward individualized structures	***Driving Forces:*** Technological advancements alter the power dynamic within the cooperative. ***Possible Outcomes:*** The power of cooperatives is reduced
Harte, 1997: ***Transaction cost & agency theory***	*Bager, 1996:* ***Population ecology***
Driving Forces: The market is becoming more open, transparent, and larger. ***Possible Outcomes:*** Conversion into IOFs or development into hybrid forms.	***Driving Forces:*** Techno-economic and institutional changes prompt cooperatives to mimic other business models. ***Possible Outcomes:*** Conversion of cooperatives or at least a loss of their specific cooperative identity.
Holmström, 1999: ***Governance, capital markets***	*Hogeland, 2006:* ***The economic culture***
Driving Forces: Improvements in capital markets result in suboptimal investment portfolios for cooperatives. ***Possible Outcomes:*** Traditional cooperatives become increasingly inefficient.	***Driving Forces:*** Industrialization of agriculture leading to large scale and capital-intensive processes. ***Possible Outcomes:*** Traditional cooperatives struggle with issues arising from members' obsolete skills.

Table 1.1 selection of approaches found in literature that explain some key problems faced by cooperatives (source: personal elaboration based on "Change in co-operative organisations", Ntrinias, 2016)

1.4 Italian Cooperatives

Distinctive Features of the Italian Cooperative Movement

The Italian cooperative movement has certain unique characteristics that set it apart from the ones of other countries. First and foremost, it has never been neutral, meaning neither apolitical nor areligious, contrary to what might have been expected if it had adhered strictly to the guidelines of the International Cooperative Alliance. The ICA has always championed neutrality as a core principle to prevent discrimination and persecution. However, in Italy, a deeply ingrained inclination towards cooperativism among broad segments of the population has led to a diversification of the movement's ideological inspirations across the entire political spectrum. This diversity was so profound that it even prevented Fascism from eradicating cooperative efforts. As discussed in the previous chapter, the earliest cooperative ventures emerged in the second half of the 19th century, branching out from the Mutual Aid Societies, which were largely influenced by secular-liberal ideals and the ideology of Giuseppe Mazzini. A second wave of cooperatives was intertwined with the rise of socialism and later communism, while a third faction emerged from Catholic interest in social engagement, significantly propelled by Pope Leone XIII's encyclical Rerum Novarum, in 1891. This rich tapestry of influences has allowed for continuity to the present day, alongside support from various governments and local administrations. Forza Italia, established in 1993, was the first major party without cooperative ties.

The fact that the movement has offered a wide array of ideological and practical approaches has fostered a broad and deep-rooted presence of cooperatives across the national territory. The fact that cooperative strength varies by region is more a reflection of local entrepreneurial capabilities and opportunities than an absence of “cooperative spirit”.

A third noteworthy peculiarity is the strong ideological cohesion within each Cooperative Central, grouping cooperatives of similar ideological persuasion. This has encouraged associated cooperatives to coordinate in networks, both horizontally (regionally) and vertically (by sector), leading to mergers, growth, and the strengthening of supply chains that enhance productivity and market competitiveness.

Legal Framework

Countries within the European Union feature a diverse landscape of national cooperative laws, encompassing at least six distinct legislative frameworks:

- no cooperative law (e.g. Ireland)
- cooperative regulation in a formally independent act (e.g. Austria, Germany)

- cooperative regulation in the commercial code (e.g. Czech Republic, Slovakia)
- cooperative regulation in the company law (e.g. Luxembourg/Belgium)
- cooperative regulation in the civil code (e.g. Italy, the Netherlands)
- cooperative regulation in the code of cooperatives (e.g. Portugal)

Remarkably, some nations, such as Japan, adopt sector-specific cooperative laws, while others, like the United States, do not have any specific federal law on the establishment of cooperatives.

Even the legal identity of cooperatives varies country by country, some recognize them as cooperative societies with limited or unlimited liability, economic interest groupings, or joint-stock companies.

There are also diverging national requirements regarding members and capital stock:

- Some countries, like Bulgaria, Denmark, and Luxembourg, don't mandate a minimum membership count. While countries such as Germany, Sweden, and USA require the presence of at least three members and Poland and Japan even more (respectively 10 and 15).
- Regarding capital, most nations do not enforce a minimum capital requirement for cooperatives, when statutes do specify a minimum, it's typically below €1'000. There are obviously some exceptions, like Malta (requiring €100'000 for agricultural producer organizations).

Cooperatives within the EU and the European Economic Area (EEA) have to adhere to the SCE Regulation, specifically Council Regulation (EC) 1435/2003 of 22 July 2003 which outlines the Statute for a European Cooperative Society (which clearly doesn't replace national cooperative laws). As the 29th cooperative model within the EU, the SCE aims to enhance the legal framework for cooperatives operating across borders, establishing a significant legal benchmark for such entities at the EU level.

The Italian regulatory framework for cooperatives is very extensive. According to the Article 45 of the Italian Constitution:

> *"the Republic recognizes the social function of cooperation with mutual character and without private speculation purposes. The law promotes and favors its growth with the most appropriate means, and ensures, with appropriate controls, its character and purposes.*

Building on this constitutional mandate, articles 2511-2548 of the Civil Code integrate cooperatives within the broader legal structure of companies, offering a foundational legal base.

1. ***Art. 2511 of the Civil Code***
   defines cooperatives as companies "with variable capital and mutual purpose". The cardinal principle, as well as the objective of the cooperatives, is that concerning the mutual exchange between members and cooperatives (the principle of mutuality). Mutuality is at the core of the cooperative model and it is expressed in the Italian legislation through various requirements which the cooperatives must respect, allowing them access to particular fiscal benefits.
2. ***Art. 2512 of the Civil Code***
   establishes that cooperatives are mutually prevalent based on the type of mutualistic exchange, when they: (1) carry out their activity mainly benefiting the members, consumers or users of products or services, (2) mainly use, in carrying out their activity, their worker members, (3) mainly use, in carrying out their activity, the products or services of their members.

Beyond these articles, there are also specific legislations cater to the unique characteristics of cooperatives, providing tailored guidance:

1. ***Decreto Legislativo C.P.S. December 1947, n. 1577***
   Provvedimenti per la cooperazione (Measures for cooperation so called "Basevi Law")
2. ***Legge 27 February 1985, n. 49***
   Misure per il credito e cooperazione – Misure urgenti per i livelli di occupazione (Measures for credit and cooperation - Urgent measures for employment levels so called "Marcora law")
3. ***Legge 31 January 1992, n. 59***
   Nuove norme in materia di società cooperative (New rules on cooperative societies)
4. ***Legge 3 April 2001, n. 142***
   Revisione della legislazione in materia cooperativistica, con particolare riferimento alla posizione del socio lavoratore (Reform of the legislation on cooperative matters, with particular reference to the position of the worker member)
5. ***Decreto Legislativo 2 August 2002, n. 220***
   Norme in materia di riordino della vigilanza sugli enti cooperativi (law on the re-organisation of the supervision of cooperatives), ai sensi dell'articolo 7, comma 1, della legge 3 aprile 2001, n. 142, recante: "Revisione della legislazione in materia cooperativistica, con particolare riferimento alla posizione del socio lavoratore"
6. ***Decreto Legislativo 17 January 2003, n. 6***
   Riforma organica della disciplina delle società di capitali e società cooperative, in attuazione della legge 3 ottobre 2001, n. 366 (Organic reform of the regulation of corporations and cooperative societies)

There are also several sectoral regulations that Italian cooperatives need to respect. In particular, with the decree of June 23, 2004, the Ministry of Productive Activities established the Registry of Cooperative Societies within the Chambers of Commerce. Article 4 of the decree categorizes cooperative societies, based on their intended activities, in: Production and Labor Cooperatives, Agricultural Work Cooperatives, Social Cooperatives, Agricultural Product and Breeding Cooperatives, Housing Construction Cooperatives, Fishing Cooperatives, Consumer

Cooperatives, Retailer Cooperatives, Transportation Cooperatives, Energy Cooperatives, Cooperative Consortia, Agricultural Consortia, Cooperative Credit Banks, Guarantee and Surety Consortia and Cooperatives, Mutual Aid Societies, Other Cooperatives (further information on the peculiarities of each category can be found here).

The process of admitting new members into a cooperative is outlined in the civil code (articles 2527 and 2528). Decisions on admission are made by the board, which must provide valid reasons for any refusal. Moreover, to facilitate the training and integration of potential new members, the civil code foresees a special member category, granting certain rights and responsibilities that diverge from those of regular members, paving the way for their eventual full membership. The number of such special members is capped at no more than one-third of the total members, and after a maximum period of five years, they have to transition to the full membership status.

The governance system of Italian cooperatives predominantly embraces a traditional model comprising an assembly, a board of directors, and an auditing entity, with the legal framework also accommodating alternative governance structures such as the dual and one-tier models, offering flexibility to adapt to varied operational contexts.

The financial framework of cooperatives is characterized by the principle of capital flexibility, which eliminates the need for a minimum share capital. Italian legislation also mandates that cooperatives allocate 30% of yearly profits to a legal reserve, and 3% to mutual funds aimed at cooperative development, under the stewardship of cooperative movement organizations.
Capital remuneration is capped by Article 2514, restricting dividend distribution beyond a set threshold tied to postal bond interest rates, ensuring financial prudence. Cooperative statutes also prohibit the distribution of reserves among members during the cooperative's lifespan and mandate the allocation of assets to mutualistic funds upon liquidation.
Cooperatives may raise capital through conventional financial instruments and by admitting investor members with a unique legal status, who are limited in their assembly voting rights and board participation to ensure cooperative governance remains member-focused.
"Member loans" offer another financing avenue, with repayable sums used strictly for cooperative purposes and capped remuneration.

Italian tax law provides cooperatives with fiscal advantages, exempting a significant portion of profits directed to indivisible reserves from taxation, with varying exemption rates across sectors. Patronage refunds are tax-exempt when reinvested as capital shares or used for cooperative capitalization, promoting financial stability and growth within the cooperative framework.

The supervision of cooperatives is governed by the Italian Civil Code and Decree No. 220/2002, mandating an external oversight system to align with Article 45 of the Constitution, ensuring

cooperatives adhere to their foundational principles and objectives. This system requires cooperatives to undergo external audits by the Ministry of Economic Development biennially, with social cooperatives facing annual reviews. The state entrusts supervisory duties to recognized cooperative movement associations, which conduct audits through designated auditors. This oversight aims to provide support to cooperatives while verifying their compliance with cooperative standards.

In Italy, the concept of “cooperation among cooperatives” is fundamental and firmly embedded in the legal framework. The Decree Law 1577/1947, specifically Article 27, introduces the "cooperative consortium" to enable cooperatives to achieve their mutual goals and engage in economic activities collectively under a unified organizational structure, forming a consortium as a cooperative entity. Such consortia can be established with at least three cooperatives and a minimum capital of €516. The consortium's by-laws can allow member cooperatives to have multiple votes (up to five) in the general meeting, based on their capital contribution or membership size. Additionally, by-laws may permit varying votes in proportion to the transactions each cooperative conducts with the consortium, offering flexibility from the "one member, one vote" principle to accommodate diverse memberships.

The "Gruppo Cooperativo Paritetico", introduced by the 2003 reform, represents a novel structure, legally defined as an agreement where two or more cooperatives, possibly from different sectors, outline the management and coordination of their businesses. This group can also include public or private entities, expanding the scope of cooperative collaboration.

Italian Cooperatives in Numbers

To examine the performance of Italian cooperatives and their related statistics, it's essential to provide some insights into the Italian economic system, which has been influenced by various external factors in recent years. In assessing a country's economic dynamics, it's customary to consider various indicators, including the Gross Domestic Product (GDP), which quantifies the overall level of economic production. This indicator reflects the total value of final goods and services produced within a country's borders over a specified period. According to the Italian National Institute of Statistics (ISTAT), the annual GDP trends from 2018 to 2022 were respectively +0.9%, +0.5%, -9%, +7%, and +3.7%. A significant downturn was noted in 2021, primarily due to the crisis triggered by COVID-19, which was countered by economic policies implemented in response to the crisis. Another significant event was Russia's invasion of Ukraine, which exacerbated existing issues and challenges, leading to a sharp increase in inflation and a significant rise in the costs of energy, food, and raw materials.

When examining the total number of cooperatives registered in the National Registry at the end of each year within the reference period from 2018 to 2021, it's observed that, after the growth observed in 2019 with 5,300 new registrations (equating to a 4.9% increase from the previous year), the subsequent two years, 2020-2021, witnessed a significant downturn due to the COVID-19 pandemic. This resulted in a cumulative decline of 3,500 units for cooperatives, more pronounced in 2020 with a 1.9% fall, and continuing into 2021—albeit at a slower pace—with a 1.1% reduction.

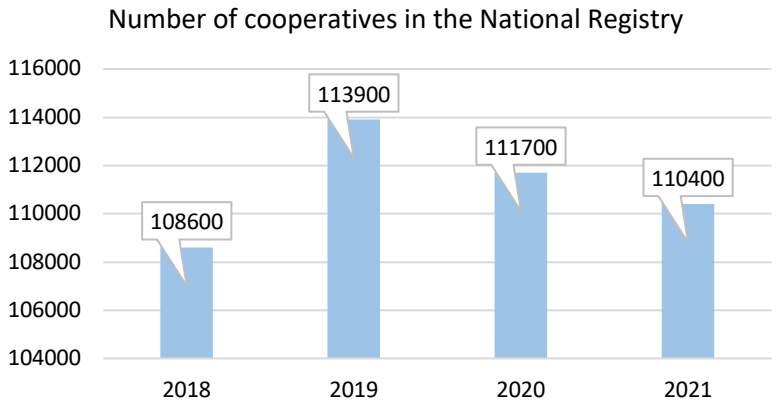


Figure 1.3 Number of cooperatives in the National Registry
(source: personal elaboration of MISE data contained in MIMIT Report 2022)

Figure 1.3 illustrates the net total of cooperatives registered in the National Registry at each year's end, reflecting both new entries and closures. Given the unique macroeconomic context of the period under review, it becomes pertinent to discern the relative impact of these two factors on the observed downturn. To facilitate this analysis, attention is directed towards Figure 1.4, which specifically tracks new registrations within the cooperative registry, broadening the scope of analysis by incorporating data from the subsequent years, 2022 and 2023.

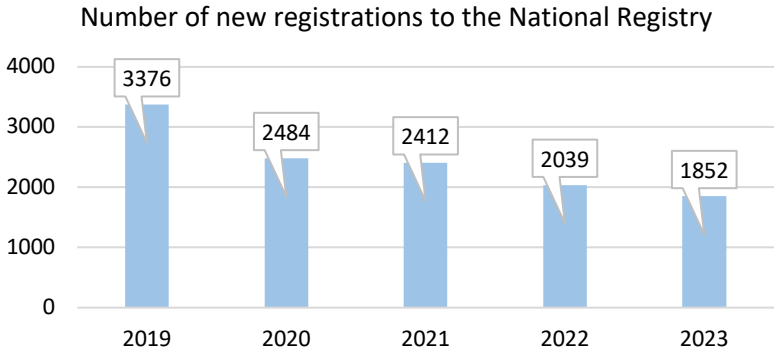


Figure 1.4 Number of new registrations to the National Registry
(source: personal elaboration of MISE data contained in Studi e Ricerche n. 243 FondoDiSviluppo 2024)

The categorization of Italian cooperatives as of December 31, 2021, as depicted in Table 1.2, reveals a significant sectoral concentration: production and labor cooperatives constitute 48.5% of

the total, with social cooperatives forming 21.6%. The agricultural sector, inclusive of cooperatives for product conferment and breeding, agricultural consortia, and labor, represents 8.5%. Housing and construction cooperatives account for just over 7%, while transportation cooperatives stand at 2%. Trading cooperatives, combining consumer and retailer types, along with fishing cooperatives, each contribute more than 1% to the total. Notably, a vast majority, 92.5% (102,215 out of 110,445), of these cooperatives adhere to a predominantly mutualistic model.

Number of cooperatives per category (as of 31.12.2021)		
Production and Labor Cooperatives	53513	48,5%
Social Cooperatives	23892	21,6%
Other cooperatives	8563	7,8%
Housing Construction Cooperatives	8020	7,3%
Agricultural Product and Breeding Cooperatives	5417	4,9%
Agricultural Work Cooperatives	3956	3,6%
Transportation Cooperatives	2201	2,0%
Fishing Cooperatives	1410	1,3%
Consumer Cooperatives	1177	1,1%
Not Categorized	1103	1,0%
Guarantee and Surety Consortia and Cooperatives	357	0,3%
Mutual Aid Societies	377	0,3%
Cooperative Credit Banks	263	0,2%
Retailer Cooperatives	144	0,1%
Agricultural Consortia	52	0,0%
TOTAL	**110445**	**100,0%**

Table 1.2 Number of cooperatives per category
(source: personal elaboration of MISE data contained in MIMIT Report 2022)

From a geographical perspective, the distribution of cooperatives across Italy shows a higher concentration in the regions of Sicily, Lazio, Lombardy, Campania, and Puglia, followed by Emilia-Romagna, Tuscany, Veneto, and Piedmont. Notably, 48% of the cooperatives are located in the Southern part of Italy, 30% in the North, and the remaining 22% in the Central region.

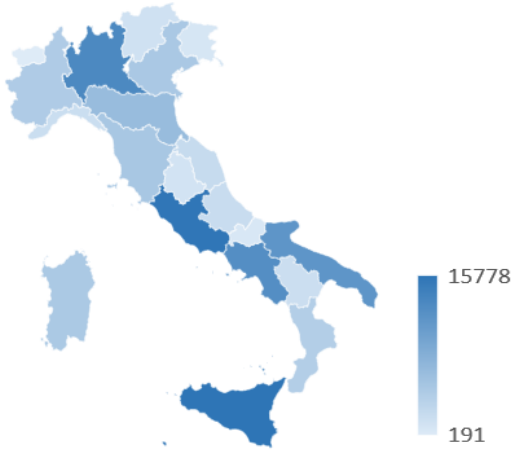


Figure 1.5 Geographic distribution of cooperatives in Italy
(source: personal elaboration of data contained in the MIMIT Report 2022)

Of the 110'400 cooperatives registered in the Registry as of December 31, 2021, 39'224 are affiliated with associations (35.5%), while 71,221 are not affiliated (64.5%). Sector associations submit to the Registry a list of their member cooperatives every six months. The following pie chart (Figure 1.6) illustrates the distribution of affiliated cooperatives among the various associations, highlighting that Confcooperative and Legacoop are the biggest in terms of number of affiliates.

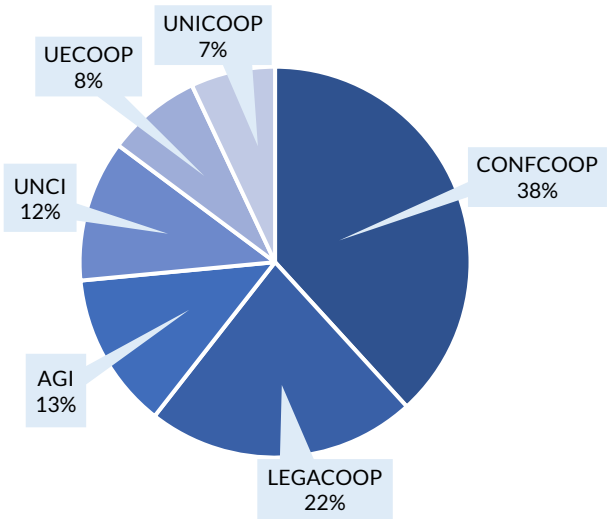


Figure 1.6 Distribution of affiliated cooperatives among the various associations, as of December 2021 (source: personal elaboration of MISE data contained in MIMIT Report 2022)

The 2022 World Cooperative Monitor, published by the European Research Institute on Cooperative and Social Enterprises (Euricse) in conjunction with the International Cooperative Alliance (ICA), features fourteen Italian cooperatives among the global giants, with a collective production value of $66.82 billion. This figure represents more than 3% of the global cooperative turnover, with the top 300 cooperatives worldwide achieving a combined turnover of $2.171 trillion. Notable Italian cooperatives included in the report are Conad, Coop Italia, Reale Mutua, Iccrea Banking Group, Cattolica Assicurazioni, Central Cash Desk Group, Agricola Tre Valli, GESCO, CEF, Granlatte, ITAS Group, Unione Farmaceutica Novarese, SACMI, and Manutencoop.

According to Euricse's report "Cooperation in Italy", which is based on the analysis of 41'000 of the 110'400 cooperatives registered on the National Registry as of December 2021 (see Table 1.3), Italian cooperatives generated a total turnover of €122 billion, contributing €29 billion in added value, as detailed in Table 1.4. Production and labor cooperatives lead in numbers and added value, making up 38.9% of the total and contributing 28.6% to the added value. Meanwhile, agricultural cooperatives lead in turnover, amassing €39.6 billion and adding €4 billion in value, underscoring their significant economic impact within the cooperative sector.

Number of cooperatives per category (31.12.2021) - National Registy			Number of cooperatives per category considered in Euricse's report	
Production and Labor Cooperatives	53513	48,5%	15948	38,9%
Social Cooperatives	23892	21,6%	11732	28,6%
Other cooperatives	8563	7,8%	4410	10,8%
Housing Construction Cooperatives	8020	7,3%	1801	4,4%
Agricultural Product and Breeding Cooperatives	5417	4,9%	5459	13,3%
Agricultural Work Cooperatives	3956	3,6%		
Transportation Cooperatives	2201	2,0%	695	1,7%
Fishing Cooperatives	1410	1,3%		
Consumer Cooperatives	1177	1,1%	819	2,0%
Not Categorized	1103	1,0%	79	0,2%
Guarantee and Surety Consortia and Cooperatives	357	0,3%		
Mutual Aid Societies	377	0,3%		
Cooperative Credit Banks	263	0,2%		
Retailer Cooperatives	144	0,1%	68	0,1%
Agricultural Consortia	52	0,0%		
TOTAL	**110445**	**100,0%**	**41011**	**100,0%**

Table 1.3 Datasets comparison: National Registry – Euricse's Report n.301, 2023
(source: personal elaboration of MISE data contained in MIMIT's Report 2022 and Euricse's Report n.301, 2023)

Number of cooperatives, turnover (in thousands of €), and added value (in thousands of €) per category – year 2021						
Category	**N° of cooperatives**	**%**	**Turnover**	**%**	**VA**	**%**
Agricultural Cooperatives	5459	13,3%	39.629.386 €	32,5%	4.018.242 €	13,9%
Production and Labor Cooperatives	15948	38,9%	21.901.702 €	17,9%	10.530.287 €	36,3%
Transportation Cooperatives	695	1,7%	2.561.319 €	2,1%	375.700 €	1,3%
Consumer Cooperatives	819	2,0%	13.089.738 €	10,7%	2.115.404 €	7,3%
Retailer Cooperatives	68	0,1%	16.251.115 €	13,3%	643.686 €	2,2%
Social Cooperatives	11732	28,6%	15.608.245 €	12,8%	9.454.749 €	32,6%
Housing Construction Cooperatives	1801	4,4%	793.543 €	0,7%	125.620 €	0,4%
Other cooperatives	4410	10,8%	12.173.050 €	10,0%	1.728.328 €	6,0%
Not Categorized	79	0,2%	37.143 €	0,0%	13.020 €	0,0%
TOTAL	**41011**	**100,0%**	122.045.241 €	100%	29.005.036 €	100,0%

Table 1.4 Number of cooperatives, turnover (in thousands of €), and added value (in thousands of €) per category – year 2021
(source: personal elaboration of MISE data contained in Euricse's Report n.301, 2023)

Analyzing the distribution of the economic value generated by each category of cooperatives sheds light on their operational essence and enriches our understanding of some underlining business paradigms. Specifically, the added value ratio, which indicates the share of value that the cooperative has directly produced through its operational processes and allocated to reward the production factors (capital and labor), is revealing. Considering the enterprise's total turnover as 100, the 2021 analysis reveals particularly high ratios for social cooperatives (60,6%; Table 1.5), and production and labor cooperatives (48,1%). These two types of cooperatives, typically operating in sectors with high labor intensity (services) and aiming (especially in the case of labor cooperatives) to create job opportunities for their members, exhibit significantly higher percentages of the distribution of newly generated income to labor, around 90%. As a result, the residual value portion (profit) is notably marginal: 1,6% for social cooperatives and 3,2% for production and labor cooperatives. Similarly, transportation cooperatives are characterized by a significant distribution of income to labor, due to its central importance, exceeding 80%.

Repartition of added value generated and distributed to production factors by category - year 2021					
Category	VA generated (=turnover/VA)	VA distributed			VA
		labor income	other	profit	
Agricultural Cooperatives	10,1%	72,8%	22,8%	4,4%	100%
Production and Labor Cooperatives	48,1%	89,8%	7,0%	3,2%	100%
Transportation Cooperatives	14,7%	84,6%	12,5%	2,9%	100%
Consumer Cooperatives	16,2%	79,8%	18,1%	2,1%	100%
Retailer Cooperatives	4,0%	38,3%	30,4%	31,4%	100%
Social Cooperatives	60,6%	93,1%	5,3%	1,6%	100%
Housing Construction Cooperatives	15,8%	25,4%	73,1%	1,5%	100%
Other cooperatives	14,2%	62,0%	54,5%	-16,5%	100%

Table 1.5 Repartition of added value generated and distributed to production factors by category - year 2021 (source: personal elaboration of MISE data contained in Euricse's Report n.301, 2023)

Euricse's analysis of Italian cooperatives' longevity reveals a significant endurance within the sector, with 57.3% of cooperatives having more than a decade of operation and approximately a quarter surpassing 30 years. The economic value of these cooperatives is substantial, with those older than 30 years contributing to 58.6% of the turnover and 48.6% of the added value. These figures reflect not just a survival rate but a robust economic presence, as these mature cooperatives average over 7 million euros in turnover and 1.5 million in added value. This data (Table 1.6) challenges the common misconception that cooperatives possess constrained growth capacities, showing instead their resilience and substantial potential for expansion as they mature.

Number, turnover (VP) and added value (VA) in millions of € by age category of the cooperatives - year 2021								
Category	N° of cooperatives	%	VP	%	average VP	VA	%	average VA
0-2 years	4086	10,0%	4.601.111,7 €	3,8%	1.126,1 €	854.874,7 €	2,9%	209,2 €
3-5 years	5292	12,9%	4.558.917,4 €	3,7%	861,5 €	1.667.907,7 €	5,8%	315,2 €
6-10 years	8163	19,9%	12.348.229,1 €	10,1%	1.512,7 €	3.614.547,1 €	12,5%	442,8 €
11-20 years	8736	21,3%	12.296.131,0 €	10,1%	1.407,5 €	3.626.489,4 €	12,5%	415,1 €
21-30 years	5107	12,5%	16.739.275,2 €	13,7%	3.277,7 €	5.148.864,2 €	17,8%	1.008,2 €
≥ 31 years	9627	23,5%	71.501.576,6 €	58,6%	7.427,2 €	14.092.353,1 €	48,6%	1.463,8 €
TOTAL	**41011**	**100,0%**	122.045.241 €	100%	2.975,9 €	29.005.036 €	100%	707,2 €

Table 1.6 Number, turnover (VP) and added value (VA) in millions of € by age category of the cooperatives - year 2021 (source: personal elaboration of MISE data contained in Euricse's Report n.301, 2023)

In general, it's important to underline that the Italian cooperative landscape presents very unique characteristics if compared with the resto of the world. The relative absence of large capitalist corporations has historically paved the way for cooperatives to flourish and consolidate to a greater degree than seen elsewhere. Italian cooperatives have capitalized on this opportunity, fostering growth through strategic mergers and the construction of sophisticated business networks. Legislative support has been pivotal in this growth, bolstering enterprise capitalization and facilitating collaborative operations.

The geographical distribution of cooperatives featured in the Euricse report (Figure 1.7) closely mirrors that of all cooperatives in the National Registry (Figure 1.5), but it's interesting –although not surprising– to see how the regional disparity becomes even more pronounced upon an economic analysis. Northern Italy drastically leads in terms of turnover and added value, accounting

for 66,3% and 65,3% of the national totals, respectively. In contrast, Southern Italy contributes only 12.6% to the turnover and 15.4% to the added value, highlighting a significant economic divide between the regions.

Emilia Romagna, in particular, stands out as the region with the highest turnover, generating 37,8 million euros, of which 7,2 million represent the added value. Lombardy is next, with a turnover of 15,8 million and an added value of 5 million, while Veneto reports a turnover of 10.2 million and an added value of 2.3 million. The economic contributions of other regions are relatively minor in comparison.

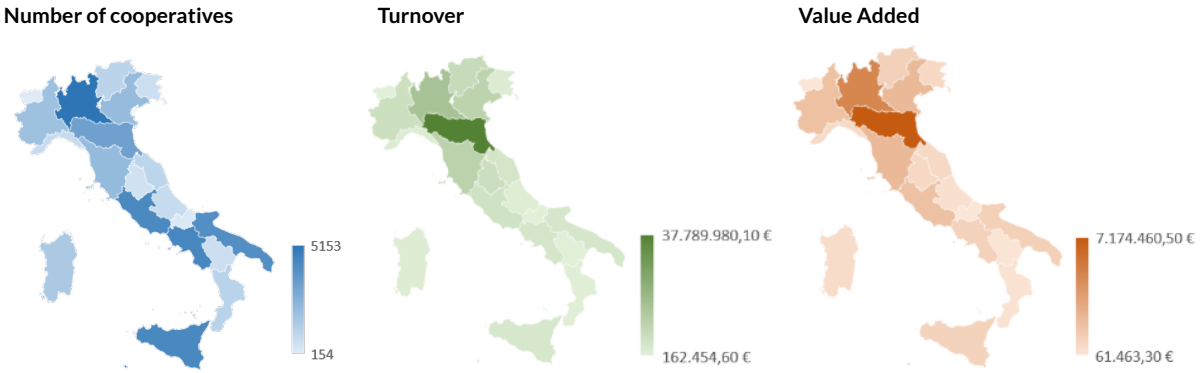


Figure 1.7 geographical distribution of cooperatives in terms of number of organizations, turnover and value added – year 2021 (source: personal elaboration of MISE data contained in Euricse's Report n.301, 2023)

2 Object of the Consultancy Project: Emisfera

2.1 About Emisfera

Emisfera's History

The foundational entity behind Emisfera is S80, a cooperative established in the late '70s by a group of professors from ITIS Cobianchi, an important educational institute in the region. This pioneering cooperative played a significant role in Italy's nascent computing landscape, specializing in software development and industrial automation.

In its last years of operation, S80 collaborated with Olivetti's Tecnost (engineering systems for access control, automated parking, and toll collection on highways) and ventured into producing and marketing devices for quality assurance in the canned food industry.

The downfall of Olivetti triggered a significant crisis for S80, further exacerbated by unsuccessful investments in its own products, which nearly drove the cooperative to bankruptcy. The situation was mitigated by the sacrifices made by the cooperative's members, who ultimately saved the organization from collapse.

This period of adversity set the stage for the emergence of Emisfera, representing a fresh start and an opportunity for generational renewal within the cooperative. Hal service S.r.l., a long-time collaborator of S80, backed the Emisfera initiative, recognizing the value of a youthful partner adept at navigating forthcoming challenges. It was 1997, with the millennium's end and the looming Y2K challenge ahead, alongside the corporate ERP revolution.

S80 and Hal stepped in as key investors for the emerging Emisfera, contributing their wealth of skills and resources to the newborn cooperative. Established in 1996 at the Tecnoparco del Lago Maggiore, Emisfera embodied a concept, more than a product, encapsulated in the slogan that still accompanies its logo: "Fabbrica Informatica" (Computer Factory).

The following year, Emisfera established a strategic alliance with Obiettivo Lavoro, an emerging Italian temporary employment firm, signaling its entry into the development of bespoke IT solutions for the industry. This collaboration culminated in the launch of WhiteNet in 2010, setting the stage for it to become the leading management solution for Local Employment Agencies across Italy.

In 2001, Emisfera reaffirmed its commitment to innovation by establishing an internally recognized research laboratory. It was within this creative incubator that an idea evolved into a patent and subsequently, in 2003, into Digima. The initial concept involved setting up a network of digital cinemas capable of offering alternative content, with the aim of rejuvenating suburban movie theaters. In 2008, Digima achieved a milestone by introducing La Scala's opening night

performances and, more generally, live concerts in cinema halls. This innovative approach not only fostered specialized skills and expanded Digima's network but also strategically positioned the company to thrive in a market transitioning towards digital, especially with the emergence of 3D cinema (fostered by the release of "Avatar" in December 2009). Digima quickly became a significant service provider for cinema operators nationwide.

Despite steady growth until 2010, the subsequent economic downturn tempered the pace. However, 2013 signified a resurgence, with a return to profit and a robust investment strategy paving the way forward.

In the ensuing years, Emisfera has methodically expanded its client base, scaled its operations, and evolved into its present organizational structure, continuing its trajectory of steady growth and innovation.

- **1996:** Emisfera Società Cooperativa was born
- **1996:** Emisfera obtained the UNI EN ISO 9001 Quality Certification
- **1997:** WhiteNet, a management system for Employment Agencies, was launched
- **2002:** Emisfera launched its own Research Laboratory recognized by the MIUR
- **2006:** Digima, an ICT company for Digital Cinema, was founded
- **2008:** Emisfera coordinated the AdHocSys, an EU FP6 research project
- **2011:** Emisfera engaged in multiple research projects with Innovation Hubs
- **2014:** EmiConnect, a WISP service, was introduced
- **2015:** The business unit of Act Value was acquired
- **2017:** Netycom, a web and social marketing company, was acquired
- **2019:** Emisfera became a founding partner of Archimedia Soc. Coop
- **2020:** WhiteNet becomes Workare
- **2021:** The majority stake in Workare was sold to Gruppo Centro Paghe

Figure 2.1 Emisfera's timeline

Emisfera Today

Since its founding in 1996, Emisfera has navigated a remarkable path of growth, gradually expanding its client base and market presence. This evolution has shaped it into the Cooperative it

is now, an organization of nearly 100 skilled professionals, mainly engineers and IT specialists, who collectively oversee a turnover of more than 7 million euros.

Emisfera operates through a network of specialized business units, each under the strategic guidance of dedicated Area Managers. These units are:

- *Digima*: a leading entity in Italy's digital cinema industry, that specializes in the sale, installation, and maintenance of projection systems and their supporting infrastructure.
- *Netycom*: a web & digital agency specialized in communication and digital marketing for companies.
- *Workare*: an organization dedicated to the design, development, and distribution of WhiteNet, a management solution tailored for Employment Agencies.
- *Networking*: an agency specialized in connectivity, data center, and cloud computing services.
- *Progetti:* the go-to division for custom software solutions, catered to the unique technological needs of businesses.
- *Laboratorio*: a private research laboratory specialized in highly innovative projects, collaborating with foreign partners and prestigious Italian and European universities.

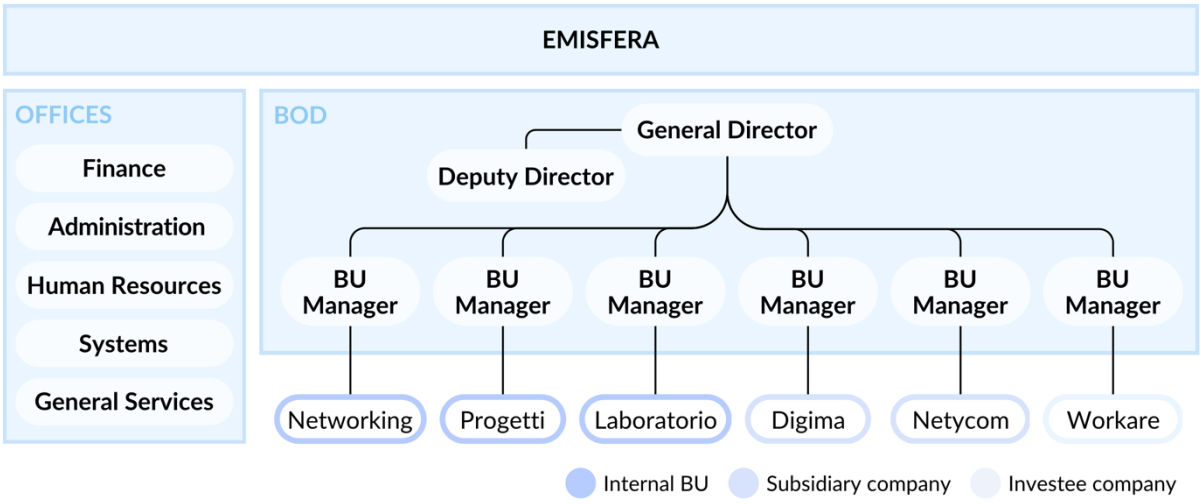


Figure 2.2 Emisfera's organizational chart

2.2 Goals and Organization of the Consultancy Project

Emisfera has requested a consultancy from the Department of Management and Production Engineering of Politecnico di Torino, to redefine its operational/ organizational/ governance and business model through the systematic structuring of operational processes, management control, and the definition of a model for supporting strategic decision-making.

Specifically, the Project has an expected duration of 12 months and is structured around 4 interrelated objectives:

- *Emisfera _ Obj.1*: definition of a development plan that considers the current corporate structure and eventual forthcoming acquisitions. The aim is to outline a clear vision for Emisfera's future, including detailed plans for investments (such as properties, infrastructure, and servers), as well as pinpointing the core sectors and skills crucial for advancement.
- *Networking _ Obj. 2*: definition of a robust management control system that supports strategic decision-making and business operations, while offering the possibility to assess the profitability and return on investment of infrastructures, such as server farms. Additionally, this system should enable a more precise calculation of the marginality of individual projects and services, thereby facilitating the formulation of more detailed and coherent commercial and marketing proposals.
- *Progetti-Workare-Netycom-Digima _ Obj. 3*: examination and updating of the business units' existing management control systems (if adopted), with the aim of devising an extensive set of key performance indicators tailored for strategic decision-making. This initiative is designed also to assist Emisfera in establishing uniform yet adaptable performance metrics, facilitating a coherent evaluation of each business unit's effectiveness and efficiency.
- *Laboratorio _ Obj. 4*: identification of the role of the R&D business unit within the organizational structure, defining possible evolutions of its operating model. This could range from project-based approaches to the formulation of broader innovation strategies.

These 4 objectives are not disjointed, but conceptually interrelated:

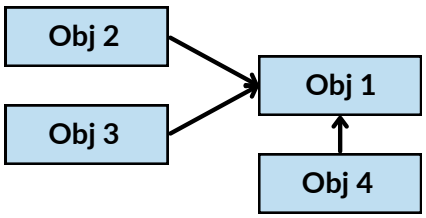


Figure 2.3 Project objectives represented as logical modules

The project is structured into several modules, engaging various parts of Emisfera in distinct ways:

1. *Operational process review and management control system implementation*: This module is dedicated to defining the essential operational activities and processes required for Emisfera's structured and efficient operation, alongside the economic tracking of each service line. This encompasses:
    - *Networking _ Obj. 2.2*, which involves a detailed examination of operational and managerial expenses to discern their fixed and variable elements and the rationale

behind their allocation. The objective is to assess the profitability and return on investment of facilities, infrastructures, and projects, while also evaluating the logic behind pricing strategies.

- *Progetti-Workare-Netycom-Digima _ Obj. 3.2,* this entails the rigorous assessment, and potential recalibration of the performance indicators currently in use across BUs . It involves pinpointing and addressing any critical issues, benefits, and limitations associated with these indicators. Additionally, there's a focus on ensuring the transmission of consistent and coherent information to Emisfera's overarching management structure.

2. *Cooperative Business Model Analysis*: This stage is dedicated to an in-depth review of the cooperative's existing service offerings, project portfolio, and opportunities for innovation. It explores different strategic positioning options, identifies key market segments, and assesses avenues for commercial growth. The analysis kicks off with a comprehensive "as-is" evaluation that encompasses market analysis, industry examination, and competence assessment, carefully weighing the cooperative's unique value proposition against its essential resources and operational activities. It also aims to pinpoint strategic partners crucial for collaborative success. This endeavor necessitates the active participation of all business units from the beginning (*Emisfera, Obj. 1.1; Networking, Obj. 2.1; Progetti-Workare-Netycom-Digima, Obj. 3.1; Laboratorio, Obj. 4.1*), influencing the direction and outcomes of all project objectives.
3. *Industrial Plan Formulation*: The focus here is on developing a strategic industrial plan that capitalizes on the previously identified opportunities for commercial expansion and innovation (*Emisfera, Obj. 1.2)*. This phase extends to the adoption of innovative strategies and tools (*Laboratorio, Obj. 4.2*) and evaluates potential financial mechanisms as strategic levers to attain set goals.

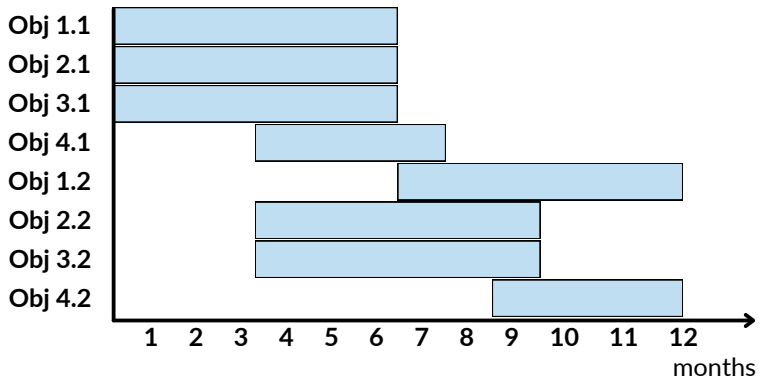


Figure 2.4 Consultancy Project Gantt

2.3 Portion of the Consultancy Project Addressed in this Thesis

The research work undertaken for this thesis began in June 2023, with the ambitious aim of developing a more efficient management control system for Emisfera by March 2024, aligning with Objectives 1 and 2 of the consultancy project.

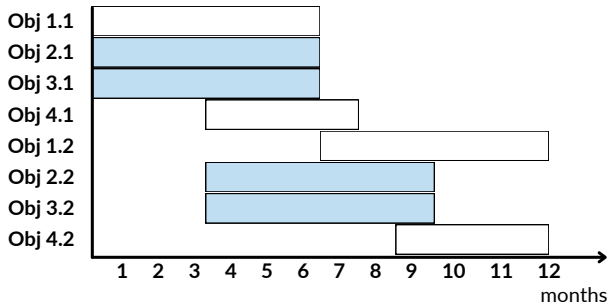


Figure 2.5 Consultancy Project Gantt-Obj addressed in this thesis work highlighted in blue

In the forthcoming chapters, we will delve into how we advanced the objectives highlighted in blue in the project Gantt chart above (Figure 2.5). To do so, we will navigate through each step of the project's roadmap reported below (Figure 2.6), providing a comprehensive exploration of the methodologies and analyses underpinning each of these stages, their interconnections, and their collective role in achieving the strategic objectives set forth by Emisfera.

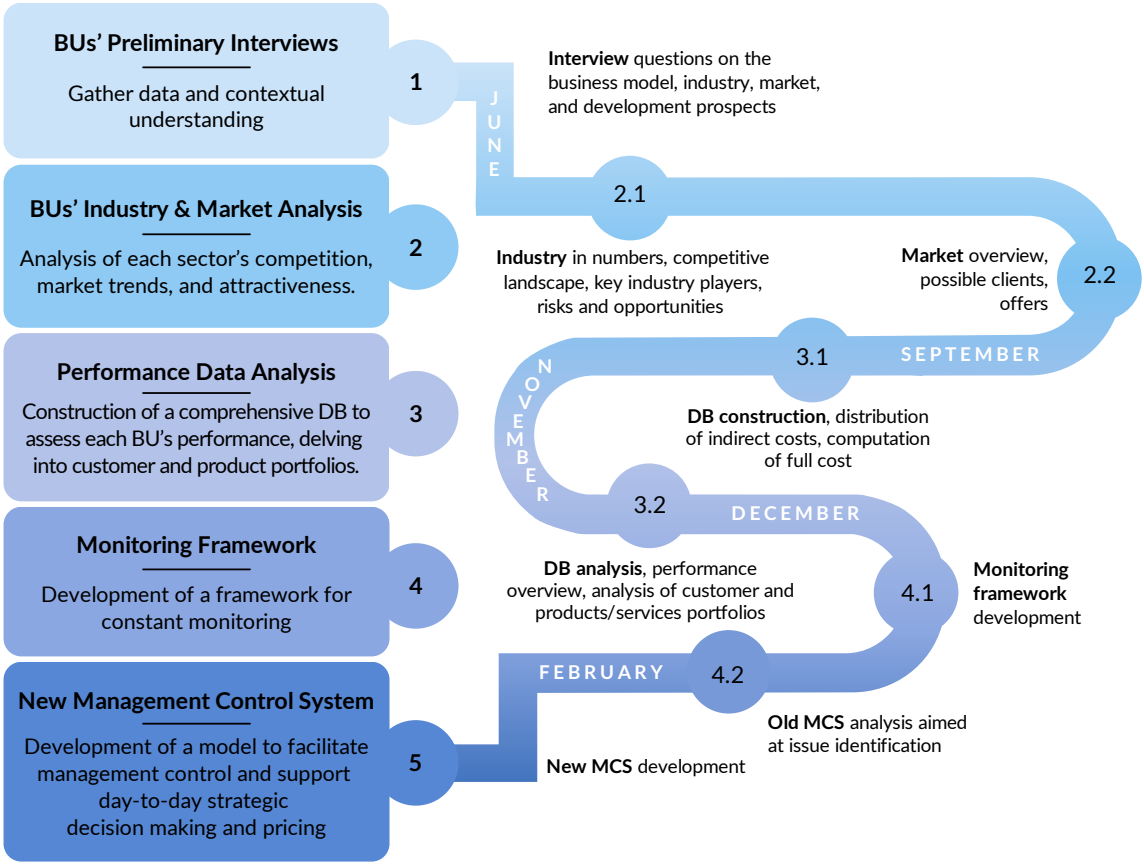


Figure 2.6 Thesis Project Roadmap

2.4 Methodology

To perform the preliminary analyses (interviews and industry & market analysis), we acted as if Emisfera were a conventional service provider in the market, thereby positioning it as a competitor in the dynamic service-oriented landscapes of Piedmont and Italy in general. This perspective was carefully balanced with a deep appreciation for Emisfera's distinct organizational culture and core values, which are pivotal. These elements not only provided a framework to assess the performance of each business unit but also laid the foundation for developing the management control system proposal.

Viewing Emisfera as a standard service provider, even temporarily, allowed us to leverage the comprehensive analytical toolkit of Innovation Management:

- We adopted principles from Project Portfolio Management and Management Control, examining the profitability and costs associated with each service. This approach extended then beyond just economic factors, aiming to enrich traditional decision-making with additional insights coming from the cooperative world.
- Data-driven tools were selected for their ability to provide clear, quantitative, and objective insights, aiding decision-making processes that typically rely on qualitative assessments and questionable strategic considerations.
- In certain cases, we delved into the operational processes of projects to systematically collect data and devised detailed computational models to facilitate our analyses.

The consultancy project was conducted using an Action Research approach to ensure that the outcomes were not solely based on what could be considered intricate analytical elements and complex engineering studies but also on collaboration. This method allowed stakeholders to view the results as valuable suggestions capable of fostering an innovative culture while honoring the organization's history and members.

The methodology we embraced incorporated several foundational elements:

- *Collaborative Engagement*: We established a dynamic partnership with the members of the cooperative, who actively participated during both the problem definition phase and the analysis and validation processes. Indeed, Interviews were chosen as a key investigative tool, complemented by direct measurements. This ensured open communication and mutual exchange throughout the project.
- *Usefulness*: The project was designed not to remain superficial and 'strategically impartial' but to drive organizational transformation. We did our best to enhance the company's grasp

of the employed tools and findings, ensuring transparency regarding the analytical evidence behind the strategic advice given.

- *Contextual Sensitivity*: We paid close attention to the context for implementing the proposed solutions, focusing on converting 'problem elements' (as technically defined in Operations Research and Problem-Solving fields) into catalysts for change.
- *Educational Focus*: The initiative placed a strong emphasis on learning. After being reviewed, discussed, and approved by the management, the tools, analyses, and results were shared with the entire cooperative in open sessions that saw the participation of all service-related managerial and operational staff.
- *Iterative approach*: Recognizing the recursive nature of analysis and implementation, we maintained continuous cycles of review and validation. This facilitated organic and thoughtful evolution of changes, creating an inclusive atmosphere to co-designing future steps.

3 Preliminary Analysis

This chapter addresses the project's initial stages by presenting the outcomes of the interviews conducted with each Business Unit, along with the industry and market analyses. These steps have been fundamental in understanding the unique characteristics of each Business Unit, capturing valuable insights that have laid the groundwork for the performance data analysis to be discussed in the upcoming chapter.

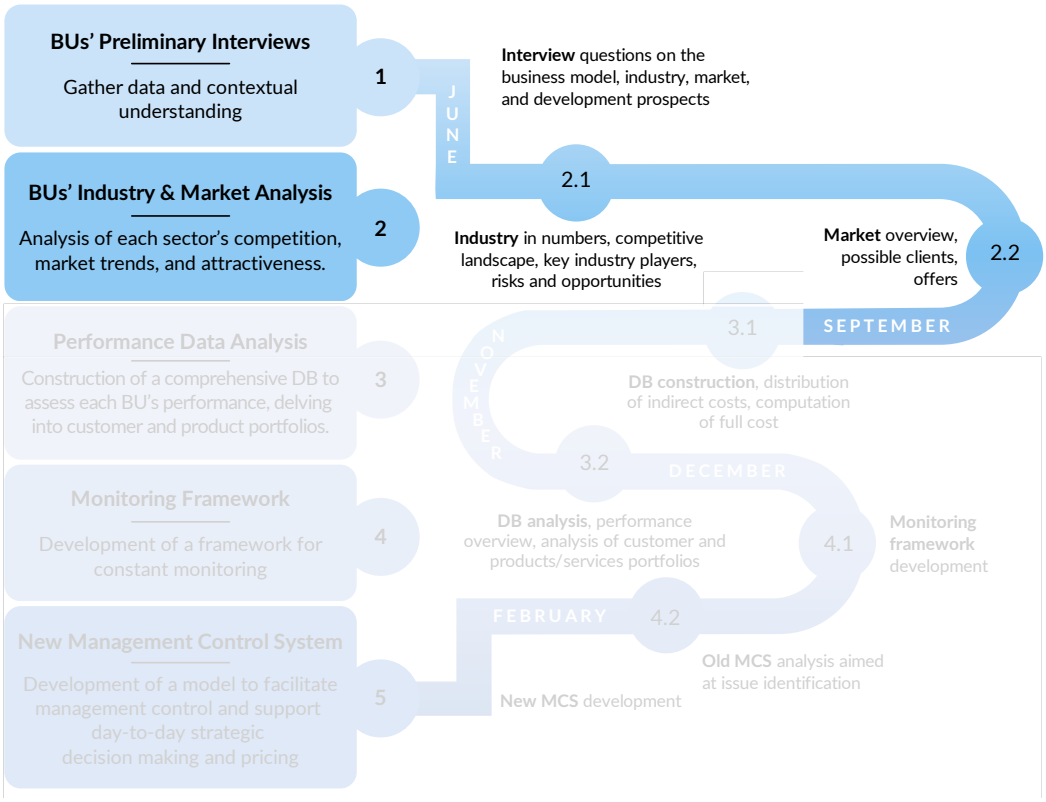


Figure 3.1 Portion of the project's roadmap addressed in this chapter

3.1 Interviews

In June, we interviewed the managers of each business unit to gather insights into their operations. These semi-structured interviews focused on four key areas:

- The business model of each BU
- The industry of each Business Unit
- The market of each Business Unit
- The development prospects envisioned by the managers of each Business Unit

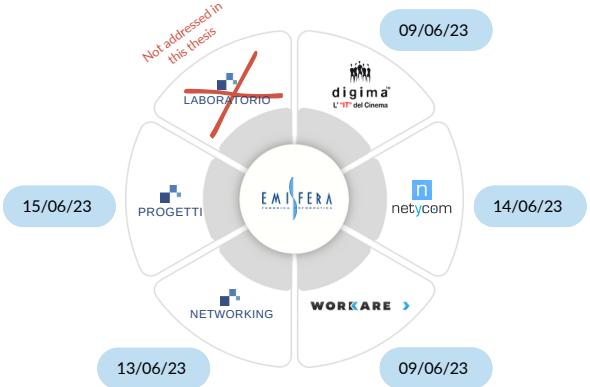


Figure 3.2 Dates of the interviews

Beyond collecting foundational data for our analyses, these interviews enabled us to establish direct relationships with all the

business unit managers. This interaction allowed for an exchange of opinions about the project and provided a clear understanding of their actual expectations.

To streamline the presentation and avoid redundancies, the insights gleaned from the interviews were integrated with findings from our industry and market analyses. These comprehensive insights will be detailed in the following chapter, organized on a business unit-by-business unit basis.

3.2 Industry and Market Analysis of each Business Unit

After conducting the interviews, we delved into the competitive environment in which each BU operates. This involved a thorough investigation of their respective market dynamics, competitive environments, and the distinct challenges and opportunities they encounter. The results of these analyses are presented in a structured manner, detailing the findings for each business unit individually.

Digima

Digima is recognized as one of the premier entities within Italy's digital cinema market. Its primary operations encompass the sale, installation, and maintenance of projection systems, along with the necessary infrastructure, which includes booking systems for shows, as well as the transmission and in-theater display of multimedia and audiovisual content. The extensive presence and geographical distribution (Figure 3.3) of movie theaters across Italy are critical to Digima's operations, as they define the intricate support and maintenance services integral to the business.

