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EXPLORING THE DESIGN OF THE INVESTMENT BUDGET IN THE FOOD SECTOR: THE CASE OF FILENI ALIMENTARE S.P.A.

ESPLORANDO IL DESIGN DEL BUDGET DEGLI INVESTIMENTI NEL SETTORE ALIMENTARE: IL CASO DI FILENI ALIMENTARE S.P.A.

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INTRODUCTION

In today's dynamic and competitive business environment, managerial accounting stands as a crucial system of tools and approaches for organizations seeking to navigate the complexities of the current business landscape (Flamholtz et al., 2000).

Managerial accounting, forms the financial compass guiding businesses through the intricate landscape of businesses, involving the thorough analysis and interpretation of financial data to provide valuable insights and support informed decision-making (Davis et al., 2020).

The budget is a critical process within any organization that serves as a financial roadmap, providing a structured plan that aligns organizational goals with financial resources. This is true especially in the dynamic and competitive landscape of the food sector, where the investment budget, in particular, holds significant importance.

The investment budget within a food company plays a pivotal role in shaping the growth and sustainability of the business. It entails allocating funds for acquiring assets, expanding facilities, upgrading technology, enhancing product quality, and innovating processes, all of which are vital for staying ahead in the market and meeting consumer demands. Effective investment budgeting allows a company to strategically allocate resources to projects

that promise the highest returns, thus maximizing profitability and ensuring long-term success.

In the fast-paced food industry, where consumer preferences and market trends evolve rapidly, timely and well-considered investments are essential for maintaining competitiveness. This budgeting process not only aids in allocating financial resources wisely but also provides a platform for evaluating risks, measuring performance, and adapting strategies to changing market dynamics. Ultimately, an efficiently planned investment budget ensures that a food company can navigate market fluctuations, seize growth opportunities, and ultimately achieve its business objectives.

In view of these considerations, the aim of this thesis is to explore the design of the investment budget in the context of the food sector.

In order to achieve this aim, a theoretical and an empirical analysis, through a case study, will be carried out.

Hence, the work is composed of three chapters organized as follows.

Chapter one opens the door to this exploration by delving into the foundational concepts and defining characteristics of managerial accounting. By grasping its essence, we lay the groundwork for a more profound exploration of its applications in the corporate world. It is also explored the primary aims of managerial accounting and its overarching relevance. These aims, which encompass planning, controlling, and decision-making, serve as

the cornerstones of management within organizations. Here, we unveil how managerial accounting aids in crafting robust financial plans, ensuring financial processes remain aligned with organizational goals, and equipping decision-makers with vital insights for sound choices. The last paragraph sheds light on the critical functions and responsibilities of the managerial accountants within organizations, uncovering how they navigate the intricacies of the financial landscape, ensuring their companies not only survive but thrive in today's competitive business environment.

Budgeting, a pivotal aspect of managerial accounting, takes center stage in Chapter two delves into the budgeting process with a particular emphasis on investment budgets, recognizing the vital role investments play in an organization's growth and sustainability.

This chapter starts by offering an initial glimpse into the budgeting process. This process, fundamental to financial planning and resource allocation, serves as the strategic backbone of organizations seeking to achieve their objectives. Within the budgeting process, the master budget reigns supreme and includes exploring its integral components, including the operating budgets and the financial budgets. By comprehending these components, we gain insights into how they collectively drive effective financial planning.

The operating budgets holds a central position within the master budget, and it is investigated how it forms the foundation for day-to-day financial

activities within an organization. Complementing the operating budgets are the financial budgets, which takes a broader view of the organization's overall financial health. The last paragraph focuses on the budget of investments. This budget takes on paramount importance as businesses strive for growth and innovation, discussing its benefits and the challenges it poses. Wise investment choices are increasingly critical in today's landscape, making this section a focal point of the exploration.

In Chapter three it is discussed the practical world of managerial accounting through the lens of the Fileni case, a prominent player in the Italian food business. This chapter unfolds the significance of managerial accounting within the unique context of a food enterprise and underscores the pivotal role played by the supply chain in this domain. Furthermore, it is delved the intricacies of Fileni's operations, meticulously examining how the decisions to invest are taken in the company under analysis, the investment budget in terms of content and process and the details of a specific investment known as Track&Trace POD.

Within the food business landscape, the challenges and opportunities are abundant, making it an ideal backdrop to illustrate the real-world applications of managerial accounting principles, in general, and of the investment budget, in particular.

Fileni's operations are a testament to the crucial role of the supply chain in the food business and for this it is explained how supply chain dynamics are central to Fileni's operational efficiency, emphasizing the significance of adept supply chain management in delivering high-quality food products to consumers