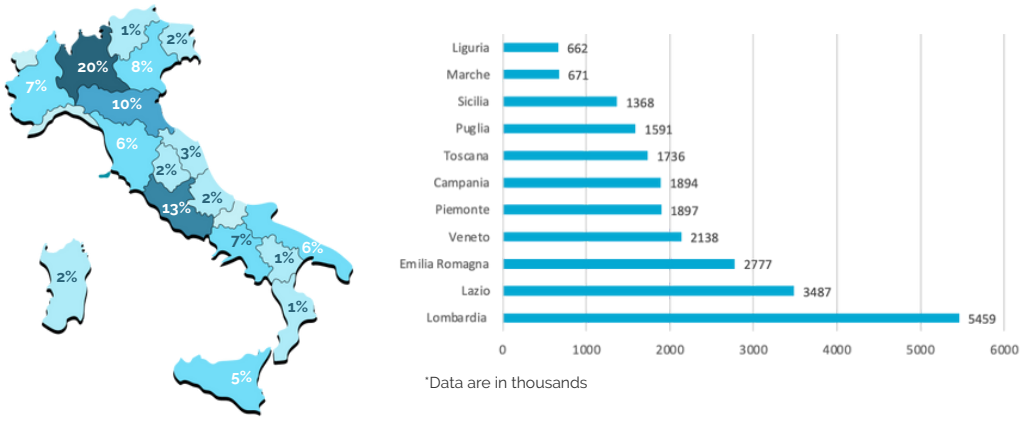


Figure 3.3 Distribution of movie theaters in Italy
(source: own elaboration of data contained in SIAE's report of 2021 " Lo Spettacolo e lo Sport nel sistema culturale italiano")

The sector is fairly concentrated, with 26 players distributed across the Italian territory, encompassing both capital companies and personal partnerships (Figure 3.4).

Small, independent, cinemas frequently engage local technicians for maintenance and day-to-day operations. These technicians, often operating as small partnerships, tend to maintain long-term associations with smaller cinema operators and generally do not pursue contracts with major cinema chains, like The Space.

The most significant concentration of these businesses is found in Lombardy and Lazio, regions known for the highest density of movie theaters and thus, the largest number of market players. However, the sector is predominantly made up of smaller firms: according to data sourced from the AIDA database and corroborated by INPS figures, more than 92% of these businesses employ fewer than ten people. With the exception of Cinemeccanica, all are designated as small or medium-sized enterprises under Italian corporate law.

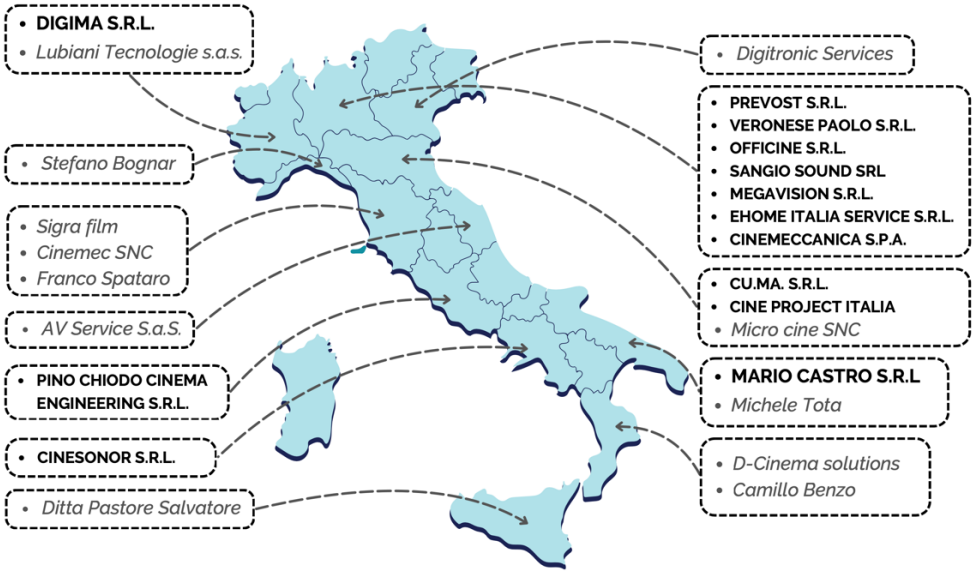


Figure 3.4 Distribution of industry players
(source: own elaboration of AIDA's data integrated with information provided by the BU's manager)

The vast majority of the companies in the sector operate at the end of the value chain, providing sales and installation services for equipment. Unique in its dual role, Cinemeccanica not only manufactures projection equipment but also distributes and installs it through a network of direct subsidiaries and strategic partners spread across Italy. These partners, often bound by exclusive contracts, are strongly influenced by Cinemeccanica's policies.

The global film industry faced unprecedented challenges due to the Covid-19 pandemic, which forced productions to halt and cinemas to close in adherence to health and safety regulations. This period saw a dramatic decline in theater operations, significantly curtailing sales and related services, which are traditionally the most profitable for those in the cinema supply chain.

In this climate, the resilience and adaptability of operators were put to the test. Our analysis shows that only a select few managed to bounce back to pre-pandemic levels of revenue in the 2022-2023

biennium, with even fewer surpassing them—among them, Digima, Prevost, and Cineproject stand out (Table 3.1). However, revenue data, while useful, do not wholly capture a company's comprehensive health, as they overlook critical managerial and strategic dimensions. To understand in detail the business policies that allowed some companies to survive, we must look beyond basic financial metrics and consider indicators of profitability, such as EBITDA (Earnings Before Interest, Taxes, Depreciation, and Amortization). The EBITDA, measure of a company's operating profitability, is calculated by subtracting all operational expenses from the revenues. A review of the sector's performance reveals a notable dip in profitability in 2020, followed by a rebound in 2021 (Table 3.2). Notably, firms that surpassed their pre-pandemic revenue levels also significantly expanded their business operations, suggesting that these companies might have adapted their business models to navigate the challenges presented.

	Revenues			
Company	**Average 2017-2019**	**2020**	**2021**	**2022**
Prevost	1.398.538 €	641.674 €	1.019.910 €	1.812.944 €
Pino Chiodo	1.172.555 €	1.513.725 €	1.103.303 €	-
Cuma	461.309 €	343.490 €	306.874 €	-
Cinesonor	871.900 €	-	809.204 €	-
Paolo veronese	656.483 €	356.014 €	673.530 €	520.474 €
E-Home Italia	3.532.840 €	1.345.780 €	1.437.408 €	1.785.048 €
Megavision SRL	416.932 €	193.613 €	278.172 €	390.889 €
Officine SRL	725.025 €	282.453 €	650.450 €	588.165 €
Cine Project Italia	525.803 €	458.552 €	546.586 €	837.499 €
Cinemeccanica	12.204.945 €	4.319.675 €	7.773.695 €	12.352.451 €
Sangio Sound	-	-	157.816 €	1.998.728 €
Digima	637.760 €	412.466 €	596.097 €	913.685 €

Table 3.1 Key industry players' revenues
(source: own elaboration of AIDA data)

	EBITDA				
Company	**2018**	**2019**	**2020**	**2021**	**2022**
Prevost	23.710 €	42.903 €	20.693 €	89.490 €	100.603 €
Pino Chiodo	87.225 €	50.470 €	22.542 €	26.373 €	-
Cuma	35.235 €	25.288 €	-29.003 €	7.880 €	-
Cinesonor	48.918 €	94.371 €	-	133.558 €	-
Paolo veronese	41.849 €	-4.058 €	67.496 €	128.956 €	8.117 €
E-Home Italia	453.459 €	852.088 €	308.301 €	-140.896 €	378.891 €
Megavision SRL	21.981 €	26.870 €	17.309 €	47.003 €	56.689 €
Officine SRL	112.831 €	110.435 €	14.723 €	106.444 €	63.071 €
Cine Project Italia	24.374 €	17.787 €	14.293 €	9.432 €	147.665 €
Cinemeccanica	-2.827.059 €	-993.351 €	-3.140.994 €	40.756 €	1.242.508 €
Sangio Sound	-	-	-	8.512 €	84.528 €
Digima	64.531 €	6.137 €	17.433 €	17.433 €	132.474 €

Table 3.2 Key industry players' EBITDA
(source: own elaboration of AIDA data)

This surge in performance could also be attributed to the second important factor that recently impacted the industry: the implementation of the PNNR by the Italian government, aimed at modernizing the cinema experience. This initiative, which focused on replacing outdated projectors with new, energy-efficient models, not only enhanced the viewing experience but also led to increased revenue for suppliers involved in the government tenders.

For a more complete analysis, we further examined the performance of the key players in the industry looking at the three standard profitability metrics: their ROS, ROI, and ROE. The ROS (Return on Sales) is a metric that assesses a company's ability to translate sales into profits, essentially indicating the portion of revenue that becomes profit after covering variable production costs. The ROI (Return on Investment), on the other hand, measures the financial performance of a particular investment, calculating the profit or loss in relation to its initial cost, thereby providing a percentage-based outcome. Lastly, the ROE (Return on Equity) evaluates a firm's efficiency in generating profits from its shareholders' equity, showcasing how effectively the invested capital is being utilized to produce earnings.

	Revenues		
Company	**ROS 2022**	**ROI 2022**	**ROE 2022**
Prevost	1,88	3,01	3,40
Pino Chiodo	0,38	n.d.	0,36
Cuma	2,27	3,30	0,51
Cinesonor	14,73	28,28	20,18
Paolo veronese	1,23	0,68	1,28
E-Home Italia	12,49	7,82	7,40
Megavision SRL	12,00	n.d.	57,95
Officine SRL	8,48	10,42	7,44
Cine Project Italia	10,95	28,89	24,26
Cinemeccanica	7,77	5,67	5,22
Sangio Sound	3,22	n.d.	76,68
Digima	12,98	n.d.	65,26

Table 3.3 Key industry players' ROS, ROI, and ROE
(source: own elaboration of AIDA data)

Upon analyzing the indicators in Table 3.3, it became evident that certain companies consistently outperformed the average, with Cinemeccanica being an exception due to its unique scale and structure, setting it apart from the comparative group.

To delve deeper into the competitive landscape of the industry, we performed Porter's Five Forces analysis (Figure 3.5). We this examined the five key factors that influence market competitiveness and profitability: the bargaining power of suppliers, the bargaining power of customers, the threat of new entrants, the threat of substitute products or services, and the intensity of competitive rivalry.

In our analysis, the threat of new entrants emerged as low, primarily due to the sector's maturity and the advanced nature of the associated technologies, deterring new competitors from entering the market. However, a notable exception is the Hollywood film industry's renewed interest in using traditional film for recording and projection, revitalizing the demand for classic projectors.

The bargaining power of customers is assessed as moderate, influenced by the varied nature of the client base that spans from small cinemas to expansive multiplex chains, with the latter wielding their considerable size to secure more favorable terms and pricing by potentially shifting suppliers.

The bargaining power of suppliers in this sector is notably strong due to the limited number of operators (Christie from Canada, Barco from Belgium, and NEC from Japan). These suppliers use highly specialized materials that are difficult to source. In a scenario where these manufacturers decide to raise their prices, companies like Digima would find themselves without viable alternatives. This strategic position enables them to markedly influence pricing without market repercussions.

The threat from substitutes is identified as significant, especially with the escalating popularity of video streaming for content consumption. This trend has been on an upward trajectory, further fueled by the rise in subscription services during the pandemic.

Lastly, the level of competitive rivalry is viewed as intense, constrained by the limited scope of competition outside the specific geographic regions of the competitors, as previously highlighted.

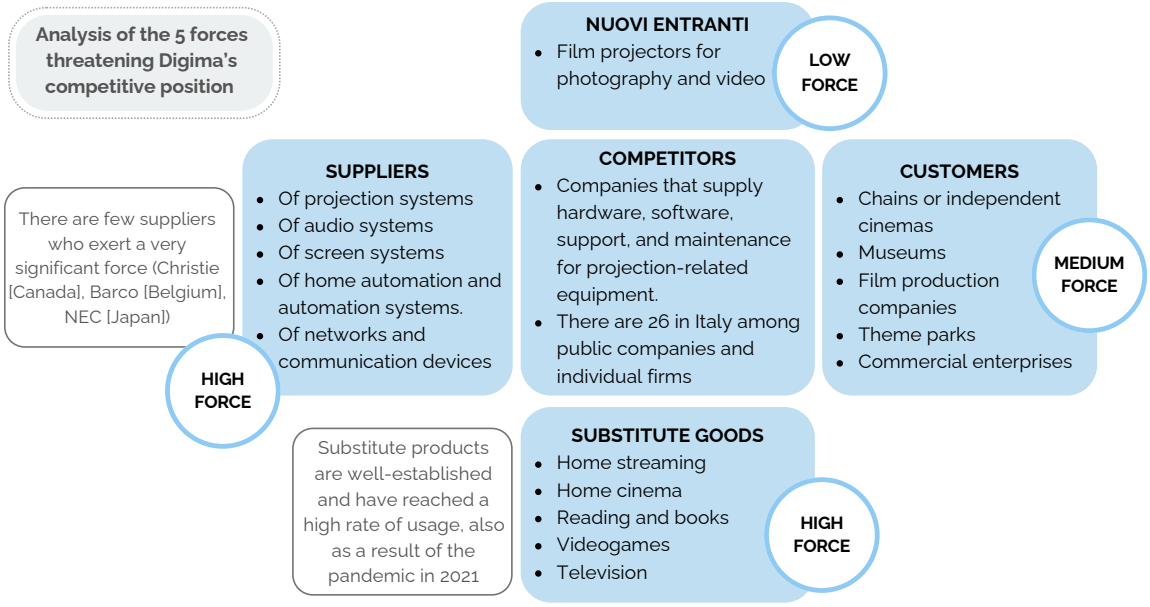


Figure 3.5 Porter's 5 forces analysis
(source: own elaboration)

Cinetel's analysis of the cinema sector indicates a significant recovery in 2022, with an 81% increase in box office receipts and a 79.6% rise in attendance from the 2021 reopening. This growth partially regains the average levels of 2017-2019, although not completely. SIAE's data, which also examines box office expenditure and attendance, aligns with this upward trend, albeit with slightly different figures and only up to 2021, hence not capturing the full recovery trajectory.

Regarding content offerings, Cinetel's report for 2022 shows that 498 new first-run films were released in movie theaters (141 more than in 2021, but 43 less than the 2017-2019 average), including 251 Italian productions or co-productions (95 more than in 2021 and 30 more than the

2017-2019 average), accounting for 50.4% of the total (compared to 43.7% in 2021 and 40.9% in the 2017-2019 average).

Geographically, cinemas are largely concentrated in Lombardy and Lazio, making up 20% and 13% of the total, respectively. This concentration aligns with the location of most sales and service companies. Almost half of Italy's cinemas are situated in the northern regions, with the remaining distributed across the islands, central, and southern parts of the country. Cinema operations exhibit a seasonal pattern, with a notable decrease in activity during the summer months.

A deeper look into the size and type of cinemas reveals the influence of agglomeration economics, particularly how large multiplexes, despite their smaller numbers, command 54% of the market's total revenue. This suggests that the proximity of cinemas, akin to local markets or shopping centers, can reduce operational costs and draw more customers, especially in multiplexes that offer a diverse array of films.

Netycom

Netycom is a web & digital agency specialized in communication and digital marketing for businesses. Its expertise ranges from crafting corporate identities to developing websites, e-commerce platforms, and advertising campaigns. The agency is part of Italy's fast growing digital agency sector, which comprises over 28,000 firms, predominantly concentrated in the northern regions. These enterprises employ over 150,000 professionals and generate a substantial combined revenue, estimated at 21.6 billion euros. The widespread presence of digital agencies underscores the increasing significance of online communication and marketing for Italian businesses, which are eager to capitalize on the opportunities presented by digital visibility.

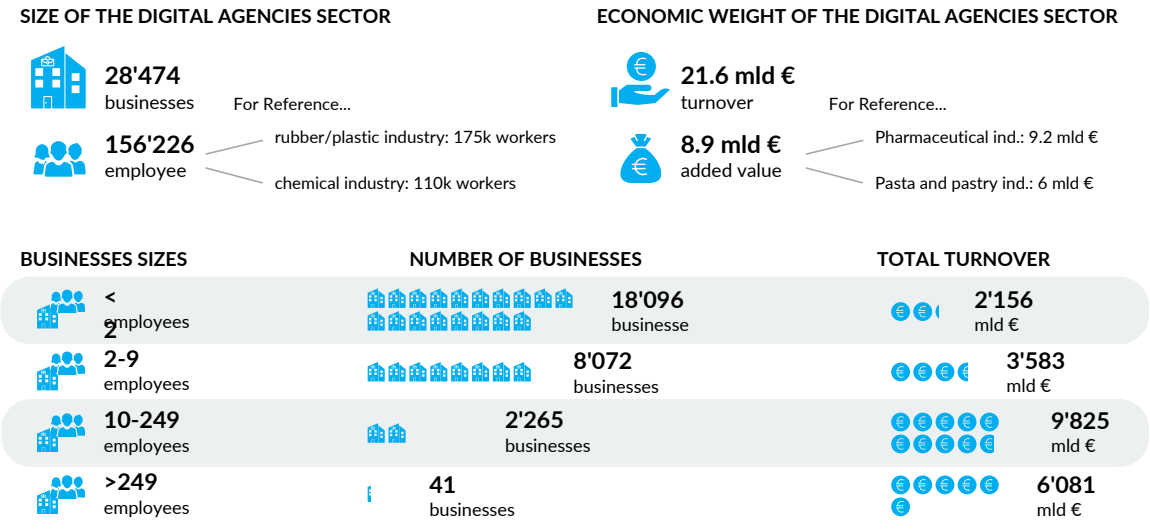


Figure 3.6 Digital agencies sector in numbers
(source: own elaboration of Prometeia's 2022 report based on ISTAT data)

The stark contrast in revenue between firms with 2 to 9 employees (3.5 billion euros) and those with 10 to 249 employees (approximately 10 billion euros) highlights a considerable disparity in size and economic performance among companies of different scales.

The rapid expansion of Italy's digital agency sector, while promising, presents Netycom with significant challenges, chief among them the heightened competitive pressure that impinges on the company's performance. This pressure arises predominantly from two critical elements. The first is the escalation of competition within the digital agency field, especially in northern Italy (Figure 3.7), which complicates the process of distinguishing oneself and effectively communicating a unique value proposition to clients. An overcrowded marketplace compels firms to innovate constantly in order to stand out and cater to the evolving demands of clients.

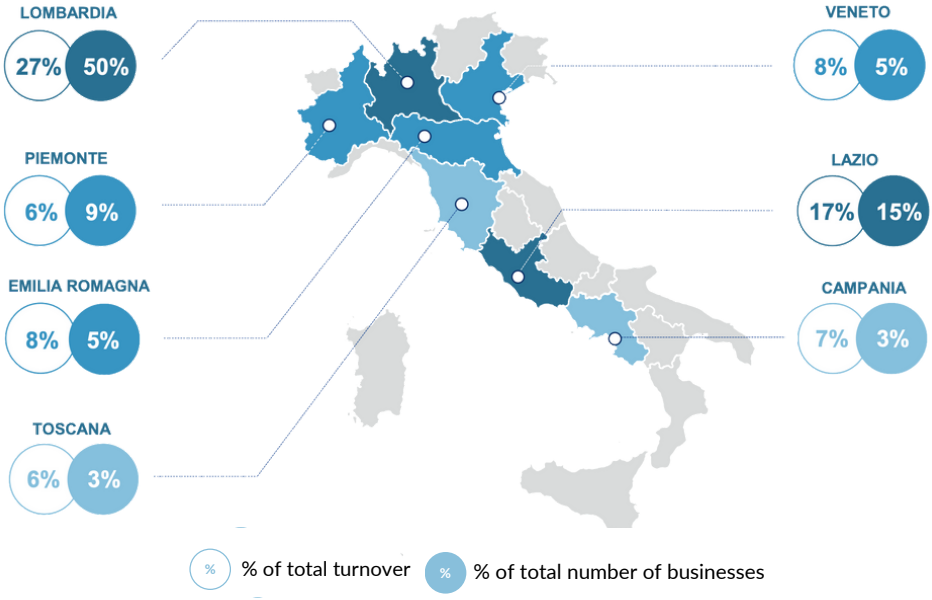


Figure 3.7 Distribution of digital agencies in Italy
(source: own elaboration of Prometeia's 2022 report based on ISTAT data)

The second element is the proliferation of advanced technologies like artificial intelligence and user-friendly Drag&Drop platforms, which have democratized digital 'do-it-yourself' capabilities. This trend has exerted a downward force on the industry's pricing structure, precipitating a persistent dip in the average market rates.

Figure 3.8 presents a comprehensive Porter's Five Forces analysis, crucial for understanding the strategic position of Netycom within the dynamic landscape of Italy's digital agency sector.
The analysis indicates that supplier power, historically high and dominated by influential companies like Adobe, is now less significant due to the rise of viable alternatives and a broader supplier base. The threat from new entrants is high because the competencies and resources required are increasingly accessible and this, coupled with the digital marketing boom, makes the field highly

attractive for new entrants like SMEs and startups harnessing innovative business models powered by new technologies (e.g., AI).

Competitive rivalry is also marked as high, with a significant concentration of digital agencies in Northern Italy, because it's challenging for clients to discern between the services offered by a vast array of competitors.

Client power is substantial due to the wide array of choices available, ranging from numerous digital agencies to the feasibility of in-house digital initiatives. Indeed, substitute goods exert a high force on the industry, especially as AI and intuitive 'Drag & Drop' platforms gain traction, empowering users with DIY digital solutions that are reshaping market expectations and pricing structures.

Netycom, amidst this intensifying competition, must find its way to navigate these leveraging on its competitive edge.

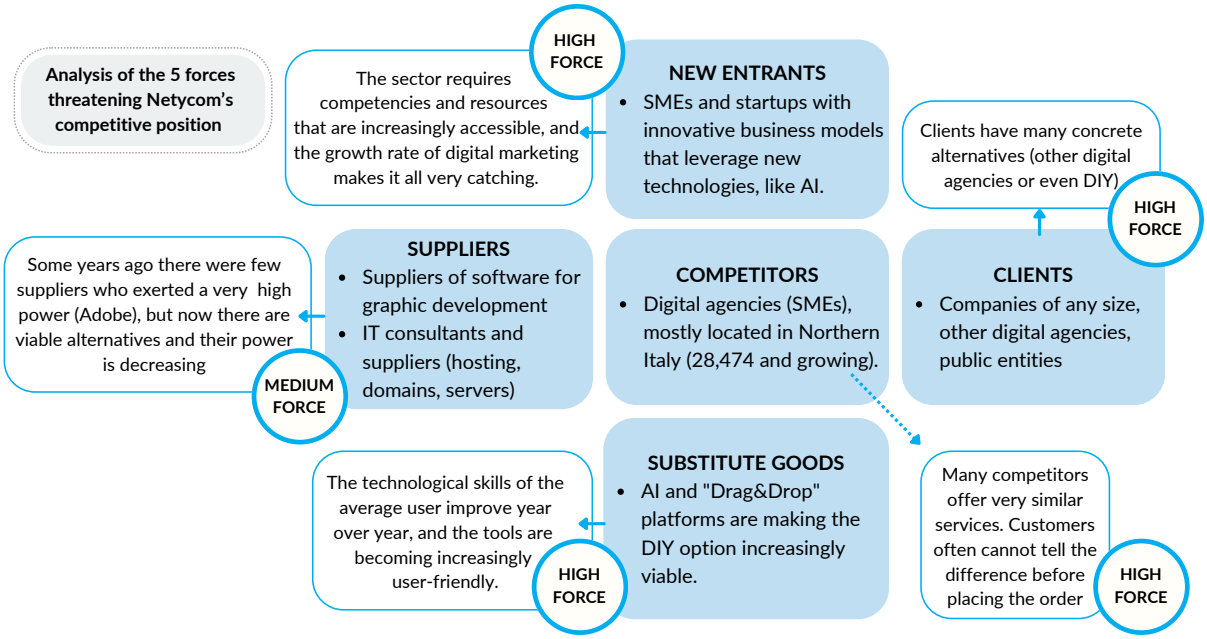


Figure 3.8 Porter's 5 forces analysis
(source: own elaboration)

Workare

Workare is an organization dedicated to the design, development, and distribution of a management solution tailored for Employment Agencies. The company's offerings include two primary products: WhiteNet 11 and its successor, WhiteNet 12, which was developed in 2015 as an advanced iteration of its predecessor. These solutions aim to streamline and enhance the operational processes of Employment Agencies.

The software is subject to continuous updates to incorporate all the necessary features to cater to the nuanced demands of the Temporary Employment Agencies, with an emphasis on compliance

and customization. WhiteNet specializes in managing aspects critical to the sector, such as the National Collective Labor Agreement (CCNL) management, personal data, and contracts.

The Temporary Employment Agency industry has a strong foothold in Northern Italy. Lombardy emerges as the epicenter, hosting 84 agencies, while regions like Lazio and Campania also maintain a robust presence, each with around twenty agencies. This geographic distribution aligns with the employment landscape, with 40% of the temporary workforce based in the Northwest, about 31% in the Northeast, and a balance spread across Central and Southern Italy. Temporary workers are primarily active in the industrial and service sectors, often within companies that maintain staff rosters well above fifty employees.

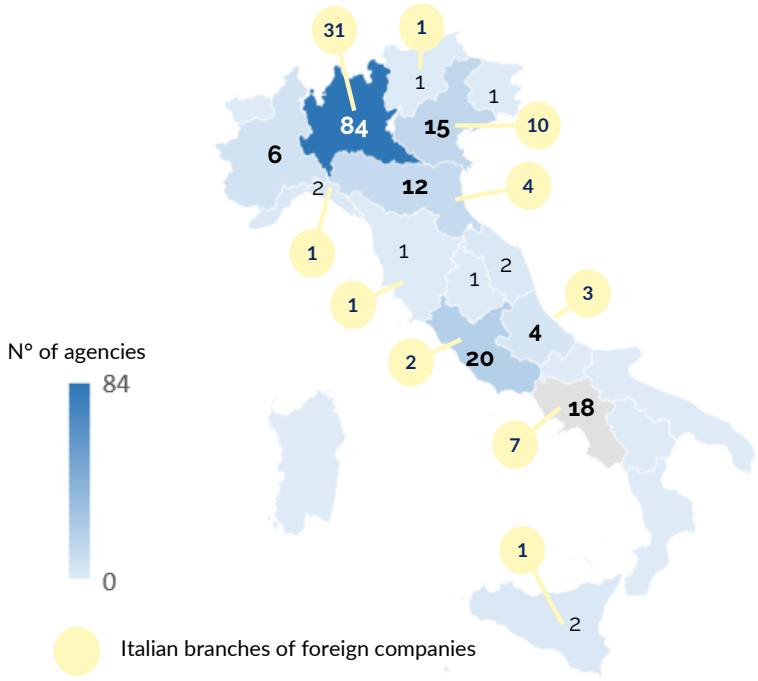


Figure 3.9 Distribution of Employment Agencies in Italy (source: own elaboration of ANPAL data)

Figure 3.10 features a detailed Porter's Five Forces analysis, illustrating the sector's considerable reliance on Oracle for supply. In recognition of this dependence, Workare has proactively channeled considerable investments in both energy and capital to develop WhiteNet 12, deliberately reducing the software's reliance on Oracle compared to WhiteNet 11.

The acquisition of Neway Solutions by Zucchetti, offering more integrated solutions, has notably shifted the market balance. While there are alternative back-office software solutions like WN11 and WN12, which include online recruitment functionalities or recruiting software, these alternatives are backed by companies with substantial resources and capital that could potentially decide to do it themselves capitalizing on economies of scale.

In this context, clients (mainly employment agencies) wield moderate negotiating power, but only few firms can deliver such specialized products and have access to distribution and sales channels. Potential new entrants include HR consulting firms, software development companies, or firms specializing in recruitment software.

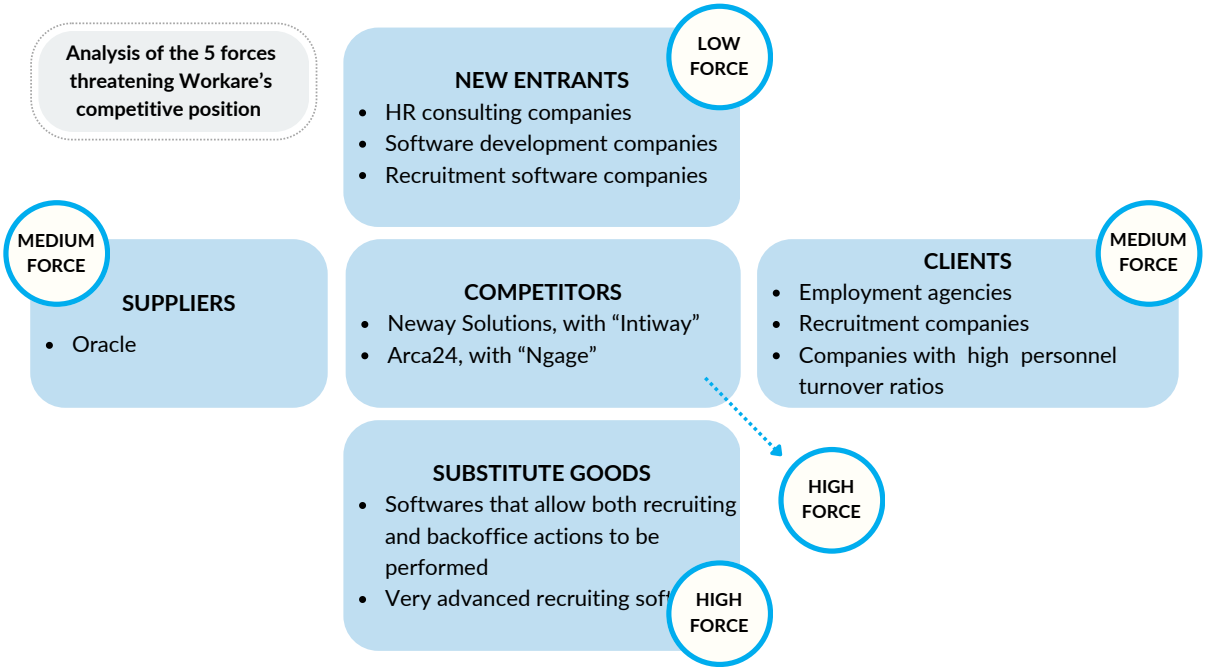


Figure 3.10 Porter's 5 forces analysis (source: own elaboration)

Networking

Networking offers connectivity, data center, and cloud computing services, which means that it's part of the digital industry, which has experienced substantial growth over the last five years. The industry's revenues increased from €70.473 billion in 2018 to €77.085 billion.

Despite the general economic downturn of 8.9% in 2020 due to the COVID-19 pandemic, the IT sector showed remarkable resilience, with just a 0.6% contraction. In 2022, Italy's GDP grew by 3.7% if compared to the previous year, buoyed by the post-pandemic economic rebound. The digital market recorded a 2.4% increase in 2022, with growth tempering primarily because of reduced consumer spending, yet this was counterbalanced by robust gains in the business market sector. Indeed, digital expenditure per employee in the Business segment rose by 1.3%, from €1,977 to €2,003, within a year.

Industry reports often break down the digital market industry into five sub-sectors: "Digital Content and Advertising," "ICT Software and Solutions," "Devices and Systems," "Telecommunication Network Services," and "ICT Services."

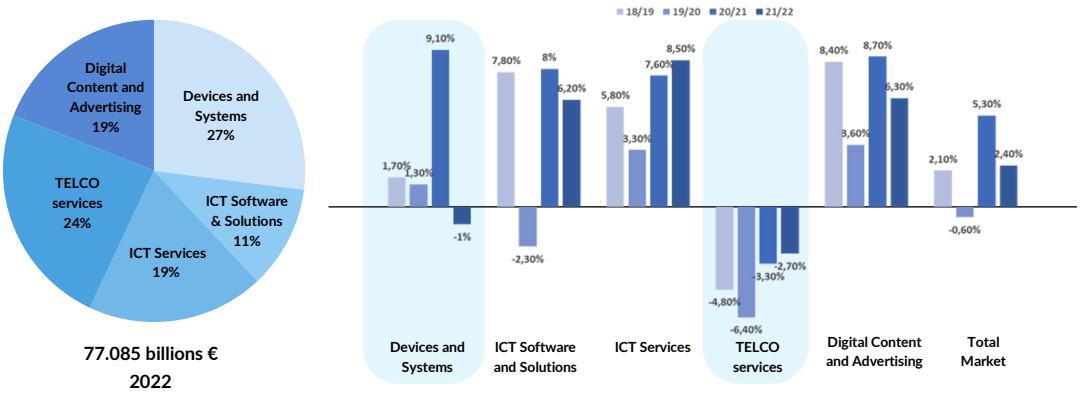


Figure 3.11 Italian Digital Market Industry per segment
(source: own elaboration of Anitec-Assiform data)

Telecommunication Network Services & Devices and Systems

The first part of this analysis concentrates on "Telecommunication Network Services" and "Devices and Systems".

Devices have witnessed an exponential surge during the 2020/2021 period, largely attributable to the widespread adoption of remote working. In contrast, telecommunication network services have seen a decline over the last five years.

According to the 2023 annual report by AGCOM (the Italian Communications Authority), the electronic communications sector generates total revenues of 27 billion euros, with 2,839 companies registered in the ROC (Communication Operators Registry). However, only a handful of these companies manage a significant share of the information traffic, and even fewer have physical infrastructure. In the mobile communications market specifically, just 4 of the 27 operators possess radio bridges and data distribution infrastructures. The remaining companies, known as MVNOs (Mobile Virtual Network Operators), buy services from these infrastructure-equipped operators to craft their own commercial strategies.

Investments in the sector are declining, which can be explained by the plateau in technological advancement reached within both mobile and fixed-line services. This downturn is mirrored in the sector's revenues, which decreased from 31,21 billion euros in 2018 to 26,94 billion in 2022, despite an explosive increase in mobile data traffic—from 3,1 zettabytes in 2019 to 8.6 zettabytes in 2022. This paradoxical situation arises from the steep drop in the cost per gigabyte to consumers. In 2013, revenue from one gigabyte of data was 9,4€, plummeting to just 0,4€ by 2022.

In the 2022 mobile data market, Tim and Wind Tre were the leading players, each securing roughly a third of the market share. On the other hand, Vodafone led the voice market, holding nearly 36% market share. MVNOs made up 12% of the voice market and 2% of the data market.

Two distinct versions of Porter's Five Forces analysis have been developed: one focusing on services, and the other on infrastructure (with the latter to be examined later in more detail).

For what concerns services (Figure 3.12), the threat of new entrants is represented by industries currently offering complementary services to telecommunications. As reported by ANSA on June 4, 2023, Amazon has been negotiating with major American infrastructure providers, including AT&T and Verizon, to offer a comprehensive bundle of services ranging from connectivity to cloud services. This expansion is noteworthy because Amazon, known for its shipping services, has also developed a global data center infrastructure.

The threat of substitutes is not as significant. Starlink, an American company owned by Elon Musk, enables internet traffic to be routed via satellites, eliminating the need for a wired network or nearby radio bridge. However, this technology demands a clear, unobstructed space for satellite connection, introducing complexities. While the connection speed can, under optimal conditions, be comparable to fiber services, it suffers from much higher latencies. Moreover, compared to traditional services, it incurs higher costs for installation and subscription.

The bargaining power of suppliers is very high. A few large entities control the essential infrastructure, dictating terms and pricing, thereby wielding significant influence over the market.

On the customer side, bargaining power is also strong. Data traffic and telephony services are nowadays commodities, customers can switch operators with minimal to no switching costs.

Internal competition is also very intense, with new players entering each year. The sector has undergone a reconfiguration since the entry of virtual operators.

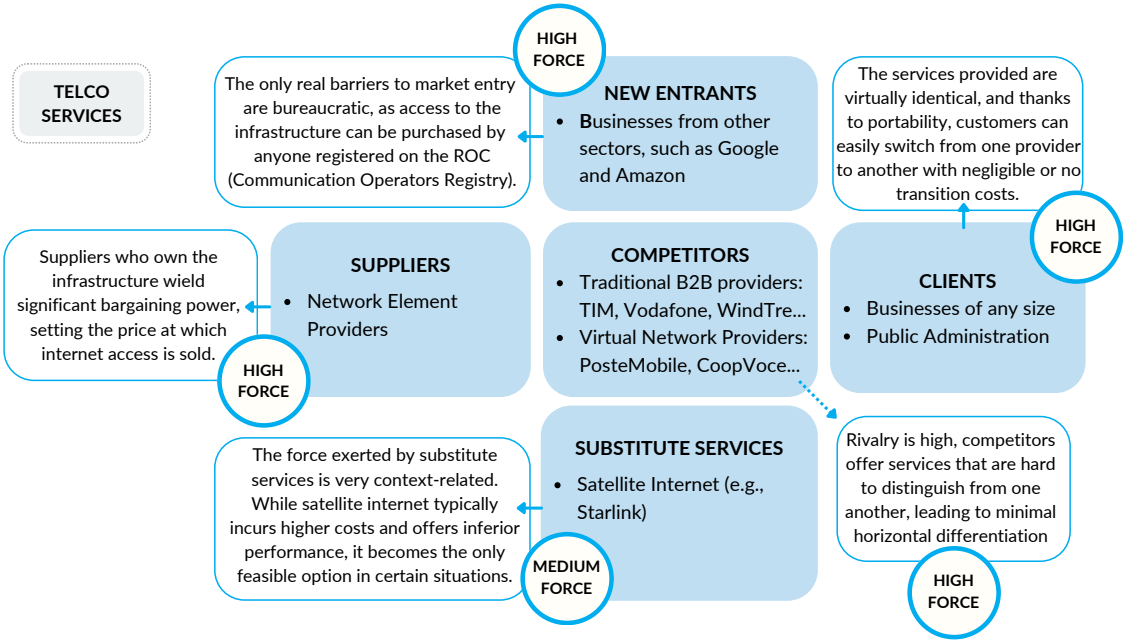


Figure 3.12 Porter's 5 forces analysis – Telco Services
(source: own elaboration)

Network infrastructure is the backbone of data exchange and underpins the functionality of internet, which is a vast assembly of interconnected networks. The structure of these IP networks has always been predominantly hierarchical. At the apex of this hierarchy, we have Tier 1 providers, who essentially hold the main conduits through which global data flows, including transoceanic cables. These providers don't directly cater to end-users but supply services to second-tier ISPs equipped with extensive continental cable networks. These, in turn, connect to local ISPs (Tier 3), who facilitate the delivery of commercial internet services at a national level. Interconnection points between these tiers are known as Internet Exchange Points (IXPs), with MIX in Milan and Namex in Rome standing as prominent examples for Italy. Sparkle, a subsidiary of Tim, represents one of the globe's most important Tier 1 networks, celebrated for its expansive linkage.

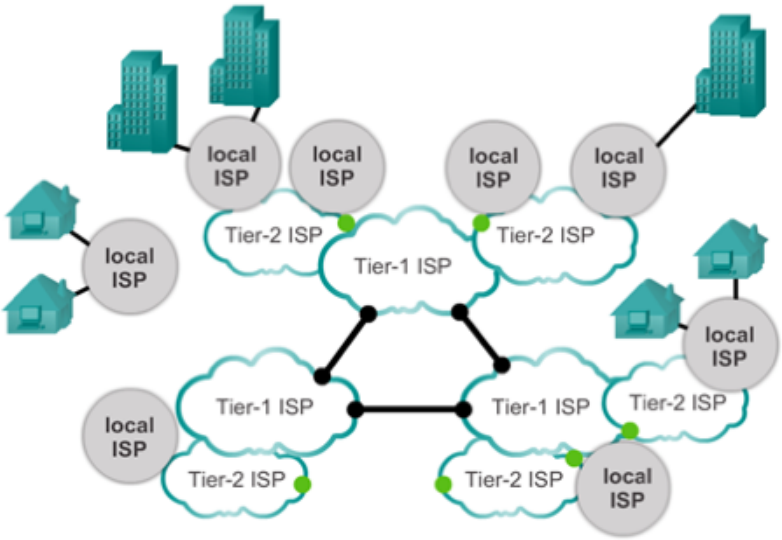


Figure 3.13 network infrastructure scheme
(source: The evolution of Internet interconnection from hierarchy to "Mesh": Stanley M. Besen,Mark A. Israel)

This hierarchical paradigm, however, has been supplanted in recent years by a more intricate and multifaceted network model which encompasses a far broader spectrum of participants, incorporating secondary interconnections and intricate interconnection agreements that often involve financial exchanges between entities. This shift reflects the industry's relentless pursuit of innovative interconnection strategies and the increasingly complex financial arrangements that accompany them. The proliferation of Content Delivery Networks (CDNs) such as Akamai and Limelight epitomizes this evolution. Numerous internet content providers now engage with CDNs to host their content on servers strategically dispersed across the internet, optimizing proximity to the residential subscribers served by ISPs or, at the very least, to the regional aggregation points that reach these end-users. This development has precipitated a profound transformation in the internet's foundational physical architecture, with the prevalent data transmission technologies detailed in the following table.

	Technology	Infrastructure	Speed
F Fibra	**Fiber Optic (FTTH)**	Cables distributed across territories, newly laid.	Commercial up to 10 Gb/s up & down
R Rame	**Optical Fiber + Copper (FTTC)**	Cables distributed over fiber territory (new) and copper (old)	Up to 200 Mb/s in download and 20 Mb/s in upload
R Rame	**Copper (VDSL)**	Cables distributed over copper territory	Up to 20 Mb/s in download and 1 Mb/s in upload
FR Misto Fibra-Radio	**Fiber + Radio Waves (FWA)**	Optical fiber cables and radio towers distributed over the territory	Up to 300 Mb/s in download and 50 Mb/s in upload
FR Misto Fibra-Radio	**Fiber + Cellular Network (FWA)**	Distributed like the cellular network, does not require a dedicated infrastructure	Up to 1 Gb/s in download and 200 Mb/s in upload

Figure 3.14 Overview of the main technologies in use

Italy's landscape is well-served by fixed-line infrastructure, predominantly managed by key national operators. Yet, when considering high-performance technological coverage, the scenario changes markedly, revealing a pronounced disparity across the country's macro-regions. Notably, the North-West and Central Italy enjoy greater access to high-speed connections exceeding 100 Mbit/s, standing above the national average. The prevailing technology in Italy is FTTC (Fiber to the Cabinet), a hybrid technology that employs fiber optic for the distribution network and copper for the "last mile," a legacy of the Telecom era.

Between March 2019 and March 2023, the total fixed-line count saw a modest decline from 20.26 million to 19.98 million. This period also witnessed a significant reduction in the reliance on copper networks, which dwindled from nearly half to just over a fifth of the total infrastructure.
In terms of technology-specific market dominance, Tim emerges as a frontrunner in both FTTC and FTTH (Fiber to the Home), while Eolo takes the lead in the FWA (Fixed Wireless Access) domain.

Figure 3.15 shows the version of Porter's 5 forces analysis tailored to the infrastructure segment of the telecommunications industry.
In this context, the entry barriers are notably high due to the substantial costs associated with building and maintaining infrastructure. This economic challenge deters virtual providers from making such hefty investments and explains why the threat of new entrants was considered as low.
The threat of substitutes is considered moderate because, although satellite-based infrastructure is costly, it offers an efficient solution for underserved areas.
The power wielded by suppliers is considerable, especially for Tier 3 providers who depend on higher-tier networks for comprehensive data connectivity.

On the consumer side, bargaining power is relatively weak, given their reliance on existing infrastructure and the need to conform to provider policies.

Competition within the industry is multifaceted, pivoting on the control of both fixed and wireless infrastructures. In fixed networks, it's uncommon for multiple providers to service the same region, leading to a quasi-monopoly in certain areas. Conversely, the wireless sector often sees overlapping coverage from different providers, fostering a more competitive environment.

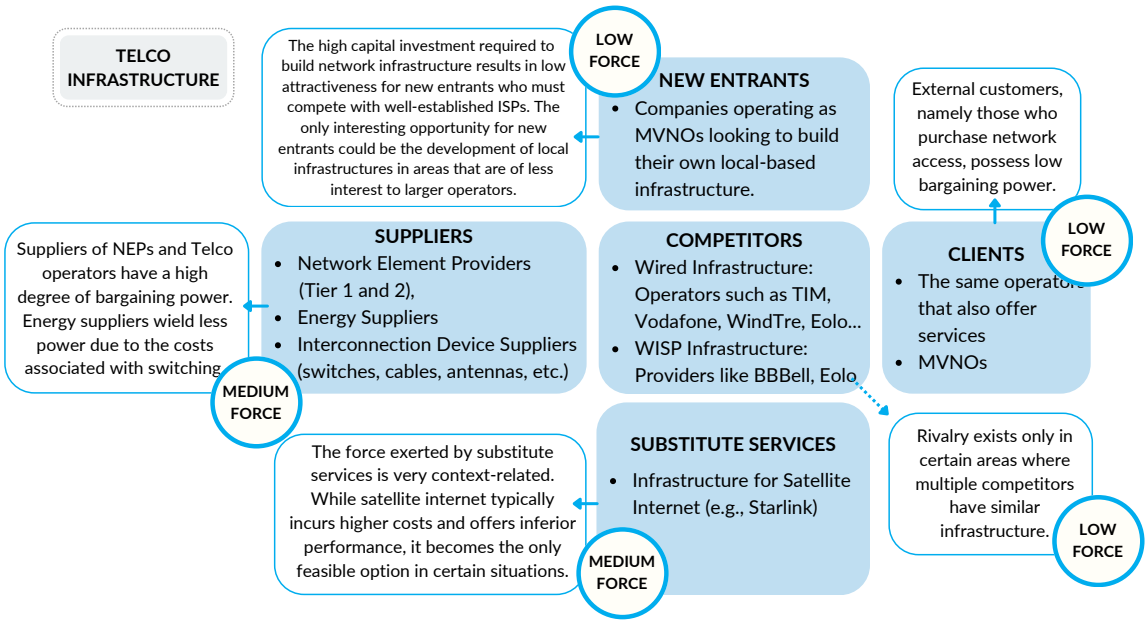


Figure 3.15 Porter's 5 forces analysis – Telco Infrastructure (source: own elaboration)

Assinform's 2023 report predicts a notable uptick in the digital market's growth rate, forecasting a climb of 5,5% from 2025 to 2026, with the anticipated market value reaching 91,7 billion euros in 2026. Particularly noteworthy is the surge in the proportion of M2M (Machine to Machine) SIM cards, which facilitate communication between devices, sensors, or "things" within the Internet of Things (IoT) ecosystem, allowing them to interact with each other and with other internet-connected devices and systems. This upward trend in M2M SIMs contrasts with a minor downturn in traditional, human-oriented SIMs typically found in smartphones.

The analysis also delves into the average cost of services and devices within the telecom sector, examining trends over a decade and across different countries. In this ten-year span, Italy witnessed a significant reduction in those costs (-26.8%), while in Spain they decreased by only 6.6%. This comparative insight underscores the distinctive market dynamics in Italy.

Data Center

Data Centers, pivotal in the digital sector, have experienced notable growth over the last five years. Private Data Centers, consisting of hardware components like servers, routers, and switches,

alongside software are those dedicated to a single company's use. In contrast, Public Data Centers are owned by entities that offer access to these facilities as a service to other companies, under various commercial models. Hosting typically involves clients leasing a server from a hosting provider, with the clients being responsible for the operation of the system software, applications, and hosted data. Colocation infrastructure provides essential services such as cooling, bandwidth, and security, while the client company manages the hardware components, including servers, storage systems, and firewalls.

Cloud computing, on the other hand, involves leveraging virtual computing resources from a cloud service provider, relieving clients from the responsibility of managing underlying infrastructure like servers, networks, and storage, all handled by the cloud provider. The trend in recent years shows a dramatic increase in cloud service expenditure, significantly dwindling the revenues from traditional hosting services.

In Italy, the data center market is predominantly occupied by public cloud services, which represented 42% of the total services in 2022. The hybrid cloud model, integrating external and internal cloud services, stands as the second most utilized solution. Italy is home to 200 public data centers, with a workforce of 17,356 individuals in this sector, slightly fewer than the commercial aviation industry's approximately 20,000 personnel. Milan emerges as the central hub for data centers in the country.

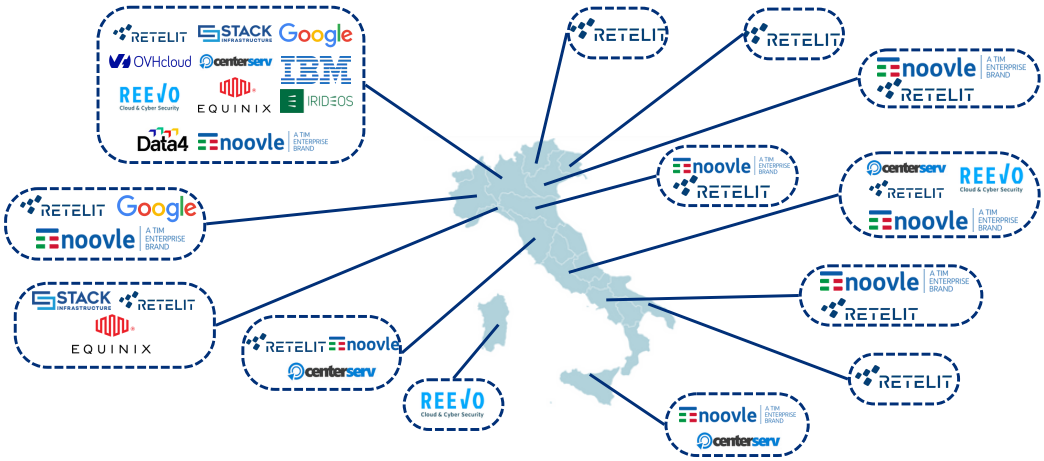


Figure 3.16 Data Centers in Italy
(source: own elaboration)

Data centers can be ranked based on the additional services they offer and their reliability level. One widely used classification system is that of the Uptime Institute, which defines four tiers of data centers based on system availability over the course of a year. Advancing from one tier to the next involves incorporating data protection strategies and implementing redundant systems (e.g., UPS and backup internet connections).

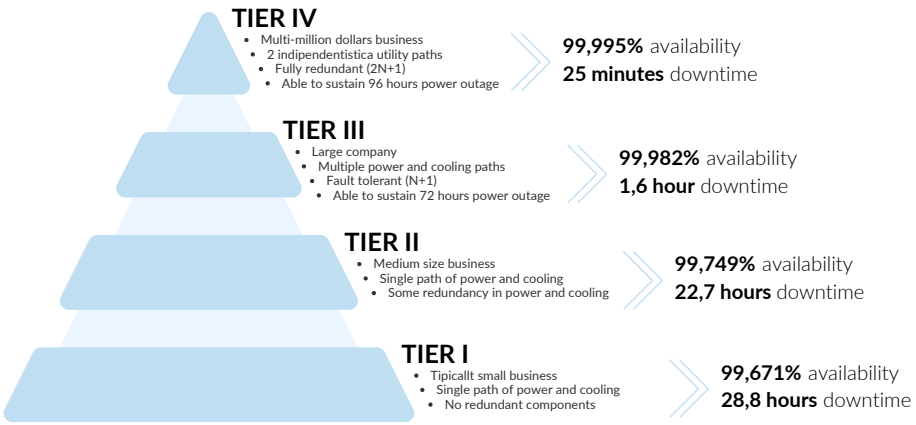


Figure 3.17 Data Center classification - Uptime Institute
(source: own graphical elaboration)

A crucial system designed to ensure service continuity is the 'disaster recovery'. This approach relies on replicating data and computing processes at an off-premise location unaffected by the eventual disaster. Should the servers malfunction, for instance, due to a natural disaster, the company could retrieve the lost data from a secondary location. In theory, an organization could also shift its computing processes to the remote site to maintain operational continuity.

Porter's 5 forces analysis presented in Figure 3.18 focuses on the sector of physical and virtual data centers. The threat of new entrants is moderate, there are new players who are interested in entering, but Italian regulations are restrictive. The threat of substitutes is non-existent, as there is no true alternative solution. The bargaining power of suppliers is moderate, although those who control critical network nodes possess significant strength, since a public data center must have access to the best network available to be competitive. The power of customers and the rivalry within the industry are very high.

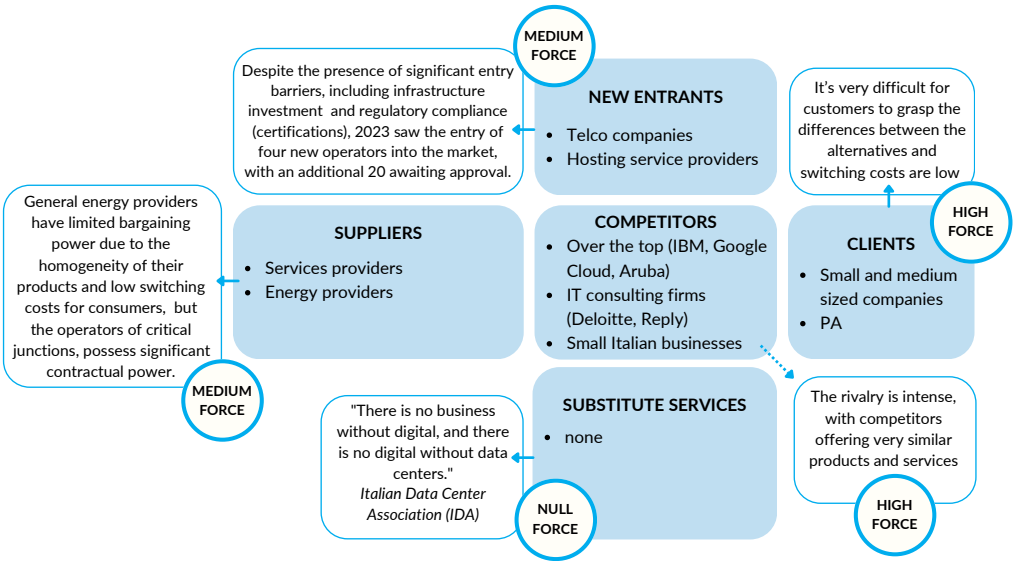


Figure 3.18 Porter's 5 forces Analysis - physical and virtual Data Centers
(source: own elaboration)

IT Consulting

The final area within Networking's purview is IT consulting, which can be segmented into three categories: IT consulting on general strategy, IT consulting on technology architecture, and IT consulting on implementation. Collectively, these segments are projected to grow from a global revenue of €47.6 billion in 2016 to an estimated €87 billion by 2028, with a Compound Annual Growth Rate (CAGR) of 5.2%.

Accenture and IBM are the sector's leaders, holding 32.3% and 14.9% of the market, respectively. Focusing on the Italian market, the revenue growth from 2022 to 2028 is estimated at 21%.

Porter's 5 forces analysis for this industry is particular because the focal point is human capital, rather than technical capital. The threat of new entrants is very high due to the low entry barriers, although achieving the credibility level of established firms is not easy. Credibility aside, the comprehensive skill set needed to meet all demands cannot be held by a single entity, and responding to the needs of more structured companies requires a robust organization. The threat from substitute goods comes from "expert systems". These systems, distinct yet not entirely separate from artificial intelligence, may utilize AI to varying extents. The bargaining power of suppliers is low, with universities being the main ones. The bargaining power of clients is high, primarily because switching costs are generally low and the metrics for evaluating consulting services ex-ante are very subjective.

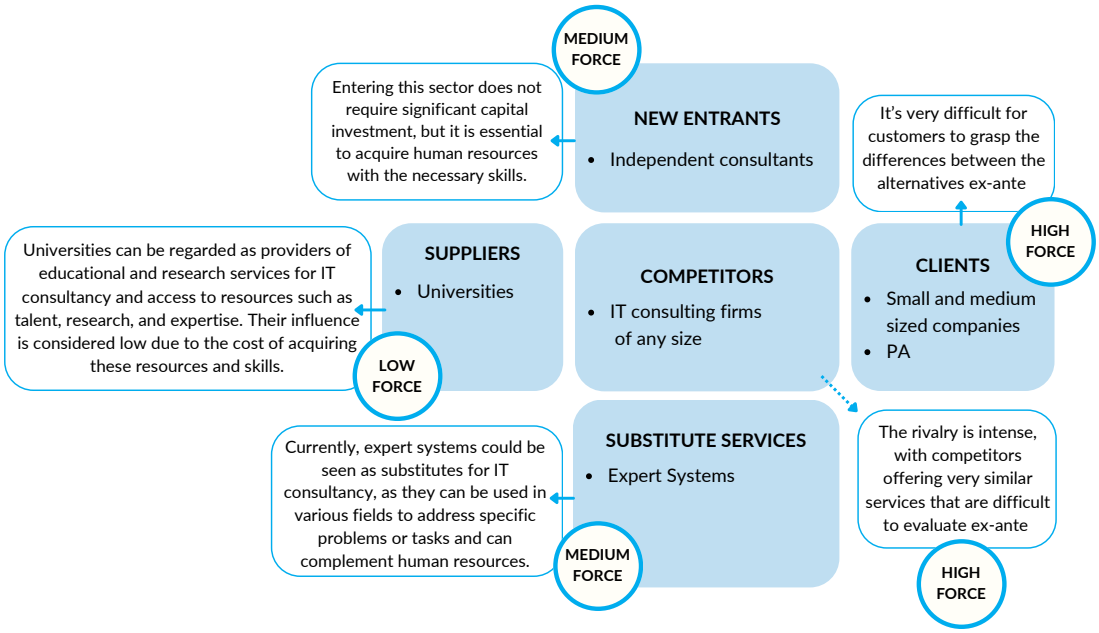


Figure 3.19 Porter's 5 forces analysis - IT consulting (source: own elaboration)

Progetti

Progetti is the go-to division for custom software solutions, catered to the unique technological needs of businesses. Its offers encompass three-tier client-server solutions on operating systems like Windows and Macintosh, HTML5-based web applications with three-tier MVC architectures, mobile applications for Android and iOS environments, and business intelligence & data analysis systems.

The software development sector's analysis reveals substantial global revenue growth, with a Compound Annual Growth Rate (CAGR) of 6% from 2016 to 2028. This growth trend is consistent in Europe with a CAGR of 5%, while in Italy, the growth is more moderate, at a CAGR of 3%. By 2028, global revenue is expected to reach approximately $850 billion, around $200 billion should come from Europe and about $9 billion from Italy.

The industry is experiencing a significant shift with the rise of Software as a Service (SaaS) solutions, replacing traditional on-premises software (Figure 3.20). This transition is driven by SaaS's flexibility, remote accessibility, and the elimination of local installation and maintenance needs.

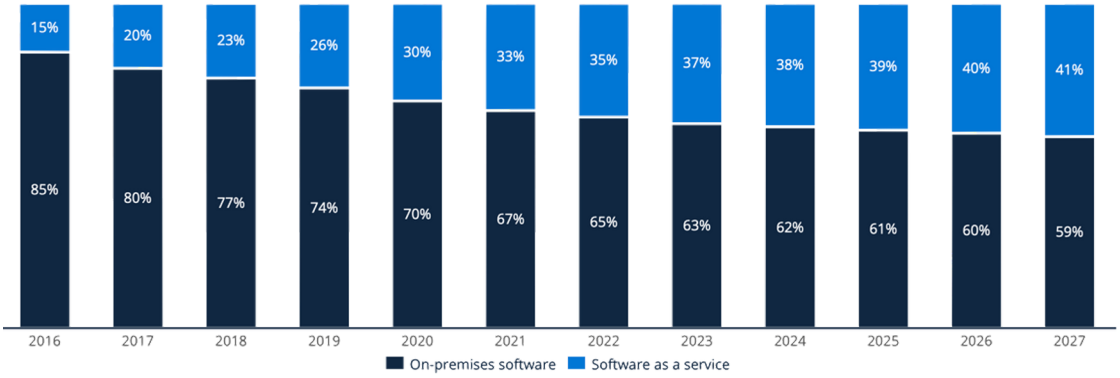


Figure 3.20 On-premises Software vs Software as a Service
(source: Statista's "Software - Market data analysis & forecasts" Report)

Another rapidly expanding sub-sector is cybersecurity, with revenue increasing from $28 billion in 2016 to an estimated $62 billion in 2026, marking a CAGR of 8% during the period. The pandemic has led to a significant uptick in cyber-attacks, spreading a long-term surge in demand for security software. During the pandemic, for instance, there was a 667% increase in email scams, a 2000% rise in virus files named after "Zoom," and the leak of 530,000 Zoom login credentials on the dark web. Key players in cybersecurity include IBM, McAfee, and Norton LifeLock.

The analysis also highlights substantial growth in application development, with global revenues rising from $98 billion in 2016 to $219 billion in 2027. This significant growth is attributed to the increasing demand for programs and tools that streamline the application development process.

The software sector can be divided into 3 subsegments: system software, middleware, and application software. Emisfera's BU (Progetti) predominantly focuses on application software, which constitutes 79% of Italy's total Software and ICT solutions market, amounting to approximately €7 billion in 2022 and forecasted to grow till $8.78 billion by 2028. The growth of this segment should be propelled by investments in the deployment of Smart Enterprise/IoT platforms and Web Management Platforms, featuring eCommerce and social solutions that support business processes and new business models anchored in multichannel strategies. In particular, the application software segment can be further divided into:

- Enterprise Software: This segment encompasses software supporting core business activities, including subsegments like Enterprise Resource Planning (ERP), Customer Relationship Management (CRM), Business Intelligence (BI), and Supply Chain Management software. Key industry players include SAP, Oracle, Microsoft, Sage (ERP); Salesforce, SAP, Oracle, Adobe (CRM); SAS, Microsoft, SAP, Oracle, IBM (BI).
- Application Development Software: These are programs and tools aiding the application development process, covering design, construction, automated software quality control, testing, and distribution. This includes app server middleware and development software. Leading players for low code platforms include App Maker, Appian, Mendix, Power Apps, while for no code platforms, Shopify, Airtable, Zapier, Typeform dominate.
- System Infrastructure Software: These are foundational frameworks for operating and managing organizational processes and services on hardware devices, including operating systems like MS Windows Server, Red Hat Enterprise Linux, Ubuntu Server, virtualization software like VMware and Hyper-V, network software like Cisco IOS and Junos OS, and storage software like EMC VMAX and NetApp.
- Productivity Software: Supports business activities conducted on computing devices, covering common applications like the Office suite, used in both B2B and B2C environments. Subsegments include administrative, office, collaboration, and creative software. Key industry figures are Microsoft (Word, Excel, Outlook, PowerPoint, Teams), Adobe (PDF, Photoshop, Illustrator, InDesign, Lightroom, After Effects, XD, Dimension).

A significant portion of the software developed by Italian software houses is dedicated to data management, including databases, documents, and other applications commonly used in office work. Currently, there are over 5,300 management software solutions utilized by both private and public companies. Among these, form-based programs for file storage and management are widely used, accounting for 25% of the demand. Other significant software categories include knowledge management solutions, making up 22% of the distribution, and front-end and back-end

management programs, each representing 21%, alongside software focused on customer management and consumer relations. This context allows for further detailed statistics regarding the types of offerings based on sector and available services. For example, 48% of the software is specialized for commercial sectors, while 57% of solutions enable product management through Cloud platforms. Regarding third-party server storage, 84% of Italian software supports this Cloud-based storage mode.

While the majority of companies in this field have chosen to specialize in specific market segments, such as ERP, CRM, SCM, and accounting software, to differentiate and solidify their reputation, Progetti has adopted an approach based on the cross-functional skills of its resources.

The Business Unit claims to be able to develop any type of application software, provided that the development aligns with specific operating systems, programming languages, and architectures. While this approach opens up a wide range of potential customers, it also presents several strategic challenges. The main complications lie in identifying a target market, assessing competitors, defining pricing strategies, and communicating with customers, who might doubt the credibility of a small entity proposing to cover the entire spectrum of software solutions or might not fully understand the extent of the company's competencies.

The most significant portion of Progetti's revenue comes from the Enterprise software segment, which was valued at approximately $3 billion in Italy in 2022, with an expected growth to $3,8 billion by 2028. Specifically, Progetti focuses on enterprise resource planning (ERP) software, supply chain management software, and business intelligence (BI) software, all sub-segments that show a consistent growth trend over the years and in forecasts.

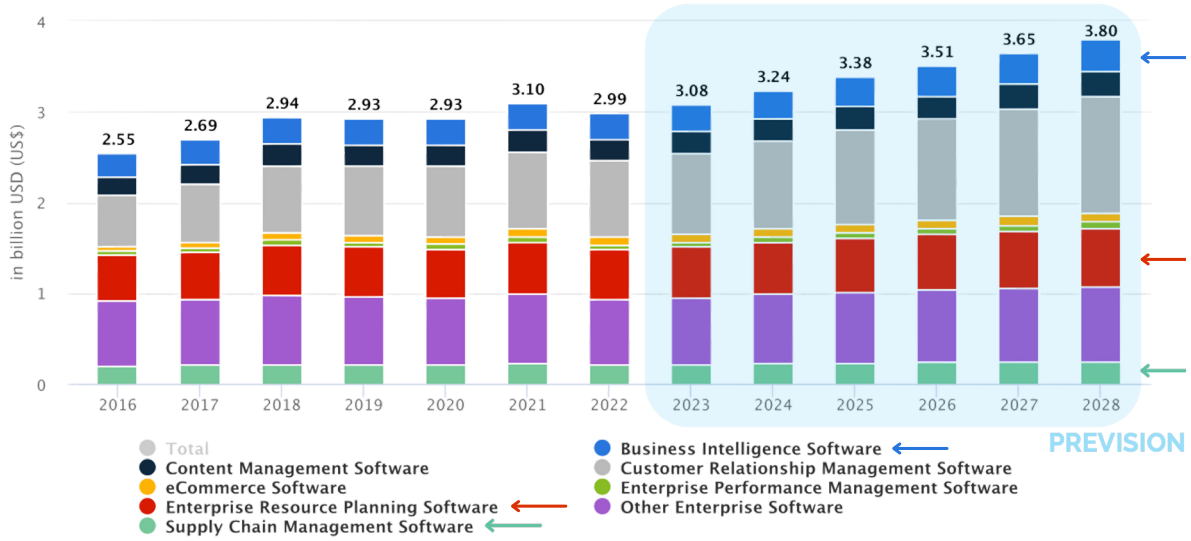


Figure 3.21 Enterprise Software Market Revenues by Segment – Italy
(source: Statista's "Software - Market data analysis & forecasts" Report)

The ERP software market is dominated by 5 very big international players who control almost half of the overall market (Figure 3.22).

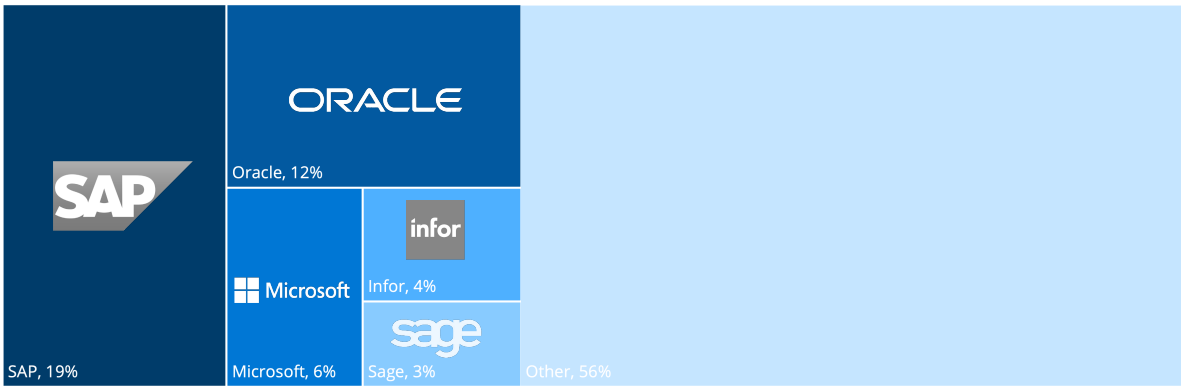


Figure 3.22 Market shares in the Enterprise Resource Planning Software subsegment in 2021 (source: Statista's "Software - Market data analysis & forecasts" Report)

In addition to these global giants, there are several other significant players at the national level, including:

- Zucchetti: Recognized as the top national entity in software revenue (source IDC), Zucchetti ranks 35th in Europe and among the top 100 developers in the annual IDC ranking. With over 8,000 employees, more than 1,650 partners in Italy, and over 350 partners in 50 countries worldwide, Zucchetti serves over 700,000 customers. It offers more than 1,700 solutions across software, hardware, and services, tailored to meet the specific needs of businesses of any sector and size, professional associations, as well as sectors like Public Administration and Healthcare.
- TeamSystem: Renowned as an Italian leader in management software, TeamSystem stands out for its expertise in supporting businesses, particularly in the crafts and micro-enterprise sectors. With over 1.4 million customers in Italy, TeamSystem relies on 550 partners and direct branches in the country and reported revenues of €695.8 million in 2022.
- Fluentis: With over 25 years in the management solutions market, Fluentis offers a high-tech ERP platform. Catering to both small businesses and medium/large national and European companies, Fluentis guides companies in reorganizing and optimizing business flows with verticalized and customized solutions.
- Four Solutions: Founded in 2002 in Modena, Four Solutions is an Italian software house that has grown as part of the Four Bytes Group. Specializing in distributing the ERP Target Cross, it provides commercial and technical support services to reseller partners, in addition to developing software specifically for the Italian market. About 2,800 companies have chosen Target Cross, spanning diverse markets and segments.

- Sisthema Spa: A standout Italian representative in the ERP sector, Sisthema Spa is known for a medium to long-term investment roadmap aimed at growing its over 2,500 clients' businesses. It offers one of the broadest ranges on the Italian SME market, acting as a single partner for managing various IT needs, from management solutions to IBM platforms, retail management, mobile working, and more.

Porter's 5 forces analysis (Figure 3.23) reveals a medium-to-high power on the suppliers' side, largely due to the scarce availability of skilled engineers and developers.

The competitive landscape is marked by a high level of intensity, with an expanding roster of companies delivering nearly identical services, complicating customers' ability to distinguish between different providers.

Alternative solutions, including off-the-shelf software, artificial intelligence, and DIY platforms, are gaining traction. However, their applicability is generally confined to situations of minimal complexity or those that are highly standardized.

As for new entrants, potential IT consulting firms looking to broaden their operations or software development startups pose a threat. According to a 2022 report by Anitec-Assinform, there are 1,264 startups and innovative SMEs in the ICT sector in Italy. But one need to consider that in such a sector, reputation and client portfolios play a pivotal role.

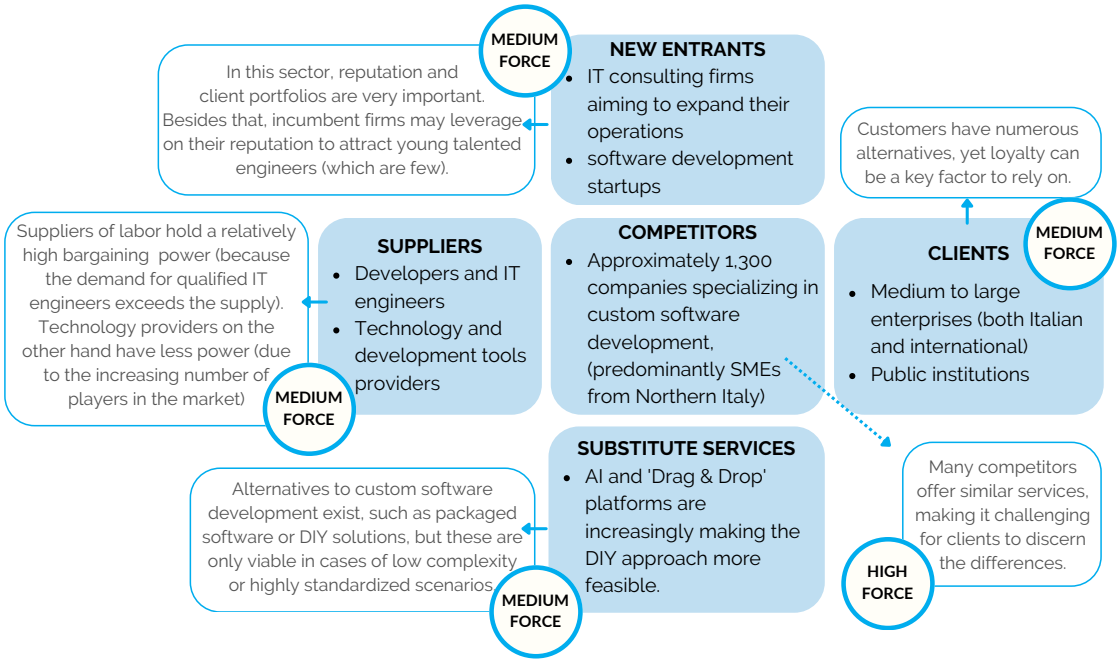


Figure 3.23 Porter's 5 forces analysis - Software Development Industry (source: own elaboration)

4 Performance Data Analysis

After examining the industry landscape and market dynamics for each business unit, as well as tracking the strategic movements of key competitors, we shifted our attention to Emisfera's historical and ongoing operations.

This chapter outlines the process of developing the database that facilitated our in-depth performance analysis of Emisfera's various business units and presents the key takeaways from this analysis. The insights gleaned were instrumental in drawing meaningful conclusions about the strategic positioning and operational efficiency of Emisfera's diverse business units.

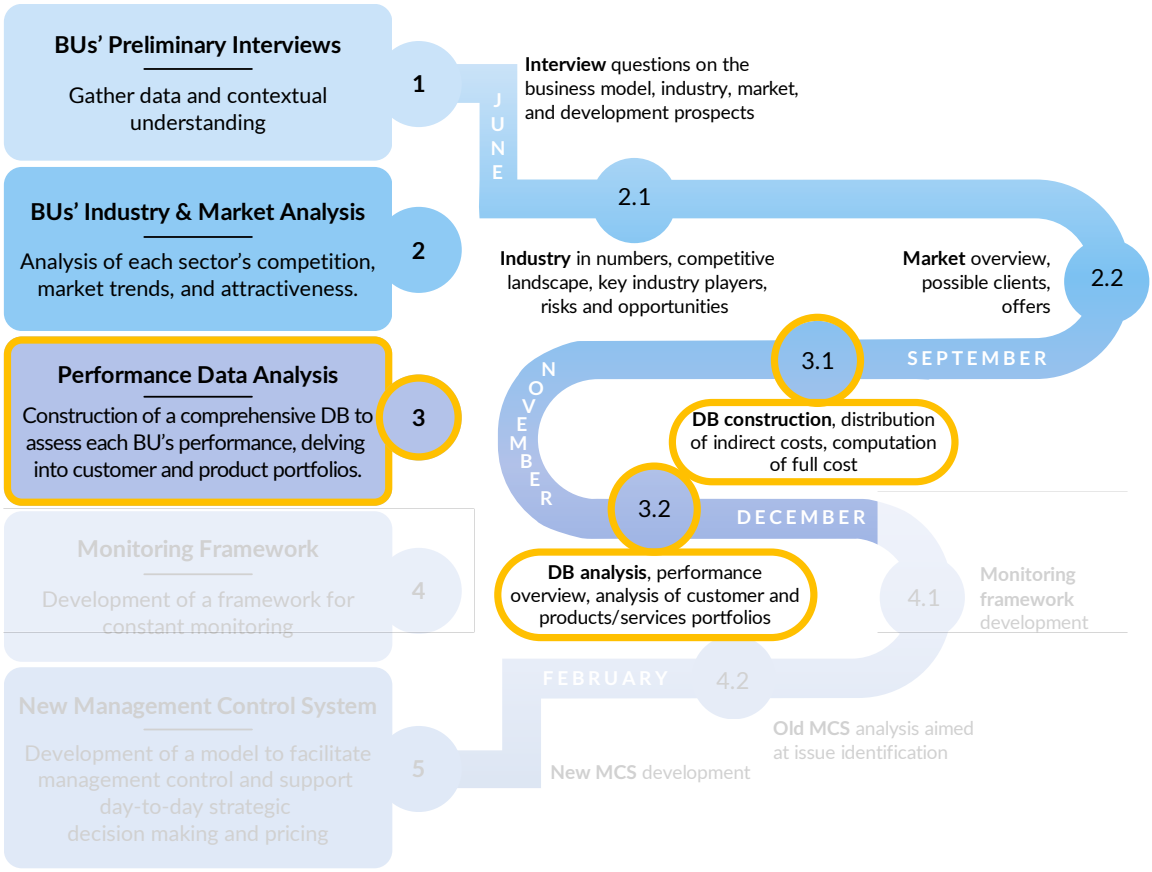


Figure 4.1 Portion of the project's roadmap addressed in this chapter - points 3.1 and 3.2

4.1 Database Construction

To construct our database, we began with a general data extraction file provided by the cooperative, spanning 5 years of activity. This Excel file comprised 19 columns and nearly 120,000 rows.

	A	B	C	D	E	F	G	H	I	J
1	Rag. Sociale cliente	COM_SEDE_LEGALE	PROV_SEDE_LEGALE	SATO_SEDE_LEGALE	Periodo	CDR_CODICE	CDR_DESCRIZIONE	Filiale di appartenenza	FC_CODICE	FC_DESCRIZIONE
2	AD SYSTEM S.P.A.	VILLORBA	TV	ITALIA	201801	R4	Prodotti terzi	Emisfera	2015-0146	Contratto Commerciale Emisfera ADSystem
3	ADECCO ITALIA HOLDING SPA	MILANO	MI	ITALIA	201801	_ND	Non definito	Emisfera	2016-0070	Contratto manutenzione HRS
4	ADECCO ITALIA HOLDING SPA	MILANO	MI	ITALIA	201801	R1	Manutenzioni	Emisfera	2016-0070	Contratto manutenzione HRS
5	ADECCO ITALIA HOLDING SPA	MILANO	MI	ITALIA	201801	R3	Prodotti propri	Emisfera	2017-0602	Servizio server virtuali
6	ADHR GROUP - AGENZIA PER IL L	CASTEL MAGGIORE	BO	ITALIA	201801	_ND	Non definito	Emisfera	2018-0010	Manutenzione WN 2018
7	ADHR GROUP - AGENZIA PER IL L	CASTEL MAGGIORE	BO	ITALIA	201801	R1	Manutenzioni	Emisfera	2018-0010	Manutenzione WN 2018
8	ADHR GROUP - AGENZIA PER IL L	CASTEL MAGGIORE	BO	ITALIA	201801	R2	Prestazioni	Emisfera	2018-0010	Manutenzione WN 2018
9	AFONE PAIEMENT	MILANO	MI	ITALIA	201801	R4	Prodotti terzi	Emisfera	2018-0598	Ecommerce globalpesca.shop integration
10	AGENZIA PER IL LAVORO DEDAL(	SUPINO	FR	ITALIA	201801	_ND	Non definito	Emisfera	2018-0381	Whitenet
11	AGENZIA PER IL LAVORO DEDAL(	SUPINO	FR	ITALIA	201801	R2	Prestazioni	Emisfera	2018-0381	Whitenet
12	AGENZIA PER IL LAVORO DEDAL(	SUPINO	FR	ITALIA	201801	R3	Prodotti propri	Emisfera	2018-0381	Whitenet
13	ALBERGO STELLA ALPINA SRL	DRUOGNO	VB	ITALIA	201801	_ND	Non definito	Netycom	2017-0066	Albergo Stella Alpina - Gestione facebook e Ins
14	ALBERGO STELLA ALPINA SRL	DRUOGNO	VB	ITALIA	201801	R1	Manutenzioni	Netycom	2017-0066	Albergo Stella Alpina - Gestione facebook e Ins
15	ALBERGO STELLA ALPINA SRL	DRUOGNO	VB	ITALIA	201801	R3	Prodotti propri	Netycom	2017-0066	Albergo Stella Alpina - Gestione facebook e Ins
16	ALBERGO STELLA ALPINA SRL	DRUOGNO	VB	ITALIA	201801	R4	Prodotti terzi	Netycom	2017-0066	Albergo Stella Alpina - Gestione facebook e Ins
17	ALBERGO STELLA ALPINA SRL	DRUOGNO	VB	ITALIA	201801	R5	Spese	Netycom	2017-0066	Albergo Stella Alpina - Gestione facebook e Ins
18	ALBERGO STELLA ALPINA SRL	DRUOGNO	VB	ITALIA	201801	R6	Telecomunicazioni	Netycom	2017-0066	Albergo Stella Alpina - Gestione facebook e Ins
19	ALI' ALESSANDRO	VILLADOSSOLA	VB	ITALIA	201801	_ND	Non definito	Emisfera	2018-0563	Fornitura Notebook x segretaria
20	ALI' ALESSANDRO	VILLADOSSOLA	VB	ITALIA	201801	R4	Prodotti terzi	Emisfera	2018-0563	Fornitura Notebook x segretaria
21	ALI SPA	ROMA	RM	ITALIA	201801	R3	Prodotti propri	Emisfera	2015-0426	Supporto S2N
22	ALI SPA	ROMA	RM	ITALIA	201801	_ND	Non definito	Emisfera	2016-0102	Servizio Server virtuali
23	ALI SPA	ROMA	RM	ITALIA	201801	R3	Prodotti propri	Emisfera	2016-0102	Servizio Server virtuali
24	ALI SPA	ROMA	RM	ITALIA	201801	_ND	Non definito	Emisfera	2017-0094	Integrazione CRM
25	ALI SPA	ROMA	RM	ITALIA	201801	R2	Prestazioni	Emisfera	2017-0094	Integrazione CRM
26	ALI SPA	ROMA	RM	ITALIA	201801	_ND	Non definito	Emisfera	2017-0572	Revisione report di andamento
27	ALI SPA	ROMA	RM	ITALIA	201801	_ND	Non definito	Emisfera	2018-0011	Manutenzione WN 2018

	K	L	M	N	O	P	Q	R	S
	Commerciale	AREA_MANAGER	COSTO_CONSUNTIVI	ORE_CONSUNTIVATE	COSTO_SPESE	COSTO_ORDINI	RDF	AREA_CODICE	AREA_DESCRIZIONE
2	GIUSEPPE RIGANO	GIANCARLO PANELLA	0	0	0	0	23,6	A01	Whitenet
3	LORENZO VANDONI	STEFANO BREGANNI	55,3125	3	0	0	0	A05	Progetti
4	LORENZO VANDONI	STEFANO BREGANNI	0	0	0	0	2574,08333	A05	Progetti
5	FERRUCCIO COLOMBARA	FERRUCCIO COLOMBARA	0	0	0	0	0	A06	Networking
6	GIUSEPPE RIGANO	GIANCARLO PANELLA	87,1875	3	0	0	0	A01	Whitenet
7	GIUSEPPE RIGANO	GIANCARLO PANELLA	0	0	0	0	2113,58333	A01	Whitenet
8	GIUSEPPE RIGANO	GIANCARLO PANELLA	0	0	0	0	149,25	A01	Whitenet
9	LORENZO VANDONI	FRANCO D'URSO	0	0	0	0	0	A05	Progetti
10	GIUSEPPE RIGANO	GIANCARLO PANELLA	0	0	0	0	0	A01	Whitenet
11	GIUSEPPE RIGANO	GIANCARLO PANELLA	0	0	0	0	0	A01	Whitenet
12	GIUSEPPE RIGANO	GIANCARLO PANELLA	0	0	0	0	0	A01	Whitenet
13	SILVIA ZANETTA	SILVIA ZANETTA	82,96875	4,5	0	0	0	A13	Netycom
14	SILVIA ZANETTA	SILVIA ZANETTA	0	0	0	0	0	A13	Netycom
15	SILVIA ZANETTA	SILVIA ZANETTA	0	0	0	0	0	A13	Netycom
16	SILVIA ZANETTA	SILVIA ZANETTA	0	0	0	0	0	A13	Netycom
17	SILVIA ZANETTA	SILVIA ZANETTA	0	0	0	0	0	A13	Netycom
18	SILVIA ZANETTA	SILVIA ZANETTA	0	0	0	0	0	A13	Netycom
19	MARCO TARTARI	Non definito Non definito	0	0	0	0	0	A06	Networking
20	MARCO TARTARI	Non definito Non definito	0	0	0	0	0	A06	Networking
21	Non definito Non definito	GIANCARLO PANELLA	0	0	0	0	0	A01	Whitenet
22	FERRUCCIO COLOMBARA	FERRUCCIO COLOMBARA	247,03125	8,5	0	0	0	A06	Networking
23	FERRUCCIO COLOMBARA	FERRUCCIO COLOMBARA	0	0	0	0	1690	A06	Networking
24	TIMOTHY PATRIZIANO	GIANCARLO PANELLA	29,0625	1	0	0	0	A01	Whitenet
25	TIMOTHY PATRIZIANO	GIANCARLO PANELLA	0	0	0	0	12500	A01	Whitenet
26	Non definito Non definito	GIANCARLO PANELLA	309,84375	14,5	0	0	0	A01	Whitenet
27	GIUSEPPE RIGANO	GIANCARLO PANELLA	1313,8	31,5	0	0	0	A01	Whitenet

Figure 4.2 Screenshot of the first 27 rows of the general extraction file

Initial examination revealed significant yearly variations in the company's accounting practices and record-keeping methods. Furthermore, we noted considerable differences in how these practices were interpreted and applied across different business units.

To address these inconsistencies and gain a deeper understanding of the underlying recording frameworks, we held meetings with the managers of each business unit. These discussions have been crucial to define our data normalization and alignment strategy.

Recognizing the need to account for the differences and exceptions on a year-by-year and business-unit-by-business-unit basis, we split the initial file into 25 smaller ones (5 years × 5 business units) and started focusing on finding a way to compute the full cost associated with each service offering, essential for profitability and pricing evaluations.

This meant starting to work on the development of robust allocation techniques to ensure that the database could serve as a reliable basis for future analysis. This endeavor was not only about data reconciliation but also entailed a process of standardization and analytical preparation.

The adopted methodology is complex and multifaceted, for the benefit of the reader interested in the intricacies of this process, a detailed account of the steps followed is presented in Appendix A,

shared with the cooperative to potentially verify the findings. A simplified version, outlining the main activities, is presented in Figure 4.3.

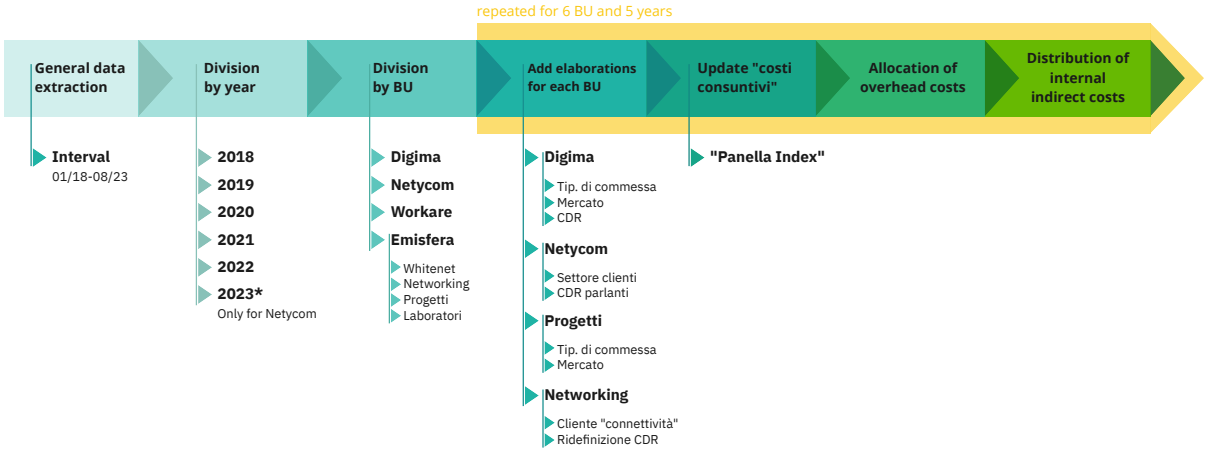


Figure 4.3 Key steps of the DB construction

4.2 Performance Analysis of each Business Unit

Building the database allowed us to align the management periods of 2018-2020 with those of 2021-2022, overcoming the challenges posed by internal management shifts and the differences across various business units.

The upcoming section will offer a broad overview of the performance of each Business Unit in the last 5 years. In particular, we will use some tools borrowed from innovation management and management control theory to analyze:

- Each BU's performance in terms of revenues, total costs, number of clients and EBITDA
- Each BU's clients' portfolio
- Each BU's products/services' portfolio
- Each BU's strengths, weaknesses, opportunities, and threats

In-depth examinations specific to each Business Unit have been provided, shared, and discussed through presentations within the cooperative.

Digima

Digima's performance overview, shown in Figure 4.4, reveals a dip in margins during the Covid-19 period, from 2020 to 2021, followed by a notable rebound in 2022, both in terms of margins and customer base.

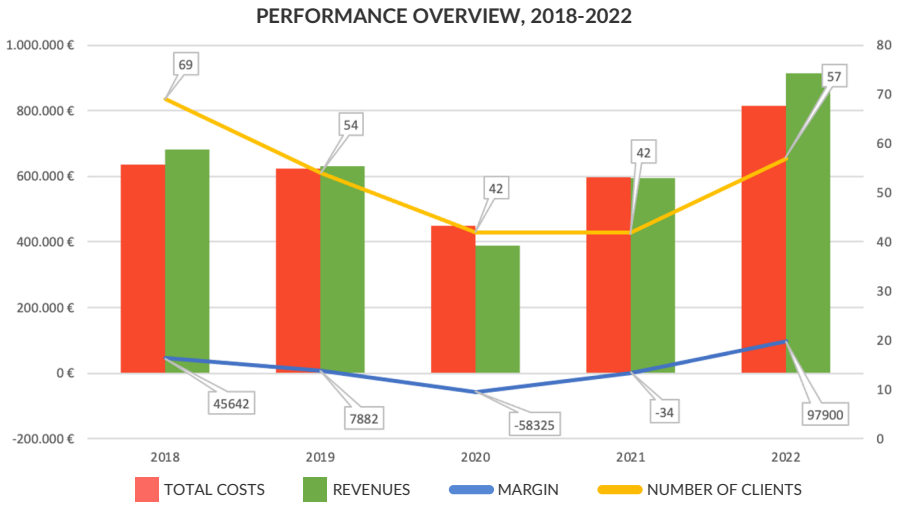


Figure 4.4 Performance Overview – Digima

Post-2020, there was a steady recovery in the average margin per customer, reaching a peak in 2022, as detailed in Table 4.1.

The significant downturn observed during the pandemic shouldn't come as a surprise considering that Digima's clients consist almost exclusively of cinemas (Figure 4.5), which were closed during the Covid-19 lockdowns.

AVERAGE MARGIN PER CLIENT, 2018-2022

Years	Average Margin per Client
2018	661€
2019	146€
2020	-1389€
2021	-0,82€
2022	1718€

Table 4.1 Average margin per client - Digima

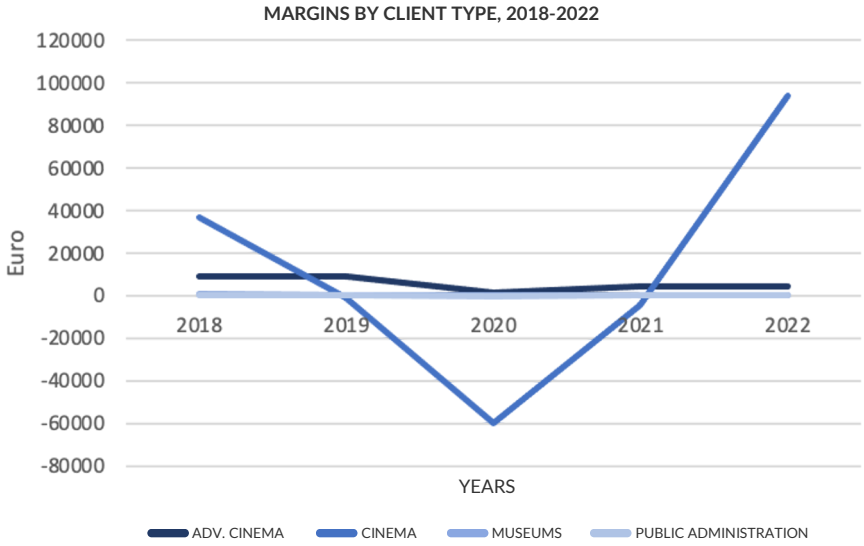


Figure 4.5 Margins by client-type - Digima

The presence of revenues from other European countries (Figure 4.6) might be misleading; these revenues originate from cinema circuits headquartered abroad, but Digima exclusively serves the domestic market.

MARGINS BY NATION, 2018-2022

MARGINS

Nations	2018	2019	2020	2021	2022
BELGIO	-15114	-6652	0	0	0
GBR	27897	1973	-32891	-6234	-10576
USA	-571	186	-28	528	34
ITALIA	33430	12392	-24833	5672	108289
SVIZZERA	0	-17	0	0	154
FRANCIA	0	0	-572	0	0
total	45642	7882	-58325	-34	97900

NUMBER OF CLIENTS

Nations	2018	2019	2020	2021	2022
BELGIO	2	1	0	0	0
GBR	2	1	1	1	1
USA	1	1	1	1	1
ITALIA	65	51	40	41	55
SVIZZERA	0	1	0	0	1
FRANCIA	0	0	1	0	0

Figure 4.6 Margins and Clients by Nation - Digima

An examination of the clients' distribution across Italy reveals a concentration in Piedmont, Digima's home region. However, the most substantial margins come from a client based in Lazio, namely The Space Cinema circuit.

MARGINS BY REGION, 2018-2022

	Abruzzo	Basilicata	Calabria	Campania	Emilia Romagna	Friuli Venezia Giulia	Lazio	Liguria	Lombardia	Marche	Molise	Piemonte	Puglia	Sardegna	Sicilia	Toscana	Trentino Alto Adige	Veneto
2018	-891	0	-3149	5887	2235	0	5549	2110	4296	-970	0	1682	-570	-2621	-2607	-350	0	22829
2019	0	37	0	5962	1320	-10621	8064	2061	-4697	-309	0	-147	0	-612	0	1027	0	10306
2020	0	0	0	1021	-427	-531	1831	56	1419	-1726	0	-2082	-1368	0	-1859	-245	-1857	-18393
2021	0	0	104	3086	-1805	595	19813	379	2595	-10	0	-7539	-235	-118	0	640	0	-11218
2022	0	0	110	3314	-595	2808	64300	3352	17645	0	92	38	-471	0	28	-823	0	18598
Totali	**-891**	**37**	**-2935**	**19271**	**728**	**-7748**	**99557**	**7957**	**21258**	**-3014**	**92**	**-8048**	**-2643**	**-3351**	**-4438**	**249**	**-1857**	**22121**

Figure 4.7 Margins by Region - Digima

NUMBER OF CLIENTS BY REGION, 2018-2022

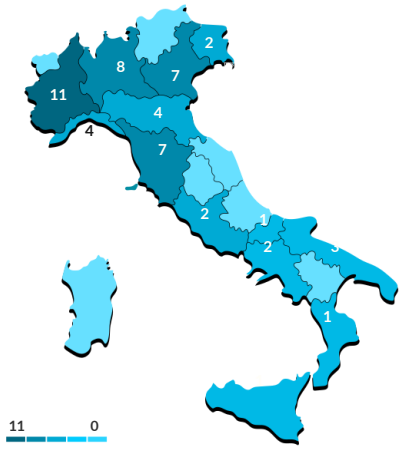


Figure 4.8 Number of Clients by Region - Digima

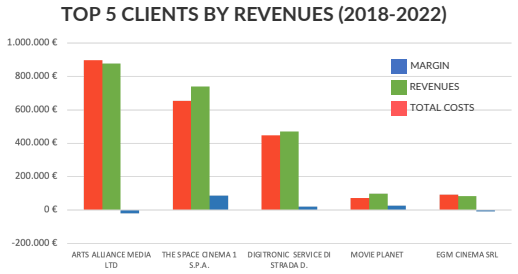
The lack of correlation between the margins and the number of clients in each region can be explained by considering that a circuit like The Space counts as one client but operates 35 multiplexes with a total of 350 screens for which it may require Digima's services, whereas other clients may only require services for a single cinema with perhaps 2 or 3 screens.

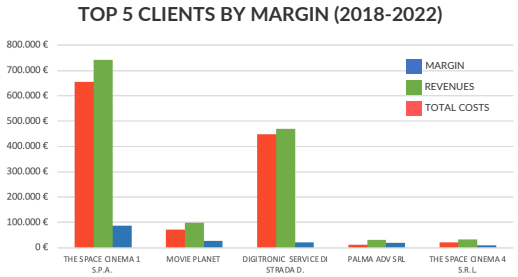
Over the past five years, the key clients by margins and/or revenues have been (Figure 4.9):

- Arts Alliance Media Ltd, a global frontrunner in digital cinema software and services, providing a wide array of solutions designed to cut costs, boost efficiency, and enhance the cinematic experience. Their software is deployed across more

than 42,000 digital screens globally, and their Network Operations Center (NOC) offers support to several thousand screens.

- The Space Cinema, the second largest operator in the Italian cinema projection market by revenue. The group operates across Italy, with a more significant presence in the north.
- EGM Cinema SRL, that manages five cinemas in Trieste, totaling 12 screens.
- Movie Planet, that operates 10 cinemas located between Turin and Milan.
- Digitronic Service, that offers design, supply, installation, and maintenance services for cinematic projection and sound systems. Since 2007, the company has been actively involved in the transition from film to digital, demonstrating a high level of commitment and interest.





CLIENTS	% OF TOTAL COSTS	% OF REVENUES	% OF MARGINS
ARTS ALLIANCE MEDIA LTD	29%	**27%**	-23%
THE SPACE CINEMA 1 S.P.A.	21%	**23%**	93%
DIGITRONIC SERVICE DI STRADA D.	14%	**15%**	22%
MOVIE PLANET	2%	**3%**	29%
EGM CINEMA SRL	3%	**3%**	-9%

CLIENTS	% OF TOTAL COSTS	% OF REVENUES	% OF MARGINS
THE SPACE CINEMA 1 S.P.A.	21%	23%	**93%**
MOVIE PLANET	2%	3%	**29%**
DIGITRONIC SERVICE DI STRADA D.	14%	15%	**22%**
PALMA ADV SRL	0%	1%	**20%**
THE SPACE CINEMA 4 S.R.L.	1%	1%	**11%**

Figure 4.9 Top 5 Clients by Revenues and Margins (2018-2022) – Digima

Pareto's chart vividly illustrates that Digima's performance is heavily reliant on a small group of clients, the top 5 clients in 2022 contributed to more than 80% of the total revenue and over 90% of the overall margin (Figure 4.10). Such a concentrated client portfolio poses a significant risk.

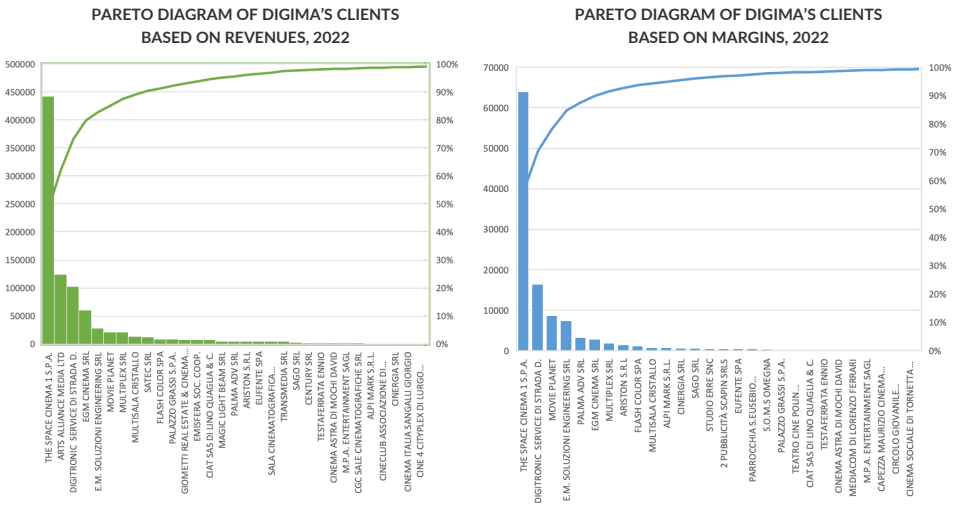


Figure 4.10 Pareto Chart of Digima's Clients

To evaluate Digima's product/service portfolio, we applied the BCG Matrix (Figure 4.11). However, the current management control model does not provide a clear categorization of products/services, compelling us to rely on revenue centers instead.

This resulted in a less meaningful analysis, but the primary goal was to introduce this tool to the company. We aimed to share some of the most suitable methodologies for monitoring the performance of each business unit in terms of their product/service portfolio, especially in light of developing a new management control model that addresses these deficiencies.

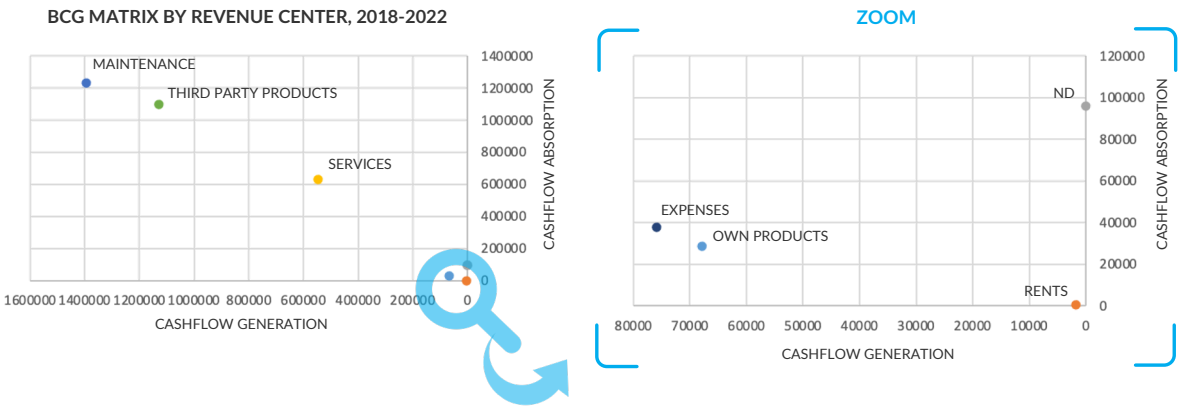


Figure 4.11 BCG Matrix – Digima

Figure 4.12 presents a SWOT analysis for Digima, offering a comprehensive overview of the company's internal strengths and weaknesses, alongside the external opportunities and threats it faces. This analysis serves as a strategic tool, encapsulating key factors that influence Digima's operational and strategic positioning. By examining these elements, we can gain deeper insights into Digima's competitive landscape, potential growth avenues, and areas requiring attention or mitigation strategies.

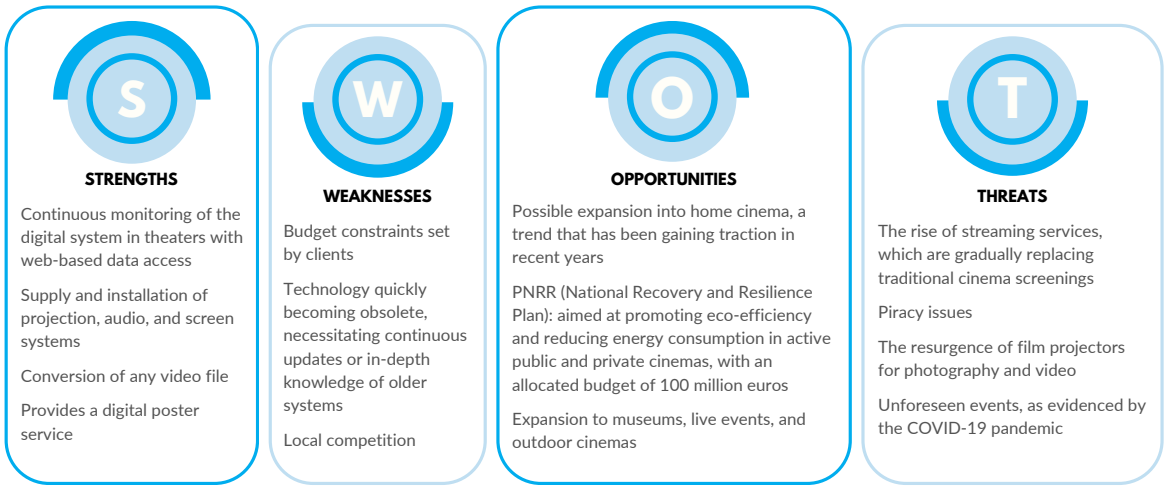


Figure 4.12 SWOT - Digima

Netycom

Netycom's, performance overview (Figure 4.13) highlights the current challenges faced by the Business Unit.

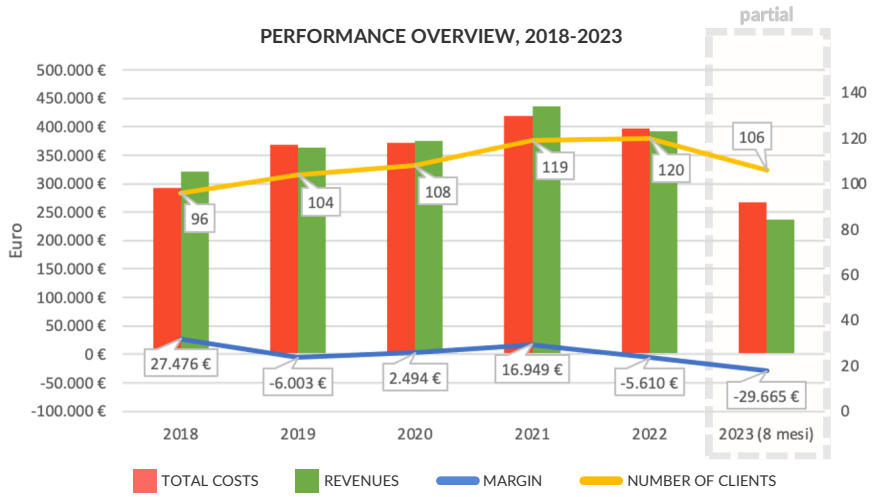


Figure 4.13 Performance Overview – Netycom

There appears to be no direct correlation between the number of acquired clients and the generated margins. Indeed, despite the increase in Netycom's annual client base, margins have not seen a significant rise, with the exception of the years 2020 and 2021, which may have been influenced by the extraordinary circumstances of the Covid-19 pandemic (Table 4.2).

AVERAGE MARGIN PER CLIENT, 2018-2023

Years	Average Margin per Client
2018	286,21 €
2019	-57,72 €
2020	23,09 €
2021	142,43 €
2022	-46,75 €
2023 (8 months)	-279,86 €

Table 4.2 Average Margin per Client - Netycom

Data from 2022 indicates that the majority of Netycom's clients are based in Italy, with a limited presence of international clients from countries such as Switzerland, China, France, Germany, and Spain (Figure 4.14).

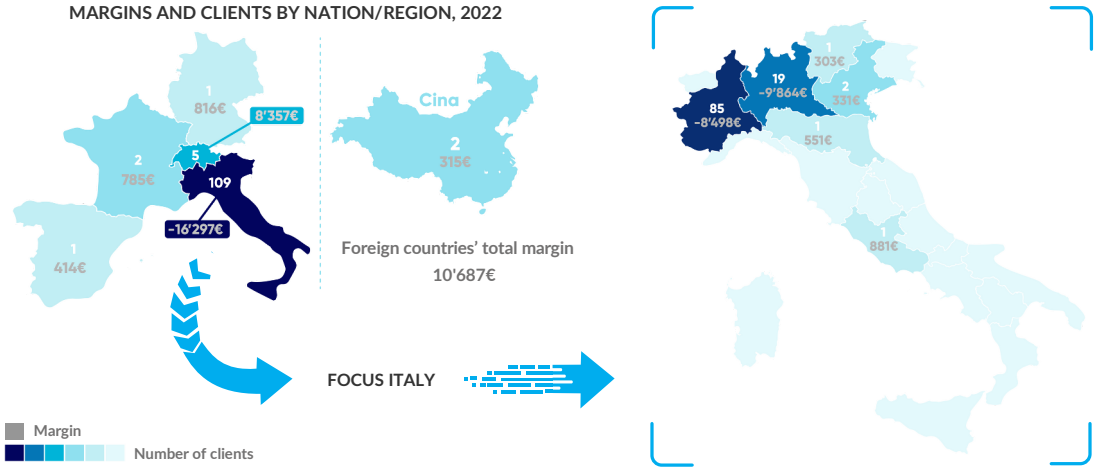


Figure 4.14 Margins and Number of Clients by Nation/Region (2022) - Netycom

Until 2022, international markets seemed very promising in terms of margins, but the trend in the first eight months of 2023 does not appear encouraging (Figure 4.15).

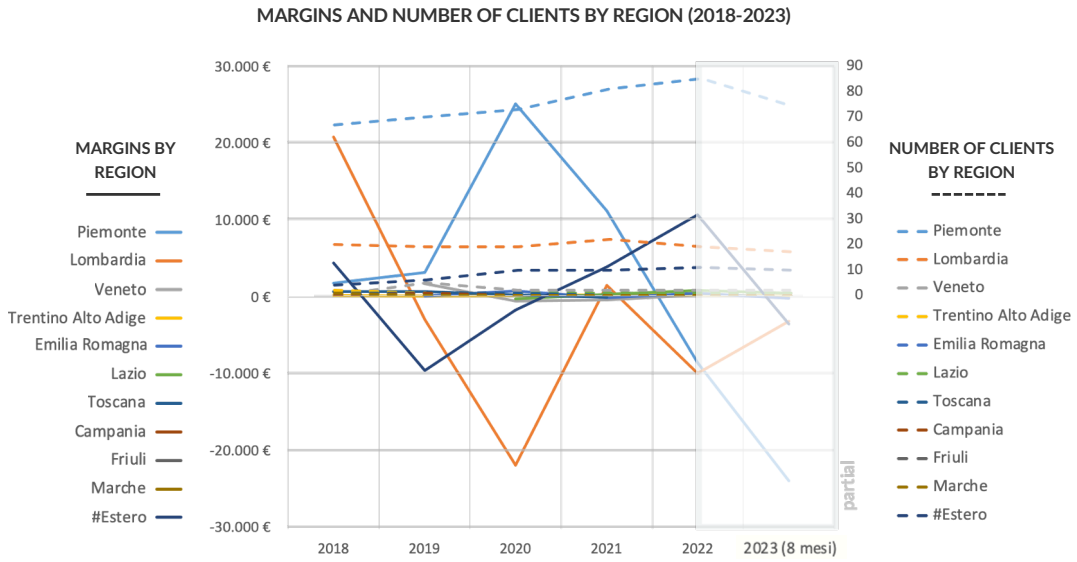


Figure 4.15 Margins and Number of Clients by Region (2018-2023) - Netycom

There appears to be no strategic focus on specific customer segments, as evidenced by Table 4.3, which shows a diverse range of customers from various industries.

	Margin by client-type, per year						
Client's Industry	**2018**	**2019**	**2020**	**2021**	**2022**	**2023** (8months)	**TOTAL**
Turismo	2.909 €	4.364 €	6.369 €	6.786 €	7.683 €	-1.525 €	26.586 €
Alimentare	2.515 €	-6.241 €	3.017 €	2.764 €	4.380 €	1.869 €	8.304 €
Immobiliare, Edile, Arredamento	126 €	1.784 €	-1.182 €	-226 €	2.637 €	1.566 €	4.705 €
Comunicazione e Media	25.720 €	-5.346 €	9.328 €	5.316 €	2.261 €	-1.823 €	35.456 €
Finanziario Assicurativo e consulenza				-523 €	1.829 €	-2.910 €	-1.604 €
Medicina	189 €	-573 €	216 €	-3.831 €	142 €	-3.281 €	-7.137 €
Sociale, culturale e educativo	-2.850 €	-3.057 €	-11.344 €	7.291 €	-228 €	-4.009 €	-14.196 €
Altro	-2.856 €	4.498 €	-8.413 €	-2.621 €	-2.499 €	-6.052 €	-17.943 €
Commerciale e al dettaglio	1.918 €	1.030 €	2.600 €	-8.877 €	-10.631 €	-10.392 €	-24.352 €
Industriale e Tecnologico	-195 €	-2.462 €	1.902 €	10.871 €	-11.185 €	-3.108 €	-4.177 €
TOTAL	**27.476 €**	**-6.003 €**	**2.494 €**	**16.949 €**	**-5.610 €**	**-29.665 €**	**5.641 €**

Table 4.3 Margins by Client-type – Netycom

However, it becomes clear that the categories most responsible for the unfavorable financial outcomes in the last two years are primarily the "commercial & retail" and "industrial & technology" ones. Delving further into these categories (refer to Table 4.4), we pinpoint the specific sectors that have been key drivers of these financial downturns: autorepair and tuning, technology, sports equipment, energy and solar panels, and the automotive body repair industry.

Commerciale e al dettaglio	**2021**	**2022**
Librerie		2.131,98 €
Abbigliamento e prodotti per il corpo	-1.746,70 €	1.454,39 €
Servizi al consumatore	-1.671,64 €	953,61 €
Rubinetterie		587,14 €
Fiori e Piante	546,00 €	539,23 €
Casalinghi	1.170,20 €	-467,84 €
Carrozzerie		-1.396,54 €
Prodotti sportivi	-7.100,19 €	-5.085,17 €
Autoricambi e tuning		-9.347,82 €
TOTALI	**-8.802,33 €**	**-10.631,01 €**

Industriale e Tecnologico	**2021**	**2022**
Macchine industriali	3.331,50 €	1.944,34 €
Logistica e trasporti	1.573,17 €	547,73 €
Manutenzione impianti	376,01 €	489,65 €
Ingegneria navale	34,50 €	146,84 €
ApL	826,82 €	-2.583,86 €
Energia e fotovoltaico	2.981,18 €	-4.041,47 €
Tecnologia	1.748,26 €	-7.687,81 €
TOTALI	**10.871,43 €**	**-11.184,59 €**

Table 4.4 Specific Drivers of the Financial downturn - Netycom

In Figure 4.16, a more detailed analysis of the problematic customers reveals significantly negative profit margins, pointing to deep-seated issues within the pricing strategies employed. This highlights the urgent need for a strategic realignment focused on addressing these pricing challenges and possibly redefining the target customer base to enhance financial performance.

		Totale Costi	Ricavi	EBITDA
Autoricambi e Tuning	AUTO CHE PASSIONE S.R.L.	19.003 €	9.655 €	-9.348 €
Tecnologia	ARCHIMEDIA SISTEMI SOC. COOP.	8.157 €	150 €	-8.007 €
	COALIZIONE CLOUD E FIXED WIRELESS ACCESS	619 €	1.500 €	881 €
	DIGIMA S.R.L.	1.142 €	850 €	-292 €
	EMISFERA SOC. COOP.	9.016 €	8.771 €	-245 €
	HAL SERVICE SPA	2.310 €	1.511 €	-800 €
	RB4U SRL START UP INNOVATIVA	66 €	100 €	34 €
	WORKARE SRL	760 €	1.502 €	742 €
Prodotti Sportivi	COBER SRL	10.134 €	5.049 €	-5.085 €
Energia e Fotovoltaico	INENERGY GAS&POWER SRL	10.236 €	5.878 €	-4.359 €
	SOLAR RETROFIT SAGL	507 €	824 €	317 €
ApL	HEADS & TALENTS HUNTER SRL	8.681 €	6.097 €	-2.584 €
Carrozzerie	CARROZZERIA STAZIONE DI MARCO BOZZO	2.447 €	1.050 €	-1.397 €

Figure 4.16 Problematic Customers, Negative Margins – Netycom

Netycom's clients' portfolio, contrary to Digima's one, isn't too concentrated. The top 5 clients in 2022 contributed to less than 45% of the total revenue and 38% of the overall margin (Figure 4.17).

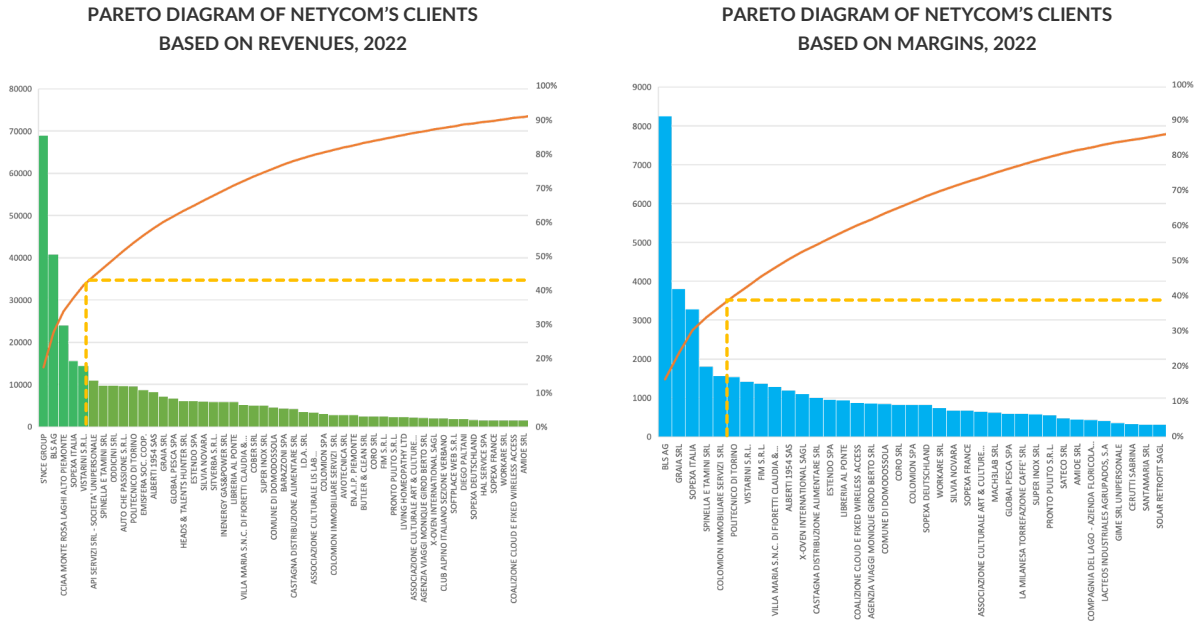


Figure 4.17 Pareto Chart of Netycom's Clients

Figure 4.18 shows the top 5 clients in terms of revenue and profit margins over the past 5 years, among these we find:

- S'nce Group: A Swiss digital agency that supports brands in enhancing their online business through cutting-edge digital experiences.
- Sopexa: This is an international digital agency specializing in the food and beverage sector.
- BLS AG: A principal Swiss railway company headquartered in Bern, BLS AG is involved in passenger and freight transportation.
- CCIAA del VCO: The Chamber of Commerce of Verbano-Cusio-Ossola is a local public entity focused on the economic promotion and development of local businesses.
- HAL Service Spa: An information technology and telecommunications company, HAL Service Spa specializes in designing, implementing, and managing infrastructure and applications. They also provide connectivity and consulting services to businesses and public administrations.

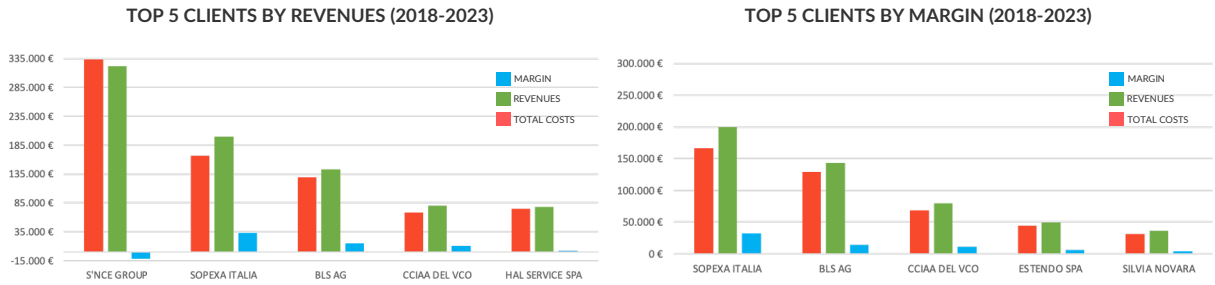


Figure 4.18 Top 5 Clients by Revenues and Margins (2018-2023) – Netycom

The array of services and products offered also seems to lack a clear strategic direction (Table 4.5). Initially, web development appeared to be Netycom's core focus, generating nearly €115'000 in profits in 2018. However, over the years, profitability in this area has diminished, with the first eight months of 2023 witnessing losses exceeding €24'000 in this segment. These significant variations over the years might be attributed to potentially inaccurate or evolving classifications. For instance, the 'ND' category shifted from a €172'000 deficit in 2018 to a neutral position in 2023, suggesting that past extra expenses might not have been accurately allocated to the corresponding sectors, thereby artificially inflating their performance.

	Margin by offer-type, per year						
Type of offer/service	**2018**	**2019**	**2020**	**2021**	**2022**	**2023** (8months)	**TOTAL**
Advertising	8.587 €	39.180 €	9.592 €	15.969 €	11.081 €	1.821 €	86.229 €
Consulenza e formazione			89 €	1.560 €	-412 €	827 €	2.064 €
Design/grafica		-2.495 €		-4.443 €	-266 €	-3.828 €	-11.032 €
Gestione editoriale	36.058 €	31.030 €	19.806 €	3.824 €	2.627 €	-409 €	92.936 €
Hosting	7.775 €	5.240 €	2.170 €	-3.262 €	-2.647 €	4.979 €	14.255 €
Manutenzione e assistenza	9.511 €	3.653 €	2.668 €	-24.117 €	-7.654 €	-8.308 €	-24.246 €
Marketing	-864 €	-4.044 €	-2.331 €	4.734 €	4.399 €	1.558 €	3.451 €
Servizi Data Center				681 €			681 €
Servizi web in abbonamento	8.872 €	4.941 €	8.212 €	9.870 €	11.841 €	1.005 €	44.740 €
Social Media Management	14.995 €	11.186 €	-145 €	-1.831 €	1.151 €	-2.540 €	22.816 €
Sviluppo web	114.975 €	50.432 €	89.592 €	14.520 €	-24.325 €	-24.268 €	220.924 €
#Altro				1.592 €	-805 €	-501 €	287 €
#ND	-172.432 €	-145.126 €	-127.158 €	-2.148 €	-600 €		-447.464 €
TOTAL	**27.476 €**	**-6.003 €**	**2.494 €**	**16.949 €**	**-5.610 €**	**-29.665 €**	**5.641 €**

Table 4.5 Margins by Offer-type per year - Netycom

To evaluate Netycom's product/service portfolio, we applied the BCG Matrix (Figure 4.19). However, as we've already mentioned, the current management control model does not provide an accurate categorization of products/services.

This resulted in a less meaningful analysis, but the primary goal was to introduce this tool to the company. We aimed to share some of the most suitable methodologies for monitoring the performance of each business unit, especially in light of developing a new management control model that addresses these deficiencies.

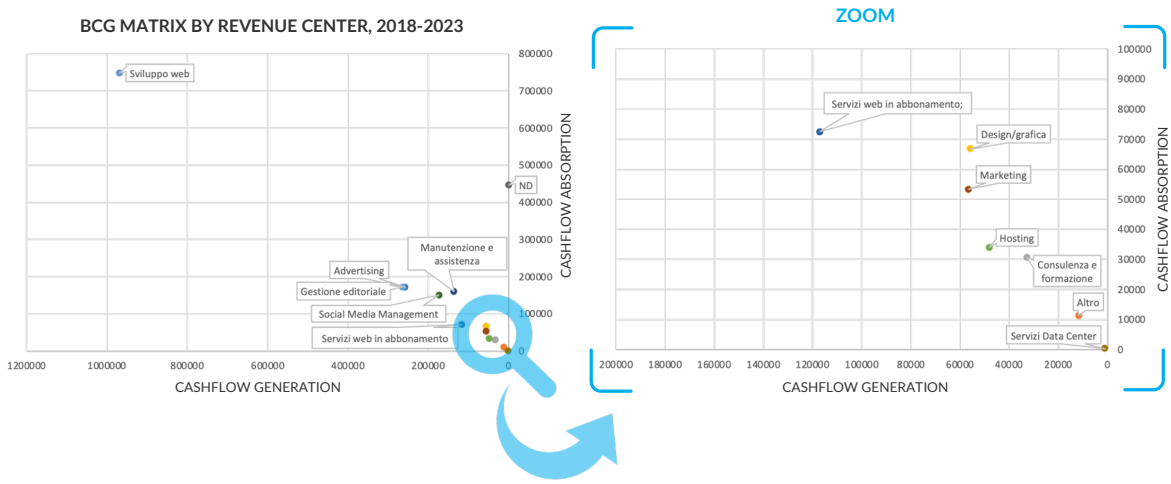


Figure 4.19 BCG Matrix – Netycom

Figure 4.20 presents Netycom's SWOT analysis, offering a comprehensive overview of the company's internal strengths and weaknesses, alongside the external opportunities and threats it faces. This analysis serves as a strategic tool through which we can gain deeper insights into Netycom's competitive landscape, potential growth avenues, and areas requiring attention or mitigation strategies.

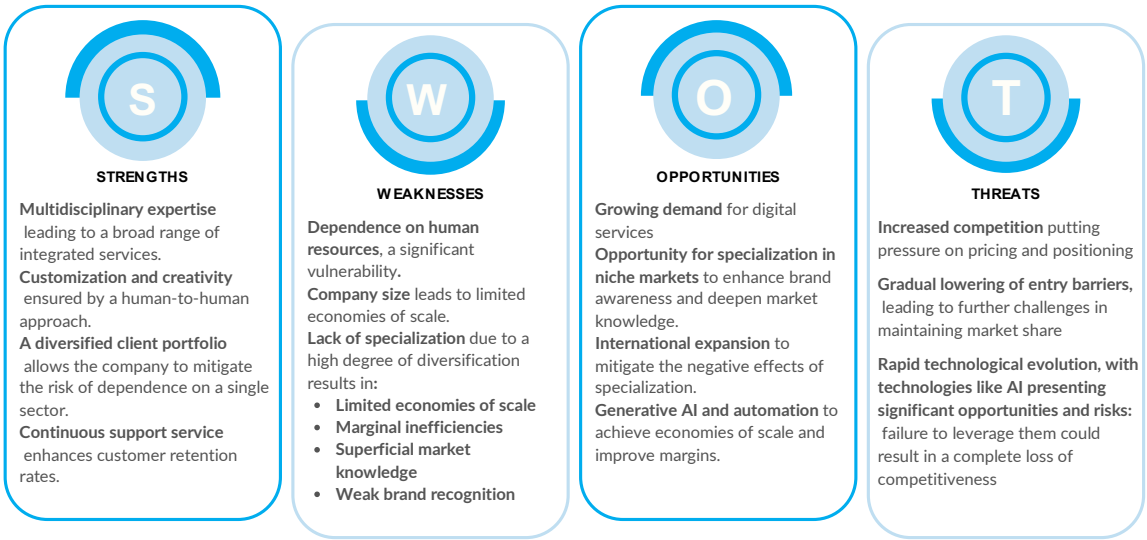


Figure 4.20 SWOT - Netycom

Workare

As illustrated in Figure 4.21, Workare experienced a negative EBITDA during the period from 2019 to 2021, likely due to the significant investments in the development of WN12 product and in property acquisitions.

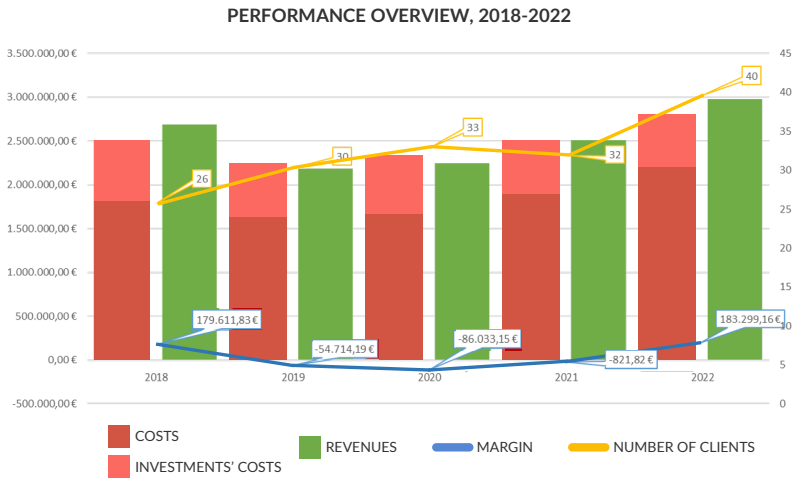


Figure 4.21 Performance Overview - Workare

The year 2022, however, marked a turning point for the company, witnessing a return to growth with substantially positive margins and an increase in client base (Table 4.6)

AVERAGE MARGIN PER CLIENT, 2018-2022

Years	Average Margin per Client
2018	6'908€
2019	-1'824€
2020	-2'607€
2021	-25,7€
2022	4'582€

Table 4.6 Average Margin per Client - Workare

Data from 2022 indicates that the majority of Workare's clients are based in Italy, with a limited presence of international clients from countries (Figure 4.22). The presence of revenues from other European countries might be misleading; these revenues originate from ApLs headquartered abroad, who operate in Italy.

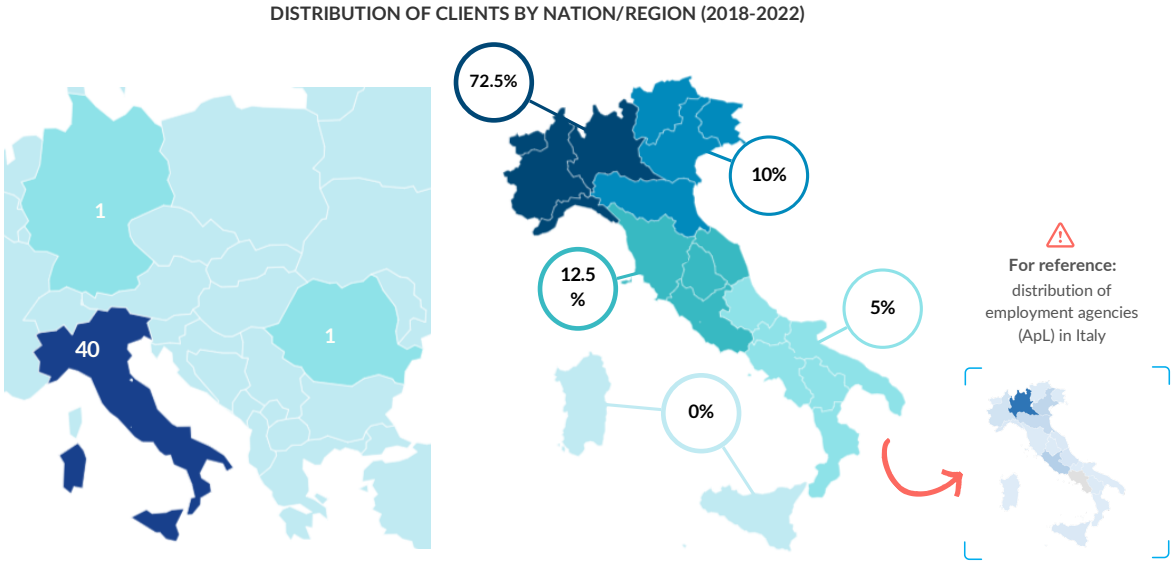


Figure 4.22 Margins and Number of Clients by Nation/Region (2018-2022) - Workare

As reported in Table 4.7, over the five-year span of our analysis, Lazio maintained a steady number of clients but saw a notable decline in margins. Similarly, Lombardy experienced an uptick in the number of clients, yet faced a sharp drop in margins during 2019 and 2020. Despite a stable client count in Piedmont, the region encountered significantly negative margins from 2020 to 2022. The international market showed a generally negative margin in 2020 and 2021, regardless of client numbers.

MARGINS AND NUMBER OF CLIENTS BY REGION (2018-2022)

Regione	2018		2019		2020		2021		2022	
Abruzzo	0,00 €		0,00 €		0,00 €		0,00 €	1	8.818,08 €
Basilicata	0,00 €		0,00 €		0,00 €		0,00 €		0,00 €
Calabria	0,00 €		0,00 €		0,00 €		0,00 €		0,00 €
Campania	1	-2.296,79 €	1	-413,86 €		0,00 €	0,00 €	1	5.493,18 €
Emilia Romagna	1	13.038,09 €	1	10.546,77 €	1	5.564,31 €	0,00 €	1	160,78 €
Friuli Venezia Giulia		0,00 €		0,00 €		0,00 €	0,00 €		0,00 €
Lazio	5	-8.998,30 €	5	-61.437,28 €	5	-41.917,88 €	5 -19.556,22 €	5	-871,03 €
Liguria		0,00 €		0,00 €		0,00 €	0,00 €		0,00 €
Lombardia	12	140.939,54 €	16	-25.482,23 €	19	-43.167,63 €	18 59.846,66 €	25	161.771,00 €
Marche		0,00 €		0,00 €		0,00 €	0,00 €		0,00 €
Molise		0,00 €		0,00 €		0,00 €	0,00 €		0,00 €
Piemonte	3	30.002,44 €	3	3.968,01 €	3	-4.614,31 €	3 -53.779,36 €	4	-25.657,54 €
Puglia		0,00 €		0,00 €		0,00 €	0,00 €		0,00 €
Sardegna	1	562,70 €	1	802,09 €	1	710,34 €	0,00 €		0,00 €
Sicilia		0,00 €		0,00 €		0,00 €	0,00 €		0,00 €
Toscana		0,00 €		0,00 €		0,00 €	0,00 €		0,00 €
Trentino Alto Adige		0,00 €		0,00 €		0,00 €	0,00 €		0,00 €
Umbria		0,00 €		0,00 €		0,00 €	0,00 €		0,00 €
Valle d'Aosta		0,00 €		0,00 €		0,00 €	0,00 €		0,00 €
Veneto	3	6.364,15 €	3	17.302,31 €	3	10.130,88 €	4 30.185,56 €	3	34.764,24 €
ESTERO		0,00 €		0,00 €	1	-12.738,87 €	2 -17.518,47 €	2	-1.179,55 €

Number of clients

Absence of employment agencies (ApL)

Table 4.7 Margins and Number of Clients by Region – Workare

Pareto's chart vividly illustrates that Workare's performance is heavily reliant on a small group of clients, the top 5 clients in 2022 accounted for 75% of total revenues and 80% of margins (Figure 4.23). Such a concentrated client portfolio poses a significant risk, but the situation is better than the one of 2018, when the top five clients generated 90% of total revenues and margins.

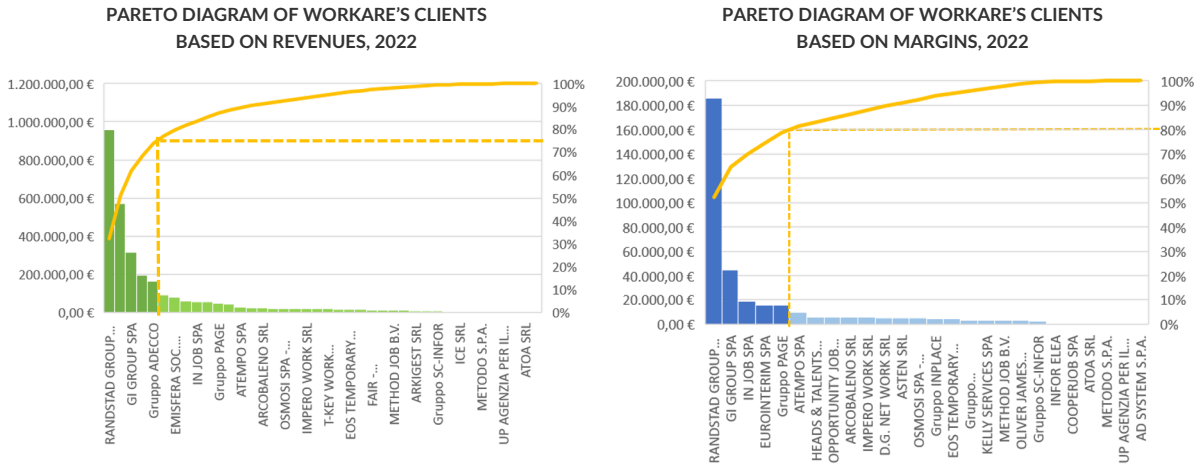


Figure 4.23 Pareto Chart of Workare's Clients

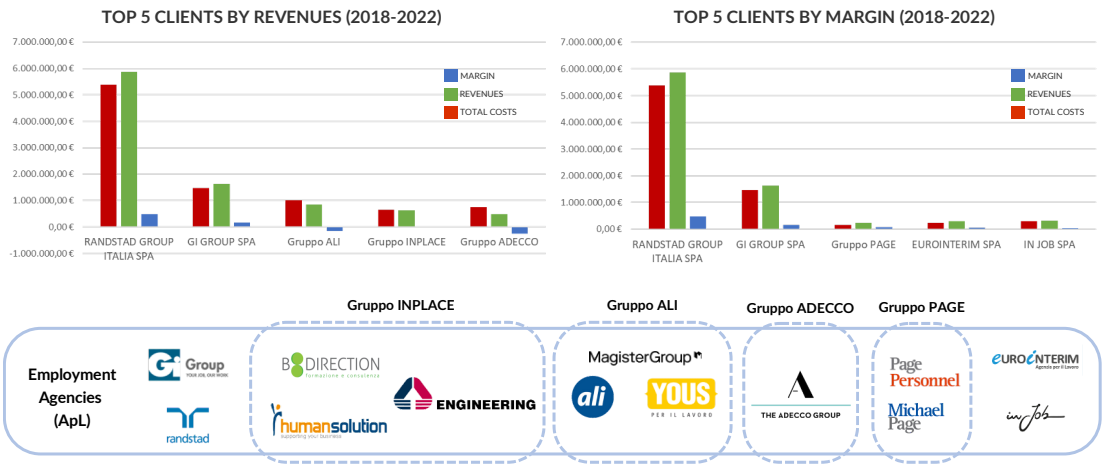


Figure 4.24 Top 5 Clients by Revenues and Margins (2018-2022) – Workare

In Workare's case, distinguishing between different types of products/services is particularly challenging. The current management control model does not provide a clear categorization, compelling us to rely on revenue centers (Table 4.8).

	Margin by offer-type, per year				
Type of offer/service	**2018**	**2019**	**2020**	**2021**	**2022**
Manutenzioni	362.466,91 €	286.785,33 €	333.940,33 €	358.347,98 €	454.055,74 €
Non definito	-1.209.831,38 €	-861.979,05 €	-849.964,18 €	-597.646,14 €	-250.610,07 €
Prestazioni	905.150,39 €	459.115,27 €	360.115,04 €	179.454,08 €	-146.732,88 €
Prodotti propri	60.255,48 €	4.221,83 €	9.320,53 €	9.356,89 €	0,00 €
Prodotti terzi	52.856,32 €	55.077,56 €	49.452,27 €	27.792,26 €	97.382,01 €
Spese	8.714,11 €	2.064,88 €	586,13 €	159,52 €	62,94 €
Noleggi+Servizi	0,00 €	0,00 €	10.516,72 €	21.713,58 €	29.141,43 €

Table 4.8 Margins by Offer-type per year - Workare

The evaluation of Workare's product/service portfolio through the BCG Matrix (Figure 4.25) is thus not so meaningful, but – again – the primary goal was to introduce this tool to the company.

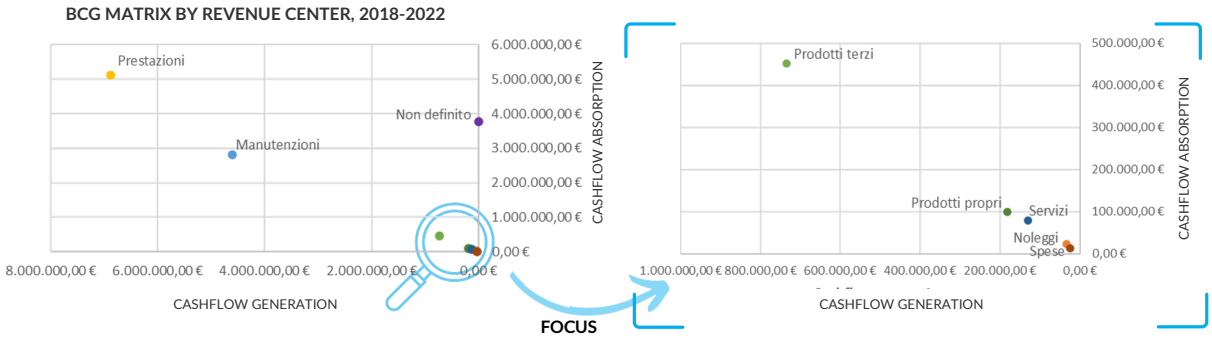


Figure 4.25 BCG Matrix – Workare

Figure 4.26 presents Workare's SWOT analysis, offering a comprehensive overview of the company's internal strengths and weaknesses, alongside the external opportunities and threats it faces. This analysis serves as a strategic tool through which we can gain deeper insights into

Workare's competitive landscape, potential growth avenues, and areas requiring attention or mitigation strategies.

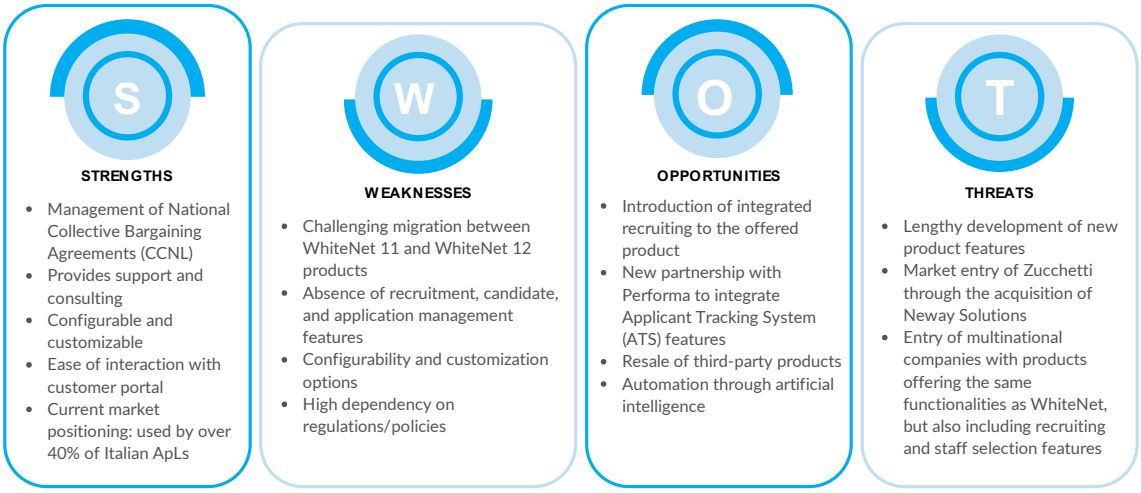
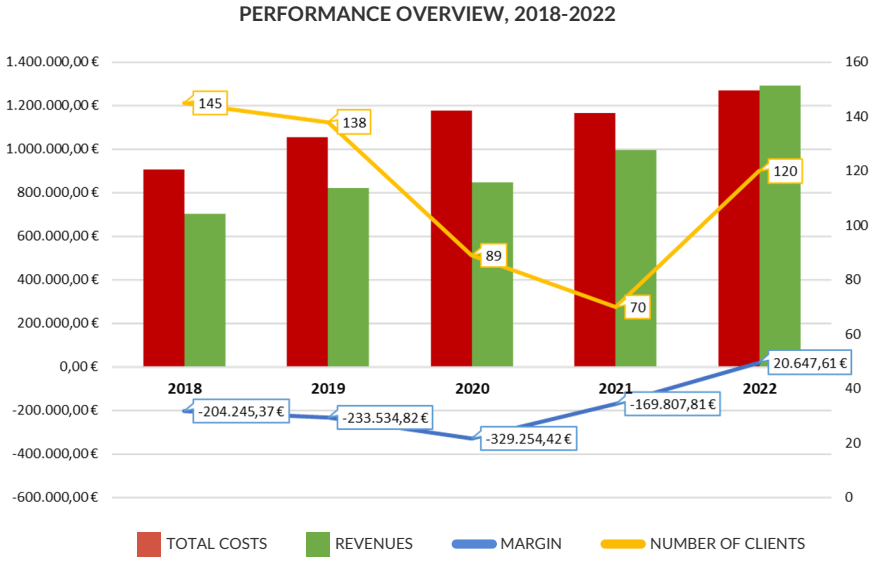


Figure 4.26 SWOT - Workare

Networking

Networking's performance overview (Figure 4.27) highlights a period of significant challenges, with a recovery emerging only in 2022. This positive shift is likely attributed to a strategic overhaul, including management changes and a redefined portfolio of products and services.



AVERAGE MARGIN PER CLIENT, 2018-2022

Years	Average Margin per Client
2018	-1'409€
2019	-1'692€
2020	-3'699€
2021	-2'426€
2022	172€

Figure 4.27 Performance Overview - Networking

In 2022, Networking's clientele was predominantly based within Italy, particularly concentrated in Piedmont, where 91 of the 111 clients were situated. This region alone generated a profit of €16'862, whereas Lombardy, with 20 clients, contributed a profit of €7'758 (Figure 4.28).

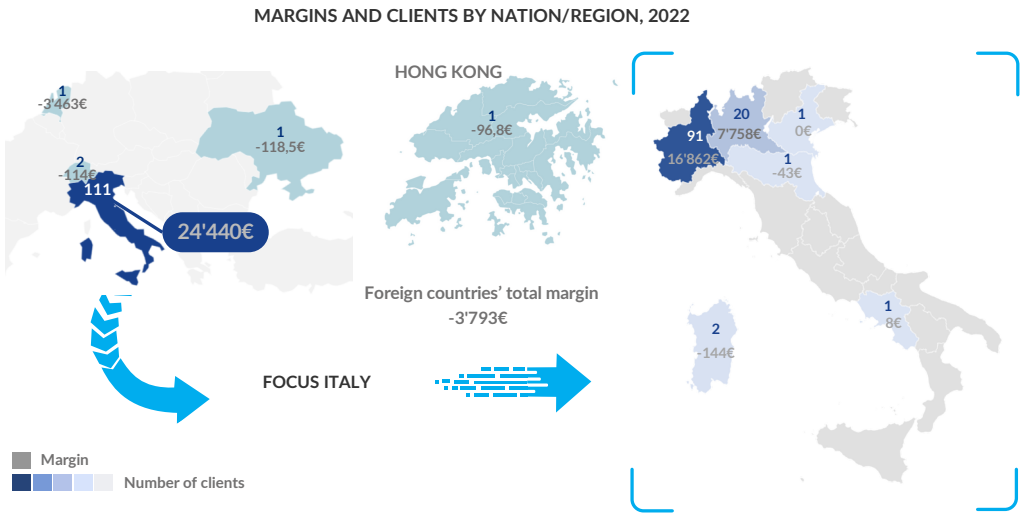


Figure 4.28 Margins and Number of Clients by Nation/Region (2022) – Networking

There seems to be a discernible correlation between the number of clients and profit margins across various regions (Figure 4.29).

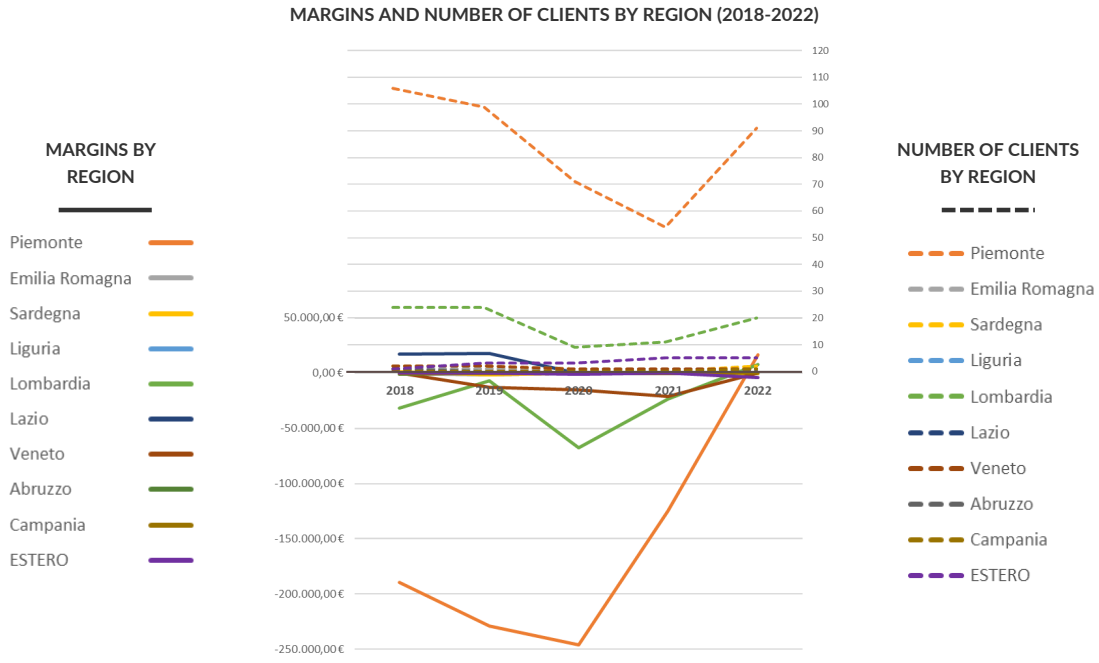


Figure 4.29 Margins and Number of Clients by Region – Networking

Pareto's analysis (Figure 4.30) showcases "Connectivity" as the most significant revenue generator, but it's important to notice that it's an artificial client we crafted to encapsulate the numerous small-scale private clients who subscribed at least one connectivity service. This strategic grouping was imperative to overcome the complexity of navigating thousands of minor, less impactful, transactions predominantly from individual clients. This means that Networking's clients' portfolio isn't actually as concentrated as it may seem from the chart.

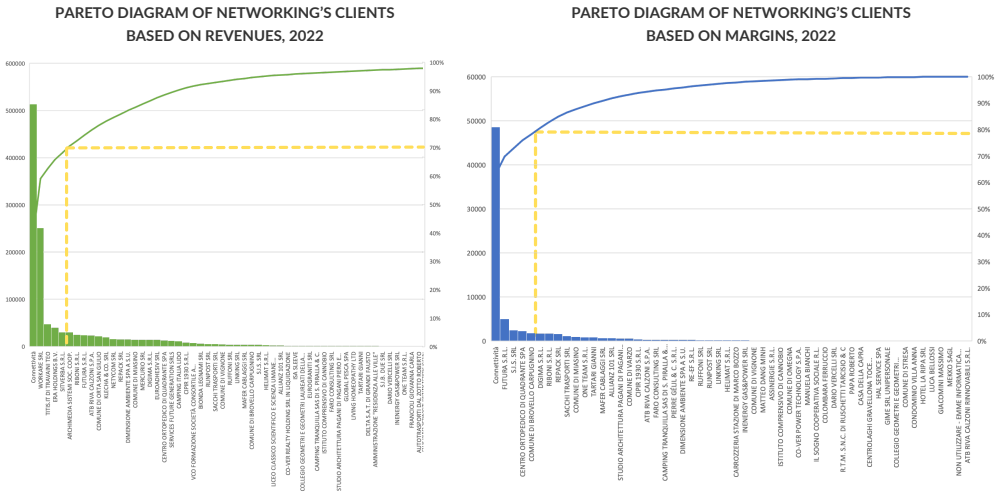


Figure 4.30 Pareto Chart of Networking's Clients

During the period under scrutiny, these connectivity clients constituted 49% of the total revenues, notwithstanding their overall negative impact on profitability. Following closely is Workare, which stands as the second major contributor to revenue. Of particular note is that among the top 5 clients in terms of profit margins are Labor B and Ali Spa, both of which are primarily clients of Workare (Figure 4.31). This observation underscores the critical role of internal service provision and cross-selling within the Networking's ecosystem, marking them key for the company's financial health.

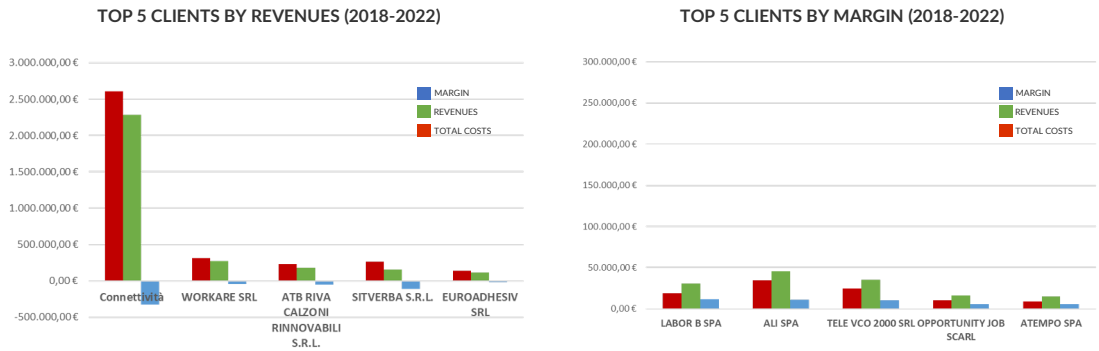


Figure 4.31 Top 5 Clients by Revenues and Margins (2018-2022) – Networking

To further analyze Networking's clients, we aggregated them based on their reference industry:

	Margin by client-type, per year					
Client's Industry	**2018**	**2019**	**2020**	**2021**	**2022**	**Totali**
Industriale e Tecnologico	10659,9257	-7003,7438	-112391,45	-79617,337	-28700,149	-217052,75
Ambiente	-2896,5063	-9303,7049	1,3105672	817,773899	310,089182	-11071,038
Altro	-12617,704	-22345,326	-6546,7222	-17784,581	444,036417	-58850,296
Finanziario, Assicurativo e Consulenza	-4360,3804	-2832,2083	-4255,7055	-10274,899	3153,82402	-18569,369
Chimico	0	-20,446892	0	0	0	-20,446892
Comunicazione e Media	-893,35137	-604,58822	0	-116,29792	252,411546	-1361,826
Immobiliare, Edile, Arredamento	-27058,271	-22850,021	-17635,278	-40643,562	1931,86052	-106255,27
Sociale, Culturale ed Educativo	-5502,4175	-7124,3252	-12199,419	-4590,0958	-1946,6977	-31362,955
Telecomunicazioni	-140695,6	-140362,36	-82017,754	-9496,2354	44063,7775	-328508,17
Alimentare e Turismo	-17902,412	-1081,7838	-3042,6041	-7527,5447	-4730,0394	-34284,384
Medicina	-217,98181	-2411,8847	-11844,542	-618,05069	2028,88859	-13063,571
Vendita	-4137,5631	-7807,5549	-3941,1235	-1123,6905	1987,59946	-15022,333
Artigianato	0	-10,556545	0	0	-6,0876872	-16,644232
PA e No Profit	1748,6502	-9779,0115	-75381,131	1166,71423	761,92323	-81482,855
Trasporti	-371,7606	2,69946813	0	0	1096,16862	727,107494
Totale	**-204245,37**	**-233534,82**	**-329254,42**	**-169807,81**	**20647,6057**	-916194,8

Table 4.9 Margins by Client-type – Networking

To evaluate Networking's product/service portfolio, we employed the BCG Matrix aggregating the diverse offerings into six macro-categories: "Computer Services", "Telecommunications", "IT Support", "IT Consulting", "Undefined", and "Other" (Figure 4.32). However, we have to bear in mind that it's an ex-post categorization, which is not very accurate.

So, as in all other cases, it resulted in a not too meaningful analysis, but -again- our main objective was to familiarize the company with this strategic tool. 'IT Consulting' and 'Connectivity' stood out as consistent cash cows throughout the evaluated timeframe. Their robust performance underscores their critical role in ensuring the financial health and ongoing viability of the business unit.

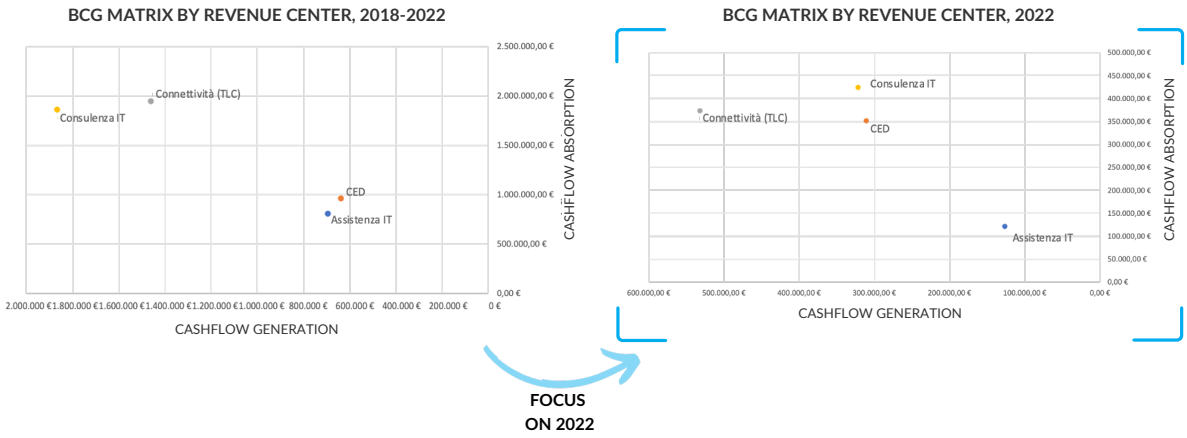


Figure 4.32 BCG Matrix – Networking

Progetti

As depicted in Figure 4.33, after three years of negative performance, 2021 marked a significant positive shift in Progetti's trajectory.

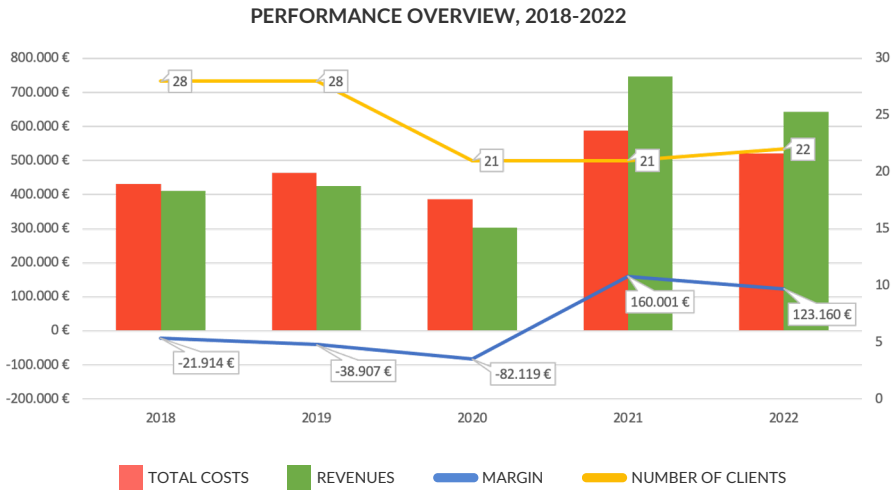


Figure 4.33 Performance Overview - Progetti

The increase in the average margin per client is undoubtedly a positive sign of the business's resilience. However, it's crucial to highlight that the reduced client base poses a serious risk to the business unit, especially given the high level of competition within the industry.

AVERAGE MARGIN PER CLIENT, 2018-2022

Years	Average Margin per Client
2018	-782,64 €
2019	-1.389,55 €
2020	-3.910,42 €
2021	7.619,08 €
2022	5.598,18 €

Table 4.10 Average Margin per Client - Progetti

Geographically, Lombardy emerges as the region where Progetti performs best, followed by Piedmont and Lazio (Figure 4.34). The substantial negative margins are attributed to clients based abroad. Given the market's high concentration (highlighted in Figure 4.35), the annual margin trends by region are largely influenced by the demands of the top 5 clients, making it challenging to make strategic assumptions about the potential of one region over another (Table 4.11)

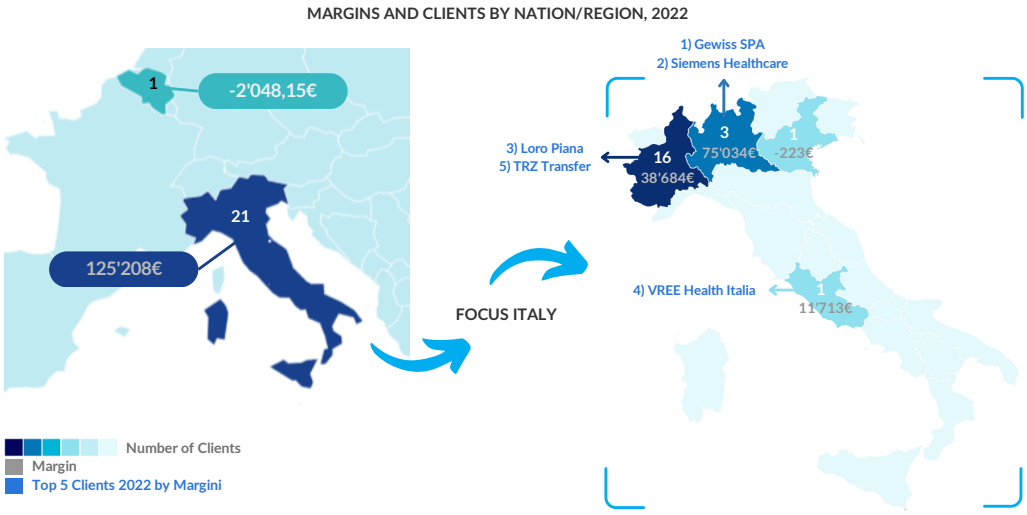


Figure 4.34 Margins and Number of Clients by Nation/Region (2022) – Progetti

MARGINS AND NUMBER OF CLIENTS BY REGION (2018-2022)

	2018		2019		2020		2021		2022		Total	
	Margin	N°	Margin	N°	Margin	N°	Margin	N°	Margin	N°	Margin	N°
Lombardia	31.855 €	8	34.746 €	10	-7.334 €	5	27.346 €	2	75.034 €	3	161.648 €	15
Piemonte	-73.278 €	13	-54.186 €	13	-36.006 €	12	140.532 €	16	38.684 €	16	15.746 €	29
Lazio									11.713 €	1	11.713 €	1
Friuli Venezia Giulia	3.356 €	1									3.356 €	1
Veneto	4.880 €	2	-3.494 €	1					-223 €	1	1.163 €	4
ND	-1.407 €	1									-1.407 €	1
#Estero	12.680 €	2	-15.973 €	2	-38.779 €	2	-7.877 €	2	-2.048 €	1	-51.998 €	2

Table 4.11 Margins and Number of Clients by Region (2018-2022) - Progetti

Pareto's analysis, presented in Figure 4.35, reveals that the top five clients of the Business Unit are responsible for more than 90% of the total revenue and 95% of the total margins. Such a concentrated client portfolio, with a limited number of clients contributing disproportionately to revenue and margins, exposes Progetti to a significant concentration risk. This dependency on a small group of clients can lead to several issues, such as vulnerability in negotiations, inability to directly control performance, and credit risk. To ensure greater financial stability in the long term, strategies aimed at diversifying risk across a broader client base should be developed.

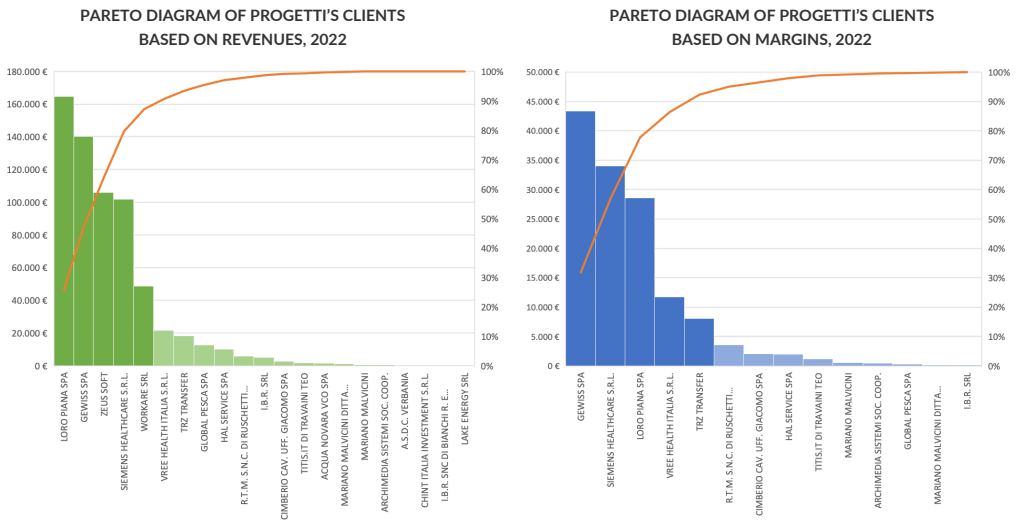
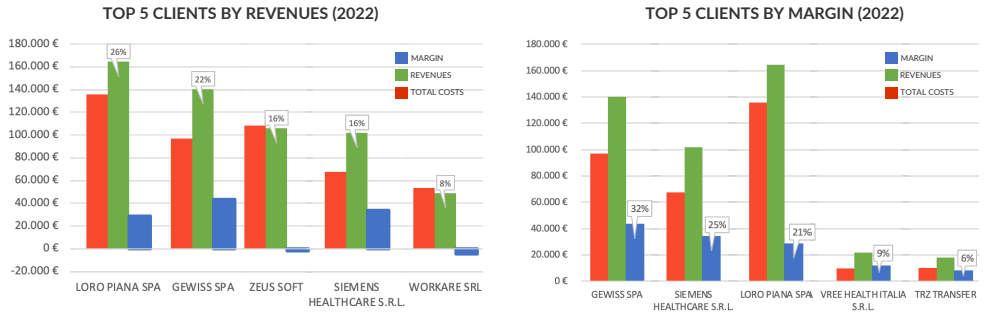


Figure 4.35 Pareto's Chart of Progetti's Clients

The analysis of the top five clients by margins in 2022 (Figure 4.36) shows that they mainly belong to the "software development" project macro-category, albeit with diversified products.



Client	Region	Description	Years	Margins	Macro-category of service	Specific project
GEWISS SPA	Lombardia	Designs and manufactures automation, energy, electric mobility and smart lighting solutions and services.	2019	17.927 €	SW development (management of plant design)	Accordo quadro 2019-2022, Modifica passarelle, ND, Progetto CAD
			2020	-5.073 €		
			2021	11.002 €		Accordo quadro 2019-2022, Progetti 2021
			2022	43.333 €		Progetti 2021, Progetti 2022
SIEMENS HEALTHCARE S.R.L.	Lombardia	Medical technology company of the German Siemens AG group.	2020	-2.569 €	SW development	Sviluppo SW - Prometeo WEB e App Covid
			2021	16.344 €		Sviluppo SW - App BeHome, App Covid, App Giro Italia, App TAO, Identity provider, progetto TAC
			2022	34.010 €		Sviluppo SW - BeHome ADI, App Covid, App TAO, Identity provider, CI MPF 1, Epoc Bluetooth, POCT 1
LORO PIANA SPA	Piemonte	Italian company that operates in the fashion/luxury goods sector	2018	-35.272 €	SW development (production management)	Abbonamento, corso .NET, Porting da VB6 a .NET, Rinnovo ComponentOne 2018
			2019	-7.110 €		Abbonamento, Gestione Fermi Macchina, ND, Porting da VB6 a .NET
			2020	-1.501 €		Abbonamento, Gestione Fermi Macchina, ND.
			2021	154.493 €		Abbonamento 2021 e a scalare, Elenco Collezioni
			2022	28.603 €		Abbonamento 2021 e a scalare, Accordo Boby Rental 2022-2023, Elenco Collezioni, Libreria WEB, Okta
VREE HEALTH ITALIA S.R.L.	Lazio	Company specialized in Digital Health services and products	2022	11.713 €	SW development	30 gg sviluppo Android
TRZ TRANSFER	Piemonte	Technological partner for the design and manufacturing of custom transfer machines	2021	-1.088 €	SW development (warehouse management)	Gestione magazzino - fase 1
			2022	8.049 €		

Figure 4.36 In-depth Analysis of the top 5 Clients - Progetti

As shown in Figure 4.37, from 2018 to 2022, the software development macro-category has consistently been the main margin generator, supporting the entire Business Unit. Within the software development macro-category, "production management software" generates the highest margins. Excluding software development, the "resale" and "sponsorship" categories emerge as margin generators, albeit with variability over the five years and a significant difference compared to software development.

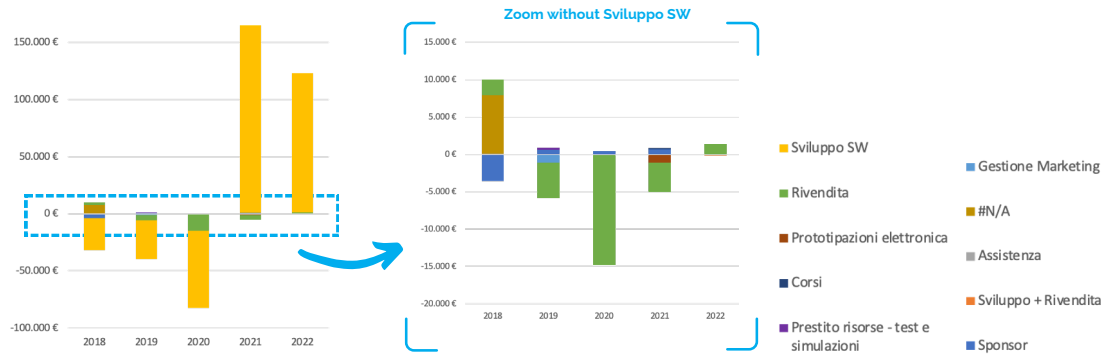


Figure 4.37 Margins by Offer-type per year - Progetti

The evaluation of Progetti's product/service portfolio through the BCG Matrix (Figure 4.38) is based on the same macro-categories, the only ones we had. To extract some meaningful results from this analysis the categories should have been on the same level of granularity, at the moment it's clear that we can't compare SW development with anything else.

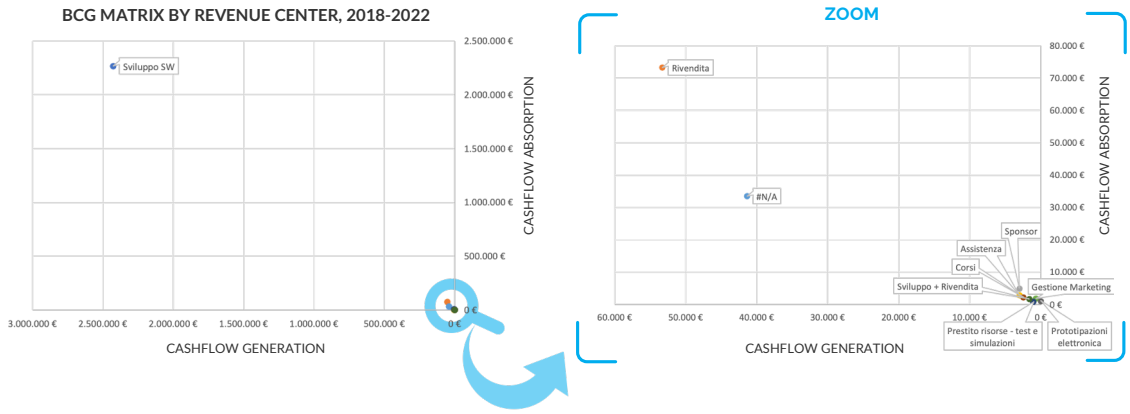


Figure 4.38 BCG Matrix – Progetti

Figure 4.39 presents Progetti's SWOT analysis, offering a comprehensive overview of the company's internal strengths and weaknesses, alongside the external opportunities and threats it faces. It's a strategic tool through which we can gain deeper insights into Progetti's competitive landscape, potential growth avenues, and areas requiring attention or mitigation strategies.

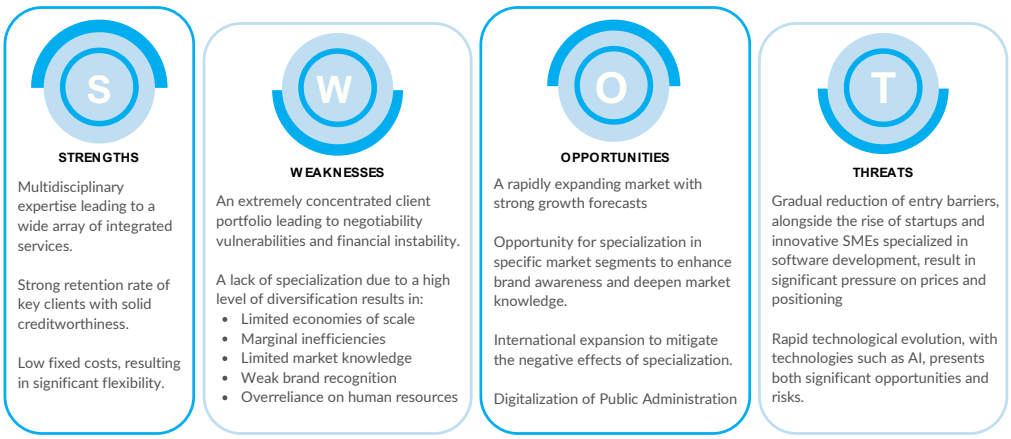


Figure 4.39 SWOT Analysis - Progetti

5 Monitoring Framework

In today's dynamic business environment, where change is the only constant, an agile and responsive monitoring framework is essential. This chapter unveils the monitoring framework proposal that builds upon the ex-post performance analysis presented in the previous chapter. This blueprint is thoughtfully designed to not only address the identified shortcomings but also to establish a solid foundation for continuous improvement and strategic decision-making. By integrating best practices in data management, performance measurement, and strategic oversight, the proposed framework aims to transform the organization's ability to navigate through the complexities of the business environment, ensuring sustained growth and competitiveness.

We will then shed light on the problems and limitations of the current management control system, which could prevent the company from implementing this monitoring framework. These limitations, ranging from indirect costs allocation problems to the absence of structured pricing procedures and standardized classification systems for products/services and clients, underscore the need for a more resilient and adaptive approach to management control.

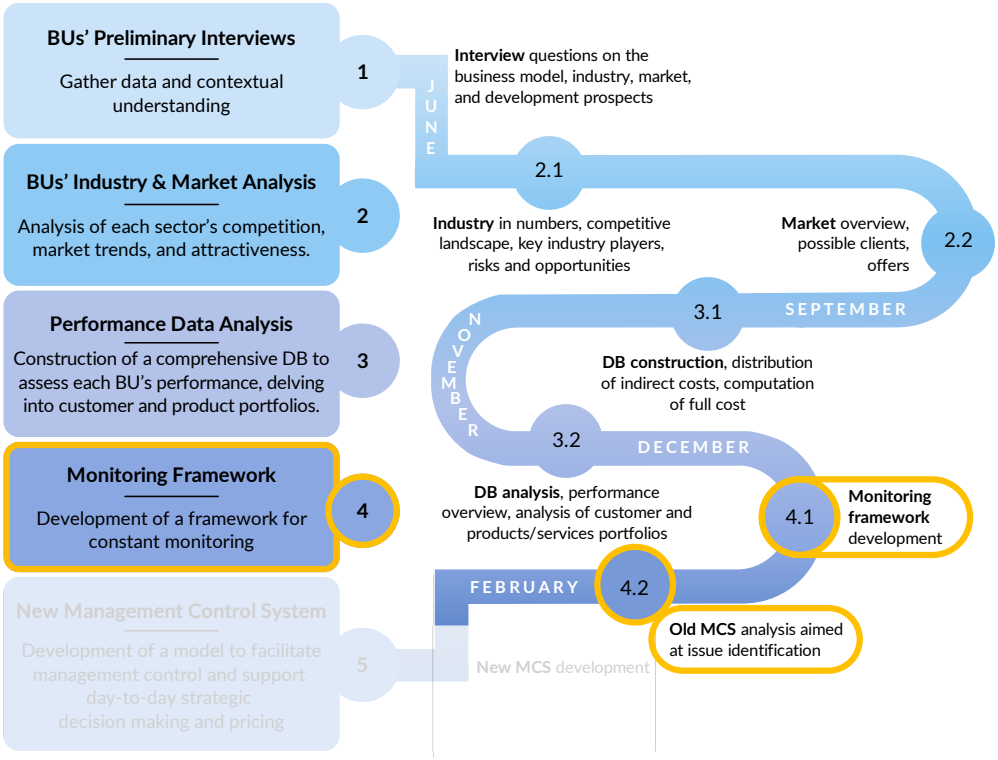


Figure 5.1 Portion of the project's roadmap addressed in this chapter - point 4

5.1 Construction of the Framework for Monitoring and Strategic Data Analysis

At its core, a monitoring framework is a structured approach designed to systematically track and evaluate the performance of various organizational facets, including operations, strategies, and

outcomes. It empowers organizations to identify performance gaps, uncover insights, and adapt strategies in alignment with their evolving objectives and the external environment. The essence of this framework lies in its ability to foster a culture of continuous improvement, informed by empirical data and strategic analysis. So, it's more than just a way to keep an eye on day-to-day operations. If well designed, it's also an early warning system, that allows businesses to spot potential problems before they escalate and take action early.

The development of Emisfera's monitoring framework was a deliberate and iterative process, underscored by a commitment to aligning the framework with the cooperative's strategic imperatives and operational realities. It was guided by a methodical process, encompassing the following key phases:

1. Needs assessment and objective setting: This initial phase involved a thorough analysis of the cooperative's strategic goals, operational challenges, and data management practices over the past 5 years (as we've seen in chapters 3 and 4). The objective was to gain a deep understanding of the cooperative's unique requirements and the specific areas where the monitoring framework could add value.
2. Monitoring matrix design: Building on the valuable insights from the needs assessment, a monitoring matrix was developed (Figure 5.2). This matrix, structured with 5 columns and 4 rows, maps out various dimensions of the cooperative's operations and strategic focus areas.

		OVERVIEW	FOCUS ON THE CLIENTS	FOCUS ON THE PRODUCTS/SERVICES	FOCUS ON THE GEOGRAPHICAL DISTRIBUTION	FOCUS ON THE MANAGERS
ANALYSIS OF MARGINS AND REVENUE TRENDS	DATA	input	input	input	input	input
	ELABORATION	output	output	output	output	output
PORTFOLIO RISK ANALYSIS AND ASSESSMENT	DATA	input	input	input	input	input
	ELABORATION	output	output	output	output	output
COST ANALYSIS	DATA	input	input	input	input	input
	ELABORATION	output	output	output	output	output
CROSS SELLING OPPORTUNITY ANALYSIS	DATA	input	input	input	input	input
	ELABORATION	output	output	output	output	output

Figure 5.2 Monitoring Matrix Structure

Each row is dedicated to an analytical domain to be monitored by the cooperative, such as margins and revenue trends, portfolio risk, cost analysis, and cross-selling opportunities. For each of them, the matrix foresees both the input of relevant data and the subsequent output of actionable insights.

The inclusion of various focus areas (columns) should enable the cooperative to dissect and understand its operational dynamics from multiple perspectives. For instance, analyzing Clients and Products/Services provides insights into profitability and market demand, while Geographical Distribution and Managerial oversight offer lenses through which to assess market penetration and leadership effectiveness.

By integrating these dimensions, the matrix supports informed decision-making by highlighting trends, variances, and potential synergies that may not be apparent when viewing each aspect in isolation.

3. BUs-specific monitoring framework development: This matrix was then applied to each of the cooperative's business units. Where the matrix's rows and columns met, detailed analyses were defined. This approach was designed to offer a holistic view of crucial performance indicators and strategic metrics pertinent to each business unit.

   To maintain clarity in this narrative, we illustrate the application of the monitoring framework using Digima as a case study. For a detailed exploration, complete matrices —tailored for each business unit and provided in their original form— are reported in Appendix B.

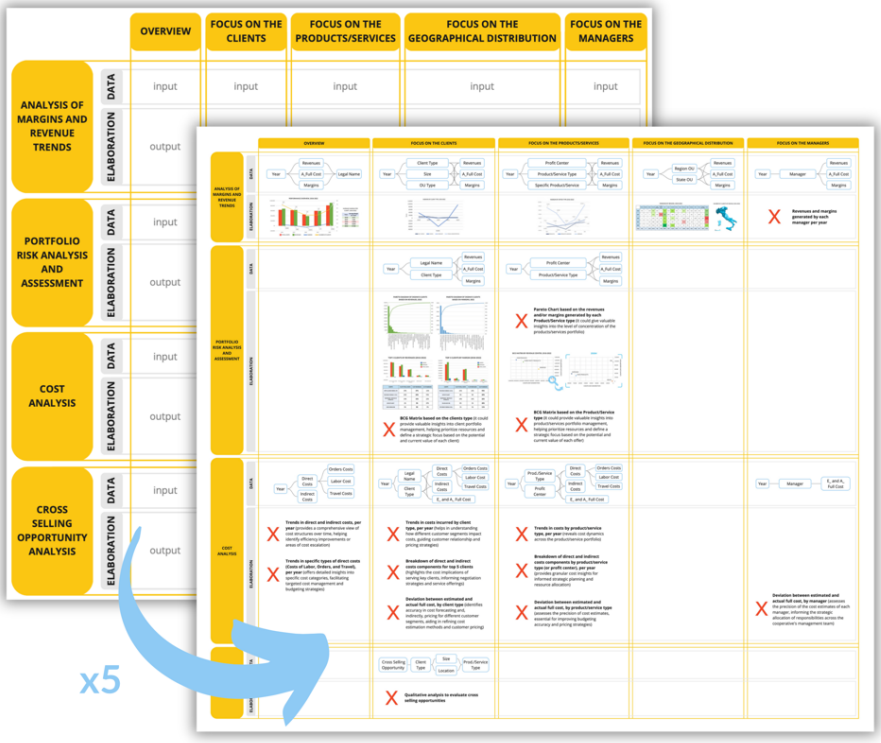


Figure 5.3 Digima's Monitoring Matrix

For readability reasons, we will dissect the matrix row by row eliminating empty columns:

Figure 5.4 Monitoring Matrix, Row Dedicated to the Analysis of Margins and Revenues Trends – Digima's example

Each red "X" accompanied by an explanatory note (rather than a graph) points to a deficiency in Emisfera's current management control system, which did not account for the collection of the necessary data to perform the analysis. In order to implement the proposed monitoring framework, these shortcomings need to be addressed.

Figure 5.5 Monitoring Matrix, Row Dedicated to the Portfolio Risk Analysis and Assessment – Digima's example

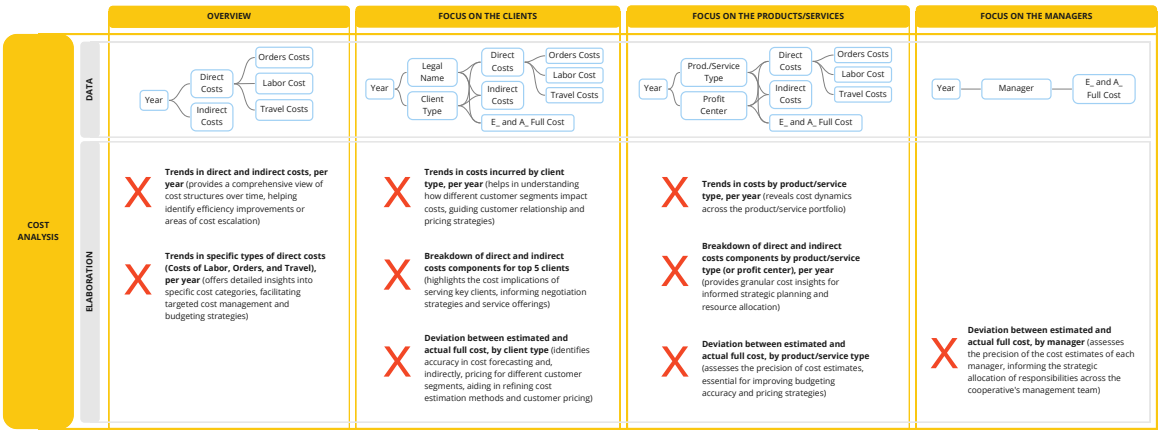


Figure 5.6 Monitoring Matrix, Row Dedicated to the Cost Analysis – Digima's example

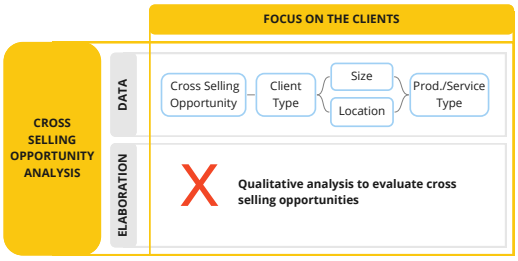


Figure 5.7 Monitoring Matrix, Row Dedicated to the Analysis of Cross-Selling Opportunities – Digima's example

4. Integration and Implementation: For the successful integration and implementation of Emisfera's monitoring framework, a critical update to the existing management control system was imperative. The process began with a thorough identification of the current system's shortcomings, which are summarized in the next paragraph.

5.2 Problems and Limitations of the Current Management Control System

1. Lack of Information for Performance Evaluation/Monitoring: Lack of information to assess the performance of different types of services, products, clients, and sales channels. This deficiency restricts the organization's ability to make informed decisions and to strategize effectively based on performance metrics.
2. Varying Levels of Detail in Revenue Centers: The granularity of revenue centers (CdR) varies significantly; some are overly generic and used across different areas, while others are highly detailed. This inconsistency in the level of detail leads to challenges in financial analysis and decision-making.

3. Internal Indirect Cost Allocation and Management: Currently, there is a lack of clarity in identifying the internal costs (P*) allocated to various business areas. This hampers the ability to accurately track and manage costs within different business units, leading to inefficiencies and inaccuracies.
4. Significant Fluctuations in General Overhead Costs: The internal cost items, particularly those categorized under code areas P*, exhibit considerable fluctuations. This variability suggests that these code areas have been interpreted differently over the years, leading to inconsistencies in cost allocation and analysis.
5. Ambiguities in Intra-Company Cost and Revenue Management: The code area A99 is noted to contain only a portion of intra-company costs, the nature of which remains unclear. This lack of clarity further complicates the understanding and management of intra-company financial transactions.
6. Unmatched Intra-Company Transactions: There are instances where intra-company costs incurred by 'Emisfera' on behalf of 'Digima' are recorded along with corresponding revenues. However, the source of these revenues, specifically the payments made by 'Digima', is not clearly documented, creating discrepancies in financial records.
7. Absence of a Structured Pricing Procedure: The organization lacks a formalized process for pricing, which leads to inconsistencies in pricing strategies and potentially affects profitability and competitiveness in the market.

Addressing these challenges is critical for enhancing the accuracy and reliability of the management control system, thereby facilitating better strategic planning and decision-making within the organization.

6 Introduction to Management Control Systems

In today's fast-paced economic landscape, particularly in the digital industry –where market predictability is low and competition high– the success of a cooperative, just like that of any other company, hinges on its ability to meet set goals while honoring commitments to stakeholders and fostering a profitable and sustainable business environment.
To meet members and consumers needs while remaining competitive within their specific market, cooperatives must enhance the quality of their processes. This involves strategically planning activities to achieve maximum results with the least possible resource expenditure, always attempting to foresee and mitigate the impact of any unforeseen events that might escape direct management control.

Cooperatives, like traditional businesses, can manage these crucial aspects through the adoption of planning and control strategies which should be instilled in their Management Control Systems. These systems play a key role in the ongoing monitoring of operations, thereby becoming an invaluable element for the success of any organization, regardless of its size or industry. It's however important to underline that by implementing a Management Control System, a cooperative doesn't just get a tool to monitor the effectiveness of its operations but, more importantly, a means to actively steer the organization towards its goals and plans. Indeed, comparing forecasted data with actual data enables managers to determine whether the business is on the planned track. If deviations occur, even though the control tools might not spell out exactly what to do next, the outputs from the Management Control System should offer a solid numerical foundation for decision-making. This ensures decisions are not merely based on instinct but are informed by rational analysis and criteria.

To further break down the essence of Management Control Systems, we can lean on two fundamental business economics concepts: managerial effectiveness and efficiency. Essentially, MC equips a company with the tools to assess whether it's hitting its targets (effectiveness) and doing so with the leanest use of resources possible (efficiency). For leaders to be able to adjust course when things aren't aligning with the plan, it's crucial that these assessments are made regularly and swiftly, sometimes prioritizing speed over absolute accuracy to ensure timely corrections and minimize waste.

When discussing these aspects, people often refer to the concept of 'Management Control' which is accurate but can be misleading because it seems to focus only on the control aspects, neglecting the preceding stages of planning and programming which are key. Therefore, this chapter will start with an overview of the planning and programming stages, framing management control — the core topic of the following chapters — within the wider context of the company's operational framework.

6.1 Foundational Concepts: Planning, Programming, and Controlling

In the realm of business economics, the concepts of planning, programming, and control are fundamental, let's take a moment to unpack their meanings very briefly:

- Planning is the art of defining what you aim to achieve and figuring out what you need to make it happen. It's the cornerstone of effective management. Without it, navigating a project would be like sailing without a compass—directionless and chaotic.
  Objectives often shift based on the project's nature, the client's expectations, and available resources. Setting goals that are both coherent and challenging is crucial to facilitate the subsequent programming phase and to yield meaningful feedback during the control stage. It's important to understand that planning is not a one-time task but evolves as a "continuous process of reassessment and course correction throughout the project's lifecycle" (Patrone and Piras, 1997). In business literature, planning is closely linked to strategy, implying a dynamic and adaptable approach. Delving deeper, we can distinguish between two levels of planning:
  - *Strategic Planning* which is the high-level game plan. It's in the realm of senior management who, armed with a broader perspective and the authority to chart new courses, make decisions that shape the company's future over the medium to long term. It's about crafting and evaluating business strategies in light of fundamental management goals, understanding and navigating the company's external environment.
  - *Operational Planning*, on the other hand, focuses on organizing individual projects in all their phases, with a much shorter time horizon.

  This layered approach underscores the importance of a clear, strategic vision that cascades down into tangible, day-to-day actions, ensuring that every level of the organization is aligned and moving towards common goals.

- While there are numerous definitions of programming, they converge on the idea that, at its core, programming turns the guidelines set out in the planning phase into concrete actions.

- Control, the focal point of this discussion, comes into play subsequently but is crucial as it actively provides managers with the necessary tools to assess the effectiveness of the chosen path and identify any need for corrective measures.
  Control is multifaceted, involving several steps throughout the management process:

- *Preventive control* checks that the operational plans are set to effectively meet the strategic goals. This phase isn't about evaluating the actions' outcomes but ensuring the short-term plans (like budgets) align with long-term business strategies.
- *Concurrent control* is the real-time monitoring phase, occurring at set intervals to track ongoing management performance through its interim results.
- *Feedback control* occurs after outcomes are realized. It can't alter past actions but is important to build a historical record, enriching the business information system with insights for future planning. Accurate outcome evaluation is only possible after the period ends.

Implementing a planning, programming, and control system is, thus, a strategic move by companies to bring more rationality into their decision-making processes. It means enhancing managerial expertise with a system that systematically sifts through key information (Figure 6.1).

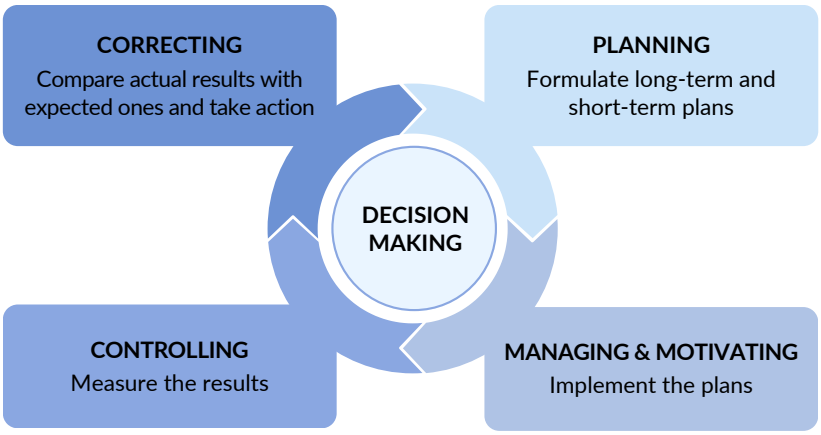


Figure 6.1 Informed Decision-Making Process

The planning and control system thus becomes a rational approach to quality decision-making, capitalizing on technological advancements and the evolution of proven techniques. The relationship between decisions and actions becomes more nuanced, embodied in the "Plan-Do-Check-Act" cycle, as depicted in Figure 6.2.

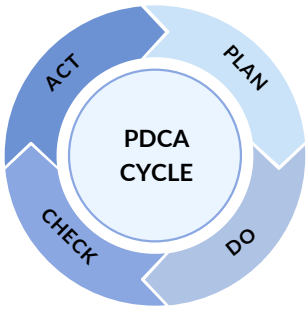


Figure 6.2 PDCA Cycle

6.2 Defining Management Control

Management Control (MC) is arguably one of the most recognized and widely used expression in business management and, as such, it is also among the most susceptible to subjective interpretations. Indeed, there's often a misuse of the term, with business practitioners employing it to define concepts only partially related to what is, in essence, a very complex business process. A common mistake is to narrowly identify MC by just the tools or methodologies used in its application, such as cost accounting or cost analysis. These elements, while vital, are simply parts of the extensive MC apparatus. On the other hand, at times, people expect the system to achieve what it cannot, such as resolving strategy issues. The role of Management Control, and of those tasked with implementing it, "is not to define the company's strategy, but to guide the organizational structure towards an already established strategy in an effective and efficient manner"(Leva, 2013).

The challenges encountered in studying and explaining MC are not merely academic but profoundly practical. Recognizing the role to be assigned to MC is perhaps the first issue to clarify when an entrepreneur considers resolving managerial inefficiencies solely by enhancing the existing information system with analytical and management accounting.

We'll first examine the individual definitions of "management" and "control," and subsequently investigate their synthesis in the term "management control," as well as the concept of "system."

Management

Broadly speaking, *management science* can be defined as "the interdisciplinary study that applies problem-solving and decision-making techniques to human organizations."

As the scope of the problems that can be addressed with quantitative methods increases year by year, MC and the tools it deploys evolve. Enhancements in computational tools, communication networks, modeling techniques, and algorithms have ensured that data availability is no longer the primary challenge of MC systems.

Modern management science is becoming more and more integrated. Corporate interventions no longer concern just specific aspects of products and services but encompass the entirety of flows, from the procurement of raw materials, semi-finished products, subsystems, complete systems, labor, and services to the delivery of finished products and/or services to end-users in the required quantities, at the desired time, to an acceptable quality level, and at a reasonable overall cost.

A good management, especially in a cooperative setting, depends not only on the type of tools employed but also, and perhaps more importantly, on the cultural, educational, and informational aspects that define the operators and users involved.

Control

In business economics, control refers to the activity aimed at examining the functionality of a business with the purpose of guiding the organization towards the achievement of certain predefined objectives. It aims to facilitate the self-regulation of the business system, allowing for adjustments and modifications to achieve what was anticipated in the business planning phase (Anthony and Govindarajan, 2006).

It's important to remember that control is not focused solely on the measurement of achieved performances, but also on direct supervision and adherence to certain internal standards. Business controls also include all the tools and activities that managers use to ensure that the behaviors and decisions of individuals within the organization are consistent with the strategies and objectives of the business entity in question (Merchant and Riccaboni, 2003).

Drawing from the analogy proposed by Anthony and Govindarajan, envision the act of driving a car: command over its speed and direction hinges on specific controls. The accelerator dictates the pace, the steering wheel steers the course, and the brakes bring it to a halt. Should any of these controls fail, the car becomes unmanageable. Similarly, the steering of a company towards its strategic aims necessitates continuous vigilance and the optimal functioning of its management tools. Naturally, controlling an organization is much more complicated than controlling a car, but the underlying principle is the same.

In general, control processes depend on four key instruments, all of which are crucial for optimal performance:

- A sensor, capable of measuring what is actually happening;
- A comparator, that can compare what is happening with standards or expected results;
- An actuator, that we can also call feedback, which modifies the operation of the controlled process if the comparator requires it;
- A communication system (or information system) that can transmit information from the sensor to the comparator and from the comparator to the actuator.

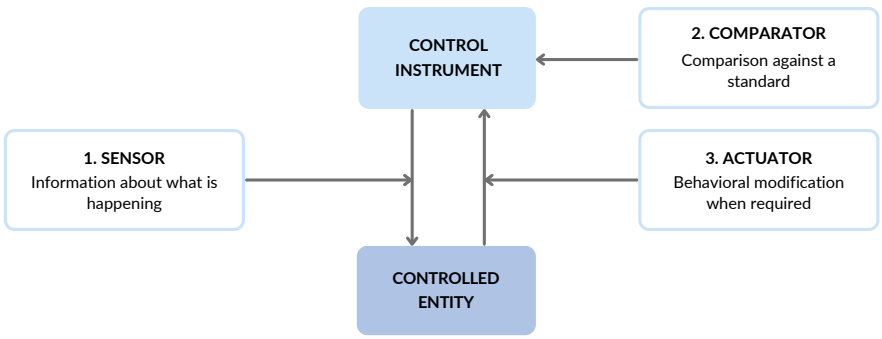


Figure 6.3 Control Process

The functioning of these elements adapts to the complexity level of the system, which depends on the degree of automation that can be implemented. When control isn't based on predetermined reactions, the behavior of the actuator is no longer automatic, and in response to the same input from the comparator, one can expect different reactions.

Management Control is one of those not entirely automatic systems. Within an organization, some sensors may be mechanical, but managers often detect crucial information directly with their eyes and instinct. Even when there appears to be a routine in comparing reports with the budget and forecasts, executives must personally act as comparators, deciding based on their judgment and experience which differences are significant and what corrective actions to take. Unfortunately, even when there is a perceived need for corrective action, it is difficult to determine which action is best to achieve the desired result.

Management Control

After having examined the meaning of the individual terms, it's important to focus on the concept as a whole. The literature provides numerous definitions of Management Control (MC):

- "An operational system aimed at guiding management towards the achievement of objectives established in operational planning, detecting the deviation between planned objectives and achieved results through the measurement of specific indicators, and informing responsible bodies so they can decide and implement appropriate corrective actions" (Azilagyi, 1988).
- "The process through which managers ensure that resources are acquired and used effectively and efficiently to achieve business objectives" (Brusa L. and Zampogna, 1994);
- "A collection of tools, processes, and roles aimed at inducing individual and organizational behaviors in line with the achievement of business objectives" (Castellano, 2003);
- "The set of processes, methods, techniques, and tools available to different organizational levels that allow individuals, in relation to their role and duties, to monitor the achievement of specific objectives set during strategic planning and operational programming in a preventive, concurrent, and subsequent manner" (Merchant K.A. and Riccaboni, 2003);
- "The process through which responsible parties can verify if the project is proceeding according to the objectives defined in planning" (Barrese and Abbatemarco, 2004);
- "Activity carried out by managers to ensure the achievement of set objectives through the effective, efficient, and responsible acquisition and use of resources, or also as the set of mechanisms and processes implemented to minimize the deviation between desired and actual managerial trends, adapting the latter to ongoing changes in the external environment" (De Angelis, 2009);

Building on these definitions we may define Management Control as the set of procedures and techniques necessary to verify the effectiveness and efficiency of management; where effectiveness means the organization's ability to achieve its objectives, and efficiency means achieving them in the best possible way, i.e., with the minimum consumption of productive factors.

Through Management Control, managers try to transfer –employing the appropriate organizational tools– the business strategies from the strategic apex to the operational base. This ensures that strategies crafted during the planning phase are seamlessly executed and encompasses many different activities (Figure 6.4), such as:

- Planning what the company will do;
- Coordinating the activities of different organizational areas;
- Correctly transmitting information;
- Evaluating and analyzing information;
- Deciding, if necessary, which actions to take;
- Influencing people, urging them to change their behavior.

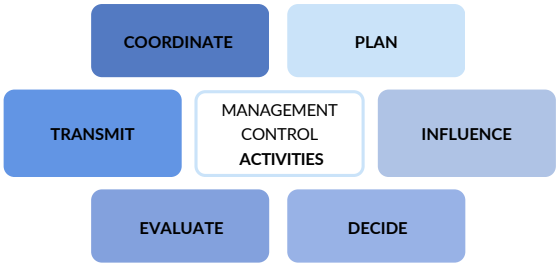


Figure 6.4 Management Control Activities

Another thing to consider is that Management Control can significantly shape a company's operational practices, as its successful implementation hinges on certain requirements which often aren't met ex-ante, such as:

- Comprehensive accounting records;
- Systematic organization of company data;
- Appropriate tools for data acquisition;
- Precisely established and followed procedures and information channels;
- Clearly delineated roles and responsibilities within the organization.

Furthermore, to bolster management decisions and streamline the delegation process, an effective Management Control System necessitates a bespoke information system developed and deployed to meet the unique demands of the organization. The most crucial aspect of MC is not the information system itself but the procedural aspect, namely, the dynamic system that sets objectives impacting the business's critical variables and continuously evaluates their progress with retrospective control. The overall objective in this case is to demystify strategic goals for decision-

makers, transforming them into measurable benchmarks, diligently tracking their attainment, comparing outcomes against these benchmarks, and making necessary adjustments. Thus, the evaluation of internal performance should transcend conventional accounting methods to become a systemic practice that proficiently disseminates accumulated insights across time and space.

Unfortunately, adhering to the plan is not necessarily good, and deviating from it is not necessarily bad. Even though systematic, as mentioned before, the MC process is far from mechanical. It encourages ongoing dialogue among individuals and seeks to mediate between corporate and personal objectives, ensuring they converge and create the right synergy for their achievement.

Therefore, Management Control Systems cannot be easily schematized, formalized, or constrained within rigid tracks but must be custom-built like a tailored suit. The unique characteristics of each business situation, the reasons for its establishment, and the features of the competitive environment must be considered. What can be constructed is an informational and mental system that, by adapting to the peculiarities of the company's organizational and managerial structure, supports decision-makers. It's not about designing a procedural structure whose non-compliance leads to severe consequences, it's about creating a system that evaluates a decision positively or negatively based on its alignment with business objectives. Management control focuses not on the operational activity's development modalities but on the outcomes of enacted decisions. Specifically, the MC system comprises three constitutive elements:

- A set of planning and control activities aimed at first defining and then monitoring corporate performance;
- A collection of technical-accounting tools designed to process information supporting decision-making processes and planning and control activities;
- An information system intended to disseminate selectively gathered and organized information to focus managers' attention on the determinants of corporate value.

Each component represents a subsystem, each complementary to the others, and only their integrated consideration allows for the identification of the MC system.

Management Control *System*

At its core, a system represents a structured (often repetitive) method for performing one or more tasks. Systems are, indeed, defined by coordinated and cyclic sequences of steps aimed at meeting specific needs.

Clearly, managers often have to navigate situations unique to their context and have to rely more on their judgment than on a predefined set of rules and steps. However, a structured, systematic, approach to Management Control can still provide valuable guidance. A well-designed and well-

implemented Management Control system can, indeed, effectively organize extensive data, providing managers with a thorough understanding of the circumstances to inform their decision-making processes. So, although these systems do not provide the solution, they empower managers with the necessary knowledge to make well-informed decisions and learn from previous oversights. After all, if MC systems could automatically offer the right solution for every issue, there would practically be no point in having human managers.

6.3 Aims and Purposes of Management Control

As we've seen, Management Control systems play a vital role in supporting the everyday decision-making processes of managers. Indeed, they tackle some of the typical inquiries of those responsible for managing a company, such as:

- Will the company show a profit or loss at the end of the fiscal year? Which areas had the most significant impact on the outcome? Which business divisions were the most efficient?
- What is the unit cost of the product? What is the unit margin generated from their sale? How do costs and margins change with variations in the production mix or the use of productive capacity?
- Is it more advantageous to invest in internal processes or to continue using third-party suppliers?
- What would happen if there was a decrease or increase in turnover?
- Is it more beneficial to seek new financing or to use equity capital?

The data obtained will then be employed to facilitate future considerations in similar situations, thus creating an evolving model of business capabilities that aids in achieving objectives. An effective Control System should at least ensure:

- Efficient monitoring of activity progress/performance, with easy-to-use methodologies for assessing project development and better managing communication flows;
- Accurate tracking of incurred costs

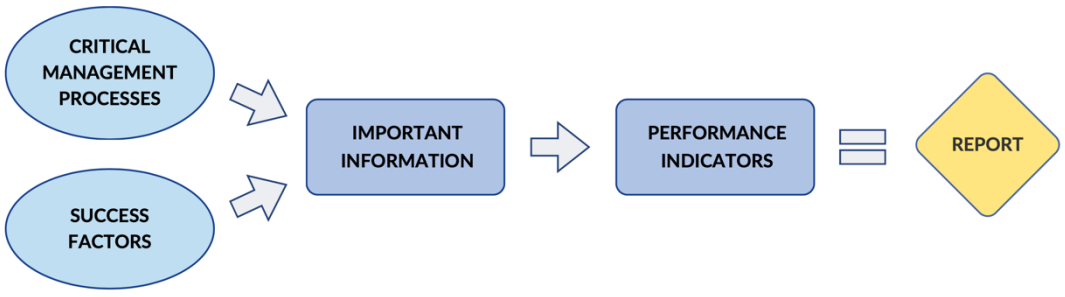


Figure 6.5 Operational Flow of the Planning, Programming, and Control System

In essence, the system should support the achievement of the following key objectives:

- Accurately forecast future scenarios to guide strategic decisions and planning;
- Ensure alignment between strategy and execution, aligning the organizational structure with the broader business strategy;
- Provide a reliable assessment of current performance by measuring the achievement of business objectives against historical performance and budget expectations.

MC should thus not be seen merely as an activity necessary to evaluate ex-post performances, at year end. The significant use of corporate resources required to implement such system is indeed justified mainly by its ability to intervene and modify or rebalance ongoing operations. The use of MC systems allows for constant and objective monitoring of the project's progress and prompt identification of deviations from the budget, to undertake suitable corrective actions (Barrese and Abbatemarco, 2004).

6.4 Structure of Management Control Systems

To ensure a company's Planning, Scheduling, and Control System is truly effective and useful, all its components must be thoughtfully structured. At its core, the system relies on three key components (Morelli, 2014):

- *Responsibility Centers* which refer to the various organizational units within a company, each tasked with overseeing its own economic and financial outcomes.
- *The Process* which outlines how these Responsibility Centers operate, covering everything from budget planning to setting performance benchmarks, assessing results, responding to feedback, and taking appropriate actions.
- *The Technical-Accounting Support Structure* which includes a suite of mainly accounting-related tools, ranging from budgeting and general ledger to cost accounting and performance indicators. These tools collectively form what's known as managerial accounting, providing the backbone for the system's functionality.

Responsibility Centers: The Building Blocks

In a company, decision-making power and responsibilities are spread throughout the entire organization structure. As the organization grows, its leaders can no longer directly oversee all aspects of its operations. This leads to a process of decentralizing decision-making, where power is gradually delegated to lower organizational units, creating a pyramidal hierarchical structure. Distributing responsibilities effectively in the planning and programming process is crucial for the successful adoption of the Control System being implemented.

To achieve this, the company is divided into centers where the responsibilities of different stakeholders in the production/development process converge. These are known as "Responsibility Centers" (RC) and can be defined as organizational units whose leaders are accountable for achieving specific results and/or utilizing certain productive resources (Merchant and Riccaboni, 2003).

Typically, each RC uses a range of inputs (in physical and/or value terms) for each significant activity within the production/development process and generates specific outputs, which can be quantified in economic-financial terms or other more articulated manners.

Responsibility centers are categorized based on the nature of their activities and the management levers held by the manager of that organizational unit. They can be distinguished into:

- *Cost Centers,* which are centers that focus is on tracking and managing costs. The performance of a cost center isn't measured by its revenues or profits, but by how efficiently it keeps its costs in line with budgeted or standard costs. Cost centers typically include departments like executive management, administration, and general services centers.
- *Expense Centers,* which are special types of cost centers where output and efficiency can be reliably determined based on the resources used to achieve certain results. The emphasis is on minimizing resource usage to meet specific target costs, with operational levers including production volumes, resource allocation methods, and the management of procurement costs. Expense centers typically includes production centers and auxiliary production units, like maintenance.
- *Revenue Centers*, which are centers focused on generating sales and revenues, where managers are responsible for a variety of factors that influence financial outcomes. These include managing sales volumes, setting prices, overseeing the salesforce, and optimizing marketing expenditures. Revenue centers are often structured around sales and marketing departments, with revenue tracked by product, sales channel, or geographic region. The success of a revenue center is measured by its ability to maximize income through effective sales strategies and customer engagement.
- *Profit Centers*, which are part of the company's structural organization and have a wider scope, involving management of more extensive and complex units. Profit centers are responsible for both generating revenue and managing costs, with their performance evaluated on the ability to produce a net profit. The key performance indicator is often a synthetic economic measure such as gross margin. High-level management evaluates these centers based on the profits generated, i.e., revenues earned and costs incurred.

- *Investment Centers*, which, unlike other centers, have control over both operational activities and capital investment decisions. Their performance is evaluated based on the effectiveness of their investments, including both fixed assets and working capital. Key metrics include the return on invested capital (ROI) and residual profit, taking into account the financial costs associated with capital investments. Investment centers are pivotal in strategic planning and asset management, aiming to maximize the profitability and efficiency of the company's investments.

The definition and implementation of these Responsibility Centers not only cultivates a managerial mindset across the organizational framework but also promotes behaviors aligned with the company's strategic goals. It facilitates the assignment of responsibilities and lays the foundation for an efficient Control System and effective management oversight. Moreover, the seamless flow of information across the company facilitates collaboration among departments making operations overall more efficient.

Managers of each department should convey to their employees that these kinds of management-innovations, despite requiring initial adaptation efforts, ultimately benefit the company and enhance their work. A team that collaborates synergistically brings vitality and increases the company's prospects for success. The drive and support for such initiatives must originate from the managerial echelons, who should champion the innovations and foster an environment conducive to the adoption and consistent application of new methods and techniques.

So, strategically coordinating the efforts of managers and their teams is pivotal for the continuous enhancement of the company's organizational efficiency. Without an organizational structure designed to embrace new guidelines, tackle challenges and issues stemming from the control system, assume designated responsibilities, pursue clearly defined goals, and operate based on established procedures it becomes challenging to manage the progression of business operations and control costs effectively.

The Control Cycle: A Systematic Approach

Management Control can also be seen as a strategic process that provides essential information to managers for decision-making and is aimed at organizing, implementing, evaluating, and refining organizational activities (Brioschi, 2017). This process is a systematic sequence of events, analyses, and feedback loops, integrating planning, programming, and control into a cohesive, cyclically recurring framework (Figure 6.6).

The initiation of this process involves a comprehensive analysis of the constraints both internal and external to the organization. Decisions regarding organizational goals must be prefaced by a

rigorous feasibility assessment that takes into account the limiting factors that could impact the realization of plans. Armed with these insights, informed decisions can be made to pursue organizational objectives, segueing into the strategic planning phase characterized by the formulation of medium to long-term strategic choices.

These strategic plans are then operationalized into concrete programs, establishing short-term objectives aligned with the envisioned long-term profitability and growth trajectories. It is at this juncture that responsibilities are assigned to specific individuals tasked with the achievement of these objectives.

Upon the establishment of these programs, it is imperative for organizational actors to align their actions with the predetermined plans. The control phase entails a continuous assessment of whether the operational outcomes are in alignment with the set objectives (Casanova, 2013).

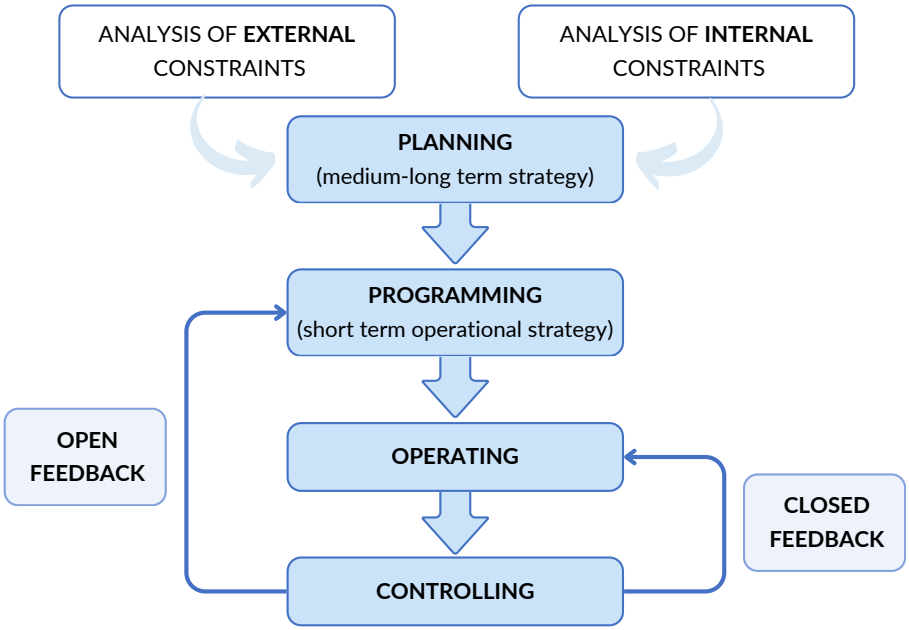


Figure 6.6 Planning, Programming, and Control Process

It's a real-time approach to monitoring rather than a retrospective analysis at the end of a period. This dynamic approach enables the timely implementation of corrective measures, ensuring that management actions are guided by the initial planning. The essence of this process is captured through the ongoing juxtaposition of anticipated and actual results, governed by established "control mechanisms." These mechanisms are categorized into two principal types: the traditional feedback control, which allows for post-hoc corrective actions based on observed deviations, and the proactive feed-forward control, which anticipates future developments and facilitates preemptive adjustments (Figure 6.7).

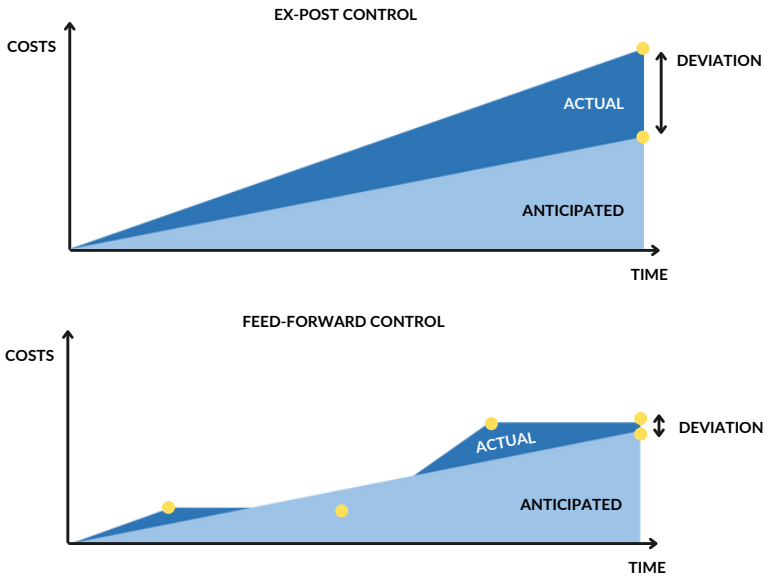


Figure 6.7 Impact of Effective Management Control on Corporate Performance

Feedback mechanisms serve as the foundation for corrective actions in response to identified variances, employing a retrospective analysis of past actions to inform future strategies (Casanova, 2013). This approach is contingent upon the formulation of outcome hypotheses and their subsequent evaluation against actual results (Figure 6.8).

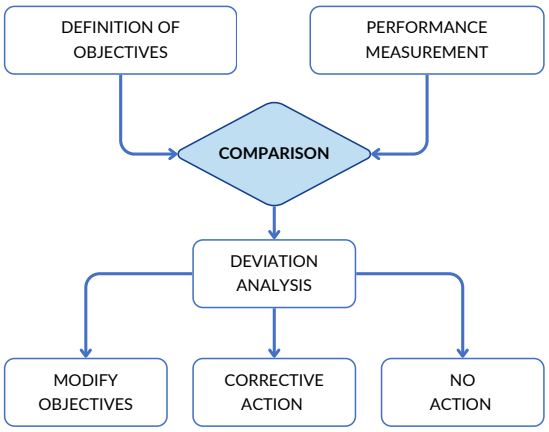


Figure 6.8 Diagram of the Typical Feedback Process in Corporate Control

While this method may suffice in stable environments, where a retrospective assessment can adequately determine goal attainment or the acceptability of variances, it may fall short in more dynamic settings (Lava, 2013). In scenarios where immediate efficiency control is paramount, relying solely on ex-post corrective actions may not suffice to meet strategic objectives. Here, the feed-forward control mechanism becomes crucial, comparing predetermined budgetary goals with estimated final outcomes based on current information, under the assumption of minimal corrective intervention. This forward-looking control mechanism offers a strategic advantage by facilitating an anticipatory response to potential shifts in the organizational landscape, underscoring the importance of timely information generation. In rapidly evolving markets, the

strategic prioritization of information timeliness over granular accuracy is essential, advocating for a management approach that values agile and representative data over exhaustive, yet potentially untimely, analyses (Lava, 2013). This distinction highlights the fundamental difference between the roles of the accountant, who meticulously records historical data, and the controller, who generates forward-looking data for strategic control and decision-making (Brunetti, 1999).

Support Structures: Enabling Effective Control

The components of Management Control form a crucial segment of what is known as the Accounting Information System within a corporation, which is tasked with the essential function of capturing quantitative data relevant to both internal operations and external managerial events. This system is versatile, leveraging a variety of tools tailored to suit the diverse landscapes of business environments. While some of these tools are flexible, allowing customization to meet the unique demands and complexities of each business scenario, others may not be as adaptable or cost-effective in certain organizational contexts due to the disproportionate balance between their implementation costs and the value they deliver.

The focus of this discussion narrows down to the tools within managerial accounting, which are instrumental in achieving two critical objectives:

- The aggregation and refinement of data that facilitates the monitoring, documentation, and analysis of business operations;
- The dissemination of strategic information to the executive leadership, crucial for enriching the decision-making ecosystem.

CHARACTERISTICS	FINANCIAL ACCOUNTING	MANAGERIAL ACCOUNTING
Necessity of use	Mandatory	Optional
Purpose	Provide a comparable overview of the company	Assist managers
Structure	Standard	Varies depending on the objectives
Users	Internal and external (not always known)	Internal (known)
Temporal Perspective	Historical	Historical and prospective
Type of Information	Monetary	Monetary and non-monetary
Precision	High	To be defined
Frequency	Quarterly/Annually	Weekly/Monthly/Quarterly
Timeliness	Not immediate	Immediate
Subject	Entire company	Portions of the company (BU,RC, Clients..)

Figure 6.9 Financial Accounting vs Managerial Accounting

Managerial accounting stands out as a cornerstone in the architecture of management control, equipping businesses with the analytical tools and insights needed for informed decision-making and strategic planning, thereby enhancing their capacity to navigate the multifaceted dimensions of their operational and financial environments.

Costing

Costing is an essential component of management control. It encompasses the comprehensive activities involved in the capture, examination, and oversight of all corporate costs, especially those related to production. Costing is fundamental in ensuring operational efficiency, assessing inventory valuations, determining the cost of the specific categories being analyzed, and pricing.

Cost information is typically gathered through general accounting methods and financial statements which systematically record the financial and economic data of business transactions to facilitate the compilation of periodic assessments. They cater to both internal managerial needs and external regulatory and tax requirements.

However, the data provided by financial accounting, while legally valid, do not suffice for managerial decision-making. This gap is filled by analytical or industrial accounting, which zeroes in on the economic aspects of internal operations and generates predominantly internal documentation. The objective of industrial accounting is to pinpoint precise analytical results and costs for a given period, evaluate operational efficiency, and underpin decision-making, programming, and control processes. Unlike general accounting, which organizes data by origin, analytical accounting categorizes costs by their allocation, providing a more nuanced understanding of how resources are consumed across different areas of the company.

Forecasting Tools

The budget is a critical instrument for forecasting that sets short-term objectives for both the company at large and individual managers. These parameters serve as benchmarks for managers to evaluate how effectively resources are utilized in their specific areas of operation.

Constructed with a reliance on standard costs, the budget anticipates expenses aligned with established objectives. It acts as the proactive dimension of accounting that outlines expected financial conditions and crystallizes the tangible goals of a project or the organization. In this role, it operates as an invaluable tool for monitoring progress, facilitating strategic planning, and enhancing motivation.

It is essential to underline that the numbers within the budget are not meant to test the predictive skills of those who compile them, their value is organizational, as they guide and mold staff actions in pursuit of the overarching goals of the business.

Deviation Analysis

Deviation analysis is a key managerial tool involving the comparison of actual results to budgeted, or target, values. It is the process of comparing budgeted figures with the actual outcomes to pinpoint overall variances. By breaking down the overall deviations into elementary discrepancies,

this tool can highlight which business area or category underperformed against expectations and analyze the underlying reasons.

Variance analysis is crucial for potential management reprogramming in response to unsatisfactory results or adjusting goals when initial projections were overly optimistic. It should be conducted regularly whenever there is an opportunity to compare forecasted data with actual results, which typically occurs on a monthly basis. This regular assessment enables businesses to maintain control and promptly address issues as they arise (Bizzotto, 2014).

Reporting

The reporting system, which can be viewed as the culminating product of managerial accounting, serves as the conduit for conveying the information generated by control procedures to the management level. The purpose of reporting is to accurately represent corporate data through summaries, tables, frameworks, diagrams, and graphs. These are essential not only for communicating information but also for facilitating its interpretation. Without reporting, the vast amount of data gathered from corporate accounting activities, as well as from planning and budgeting processes, would be challenging to read and interpret accurately, remaining accessible only to a handful of specialists. The reporting system transforms this data into a structured and comprehensible format, enabling informed decision-making across all levels of the organization.

6.5 Challenges and Considerations

A prevailing perception among entrepreneurs is that MC is predominantly relevant for large, structured corporations. This perception is not unfounded, as the fundamental goals of MC, such as optimizing short-term operational efficiency, managing delegation of authority effectively, and aligning employee behavior with corporate strategy, are typically more pronounced in larger organizations. Furthermore, the application of MC in small businesses faces unique challenges due to their specific operational environments and the entrepreneurial mindset that often dominates these settings. Entrepreneurs in small businesses may believe they possess a comprehensive understanding of how to manage their operations efficiently without the aid of formal tools or reports. This is compounded by the close personal relationships often found within small business, where trust and familiarity can override formal qualifications in the delegation of responsibilities.

Many small enterprises may not recognize the need for an MC system, perceiving it as a feature of larger corporations, or they may implement it only partially, leaving significant gaps in setting and evaluating expected outcomes.

Given the scarcity of resources, small businesses might prioritize areas deemed critical by the entrepreneur through informal means, potentially overlooking other important aspects.

A significant impediment to effective MC is the absence of sophisticated analytical accounting tools, particularly in businesses where entrepreneurs wish to maintain hands-on control over all operations without true delegation. Analytical accounting can be beneficial even in entities where the delegation process is nascent, provided the informational needs are well-defined (Lava, 2013).

7 Management Control System Proposal

This chapter is dedicated to the presentation of the Management Control System developed for Emisfera (Figure 7.1).

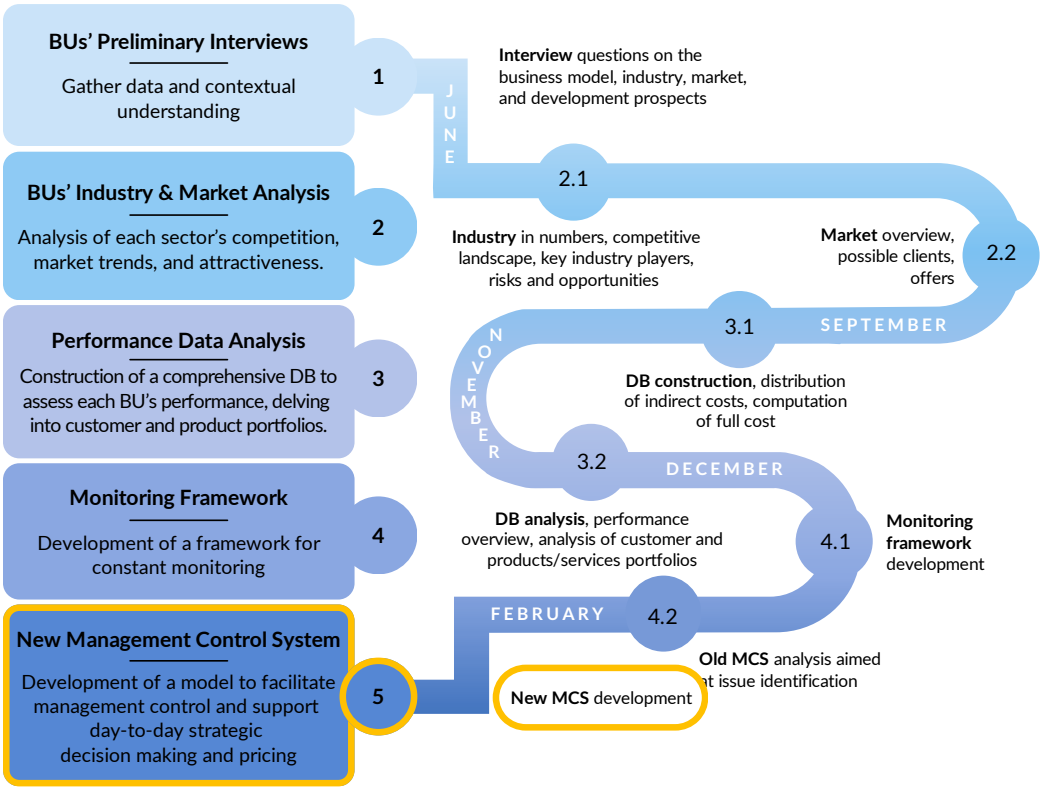


Figure 7.1 Portion of the project's roadmap addressed in this chapter - point 5

We will examine the strategic methodology employed in its development, highlighting the objectives and key outcomes of each of the five crucial steps we followed:

1. **Definition of the Analysis-Potential of the Current MC System**
2. **Identification of Control Elements and Dimensions**
3. **Establishment of a proper Monitoring Framework**
4. **Development of the Client and Order Registration Frameworks**
5. **Definition of the Mechanisms for Indirect Costs Registration and Allocation**

In the forthcoming sections, we will explore each step in detail. However, given that the analyses underpinning steps 1 and 3 have already been extensively covered in preceding chapters (respectively 4 and 5), we will touch upon them only briefly, aiming to elucidate their pivotal role in forging the new Management Control System.

7.1 Definition of the Analysis-Potential of the Current MC System

The performance data analysis presented in Chapter 4 wasn't solely aimed at deepening our understanding of Emisfera's operations. Instead, we also sought to demonstrate to the Board of Directors (BOD) the value of certain Project Portfolio and Management Control tools in enhancing strategic decision-making (Figure 7.2). This, while assessing the 'analysis-potential' of the existing Management Control System.

Figure 7.2 Example of some Performance Data Analyses presented in Chapter 4 based on the current MC System

The BOD gained a profound appreciation for the strategic value of systematic data collection and, concurrently, recognized significant limitations within Emisfera's current Information System—most notably, its deficit in automation capabilities. For instance, all the analyses based on the various client-types required a manual, client-by-client review due to the absence of client-type data categorization. This intensive manual process underscored that without an upgraded Information System, underpinned by a new Management Control System, Emisfera would struggle to regularly undertake such rigorous analytics.

This sparked critical discussions on the optimal level of data granularity, which leads us to the subsequent phase, the definition of control elements and dimensions.

7.2 Identification of Control Elements and Dimensions

This phase, dedicated to identifying the control elements and dimensions critical to Emisfera's operations, culminated in the development of the multidimensional diagram depicted in Figure 7.3.

This diagram encapsulates the multifaceted aspects of Emisfera's operations across five core control elements: costs, revenues, products/services, clients, and time. These control elements are represented on axes that report their dimensions, extending outward from the most specific to the most aggregated one.

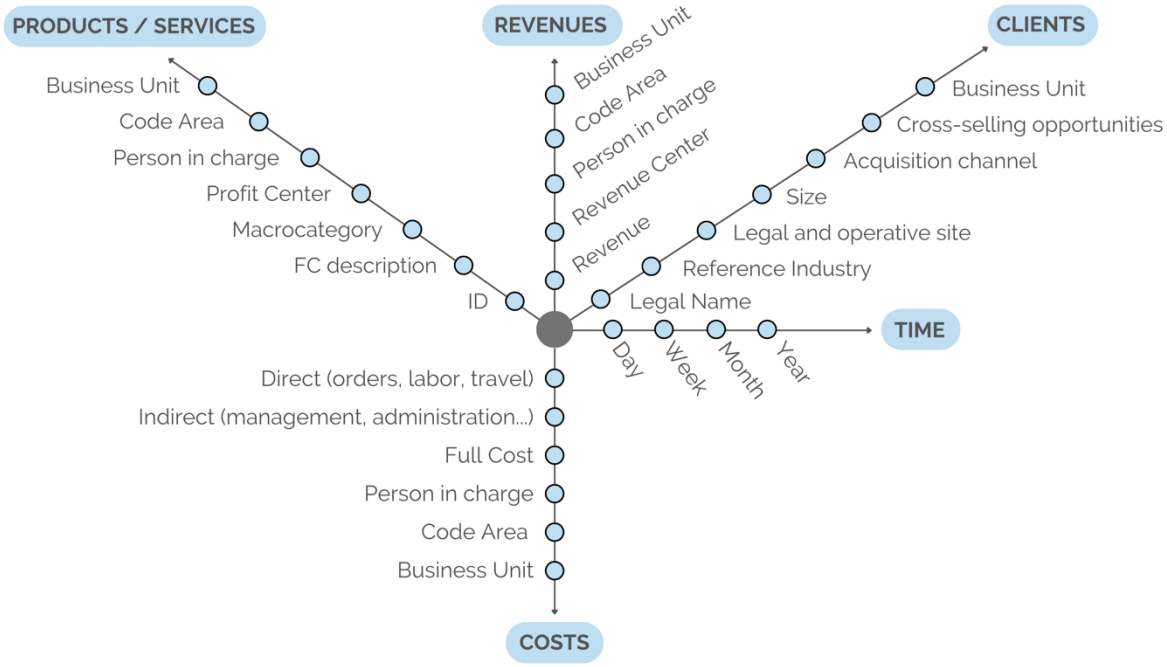


Figure 7.3 Control Elements and Dimensions Diagram

The analysis of these dimensions fueled the aforementioned discussion regarding the optimal level of data granularity even further, underscoring the need to balance the benefits of detailed insights with the costs of data collection.

But the true value of this diagram lies in its ability to facilitate multidimensional analyses. Indeed, by connecting the dots across different axes, we can interpolate data, thereby extracting key information that can drive insightful decisions (Figure 7.4).

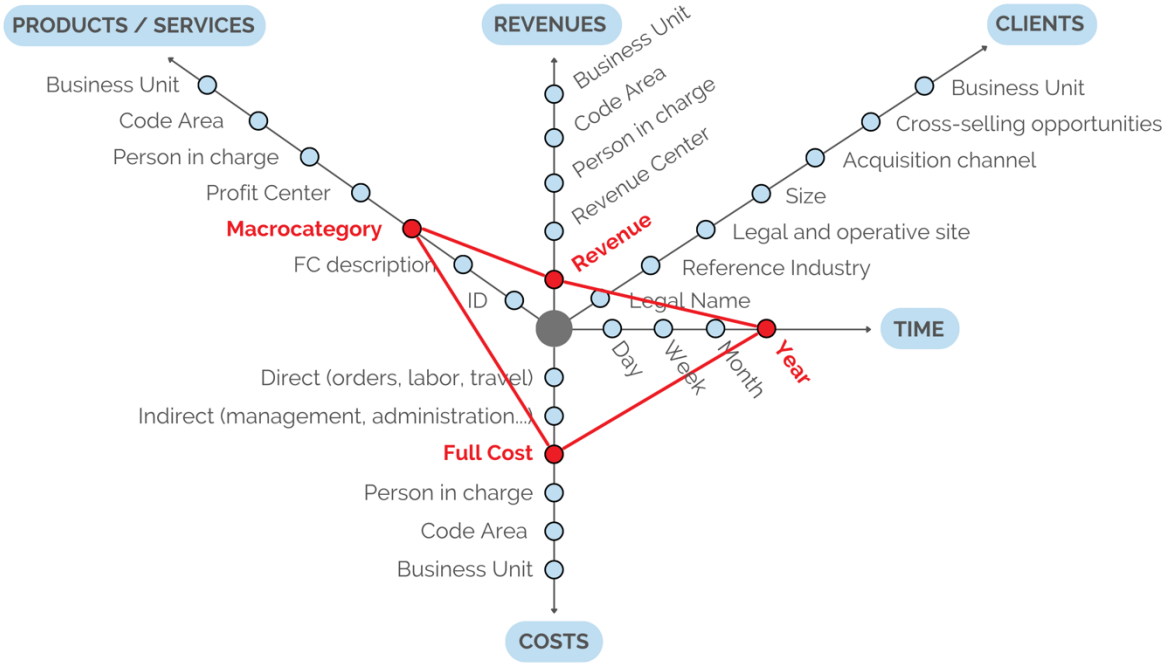


Figure 7.4 Data Interpolation Example 1

The diagram goes beyond merely representing the actual dimensions managed by Emisfera's existing Information System; it also proactively identifies potential dimensions that could be woven into a new, enhanced, system.

These additions were strategically designed to initiate discussions about potential enhancements to Emisfera's Management Control System and, consequently, Information System.

For instance, the "Macro-category of products/services" dimension (which is the focus of the analysis in Figure 7.4), represents an enhancement to the current system. Integrating this dimension could pave the way for automating numerous informative analyses that are currently not feasible. Likewise, in Figure 7.5, we explore the potential of adding a new dimension—'acquisition channel'—and its value for deepening Emisfera's analysis capabilities.

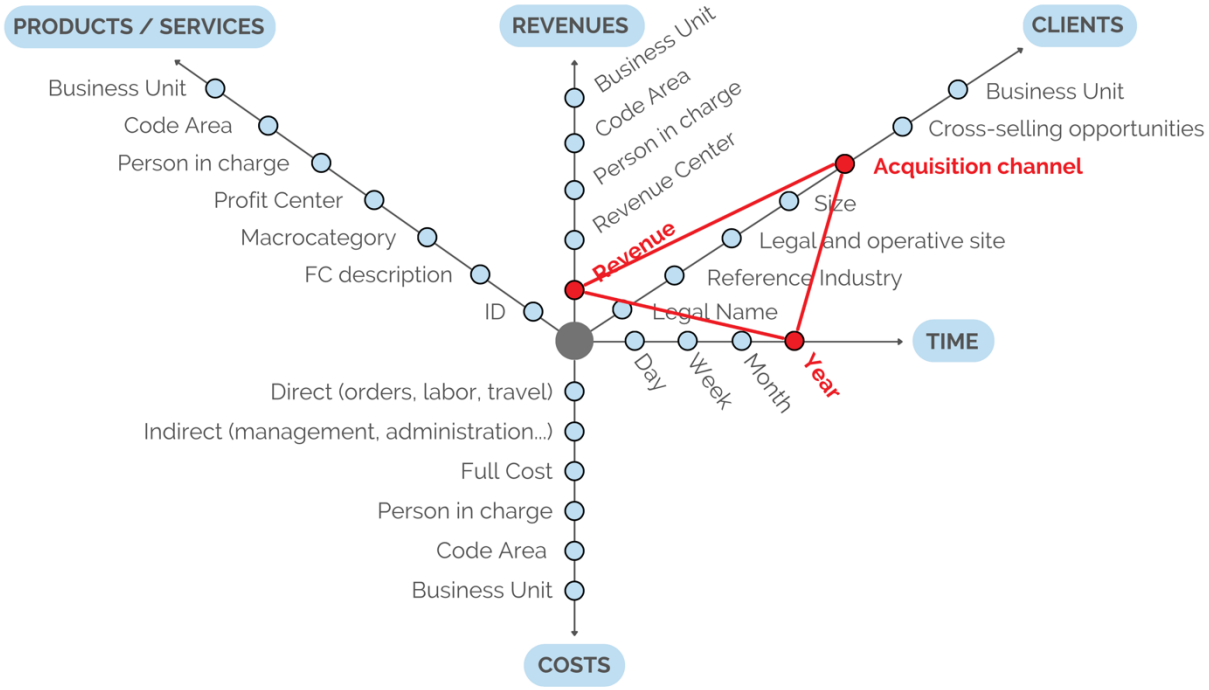


Figure 7.5 Data Interpolation Example 1

Thus, the diagram acts as a catalyst for dialogue about the future Management Control System, emphasizing the need for capturing a broader spectrum of operational data. It's not just a mere representational tool, it's a dynamic tool that encourages exploration into new areas of data analysis that could significantly impact Emisfera's strategic agility and operational efficiency.

The results of this exploration laid the foundation for the Monitoring Framework development presented in the subsequent section.

7.3 Establishment of a proper Monitoring Framework

Taking into account Emisfera's unique characteristics, the insights gained from the business unit performance analyses, and the comprehensive identification of control elements and dimensions, we established a tailored Monitoring Framework for each business unit.

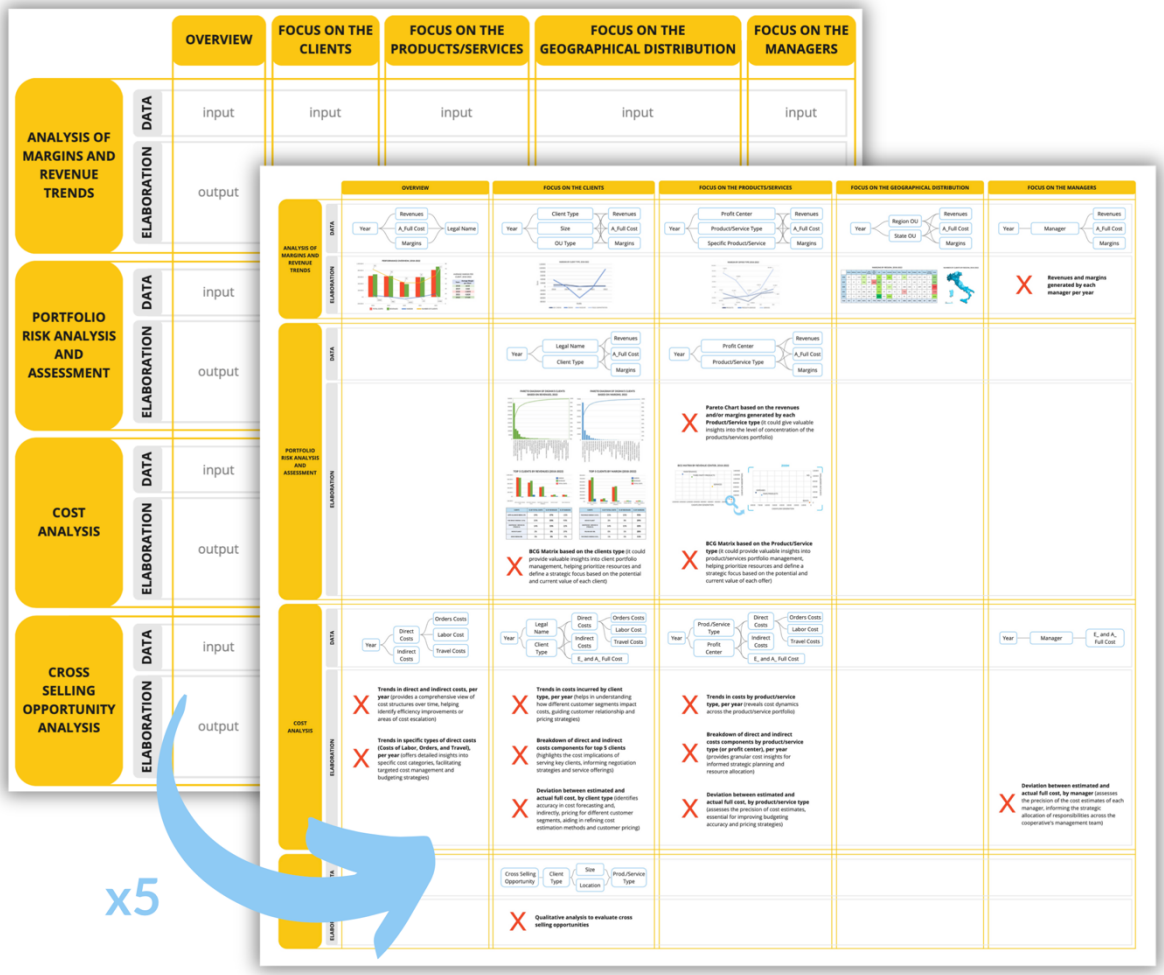


Figure 7.6 Monitoring Framework

These frameworks were designed to integrate seamlessly with the overarching strategic objectives of Emisfera, ensuring that each business unit's performance could be scrutinized and managed effectively. They were crafted not as standalone elements but as fundamental components of a broader System that aligns operational activities with strategic imperatives.

The intricacies of constructing these frameworks have been extensively covered in Chapter 5, and thus will not be reiterated in detail here. Our intent, in this case, is just to underscore the end result, because it's from there that we derived the data requirements which set the stage for the upcoming section on the development of the client and order registration frameworks.

7.4 Development of the Client and Offer/Order Registration Frameworks

Upon reaching this stage of our analysis, we had gathered all the necessary information to develop an efficient and effective framework for the registration of Emisfera's clients and offers/orders. We engineered a system to meet all of Emisfera's data requirements, facilitating informed decision-making and streamlining everyday operations. Our ambition was to craft an exemplary blueprint, the epitome of efficiency and analytical depth, tailored to accommodate the full spectrum of analyses that had captured the cooperative's interest, while supporting pricing decisions.

To ensure clarity and minimize repetition, in this chapter we will present only Digima's frameworks. For those interested in a more comprehensive examination, the full suite of frameworks, each customized for a specific BU and presented in its original form, can be found in Appendix C.

The final framework for what concerns the registration of Digima's clients, is reported in Figure 7.7.

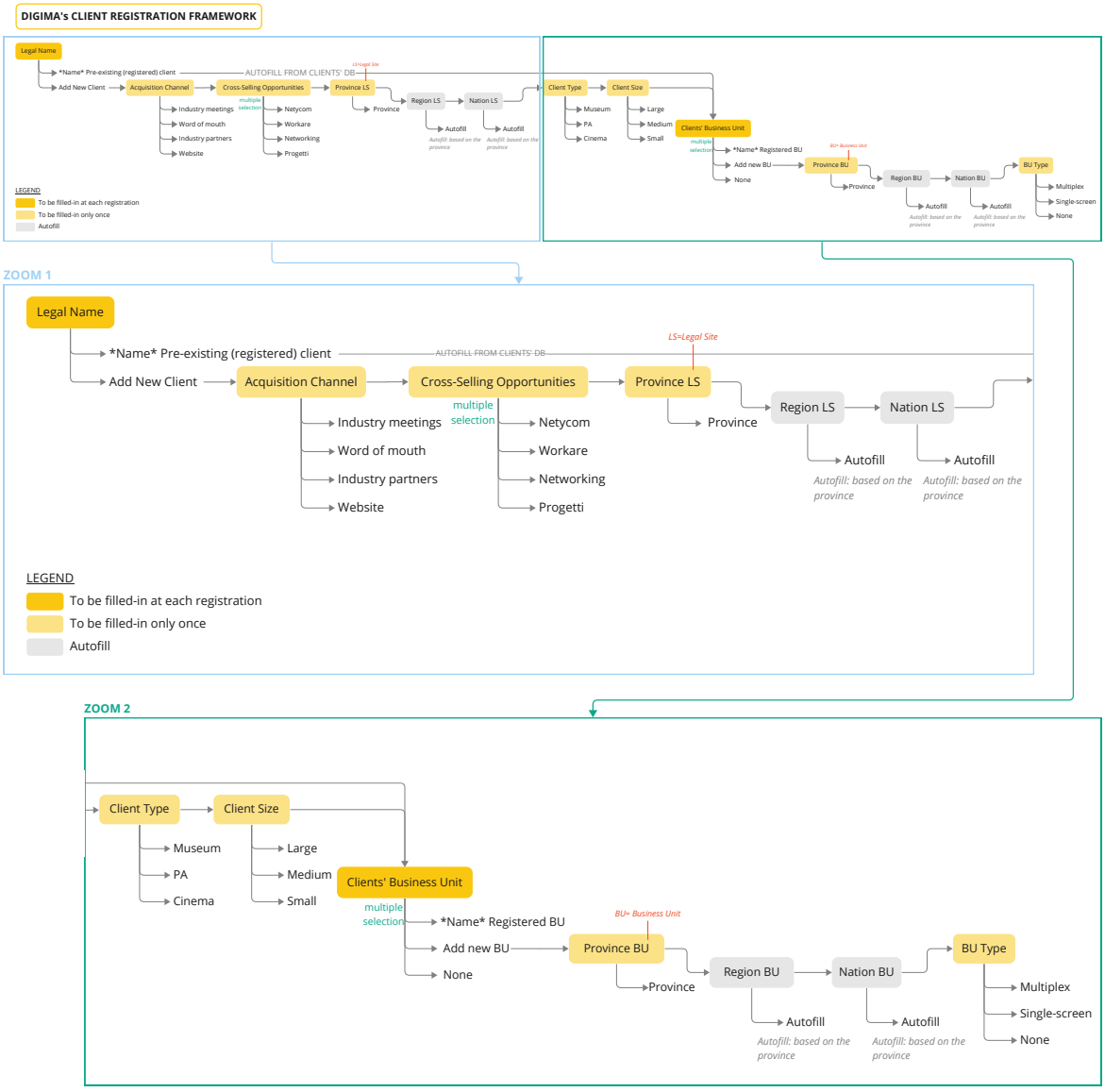


Figure 7.7 Digima's Client Registration Framework

We designed a comprehensive framework also for the offer/order registration process, the details of which are split across Figures 7.8 and 7.9, for enhanced readability.

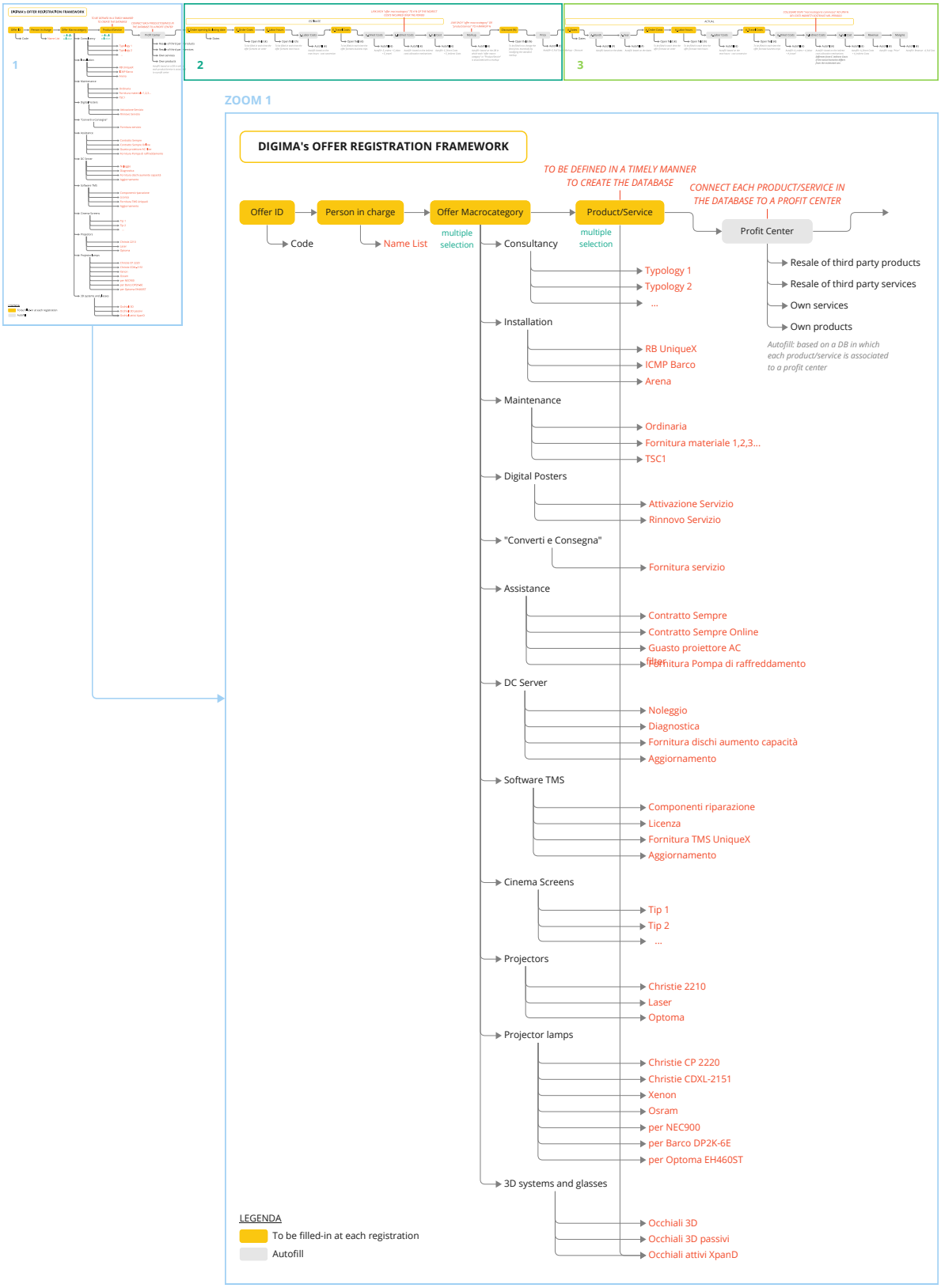


Figure 7.8 Digima's Offer Registration Framework (1)

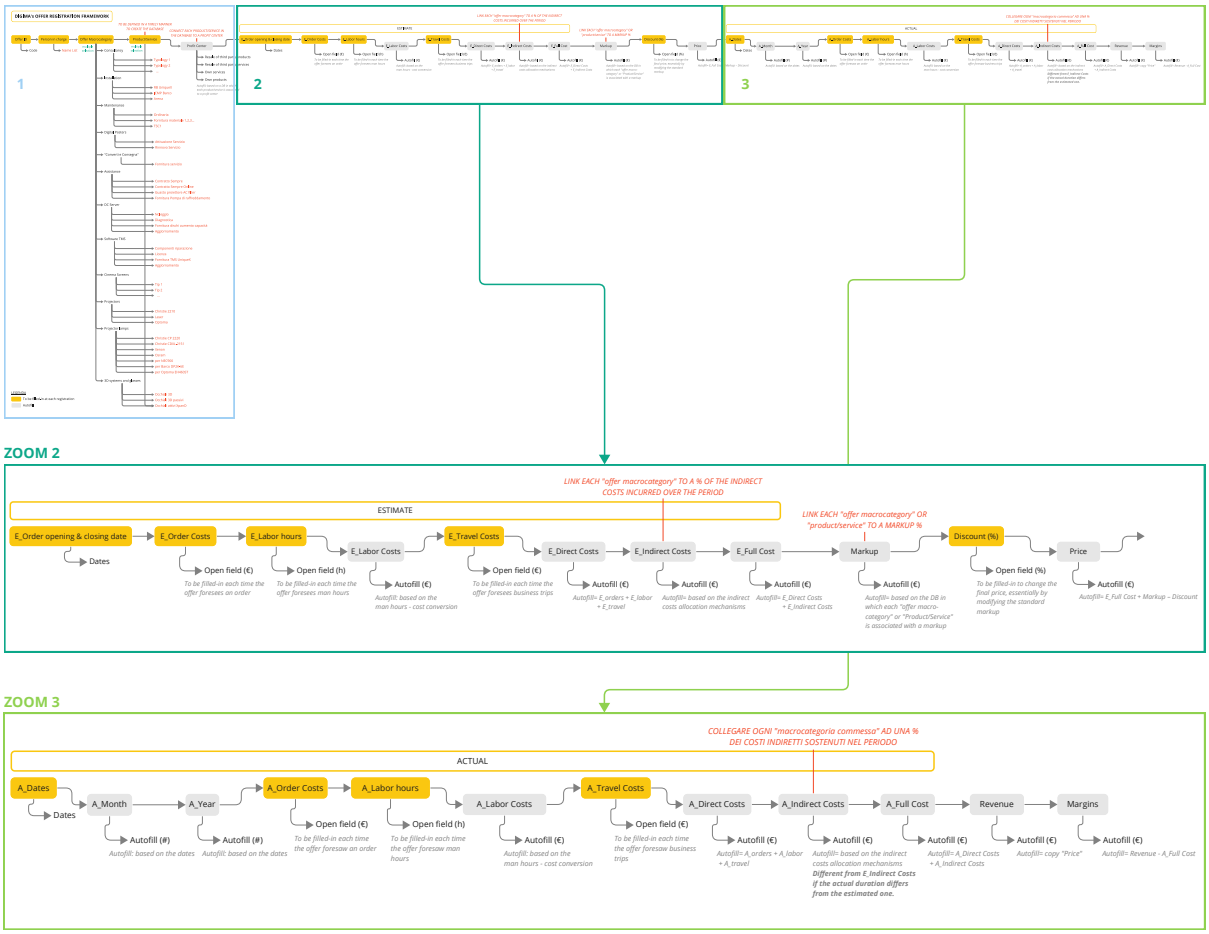


Figure 7.9 Digima's Offer/Order Registration Framework (2)

When introducing these frameworks to the cooperative, we described them as 'ideal'—not to suggest that they are merely theoretical constructs, but to emphasize that they should be viewed as long-term goals. Objectives to be attained through careful, incremental changes, each assessed for its cost-benefit impact before implementation. This approach underscores the notion that achieving the 'ideal' state is a gradual process, marked by deliberate and manageable steps.

This is not only because it requires huge investments in terms of time and money, but also because it must be welcomed and digested by all members of the cooperative, which clearly requires time.

Given these considerations, the consultancy efforts of the next months (from April to July) will focus on formulating a strategic plan for the model's gradual implementation. This initiative will be highly collaborative, involving the in-depth engagement of BU managers to refine and adapt the framework to Emisfera's operational realities. Indeed, the current dropdown menu options, presenting a range of possible answers for each field, are deeply provisional and meant just to convey the overall sense. They will need to be refined during the implementation phase.

The overall goal is to ensure that the final framework won't only be conceptually sound but also pragmatically viable, seamlessly integrating with Emisfera's dynamic operational environment.

7.5 Definition of the Mechanisms for Indirect Costs Registration and Allocation

To operationalize the abovementioned frameworks, it's imperative to delineate clear mechanisms for the allocation of indirect costs. These are pivotal for the computation of the full cost, which underpins the proposed pricing model.

Emisfera's business units' indirect costs can be divided in two main categories:

- General Indirect Costs, the overheads paid by the business units to Emisfera for utilizing the services provided by cross-functional departments such as executive management, administration, and human resources.
- Internal Indirect Costs, the indirect costs that each BU incurs independently.

At present, each BU registers its internal indirect costs attributing them to a fictitious client, named after the respective BU, which displays only costs and no revenues.

Albeit unconventional, this method does not pose a direct issue itself. Complications arise if, like in Emisfera's case, the system lacks the capability to elucidate the specifics of these recorded costs. This limitation hampers any form of detailed indirect costs analysis, permitting only broad, aggregated evaluations.

The absence of a distinct categorization for internal indirect costs also hinders their appropriate allocation.
In fact, BU managers currently do not allocate indirect costs to specific products or services. In the pricing phase, they rely solely on estimates of direct costs and apply a substantial markup, guided by intuition and past experience, in the hope of covering the indirect costs and retain some margin. Our examination of the BUs' performance over the last five years clearly showed that this methodology has led to several problems.

Consistent with the approach in previous chapters, to ensure clarity while reducing redundancy, this chapter will use Digima as an illustrative case study. For those interested in a more thorough analysis, the complete set of indirect cost registration and allocation mechanisms, individually tailored for each BU and presented in their original form, can be found in Appendix D.

Table 7.1 outlines all indirect costs sustained by Digima from the beginning of 2022 through the first eight months of 2023. For the purpose of our analysis, the exact figures are secondary. Our focus should be on the categorization of the line items, which appear inadequately defined, if not outright misclassified. Indeed, the costs are recorded with unstructured description lines within certain categories that, despite aiming to be relevant across BUs and projects, prove to be ill-suited for any specific BU.

	Costi	Ricavi
DIGIMA S.R.L.	**444.975,34 €**	**0,00 €**
A04 (Digima)	**319.285,73 €**	**0,00 €**
R1 (manutenzioni)	**6.517,99 €**	**0,00 €**
Attività interne	6.517,99 €	0,00 €
R2 (prestazioni)	**281.530,22 €**	**0,00 €**
Attività commerciale	46.212,20 €	0,00 €
Attività interne	26.442,47 €	0,00 €
Contratto di collaborazione Sergio Carmine	2.300,00 €	0,00 €
Corso di formazione proiettori Barco Laser	7.986,55 €	0,00 €
Costi da Emisfera	196.323,58 €	0,00 €
Digima - materiali e servizi - NO INVESTIMENTI	20,59 €	0,00 €
Magazzino 2021-2023	1.610,33 €	0,00 €
Progetto introduzione nuovo sistema di ticketing	634,50 €	0,00 €
R4 (prodotti terzi)	**17.957,27 €**	**0,00 €**
Digima - materiali e servizi - NO INVESTIMENTI	98,98 €	0,00 €
Magazzino 2021-2023	17.268,29 €	0,00 €
PNRR 2021 - Progetto Cinema in classe A	590,00 €	0,00 €
R5 (spese)	**3.939,99 €**	**0,00 €**
Costi da Emisfera	1.603,31 €	0,00 €
Magazzino 2021-2023	2.336,68 €	0,00 €
R8 (servizi)	**9.340,27 €**	**0,00 €**
Attività interne	9.340,27 €	0,00 €
IP11 (investimenti sistemi)	**4.939,37 €**	**0,00 €**
R4 (prodotti terzi)	**4.935,37 €**	**0,00 €**
Digima - Investimenti Hardware e attrezzature	4.935,37 €	0,00 €
R5 (spese)	**4,00 €**	**0,00 €**
Digima - Investimenti Hardware e attrezzature	4,00 €	0,00 €
P00 (Direzione)	**23.206,52 €**	**0,00 €**
R4 (prodotti terzi)	**8.517,53 €**	**0,00 €**
CineEuope 2023 Trade Show Barcellona	1.067,53 €	0,00 €
Direzione Digima	7.450,00 €	0,00 €
R8 (servizi)	**14.688,99 €**	**0,00 €**
Cine 2022 Trade Show Riccione	169,70 €	0,00 €
Cine 2023 Trade Show Riccione	5.721,50 €	0,00 €
CineEuope 2022 Trade Show Barcellona	1.032,26 €	0,00 €
CineEuope 2023 Trade Show Barcellona	18,68 €	0,00 €
Direzione Digima	5.916,85 €	0,00 €
Giornate Professionali 2022 Trade Show Sorrento	1.830,00 €	0,00 €
P01 (Amministrazione)	**92.350,62 €**	**0,00 €**
R2 (prestazioni)	**75.837,60 €**	**0,00 €**
AMMINISTRAZIONE	75.837,60 €	0,00 €
R4 (prodotti terzi)	**417,63 €**	**0,00 €**
AMMINISTRAZIONE	417,63 €	0,00 €
R8 (servizi)	**16.095,39 €**	**0,00 €**
AMMINISTRAZIONE	14.159,39 €	0,00 €
Centralino aziendale	1.380,00 €	0,00 €
Iscrizione Registro A.E.E.	556,00 €	0,00 €
P03 (Risorse Umane)	**5.193,10 €**	**0,00 €**
R8 (servizi)	**5.193,10 €**	**0,00 €**
Formazione DIGIMA	1.038,00 €	0,00 €
Formazione DIGIMA 2023	69,38 €	0,00 €
Gestione risorse DIGIMA	363,15 €	0,00 €
Gestione risorse DIGIMA 2023	164,16 €	0,00 €
Paghe DIGIMA 2022	2.325,71 €	0,00 €
Paghe DIGIMA 2023	1.232,71 €	0,00 €

Internal indirect costs (years 2022-2023)

General indirect costs (years 2022-2023)

Table 7.1 Digima's Indirect Costs (2022-first 8 months of 2023)

Our proposal for the registration of Digima's internal indirect costs (Figure 7.10) seeks to refine Emisfera's current system, ensuring an accurate categorization of indirect cost types to facilitate the analyses foreseen by the Monitoring Framework.

As depicted in Figure 7.10, the proposed registration system continues to attribute these indirect costs to the fictitious client 'Digima', but the registration of this client and operation follows the newly developed framework. In particular, it requires to explicitly record the cost as an 'internal indirect cost' by selecting the corresponding option from the 'Offer Macrocategory' dropdown menu. Furthermore, it demands to clarify the specific type of internal indirect cost by choosing the appropriate option within the "products/services" field options.

These categories of internal indirect costs will then be distributed on the specific 'Offer Macrocategories' (or 'Product/Service') based on predetermined drivers proposed by the BUs managers. This will enable Emisfera to automate the allocation of these indirect costs and the consequent Full Cost computation.

Figures 7.10 and 7.11 showcase two different examples of allocation mechanisms, based on different levels of granularity. This proposal empowers each Business Unit to determine the specificity with which it wants to allocate its indirect costs.

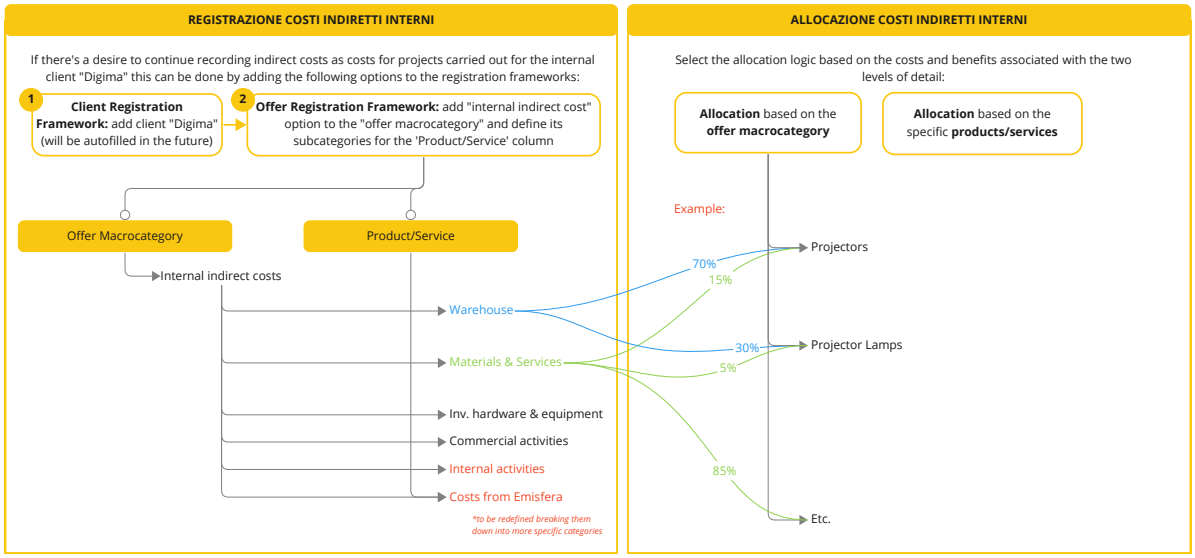


Figure 7.10 Digima's Internal Indirect Cost Registration and Allocation Method (1)

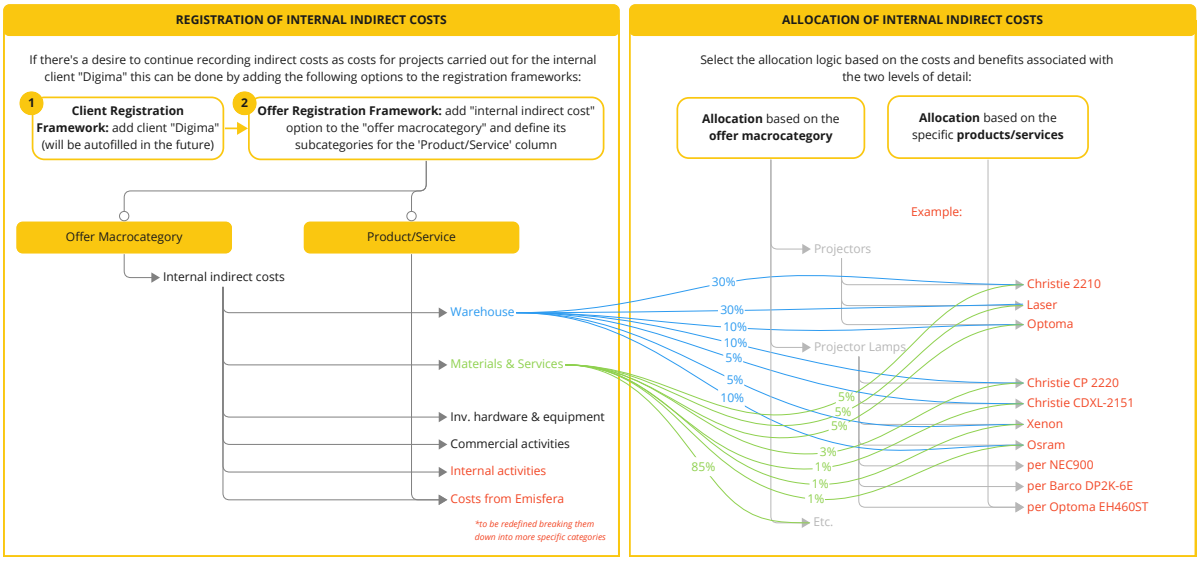


Figure 7.11 Digima's Internal Indirect Cost Registration and Allocation Method (2)

Regarding the registration of general indirect costs, as outlined in Figure 7.12, the proposed procedure mirrors that of the internal indirect costs, with the key distinction being the selection of "general indirect costs" instead of "internal indirect costs."

In terms of allocation, Business Units will need to decide whether to distribute these costs based on a standard predetermined percentage for each offer macrocategory or through case-specific drivers tailored to the unique circumstances of each project.

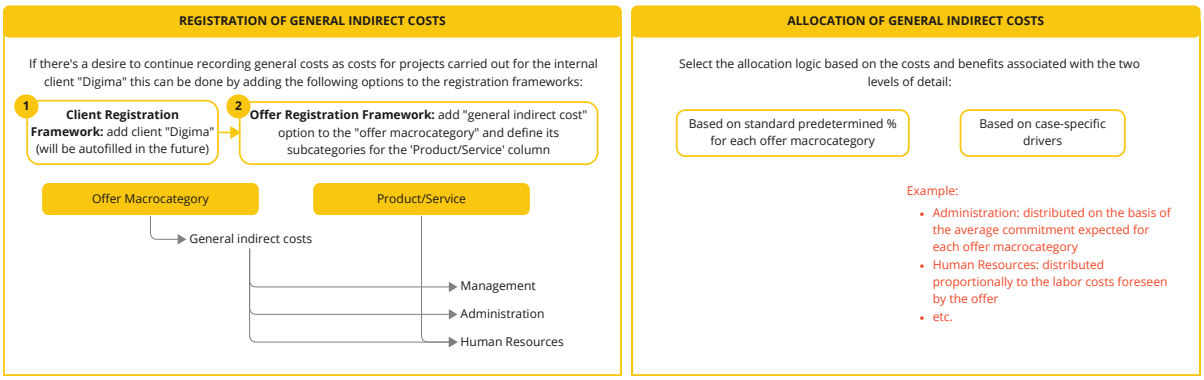


Figure 7.12 Digima's General Indirect Cost Registration and Allocation Method

8 Considerations on the Proposed Model

First and foremost, it's crucial to emphasize that the proposal for this new Management Control (MC) system is just one facet of a broader consultancy initiative led by the Department of Engineering and Production Management at Politecnico di Torino (DIGEP), in partnership with Emisfera. This broader consultancy project is anchored in a comprehensive vision aimed at catalyzing a holistic transformation within Emisfera, targeting the refinement of its operational, organizational, and business architectures. The project's scope goes beyond simple structural adjustments, delving into the sphere of innovation with the goal of uncovering and fostering new avenues for growth, thereby preparing Emisfera for the challenges and opportunities of the future.

This broader perspective underscores the fact that the proposed MC system is a cog in a larger mechanism of change. It is closely connected to a series of strategic interventions, designed to collectively enhance Emisfera's market stance, operational efficacy, and organizational cohesion.

Figure 8.1 presents a visual representation of the consultancy project's detailed blueprint, showcasing the interconnected steps planned to achieve the ambitious objective of revitalizing and redefining Emisfera.

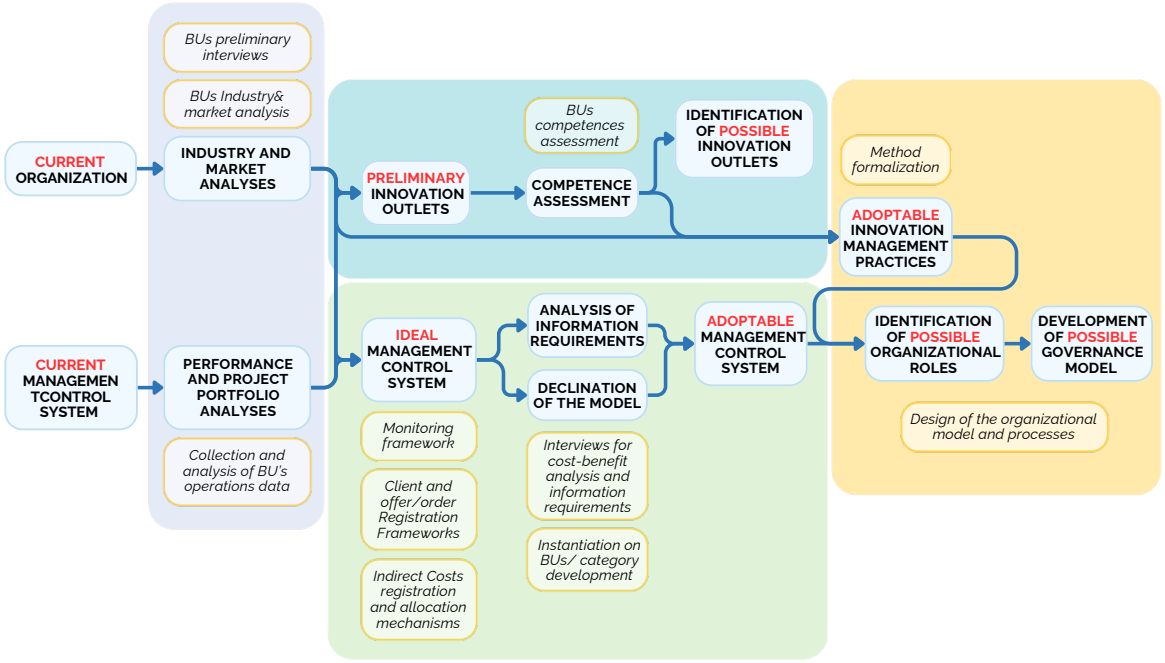


Figure 8.1 Visual Representation of the Consultancy Project's Modules – in purple and green the parts assessed in this thesis

8.1 Gradual Implementation Plan

As mentioned in the previous chapter, when introducing these models to the cooperative, we described them as 'ideal'—not to suggest that they are merely theoretical constructs, but to

emphasize that they should be viewed as long-term goals. Objectives to be attained through careful, incremental changes, each assessed for its cost-benefit impact.

This approach underscores the notion that achieving the 'ideal' state is a gradual process, marked by deliberate and manageable steps. This is essential not only because the implementation of a the MC system requires significant investments in terms of time and money, but also because it must be welcomed and digested by all members of the cooperative, which clearly requires time.

We envisioned the following macro-steps to ensure that the final MC system won't only be conceptually sound but also pragmatically viable:

- *Initial Phase – Refinement of the Model*: April to July 2024 will serve as a critical period focused on the strategic planning for the model's phased implementation. This stage will heavily involve Business Unit (BU) managers, ensuring the adaptation of the model to align with Emisfera's operational realities. The provisional nature of the current framework, especially the dropdown menu options in the client and offer/order registration frameworks, necessitates a collaborative refinement process. The objective during this phase is to transition from a conceptual model to a practical tool, harmonized with the cooperative's operational tempo.
- *Intermediate Step - Information System Redesign*: The focus will be on developing an information system architecture that is fully aligned with the demands of the new MC system. Given Emisfera's strong foundation in IT engineering, the cooperative possesses the intrinsic expertise required for this endeavor, but it will demand time and careful planning.
- *Final Phase - Integration and Adaptation:* This phase extends beyond technical refinements, it's about fostering a collective understanding and acceptance of the new system, underscoring the cooperative's foundational values of collaboration and mutual support. The integration of the new MC system will be an iterative process, with continuous feedback loops from all stakeholders, ensuring that the system not only supports but also enhances Emisfera's operational and strategic objectives.

8.2 Expected Benefits

The adoption of a tailored MC system within Emisfera is anticipated to herald a multitude of benefits, extending beyond mere operational efficiencies to encompass strategic enhancements.

- Strategic Decision-Making: Armed with a robust MC system, Emisfera's management will be empowered with actionable insights, facilitating informed strategic decisions that align with the cooperative's long-term objectives.

- Operational Efficiency: By streamlining processes and providing a clear framework for monitoring key performance indicators, the new system is expected to significantly enhance operational efficiency across all BUs.
- Innovation and Growth: The system's emphasis on data-driven decision-making and systematic data collection paves the way for innovation, identifying new opportunities for growth and competitive advantage.
- Cultural Cohesion: By embedding the principles of the MC system within the cooperative's fabric, a culture of continuous learning, collaboration, and innovation is fostered, reinforcing Emisfera's collective ethos.

8.3 Possible Obstacles

While the envisioned MC system holds great promise, its implementation is not without challenges. These obstacles, often rooted in the cooperative's structural and cultural dynamics, require careful navigation.

- *Cultural Resistance:* The most significant barrier may come from within, as changes to entrenched practices and systems can be met with skepticism or resistance. Ensuring unanimous support and active participation is crucial for the model's success.
- *Resource Allocation*: The deployment of the new system demands not only financial investment but also considerable time and effort from all members of the cooperative. Balancing these resource allocations with ongoing operations will be a delicate task.
- *Operational Disruptions:* The transition to a new MC system may temporarily disrupt established workflows and processes, necessitating a period of adjustment and recalibration.
- *Alignment with Cooperative Values*: Ensuring that the new system aligns with Emisfera's core values and principles is paramount. The model must enhance, rather than undermine, the cooperative's commitment to collective action and mutual support.

In conclusion, while the path to implementing the new MC system is fraught with challenges, the collaborative spirit and innovative drive of Emisfera's members provide a solid foundation for overcoming these obstacles. The journey towards this 'ideal' operational model, guided by a well-considered plan, holds the promise of transforming Emisfera into a more resilient, competitive, and forward-looking cooperative.

Conclusions

This thesis began in June 2023, targeting the ambitious goal of developing a new Management Control System for Emisfera by March 2024.

The work started with a detailed examination of the general structure of cooperative organizations, their historical evolution, and governing frameworks. This gave us insights into the rationale behind some of Emisfera's decisions, including its commitment to job retention regardless of cost, and its extensive involvement of stakeholders in decision-making processes. Without this contextual backdrop, such choices might have been mistakenly viewed as inefficiencies rather than deliberate value-driven actions. Understanding the role of Italian cooperatives in the national economy further highlighted the strengths and weaknesses of Emisfera's organizational model.

Our preliminary analysis went on with the interviews of the business unit managers, which not only facilitated data collection for the subsequent Market and Industry Analyses but also established direct connections with the cooperative's members, fostering open communication and mutual exchange, vital for any successful consulting project.

The subsequent detailed investigation of the competitive and market dynamics across Emisfera's diverse business units, alongside an analysis of strategic maneuvers by leading competitors, redirected the focus towards understanding Emisfera's operational history and current practices. In this context, the creation of a comprehensive database enabled us to address the intricacies brought forth by several internal management transitions and differences across business units. This database facilitated an exhaustive review of the performance of each business unit over the last five years, applying a blend of Innovation Management and Management Control methodologies to evaluate financial performance, client and product/service portfolios, and to identify strategic opportunities and threats.

The substantial diversification among business units, at first glance, seemed like a weakness because it led to the duplication of commercial efforts and marketing champaigns, and blurred Emisfera's market specialization and positioning. However, a deeper examination of the business units' performances revealed that this strategy has been a cornerstone of Emisfera's resilience over the years. Indeed, through its five business units, Emisfera has strategically differentiated its product offerings and customer base. For instance, while the Digima –catering to cinemas– faced significant challenges during the pandemic lockdowns, Netycom –a digital agency– found new opportunities and growth. This is just an example, but it underscores the advantages of having diverse and relatively independent business units, which, despite introducing operational complexities, have enabled Emisfera to withstand and overcome many difficulties.

While deepening our understanding of all BUs, these analyses shed light on several shortcomings of the current Management Control system, from indirect cost allocation issues to the lack of structured pricing procedures and standardized classifications for products, services, and clients.

To address these shortcomings and lay a solid foundation for the development of the new MC system, we focused on identifying control elements and dimensions essential for supporting management and evaluating the performance of each business unit.
We crafted a diagram that distills Emisfera's complex operations into five fundamental control elements: costs, revenues, products/services, clients, and time, mapping their dimensions on axes that range from highly specific to broadly aggregated. This diagram, far from being merely illustrative, acted as a dynamic tool, fostering exploration into new analytical domains with the potential to greatly enhance Emisfera's strategic flexibility and operational effectiveness. It also sparked a discussion on the ideal granularity of data, highlighting the imperative to strike a careful balance between the benefits of detailed insights and the costs of data collection.

Based on the insights gained from these considerations, we developed a general Monitoring Framework that was adapted to each BU's unique characteristics. This framework was designed not as standalone element but as fundamental component of a broader system that aligns operational activities with strategic imperatives.

Building on this, we proceeded to design the client and offer/order registration frameworks. We engineered a system to meet all of Emisfera's data requirements, facilitating informed decision-making and streamlining everyday operations. Notably, two diagrams for each BU were developed, outlining the fields to be filled-in during the registration of clients and orders, with a dropdown menu proposal listing available options for each field. These option lists are provisional and will need to be refined during the implementation phase (scheduled between May and July 2024).
In this phase, also the indirect cost allocation logics and drivers will need to be validated in collaboration with the business unit managers. Once validated, managers will have the Full Cost of each product/service at their disposal to support efficient and effective pricing strategies.

Emisfera's Board of Directors has recognized the potential of the new Management Control system proposal and is therefore committed to invest the necessary resources to implement the model.

Beyond the operational strategy for its implementation, the efficacy of the model hinges on its cultural assimilation within the organization. Without unanimous support and active participation, the model may not yield the anticipated outcomes. However, for an organization grounded in the principles of collaboration and collective action, securing this level of commitment should be well within reach.

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Oggi mi trovo di fronte alla dolce amarezza di un capitolo che si chiude, portando con sé ricordi, sfide e inestimabili insegnamenti.

Tra i momenti che hanno segnato questa avventura, quelli che brillano per il loro impatto sono accumunati da un elemento, o meglio, una persona: la Professoressa Montagna. La sua determinazione e passione sono state il motore di un cambiamento radicale nella mia traiettoria accademica e personale. Oltre ad essere stata una mentore eccezionale, ha incarnato un modello di dedizione e integrità che continuerà a ispirarmi nei futuri capitoli della mia vita.

Se oggi mi appresto a varcare la soglia di nuove avventure, porto con me il peso della gratitudine per una guida che ha saputo vedermi non solo come studentessa, ma come persona.

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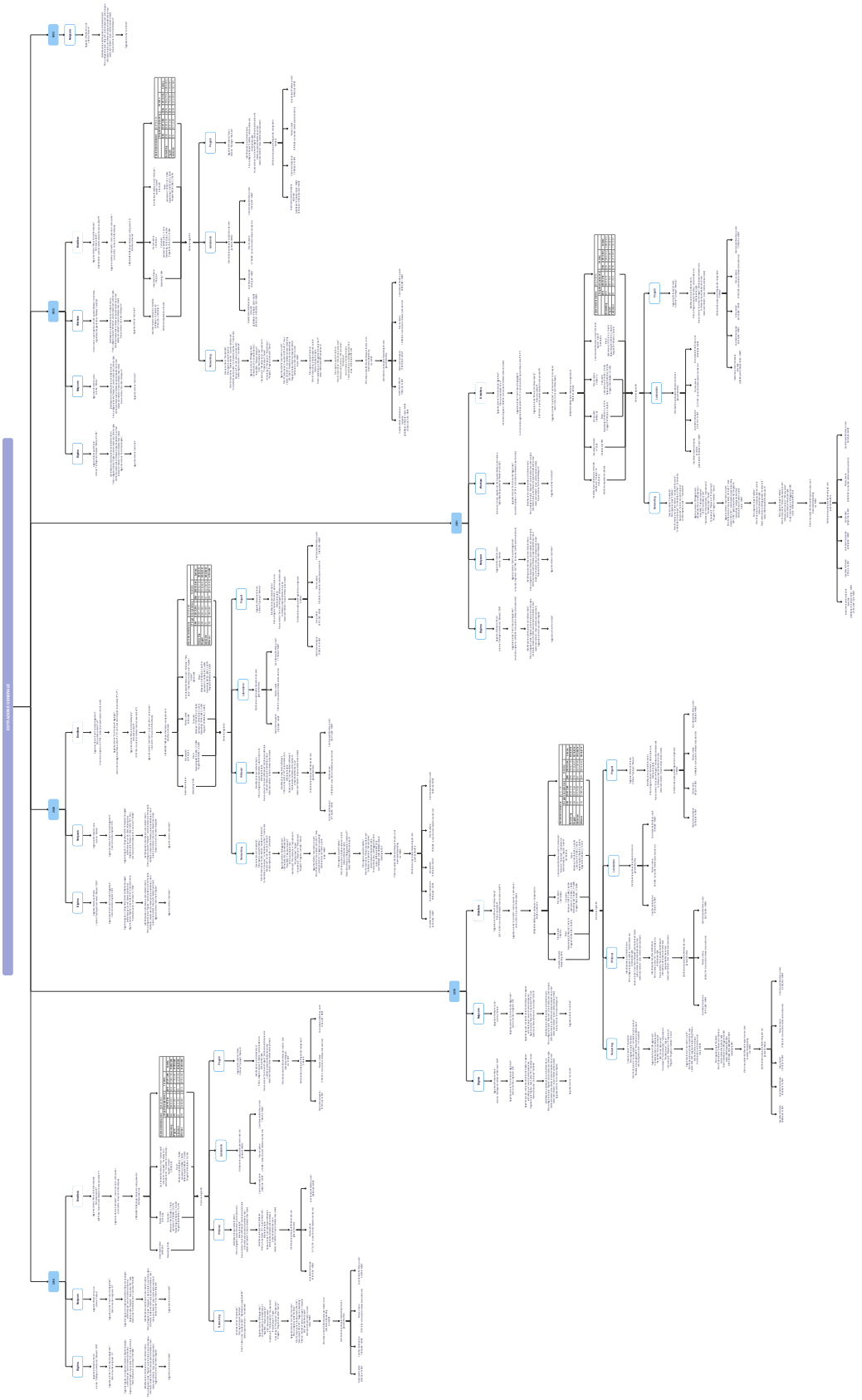
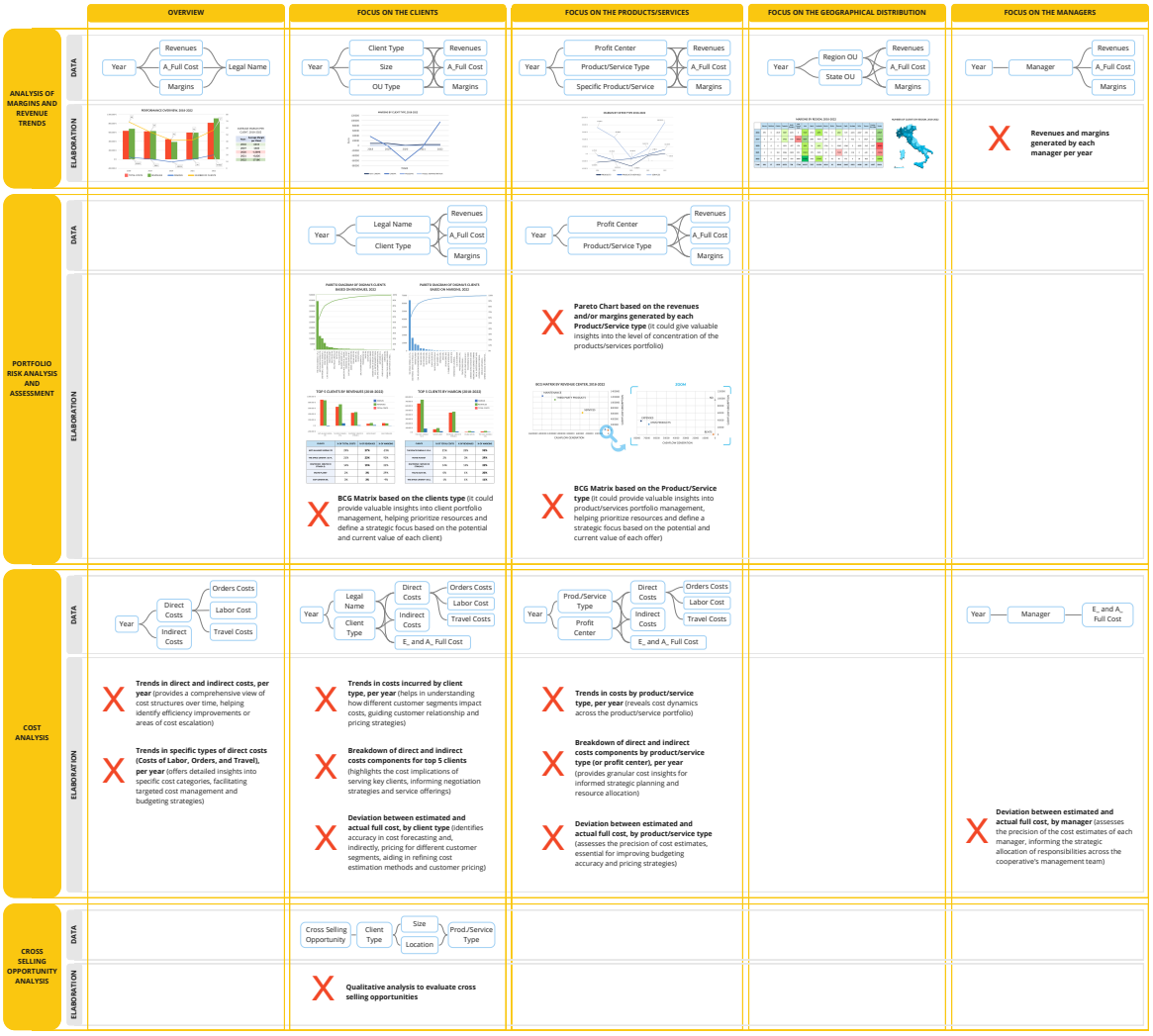
Appendix

Appendix A – DB Construction Procedure

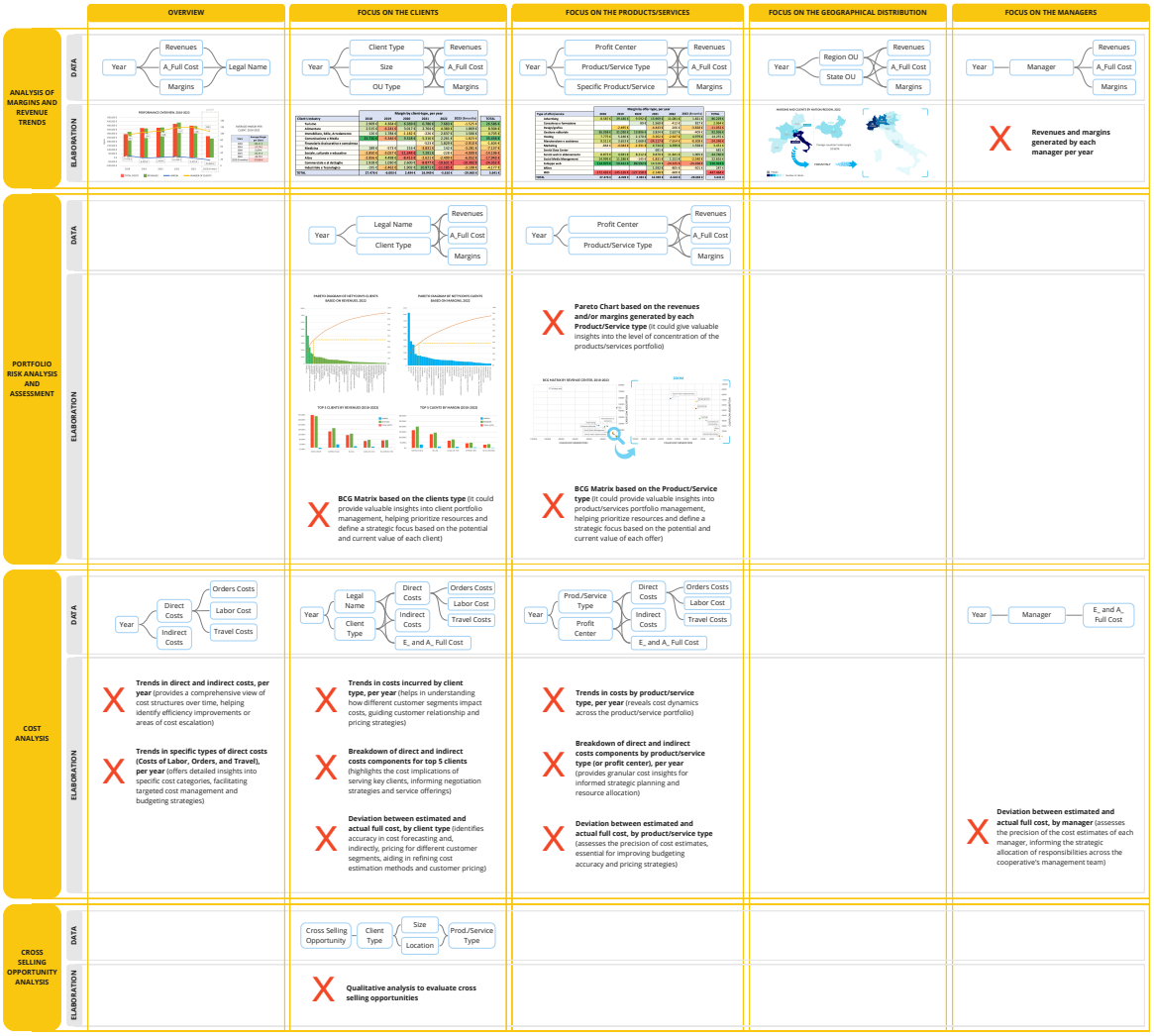


Appendix B – Monitoring Framework

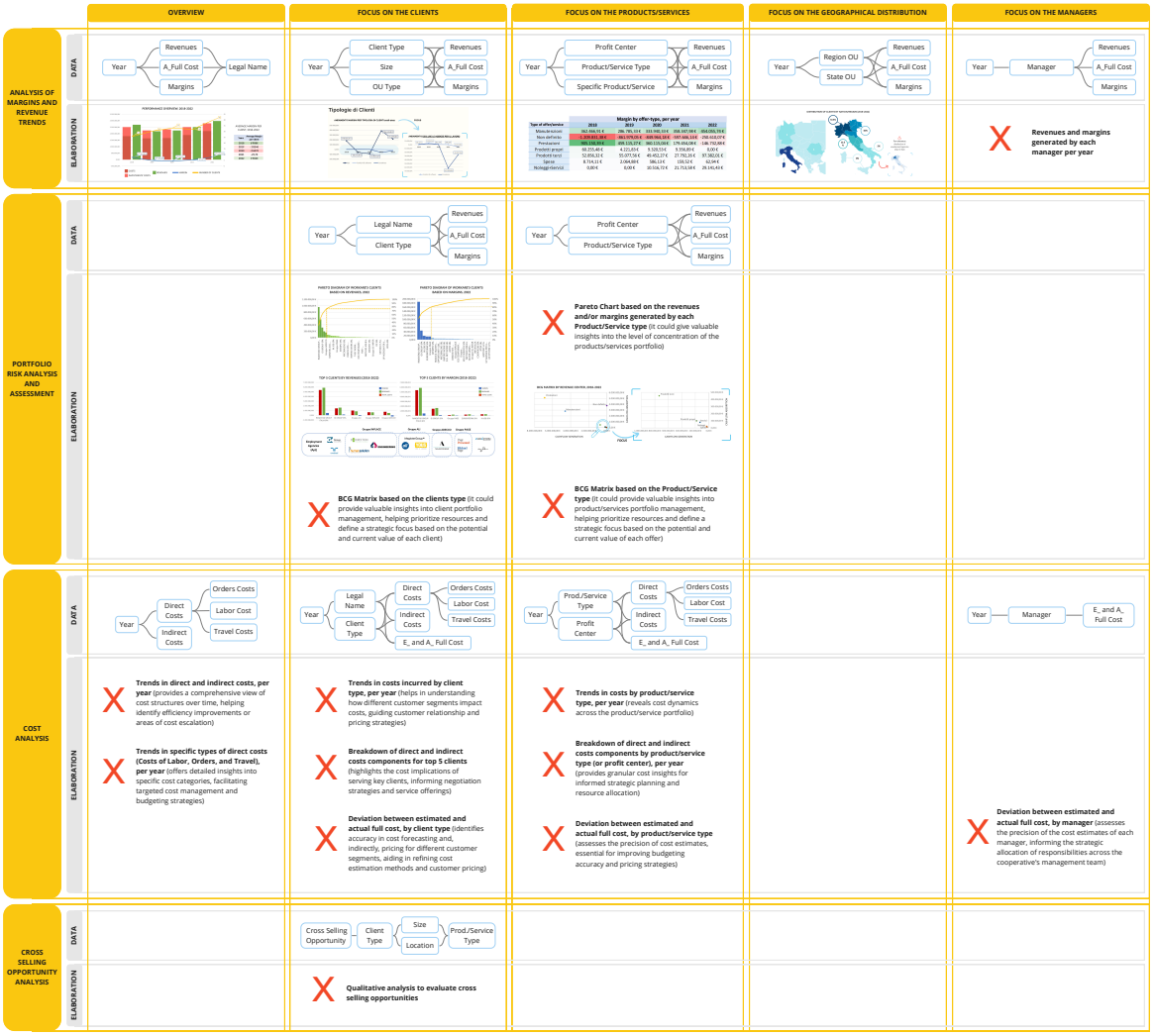
B.1 Digima



B.2 Netycom


OVERVIEW
FOCUS ON THE CLIENTS
FOCUS ON THE PRODUCTS/SERVICES
FOCUS ON THE GEOGRAPHICAL DISTRIBUTION
FOCUS ON THE MANAGERS
ANALYSIS OF MARGINS AND REVENUE TRENDS
DATA
ELABORATION
Year
Revenues
A_Full Cost
Margins
Legal Name
Client Type
Size
OU Type
Profit Center
Product/Service Type
Specific Product/Service
Region OU
State OU
Manager
Revenues and margins generated by each manager per year
PORTFOLIO RISK ANALYSIS AND ASSESSMENT
Pareto Chart based on the revenues and/or margins generated by each Product/Service type (it could give valuable insights into the level of concentration of the products/services portfolio)
BCG Matrix based on the clients type (it could provide valuable insights into client portfolio management, helping prioritize resources and define a strategic focus based on the potential and current value of each client)
BCG Matrix based on the Product/Service type (it could provide valuable insights into product/services portfolio management, helping prioritize resources and define a strategic focus based on the potential and current value of each offer)
COST ANALYSIS
Direct Costs
Indirect Costs
Orders Costs
Labor Cost
Travel Costs
Prod./Service Type
Profit Center
E_ and A_ Full Cost
Trends in direct and indirect costs, per year (provides a comprehensive view of cost structures over time, helping identify efficiency improvements or areas of cost escalation)
Trends in specific types of direct costs (Costs of Labor, Orders, and Travel), per year (offers detailed insights into specific cost categories, facilitating targeted cost management and budgeting strategies)
Trends in costs incurred by client type, per year (helps in understanding how different customer segments impact costs, guiding customer relationship and pricing strategies)
Breakdown of direct and indirect costs components for top 5 clients (highlights the cost implications of serving key clients, informing negotiation strategies and service offerings)
Deviation between estimated and actual full cost, by client type (identifies accuracy in cost forecasting and, indirectly, pricing for different customer segments, aiding in refining cost estimation methods and customer pricing)
Trends in costs by product/service type, per year (reveals cost dynamics across the product/service portfolio)
Breakdown of direct and indirect costs components by product/service type (or profit center), per year (provides granular cost insights for informed strategic planning and resource allocation)
Deviation between estimated and actual full cost, by product/service type (assesses the precision of cost estimates, essential for improving budgeting accuracy and pricing strategies)
Deviation between estimated and actual full cost, by manager (assesses the precision of the cost estimates of each manager, informing the strategic allocation of responsibilities across the cooperative's management team)
CROSS SELLING OPPORTUNITY ANALYSIS
Cross Selling Opportunity
Client Type
Size
Location
Prod./Service Type
Qualitative analysis to evaluate cross selling opportunities

B.3 Workare


OVERVIEW
FOCUS ON THE CLIENTS
FOCUS ON THE PRODUCTS/SERVICES
FOCUS ON THE GEOGRAPHICAL DISTRIBUTION
FOCUS ON THE MANAGERS
ANALYSIS OF MARGINS AND REVENUE TRENDS
DATA
ELABORATION
Year
Revenues
A_Full Cost
Margins
Legal Name
Client Type
Size
OU Type
Profit Center
Product/Service Type
Specific Product/Service
Region OU
State OU
Manager
Revenues and margins generated by each manager per year
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Direct Costs
Indirect Costs
Orders Costs
Labor Cost
Travel Costs
Prod./Service Type
Profit Center
E_ and A_ Full Cost
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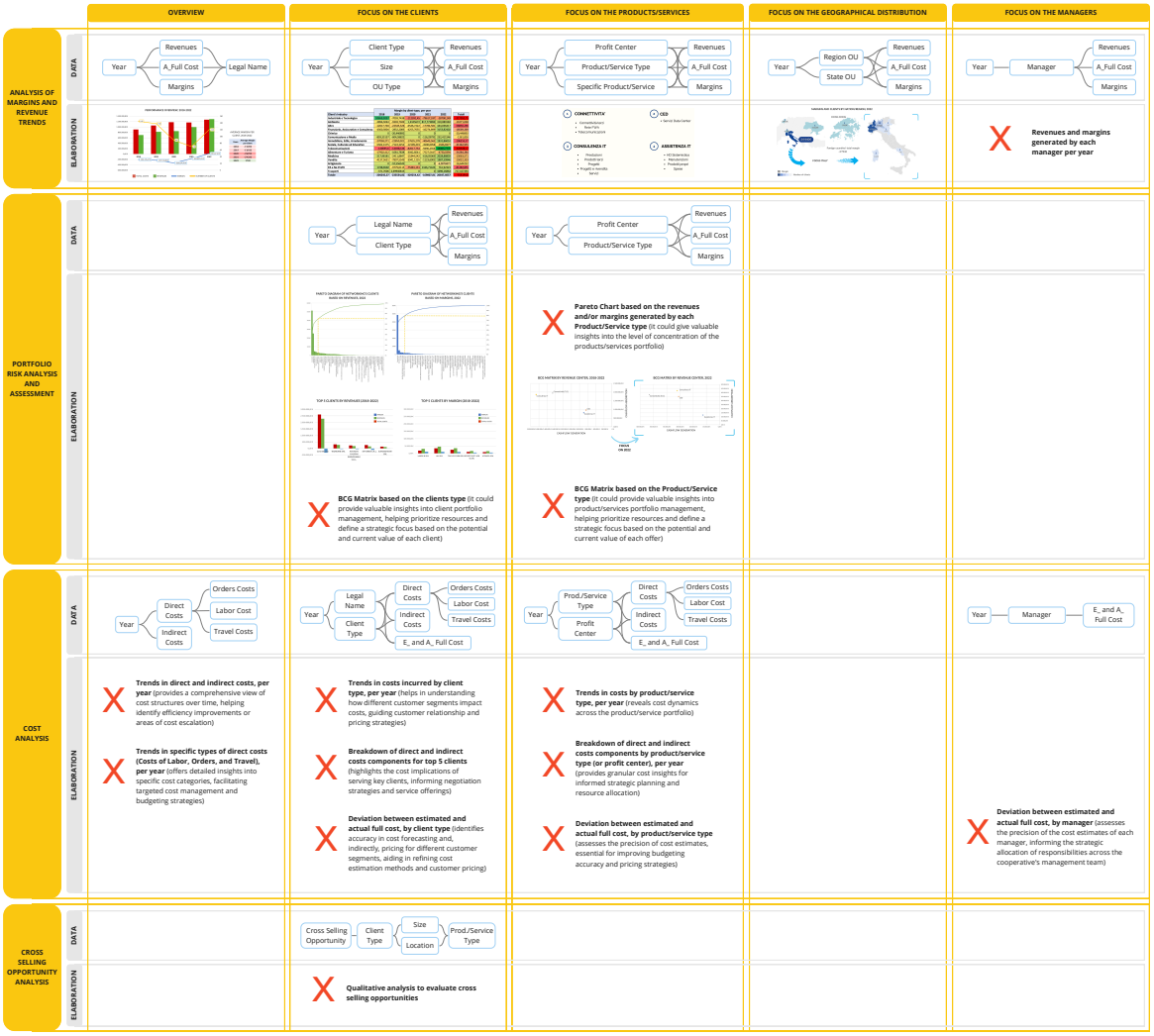
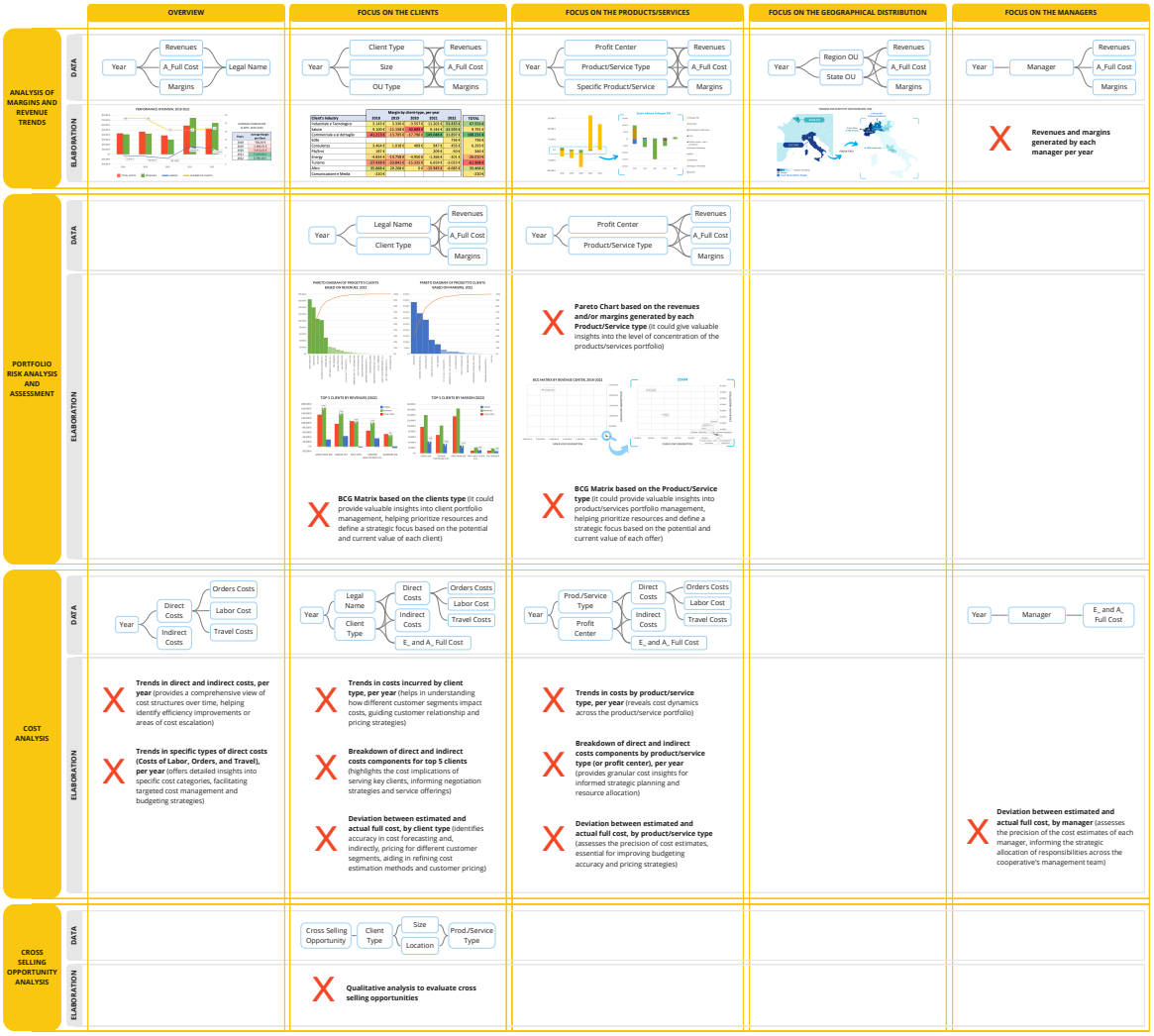
Deviation between estimated and actual full cost, by manager (assesses the precision of the cost estimates of each manager, informing the strategic allocation of responsibilities across the cooperative's management team)
CROSS SELLING OPPORTUNITY ANALYSIS
Cross Selling Opportunity
Client Type
Size
Location
Prod./Service Type
Qualitative analysis to evaluate cross selling opportunities

B.4 Networking



B.5 Progetti


OVERVIEW
FOCUS ON THE CLIENTS
FOCUS ON THE PRODUCTS/SERVICES
FOCUS ON THE GEOGRAPHICAL DISTRIBUTION
FOCUS ON THE MANAGERS
ANALYSIS OF MARGINS AND REVENUE TRENDS
PORTFOLIO RISK ANALYSIS AND ASSESSMENT
COST ANALYSIS
CROSS SELLING OPPORTUNITY ANALYSIS
DATA
ELABORATION
Year
Revenues
A_Full Cost
Margins
Legal Name
Client Type
Size
OU Type
Profit Center
Specific Product/Service
Product/Service Type
Region OU
State OU
Manager
Direct Costs
Indirect Costs
Orders Costs
Labor Cost
Travel Costs
Legal Name
Client Type
Prod./Service Type
Profit Center
E_ and A_ Full Cost
Cross Selling Opportunity
Location
Revenues and margins generated by each manager per year
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BCG Matrix based on the clients type (it could provide valuable insights into client portfolio management, helping prioritize resources and define a strategic focus based on the potential and current value of each client)
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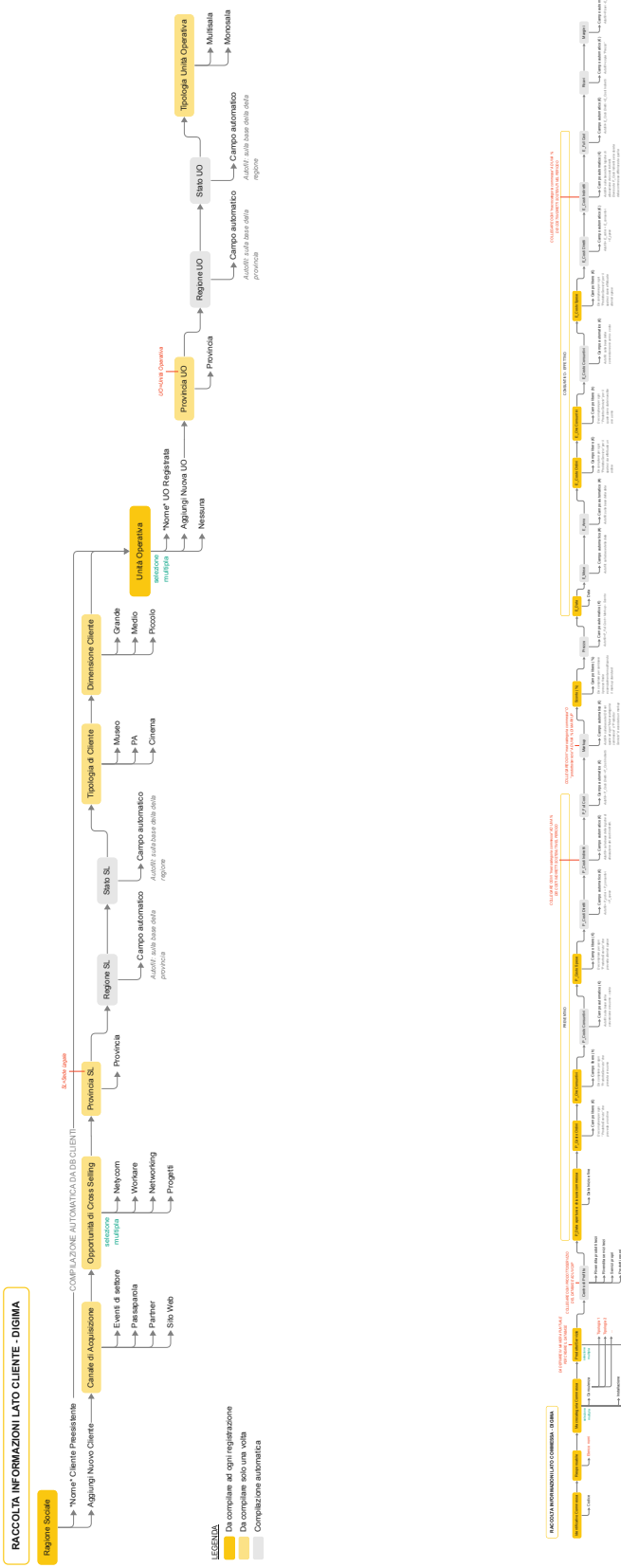
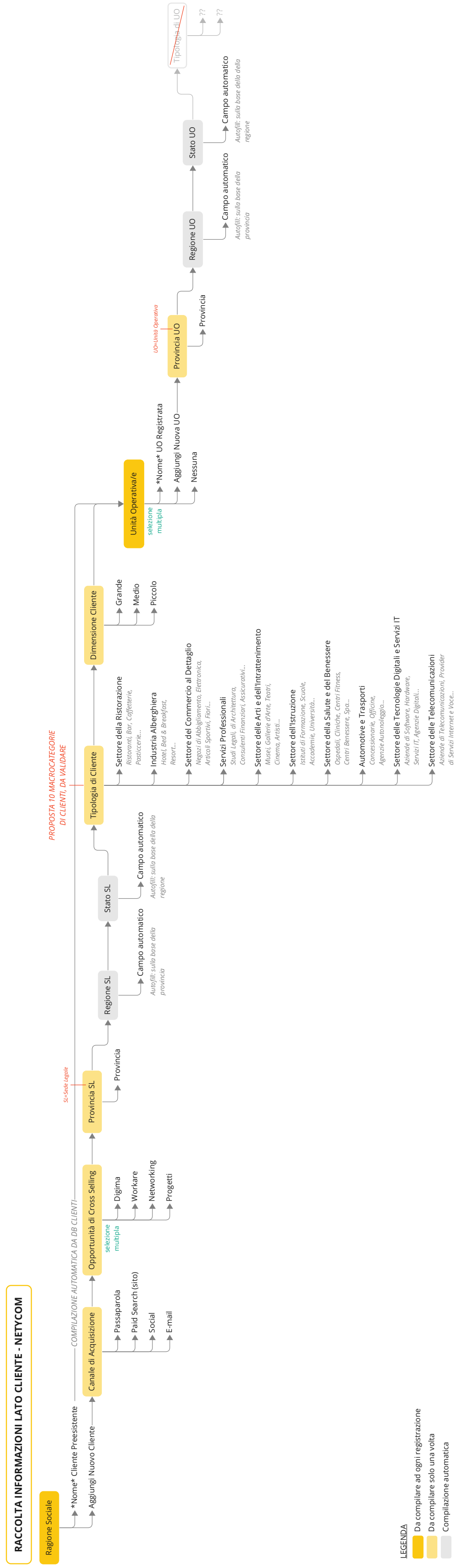
Deviation between estimated and actual full cost, by manager (assesses the precision of the cost estimates of each manager, informing the strategic allocation of responsibilities across the cooperative's management team)
Qualitative analysis to evaluate cross selling opportunities

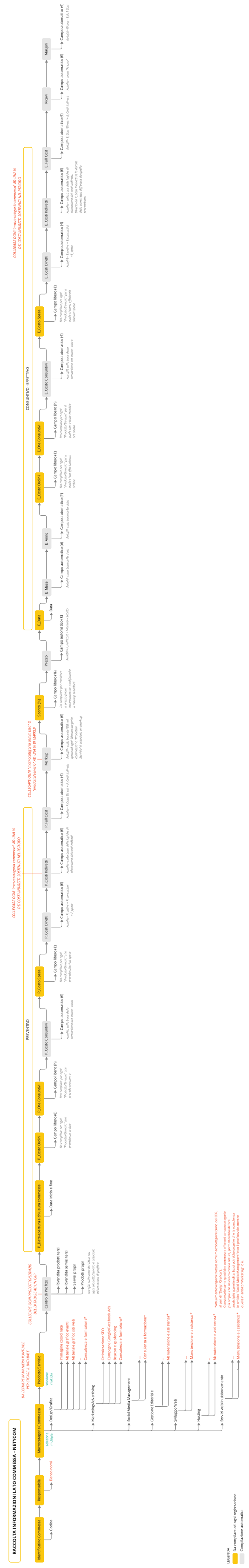
Appendix C – Client and Order Registration Frameworks

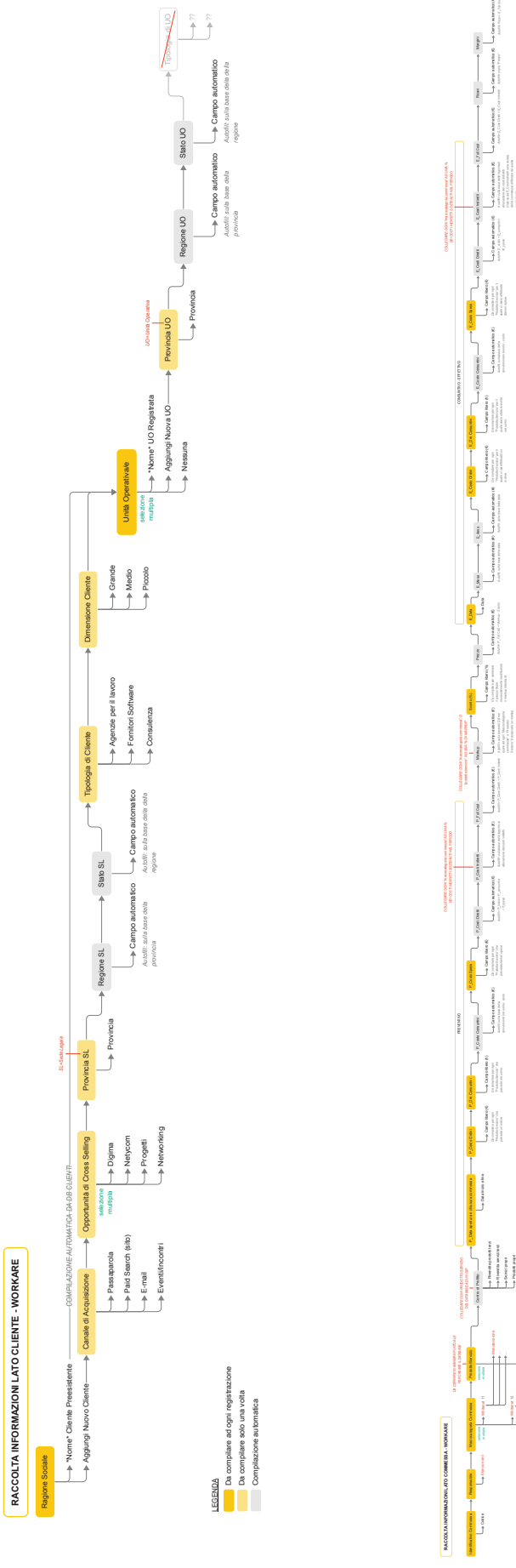
C.1 Digima



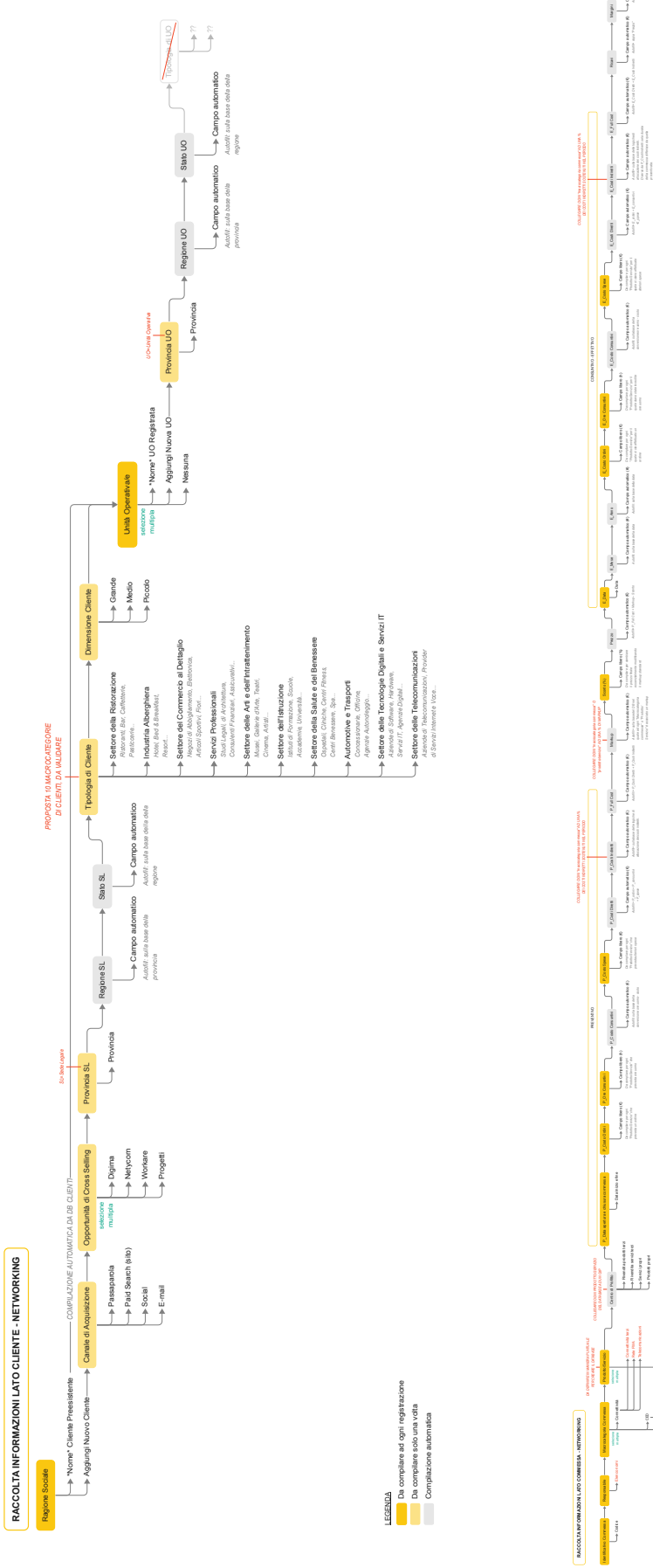
C.2 Netycom

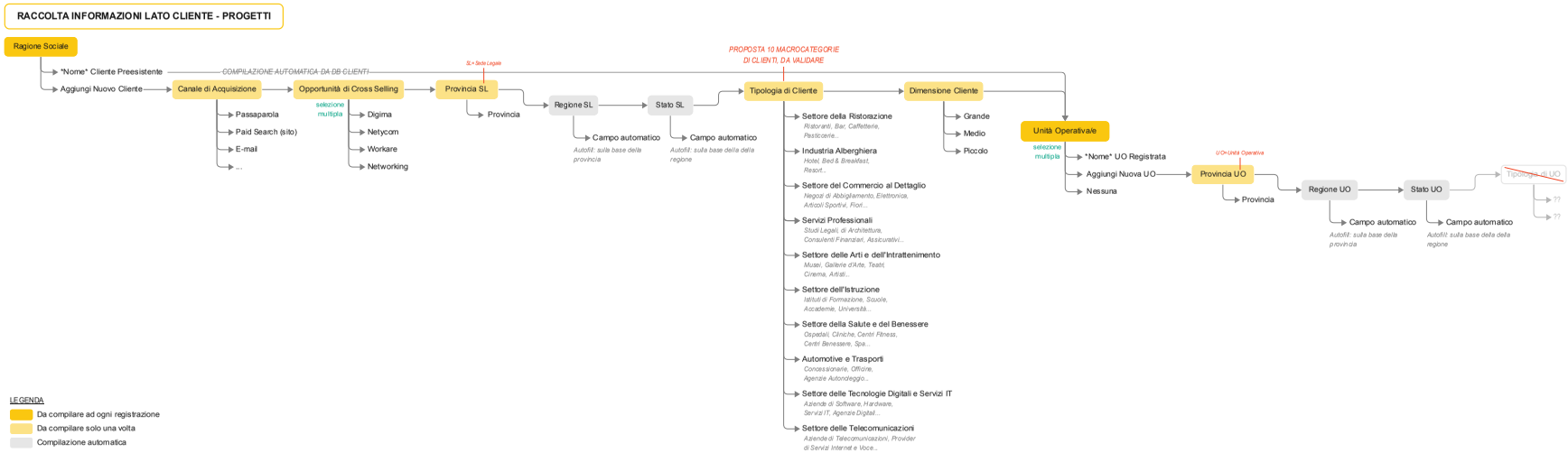

RACCOLTA INFORMAZIONI LATO CLIENTE - NETYCOM
Ragione Sociale
Nome Cliente Preesistente
Aggiungi Nuovo Cliente
COMPILAZIONE AUTOMATICA DA DB CLIENTI
Canale di Acquisizione
Passaparola
Paid Search (sito)
Social
E-mail
Opportunità di Cross Selling
selezione multipla
Digima
Workare
Networking
Progetti
SL=Sede Legale
Provincia SL
Provincia
Regione SL
Campo automatico
Autofill: sulla base della provincia
Stato SL
Campo automatico
Autofill: sulla base della regione
PROPOSTA 10 MACROCATEGORIE DI CLIENTI, DA VALIDARE
Tipologia di Cliente
Settore della Ristorazione
Industria Alberghiera
Settore del Commercio al Dettaglio
Servizi Professionali
Settore delle Arti e dell'Intrattenimento
Settore dell'Istruzione
Settore della Salute e del Benessere
Automotive e Trasporti
Settore delle Tecnologie Digitali e Servizi IT
Settore delle Telecomunicazioni
Dimensione Cliente
Grande
Medio
Piccolo
Unità Operative/e
selezione multipla
Nome UO Registrata
Aggiungi Nuova UO
Nessuna
UO=Unità Operativa
Provincia UO
Provincia
Regione UO
Campo automatico
Autofill: sulla base della provincia
Stato UO
Campo automatico
Autofill: sulla base della regione
Tipologia di UO
??
??
LEGENDA
Da compilare ad ogni registrazione
Da compilare solo una volta
Compilazione automatica

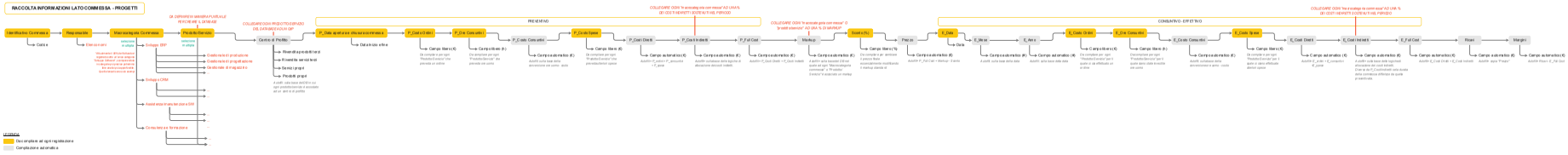



RACCOLTA INFORMAZIONI LATO CLIENTE - WORKARE
Ragione Sociale
COMPILAZIONE AUTOMATICA DA DB CLIENTI
"Nome" Cliente Preesistente
Aggiungi Nuovo Cliente
Canale di Acquisizione
Passaparola
Paid Search (sito)
E-mail
Eventi/Incontri
Opportunità di Cross Selling
selezione multipla
Digma
Netycom
Progetti
Networking
Provincia SL
Provincia
Regione SL
Campo automatico
Autofill sulla base della provincia
Stato SL
Campo automatico
Autofill sulla base della regione
Tipologia di Cliente
Agenzie per il lavoro
Fornitori Software
Consulenza
Dimensione Cliente
Grande
Medio
Piccolo
Unità Operativale
selezione multipla
"Nome" UO Registrata
Aggiungi Nuova UO
Nessuna
UO=Unità Operativa
Provincia UO
Provincia
Regione UO
Campo automatico
Autofill sulla base della provincia
Stato UO
Campo automatico
Autofill sulla base della regione
Tipologia di UO
??
??
LEGENDA
Da compilare ad ogni registrazione
Da compilare solo una volta
Compilazione automatica

C.4 Networking




RACCOLTA INFORMAZIONI LATO CLIENTE - PROGETTI
Ragione Sociale
Nome Cliente Preesistente
Aggiungi Nuovo Cliente
COMPILAZIONE AUTOMATICA DA DB CLIENTI
Canale di Acquisizione
Passaparola
Paid Search (sito)
E-mail
...
Opportunità di Cross Selling
selezione multipla
Digima
Netycom
Workare
Networking
SL= Sede Legale
Provincia SL
Provincia
Regione SL
Campo automatico
Autofill: sulla base della provincia
Stato SL
Campo automatico
Autofill: sulla base della della regione
PROPOSTA 10 MACROCATEGORIE DI CLIENTI, DA VALIDARE
Tipologia di Cliente
Settore della Ristorazione
Ristoranti, Bar, Caffetterie, Pasticcerie...
Industria Alberghiera
Hotel, Bed & BreakFast, Resort...
Settore del Commercio al Dettaglio
Negozi di Abbigliamento, Elettronica, Articoli Sportivi, Fiori...
Servizi Professionali
Studi Legali, di Architettura, Consulenti Finanziari, Assicurativi...
Settore delle Arti e dell'Intrattenimento
Musei, Gallerie d'Arte, Teatri, Cinema, Artisti...
Settore dell'Istruzione
Istituti di Formazione, Scuole, Accademie, Università...
Settore della Salute e del Benessere
Ospedali, Cliniche, Centri Fitness, Centri Benessere, Spa...
Automotive e Trasporti
Concessionarie, Officine, Agenzie Autonoleggio...
Settore delle Tecnologie Digitali e Servizi IT
Aziende di Software,Hardware, Servizi IT, Agenzie Digitali...
Settore delle Telecomunicazioni
Aziende di Telecomunicazioni, Provider di Servizi Internet e Voce...
Dimensione Cliente
Grande
Medio
Piccolo
Unità Operativale
selezione multipla
Nome UO Registrata
Aggiungi Nuova UO
Nessuna
U.O= Unità Operativa
Provincia UO
Provincia
Regione UO
Campo automatico
Autofill: sulla base della provincia
Stato UO
Campo automatico
Autofill: sulla base della della regione
Tipologia di UO
??
??
LEGENDA
Da compilare ad ogni registrazione
Da compilare solo una volta
Compilazione automatica


RACCOLTA INFORMAZIONI LATO COMMESSA - PROGETTI
PREVENTIVO
CONSUNTIVO - EFFETTIVO
LEGENDA
Da compilare ad ogni registrazione
Compilazione automatica

Appendix D – Indirect Costs Registration and Allocation

D.1 Digima

Indirect costs 2022-2023

	Costi	Ricavi
DIGIMA S.R.L.	**444.975,34 €**	**0,00 €**
A04 (Digima)	**319.285,73 €**	**0,00 €**
R1 (manutenzioni)	**6.517,99 €**	**0,00 €**
Attività interne	6.517,99 €	0,00 €
R2 (prestazioni)	**281.530,22 €**	**0,00 €**
Attività commerciale	46.212,20 €	0,00 €
Attività interne	26.442,47 €	0,00 €
Contratto di collaborazione Sergio Carmine	2.300,00 €	0,00 €
Corso di formazione proiettori Barco Laser	7.986,55 €	0,00 €
Costi da Emisfera	196.323,58 €	0,00 €
Digima - materiali e servizi - NO INVESTIMENTI	20,59 €	0,00 €
Magazzino 2021-2023	1.610,33 €	0,00 €
Progetto introduzione nuovo sistema di ticketing	634,50 €	0,00 €
R4 (prodotti terzi)	**17.957,27 €**	**0,00 €**
Digima - materiali e servizi - NO INVESTIMENTI	98,98 €	0,00 €
Magazzino 2021-2023	17.268,29 €	0,00 €
PNRR 2021 - Progetto Cinema in classe A	590,00 €	0,00 €
R5 (spese)	**3.939,99 €**	**0,00 €**
Costi da Emisfera	1.603,31 €	0,00 €
Magazzino 2021-2023	2.336,68 €	0,00 €
R8 (servizi)	**9.340,27 €**	**0,00 €**
Attività interne	9.340,27 €	0,00 €
IP11 (investimenti sistemi)	**4.939,37 €**	**0,00 €**
R4 (prodotti terzi)	**4.935,37 €**	**0,00 €**
Digima - Investimenti Hardware e attrezzature	4.935,37 €	0,00 €
R5 (spese)	**4,00 €**	**0,00 €**
Digima - Investimenti Hardware e attrezzature	4,00 €	0,00 €
P00 (Direzione)	**23.206,52 €**	**0,00 €**
R4 (prodotti terzi)	**8.517,53 €**	**0,00 €**
CineEuope 2023 Trade Show Barcellona	1.067,53 €	0,00 €
Direzione Digima	7.450,00 €	0,00 €
R8 (servizi)	**14.688,99 €**	**0,00 €**
Cine 2022 Trade Show Riccione	169,70 €	0,00 €
Cine 2023 Trade Show Riccione	5.721,50 €	0,00 €
CineEuope 2022 Trade Show Barcellona	1.032,26 €	0,00 €
CineEuope 2023 Trade Show Barcellona	18,68 €	0,00 €
Direzione Digima	5.916,85 €	0,00 €
Giornate Professionali 2022 Trade Show Sorrento	1.830,00 €	0,00 €
P01 (Amministrazione)	**92.350,62 €**	**0,00 €**
R2 (prestazioni)	**75.837,60 €**	**0,00 €**
AMMINISTRAZIONE	75.837,60 €	0,00 €
R4 (prodotti terzi)	**417,63 €**	**0,00 €**
AMMINISTRAZIONE	417,63 €	0,00 €
R8 (servizi)	**16.095,39 €**	**0,00 €**
AMMINISTRAZIONE	14.159,39 €	0,00 €
Centralino aziendale	1.380,00 €	0,00 €
Iscrizione Registro A.E.E.	556,00 €	0,00 €
P03 (Risorse Umane)	**5.193,10 €**	**0,00 €**
R8 (servizi)	**5.193,10 €**	**0,00 €**
Formazione DIGIMA	1.038,00 €	0,00 €
Formazione DIGIMA 2023	69,38 €	0,00 €
Gestione risorse DIGIMA	363,15 €	0,00 €
Gestione risorse DIGIMA 2023	164,16 €	0,00 €
Paghe DIGIMA 2022	2.325,71 €	0,00 €
Paghe DIGIMA 2023	1.232,71 €	0,00 €

Costi indiretti interni (anni 2022-2023)

Costi indiretti generali (anni 2022-2023)

Come (e quando) viene determinata la quota di costi generali che spettano a Digima?

General indirect costs registration and allocation

REGISTRAZIONE COSTI GENERALI INTERNI

Se si vogliono continuare a registrare i costi generali come costi di commesse effettuate per il cliente interno Digima:

Informazioni cliente: autofill cliente "Digima"

Informazioni commessa: in "macrocategoria commessa" va aggiunta la voce "costi indiretti generali" e vanno definite nuove sotto-voci per la colonna "prodotto/servizio"

Macrocategoria commessa

Prodotto/Servizio

Costi indiretti generali

- Direzione
- Amministrazione
- Risorse Umane

ALLOCAZIONE COSTI GENERALI INTERNI

Scegliere la logica di allocazione valutando costi benefici dei due livelli di dettaglio:

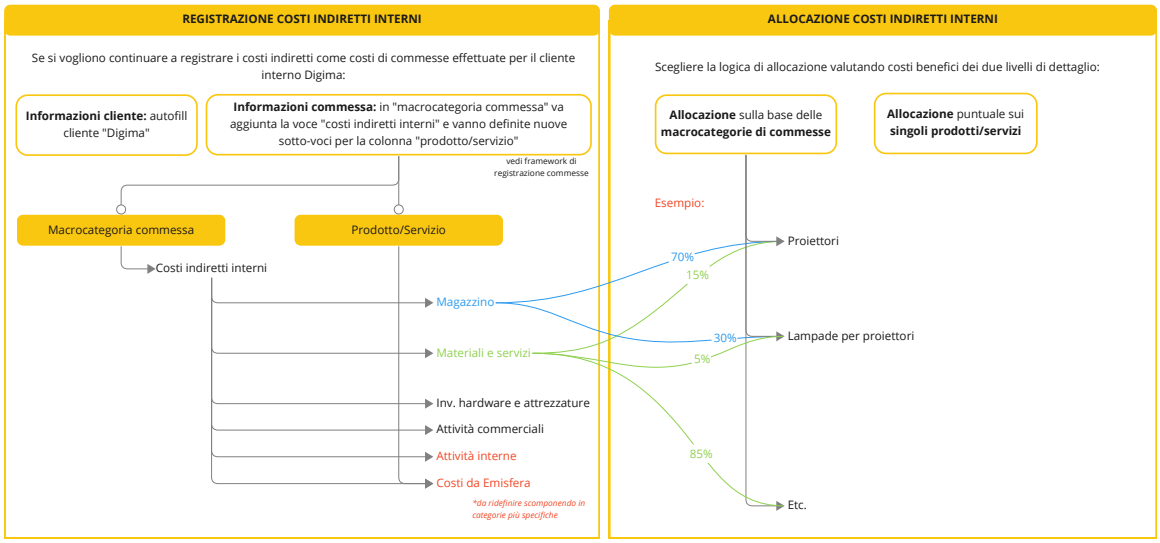
Proporzionali ai ricavi di ogni commessa

Sulla base del driver ritenuto più opportuno alle specifiche casistiche

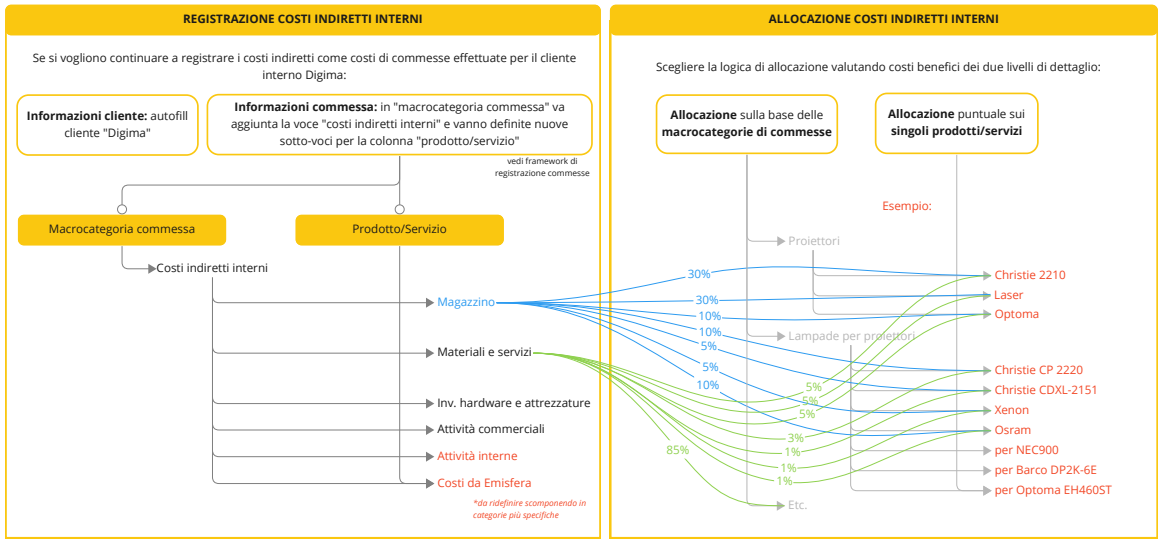
Esempio:

- Amministrazione: distribuito sulla base dell'impegno medio previsto per ogni macrocategoria di commessa
- Risorse Umane: distribuito proporzionalmente ai costi consuntivi
- etc.

Internal indirect costs registration and allocation, option 1:



Internal indirect costs registration and allocation, option 2:



D.2 Netycom

Indirect costs 2022-2023

	Costi	Ricavi
NETYCOM SRL	**256.615,60 €**	**0,00 €**
A13 (Netycom)	**157.492,02 €**	**0,00 €**
_ND (non definito)	**1.604,75 €**	**0,00 €**
Coordinamento area Netycom	1.604,75 €	**0,00 €**
A06 FARM	**1.174,88 €**	**0,00 €**
Coordinamento area Netycom	1.174,88 €	0,00 €
A13 ABBON (servizi web in abbonamento)	**14.473,60 €**	**0,00 €**
Coordinamento area Netycom	14.473,60 €	0,00 €
A13 ADV (advertising)	**13.908,36 €**	**0,00 €**
Coordinamento area Netycom	13.908,36 €	0,00 €
A13 ALTRO	**1.316,67 €**	**0,00 €**
Coordinamento area Netycom	1.316,67 €	0,00 €
A13 BUADV	**2.802,11 €**	**0,00 €**
Coordinamento area Netycom	2.802,11 €	0,00 €
A13 CONSUL (consulenza e formazione)	**1.166,67 €**	**0,00 €**
Coordinamento area Netycom	1.166,67 €	0,00 €
A13 DESIGN (design)	**691,67 €**	**0,00 €**
Coordinamento area Netycom	**691,67 €**	**0,00 €**
A13 GRAF (grafica)	**69,93 €**	**0,00 €**
Coordinamento area Netycom	69,93 €	0,00 €
A13 HSTNG (hosting)	**5.997,23 €**	**0,00 €**
Coordinamento area Netycom	5.997,23 €	0,00 €
A13 MANUT (manutenzione e assistenza)	**1.166,67 €**	**0,00 €**
Coordinamento area Netycom	1.166,67 €	0,00 €
A13 MKT (marketing)	**2.804,37 €**	**0,00 €**
Coordinamento area Netycom	2.804,37 €	0,00 €
A13 PRJ (sviluppo web)	**27.732,42 €**	**0,00 €**
Avvocato - contenzioso Hotel Borromees	117,60 €	0,00 €
Coordinamento area Netycom	27.614,82 €	0,00 €
A13 REDAZ (gestione editoriale)	**2.333,33 €**	**0,00 €**
Coordinamento area Netycom	2.333,33 €	0,00 €
A13 SOCIAL (social media management)	**1.538,56 €**	**0,00 €**
Coordinamento area Netycom	1.538,56 €	0,00 €
R3 (sviluppo web)	**66.332,92 €**	**0,00 €**
Coordinamento area Netycom	66.332,92 €	0,00 €
R8 (servizi)	**12.377,89 €**	**0,00 €**
Avvocato - contenzioso Hotel Borromees	600,00 €	0,00 €
Coordinamento area Netycom	11.777,89 €	0,00 €
IP11 (Investimenti sistemi)	**2.950,00 €**	**0,00 €**
A13 PRJ (sviluppo web)	**2.950,00 €**	**0,00 €**
Investimenti Sistemi Netycom	2.950,00 €	0,00 €
P00 (Direzione)	**9.618,12 €**	**0,00 €**
R8 (servizi)	**9.618,12 €**	**0,00 €**
Direzione Netycom	9.618,12 €	0,00 €
P01 (Amministrazione)	**82.794,30 €**	**0,00 €**
R8 (servizi)	**82.794,30 €**	**0,00 €**
AMMINISTRAZIONE	82.794,30 €	0,00 €
P03 (Risorse Umane)	**3.761,17 €**	**0,00 €**
R8 (servizi)	**3.761,17 €**	**0,00 €**
Formazione NETYCOM	0,00 €	0,00 €
Gestione risorse NETYCOM	11,98 €	0,00 €
Gestione risorse NETYCOM 2023	76,95 €	0,00 €
Paghe NETYCOM 2022	2.995,20 €	0,00 €
Paghe NETYCOM 2023	677,04 €	0,00 €

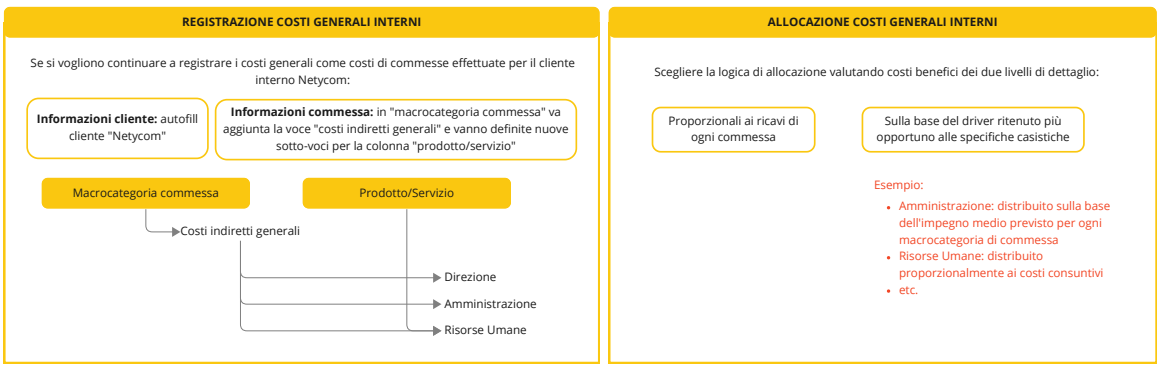
Costi indiretti interni (anni 2022-2023)

METODO DI REGISTRAZIONE DIVERSO DA DIGIMA

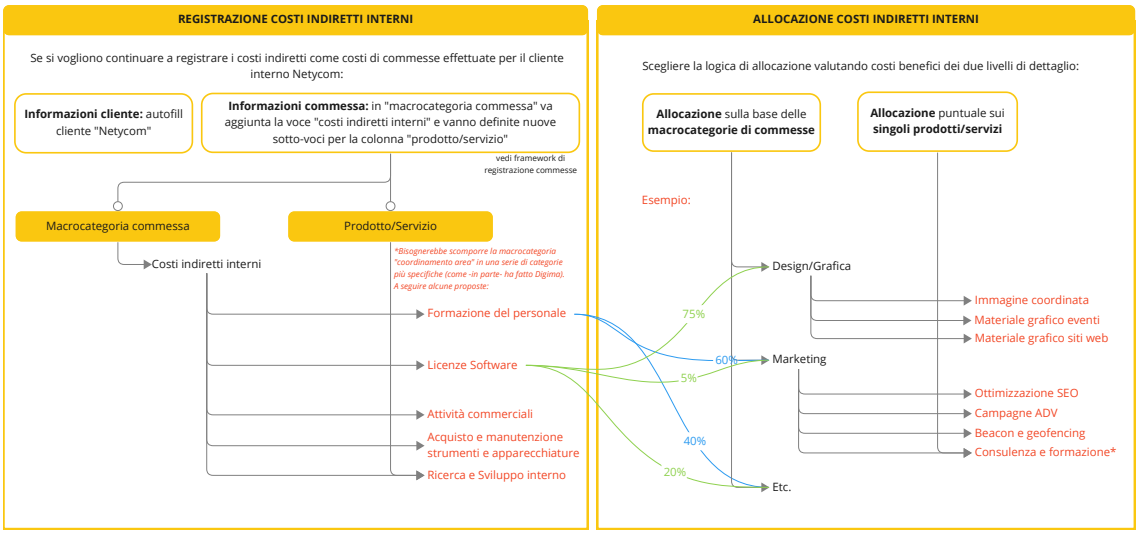
Costi indiretti generali (anni 2022-2023)

Come (e quando) viene determinata la quota di costi generali che spettano a Netycom?

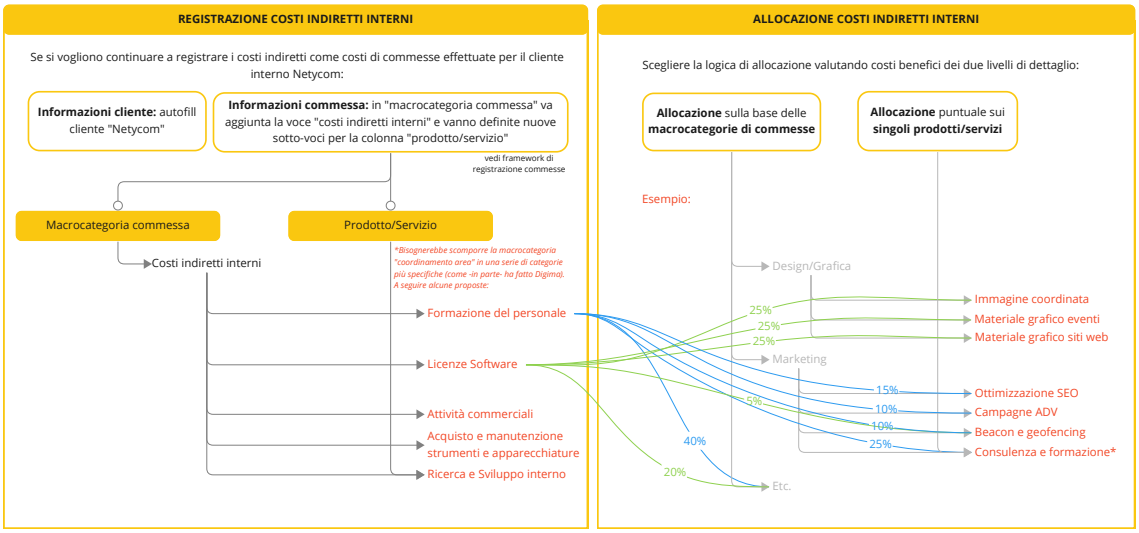
General indirect costs registration and allocation



Internal indirect costs registration and allocation, option 1:



Internal indirect costs registration and allocation, option 2:



D.3 Workare

Indirect costs 2022-2023

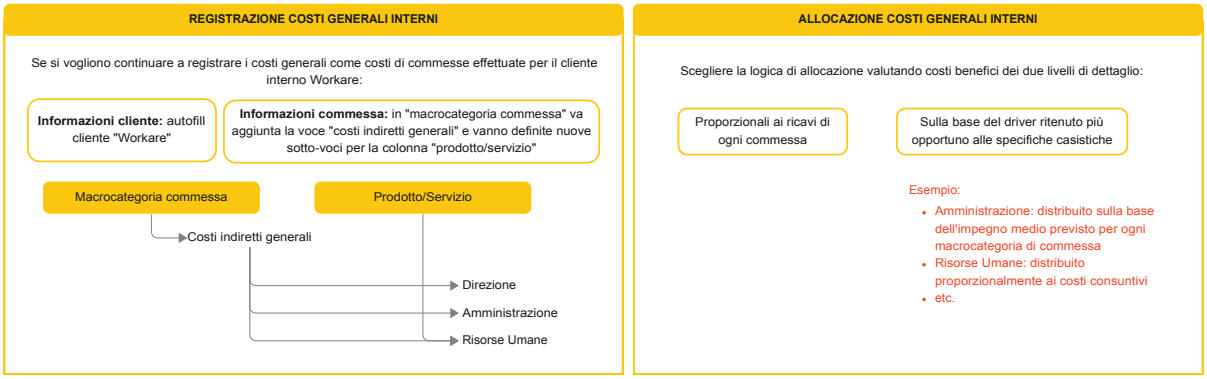
	Costi	Ricavi
WORKARE SRL	**2.878.023,97 €**	**0,00 €**
A01 (Workare)	**2.453.970,47 €**	**0,00 €**
R2 (prestazioni)	**2.169.635,99 €**	**0,00 €**
Attività di marketing digitale	4.090,00 €	0,00 €
Avvocato - Contenzioso KAROL	9,94 €	0,00 €
Commerciale 2023	29.247,10 €	0,00 €
Gestione centro studi 2022	2.873,84 €	0,00 €
Gestione centro studi 2023	54.182,34 €	0,00 €
Gestione prodotti 2021	334,85 €	0,00 €
Gestione prodotti 2022	13.461,85 €	0,00 €
Gestione prodotti 2023	27.283,78 €	0,00 €
Gruppo clienti APL 2022	197.631,74 €	0,00 €
Gruppo clienti APL 2023	93.857,96 €	0,00 €
Gruppo produzione S2N 2022	582.548,41 €	0,00 €
Gruppo produzione S2N 2023	349.412,21 €	0,00 €
Gruppo produzione WN 2022	84.814,56 €	0,00 €
Gruppo produzione WN 2023	74.362,45 €	0,00 €
Help Desk APL 2022	135.362,62 €	0,00 €
Help Desk APL 2023	72.831,41 €	0,00 €
IARP	1.302,83 €	0,00 €
Multitenant WN12	513,00 €	0,00 €
Paghe APL 2022	3.613,71 €	0,00 €
Paghe APL 2023	1.847,35 €	0,00 €
Partnership AliasLab TeamSystem	5.029,45 €	0,00 €
Partnership ESTEP risorse	0,00 €	0,00 €
Partnership OPTIMO risorse	25.200,00 €	0,00 €
Partnership Oracle	67.084,60 €	0,00 €
Partnership Viatek Account	10.500,00 €	0,00 €
Partnership Viatek Sistemi	31.500,00 €	0,00 €
Partnership ZOPPELLO risorse	21.700,00 €	0,00 €
Sistemi APL 2022	73.859,68 €	0,00 €
Sistemi APL 2023	205.180,32 €	0,00 €
R4 (prodotti terzi)	**2.280,00 €**	**0,00 €**
Partnership Oracle	2.280,00 €	0,00 €
R6 (social media management)	**207.648,34 €**	**0,00 €**
Sistemi APL 2022	207.648,34 €	0,00 €
R8 (servizi)	**74.406,14 €**	**0,00 €**
Gestione centro studi 2022	52.038,50 €	0,00 €
Gruppo clienti APL 2022	22.367,64 €	0,00 €
IP11 (investimenti sistemi)	**16.131,32 €**	**0,00 €**
R1 (manutenzioni)	**16.751,15 €**	**0,00 €**
Investimenti sistemi 2022	14.244,46 €	0,00 €
Investimenti sistemi 2023	2.506,69 €	0,00 €
R2 (prestazioni)	**66,00 €**	**0,00 €**
Investimenti sistemi 2022	66,00 €	0,00 €
R4 (prodotti terzi)	**-713,02 €**	**0,00 €**
Investimenti sistemi 2022	-1.756,24 €	0,00 €
Investimenti sistemi 2023	1.043,22 €	0,00 €
R5 (spese)	**10,00 €**	**0,00 €**
Investimenti sistemi 2022	10,00 €	0,00 €
R8 (servizi)	**17,19 €**	**0,00 €**
Investimenti sistemi 2023	17,19 €	0,00 €
P00 (Direzione)	**71.789,21 €**	**0,00 €**
_ND (non definito)	**11.066,00 €**	**0,00 €**
Immagine coordinata e sito	650,00 €	0,00 €
Presidenza WORKARE	10.416,00 €	0,00 €
R8 (servizi)	**60.723,21 €**	**0,00 €**
Credito imposta 2022	3.952,24 €	0,00 €
Immagine coordinata e sito	1.157,00 €	0,00 €
Presidenza WORKARE	55.613,98 €	0,00 €
P01 (Amministrazione)	**279.727,70 €**	**0,00 €**
_ND (non definito)	**117.965,00 €**	**0,00 €**
Amministrazione WK	117.965,00 €	0,00 €
R8 (servizi)	**161.762,70 €**	**0,00 €**
Amministrazione WK	160.934,17 €	0,00 €
Gestione risorse WORKARE	397,08 €	0,00 €
Gestione risorse WORKARE 2023	431,45 €	0,00 €
P03 (Risorse Umane)	**47.049,03 €**	**0,00 €**
R2 (prestazioni)	**16,88 €**	**0,00 €**
Risorse Umane e Paghe	16,88 €	0,00 €
R8 (servizi)	**47.032,15 €**	**0,00 €**
Formazione WORKARE	4.997,55 €	0,00 €
Formazione WORKARE 2023	21.172,23 €	0,00 €
Risorse Umane e Paghe	20.862,38 €	0,00 €
P11	**9.356,24 €**	**0,00 €**
R8 (servizi)	**9.356,24 €**	**0,00 €**
Materiale di consumo	1.756,24 €	0,00 €
Partnership Microsoft	7.600,00 €	0,00 €

Costi indiretti interni (anni 2022-2023)

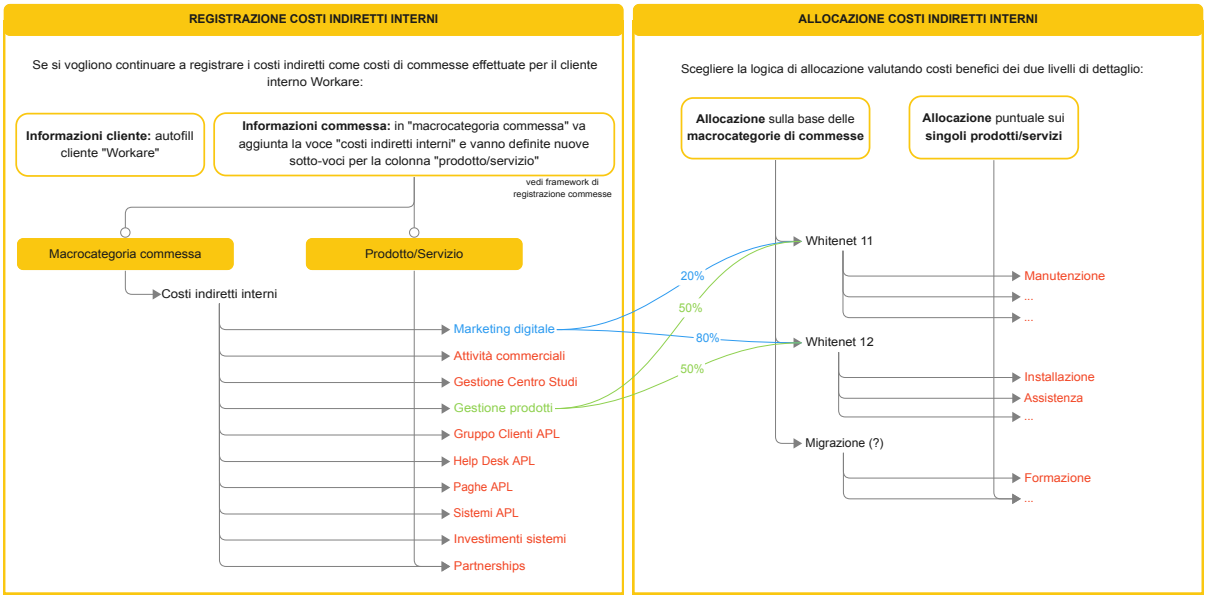
Costi indiretti generali (anni 2022-2023)

Come (e quando) viene determinata la quota di costi generali che spettano a Digima?

General indirect costs registration and allocation



Internal indirect costs registration and allocation



D.4 Networking

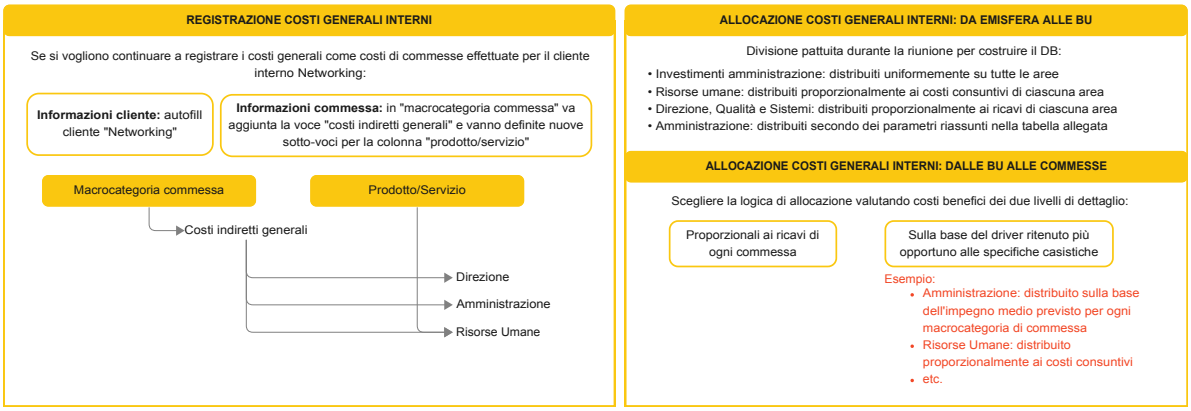
Indirect costs 2022-2023

A06 (Networking)	**1.256.529,17 €**	**835.000,63 €**
_ND	**4.580,80 €**	**0,00 €**
CANALE RESELLER - SEGNALATORI 2017 - 2022-2023	60,00 €	0,00 €
CANALE SMALL ACCOUNT - HD	484,96 €	0,00 €
CONNETTIVITA' - COSTI FISSI	1.450,00 €	0,00 €
SOFTWARE - COSTI BUSINESS	2.275,84 €	0,00 €
Stampante Emisfera	310,00 €	0,00 €
A06 CNN1	**243.928,71 €**	**835.000,63 €**
CANALE RESELLER - SEGNALATORI 2017 - 2022-2023	0,00 €	340.969,95 €
CANALE SMALL ACCOUNT - HD	826,88 €	340.472,17 €
CONNETTIVITA' - COSTI BUSINESS	201.530,42 €	0,00 €
Coordinamento area Networking 2021-2030	232,79 €	0,00 €
INFRASTRUTTURA SALA SERVER	300,00 €	0,00 €
Magazzino Networking	4.080,51 €	0,00 €
Ricavi Canale Key Account	0,00 €	153.558,51 €
SERVIZI VOCE - COSTI BUSINESS	36.938,15 €	0,00 €
SOFTWARE - COSTI BUSINESS	19,96 €	0,00 €
A06 CNN2	**46.187,34 €**	**0,00 €**
CONNETTIVITA' - COSTI BUSINESS	46.187,34 €	0,00 €
A06 FARM	**297.135,02 €**	**0,00 €**
Area sistemi 2014 - 2015 - 2016 - 2017	168,35 €	0,00 €
Area sistemi 2018 - 2019	1.797,40 €	0,00 €
CONNETTIVITA' - COSTI BUSINESS	7.847,32 €	0,00 €
CONNETTIVITA' - COSTI FISSI	13.924,20 €	0,00 €
INFRASTRUTTURA SALA SERVER	71.382,59 €	0,00 €
SOFTWARE - COSTI BUSINESS	195.776,60 €	0,00 €
SW SALA SERVER	6.238,56 €	0,00 €
A06 HD	**201.728,30 €**	**0,00 €**
ATTIVITA' ASSISTENZA	140.087,61 €	0,00 €
CANALE SMALL ACCOUNT - HD	400,00 €	0,00 €
Coordinamento area Networking 2021-2030	46.204,40 €	0,00 €
SOFTWARE - COSTI BUSINESS	13.831,30 €	0,00 €
SW SALA SERVER	1.205,00 €	0,00 €
A06 PRJ	**439.790,81 €**	**0,00 €**
Attività R&D per Area Networking	9.034,85 €	0,00 €
CANALE RESELLER - SEGNALATORI 2017 - 2022-2023	12.536,35 €	0,00 €
CANALE SMALL ACCOUNT - HD	5.708,52 €	0,00 €
CONNETTIVITA' - COSTI BUSINESS	119.551,88 €	0,00 €
CONNETTIVITA' - COSTI FISSI	24.182,78 €	0,00 €
Coordinamento area Networking 2021-2030	167.889,94 €	0,00 €
Formazione Risorse Networking	2.545,51 €	0,00 €
Fotovoltaico	645,30 €	0,00 €
INFRASTRUTTURA SALA SERVER	42.223,84 €	0,00 €
Magazzino Networking	11.293,93 €	0,00 €
SOFTWARE - COSTI BUSINESS	43.439,18 €	0,00 €
Stampante Emisfera	738,73 €	0,00 €
R2 (prestazioni)	**727,37 €**	**0,00 €**
Attività R&D per Area Networking	727,37 €	0,00 €
R5 (spese)	**667,38 €**	**0,00 €**
Avvocato - Contenzioso GIACOMELLO	70,00 €	0,00 €
Avvocato - Credito Marcelli Flavio	587,18 €	0,00 €
CANALE SMALL ACCOUNT - HD	10,20 €	0,00 €
R8 (servizi)	**21.783,45 €**	**0,00 €**
Coordinamento area Networking 2021-2030	1.671,01 €	0,00 €
Formazione Risorse Networking	20.112,44 €	0,00 €
I06 (investimenti networking)	**95.995,51 €**	**0,00 €**
A06 FARM	**68.113,43 €**	**0,00 €**
Altri investimenti Networking	68.113,43 €	0,00 €
A06 PRJ	**27.882,08 €**	**0,00 €**
Altri investimenti Networking	2.864,72 €	0,00 €
EMIConnect Investimenti 2018 - 2019 - 2020 - 2021 - 2022	25.017,36 €	0,00 €
IP11 (investimenti sistemi)	**13.813,64 €**	**0,00 €**
_ND	**41,80 €**	**0,00 €**
Investimenti sistemi Networking	41,80 €	0,00 €
A05 PRJ	**41,79 €**	**0,00 €**
Investimenti sistemi 2023	41,79 €	0,00 €
A06 PRJ	**2.963,01 €**	**0,00 €**
Investimenti sistemi 2022	2.963,01 €	0,00 €
R2 (prestazioni)	**495,89 €**	**0,00 €**
Investimenti sistemi 2023	495,89 €	0,00 €
R4 (prodotti terzi)	**10.255,16 €**	**0,00 €**
Investimenti sistemi 2022	4.556,35 €	0,00 €
Investimenti sistemi 2023	5.698,81 €	0,00 €
R5 (spese)	**15,99 €**	**0,00 €**
Investimenti sistemi 2022	7,00 €	0,00 €
Investimenti sistemi 2023	8,99 €	0,00 €
P00 (Direzione)	**131.139,99 €**	**0,00 €**
R8 (servizi)	**131.139,99 €**	**0,00 €**
Costi direzione Emisfera 2022	71.053,01 €	0,00 €
Costi direzione Emisfera 2023	45.258,15 €	0,00 €
FONDAZIONE ITS MILANO	121,30 €	0,00 €
Presidenza EMISFERA	14.707,53 €	0,00 €
P01 (Amministrazione)	**653.157,63 €**	**0,00 €**
R8 (servizi)	**653.157,63 €**	**0,00 €**
AMMINISTRAZIONE - GRUPPO EMISFERA	14.777,17 €	0,00 €
Amministrazione 2022	177.979,87 €	0,00 €
AMMINISTRAZIONE 2023	216.956,19 €	0,00 €
Bilanci 2022	224.172,38 €	0,00 €
Bilanci 2023	19.272,03 €	0,00 €
IP01 (investimenti amministrazione)	**13.446,06 €**	**0,00 €**
R8 (servizi)	**13.446,06 €**	**0,00 €**
Investimenti stabile	13.446,06 €	0,00 €
P02 (qualità)	**21.661,64 €**	**0,00 €**
R8 (servizi)	**21.661,64 €**	**0,00 €**
GDPR	2.436,19 €	0,00 €
Responsabilità Amministrativa degli Enti (ODV)	1.642,63 €	0,00 €
Ufficio Qualità 2022	9.588,61 €	0,00 €
Ufficio Qualità e Privacy 2023	7.994,22 €	0,00 €
P03 (risorse umane)	**105.658,56 €**	**0,00 €**
R8 (servizi)	**105.658,56 €**	**0,00 €**
Formazione EMISFERA	5.430,95 €	0,00 €
Formazione EMISFERA 2023	584,88 €	0,00 €
Gestione risorse EMISFERA	381,20 €	0,00 €
Gestione risorse EMISFERA 2023	291,27 €	0,00 €
Paghe EMISFERA 2022	7.751,09 €	0,00 €
Paghe EMISFERA 2023	6.076,88 €	0,00 €
Risorse Umane 2022	52.104,03 €	0,00 €
Risorse Umane 2023	33.038,28 €	0,00 €
P11 (sistemi)	**42.848,57 €**	**0,00 €**
_ND	**4.329,80 €**	**0,00 €**
Manutenzione sistemi	4.218,00 €	0,00 €
Ufficio Sistemi 2015 - 2017	111,80 €	0,00 €
A06 CNN1	**52,57 €**	**0,00 €**
Ufficio Sistemi 2020	52,57 €	0,00 €
A06 FARM	**1.198,27 €**	**0,00 €**
Ufficio sistemi 2018 - 2019	1.198,27 €	0,00 €
R8 (servizi)	**37.267,93 €**	**0,00 €**
Manutenzione sistemi	37.267,93 €	0,00 €

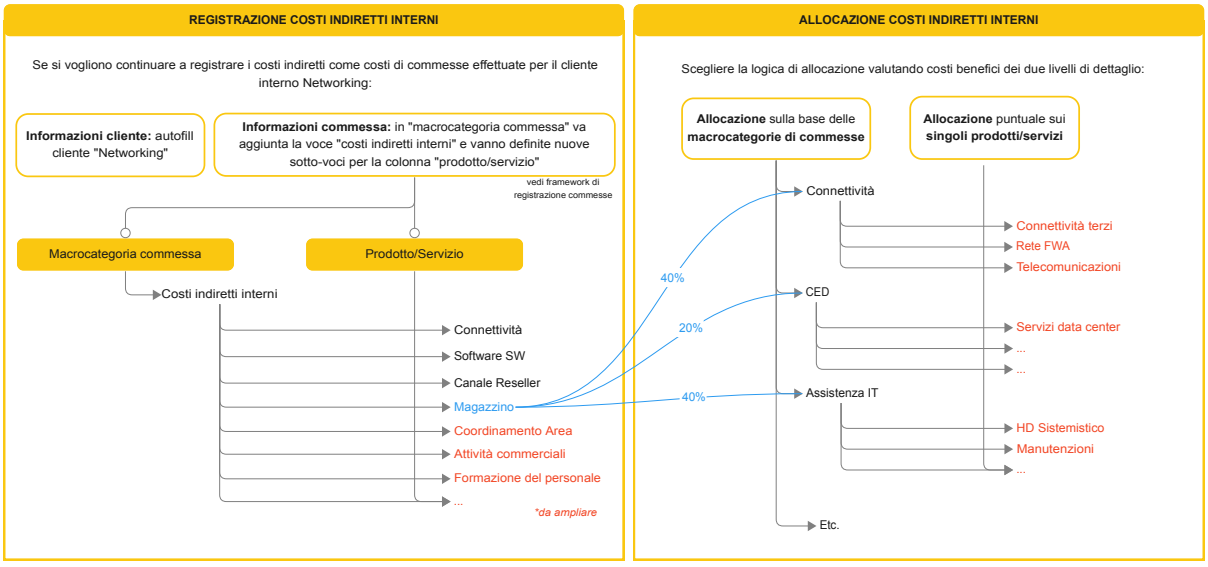
Costi indiretti interni (anni 2022-2023)

Costi indiretti generali (anni 2022-2023)

General indirect costs registration and allocation



Internal indirect costs registration and allocation



D.5 Progetti

Indirect costs 2022-2023

	Costi	Ricavi
EMISFERA SOC. COOP.	2.704.030,20 €	1.095.611,22 €
A05 (Progetti)	68.176,06 €	0,00 €
A05 ARX	2.690,71 €	0,00 €
Attività Emisfera per Area Progetti	2.690,71 €	0,00 €
A05 CRM	1.560,19 €	0,00 €
Attività Emisfera per Area Progetti	1.560,19 €	0,00 €
A05 PRJ	7.766,84 €	0,00 €
Attività Emisfera per Area Progetti	1.066,83 €	0,00 €
Riunioni e gestione gruppo	6.700,01 €	0,00 €
R2 (prestazioni)	10.470,18 €	0,00 €
Attività Progetti	6.689,20 €	0,00 €
Coordinamento area Progetti 2021	326,23 €	0,00 €
Partnership IT&M Srl per OpenCRMItalia	3.166,67 €	0,00 €
Riunioni e gestione gruppo	288,09 €	0,00 €
R8 (servizi)	45.688,14 €	0,00 €
Formazione Risorse Progetti	45.688,14 €	0,00 €
P00 (Direzione)	131.139,99 €	0,00 €
R8 (servizi)	131.139,99 €	0,00 €
Costi direzione Emisfera 2022	71.053,01 €	0,00 €
Costi direzione Emisfera 2023	45.258,15 €	0,00 €
FONDAZIONE ITS MILANO	121,30 €	0,00 €
Presidenza EMISFERA	14.707,53 €	0,00 €
P01 (Amministrazione)	653.157,63 €	0,00 €
R8 (servizi)	653.157,63 €	0,00 €
AMMINISTRAZIONE - GRUPPO EMISFERA	14.777,17 €	0,00 €
Amministrazione 2022	177.979,87 €	0,00 €
AMMINISTRAZIONE 2023	216.956,19 €	0,00 €
Bilanci 2022	224.172,38 €	0,00 €
Bilanci 2023	19.272,03 €	0,00 €
IP01 (investimenti amministrazione)	13.446,06 €	0,00 €
R8 (servizi)	13.446,06 €	0,00 €
Investimenti stabile	13.446,06 €	0,00 €
P02 (qualità)	21.661,64 €	0,00 €
R8 (servizi)	21.661,64 €	0,00 €
GDPR	2.436,19 €	0,00 €
Responsabilità Amministrativa degli Enti (ODV)	1.642,63 €	0,00 €
Ufficio Qualità 2022	9.588,61 €	0,00 €
Ufficio Qualità e Privacy 2023	7.994,22 €	0,00 €
P03 (risorse umane)	105.658,56 €	0,00 €
R8 (servizi)	105.658,56 €	0,00 €
Formazione EMISFERA	5.430,95 €	0,00 €
Formazione EMISFERA 2023	584,88 €	0,00 €
Gestione risorse EMISFERA	381,20 €	0,00 €
Gestione risorse EMISFERA 2023	291,27 €	0,00 €
Paghe EMISFERA 2022	7.751,09 €	0,00 €
Paghe EMISFERA 2023	6.076,88 €	0,00 €
Risorse Umane 2022	52.104,03 €	0,00 €
Risorse Umane 2023	33.038,28 €	0,00 €
P11 (sistemi)	42.848,57 €	0,00 €
_ND	4.329,80 €	0,00 €
Manutenzione sistemi	4.218,00 €	0,00 €
Ufficio Sistemi 2015 - 2017	111,80 €	0,00 €
A06 CNN1	52,57 €	0,00 €
Ufficio Sistemi 2020	52,57 €	0,00 €
A06 FARM	1.198,27 €	0,00 €
Ufficio sistemi 2018 - 2019	1.198,27 €	0,00 €
R8 (servizi)	37.267,93 €	0,00 €
Manutenzione sistemi	37.267,93 €	0,00 €

Costi indiretti interni (anni 2022-2023)

Costi indiretti generali (anni 2022-2023)

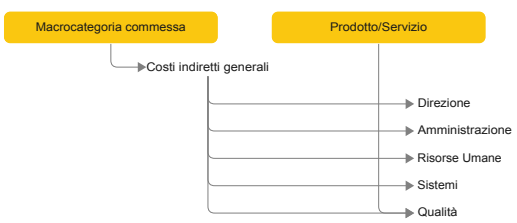
General indirect costs registration and allocation

REGISTRAZIONE COSTI GENERALI INTERNI

Se si vogliono continuare a registrare i costi generali come costi di commesse effettuate per il cliente interno Progetti:

Informazioni cliente: autofill cliente "Progetti"

Informazioni commessa: in "macrocategoria commessa" va aggiunta la voce "costi indiretti generali" e vanno definite nuove sotto-voci per la colonna "prodotto/servizio"



ALLOCAZIONE COSTI GENERALI INTERNI: DA EMISFERA ALLE BU

Divisione pattuita durante la riunione per costruire il DB:

- Investimenti amministrazione: distribuiti uniformemente su tutte le aree
- Risorse umane: distribuiti proporzionalmente ai costi consuntivi di ciascuna area
- Direzione, Qualità e Sistemi: distribuiti proporzionalmente ai ricavi di ciascuna area
- Amministrazione: distribuiti secondo dei parametri riassunti nella tabella allegata

ALLOCAZIONE COSTI GENERALI INTERNI: DALLE BU ALLE COMMESSE

Scegliere la logica di allocazione valutando costi benefici dei due livelli di dettaglio:

Proporzionali ai ricavi di ogni commessa

Sulla base del driver ritenuto più opportuno alle specifiche casistiche

Esempio:

- Amministrazione: distribuito sulla base dell'impegno medio previsto per ogni macrocategoria di commessa
- Risorse Umane: distribuito proporzionalmente ai costi consuntivi
- etc.

Internal indirect costs registration and allocation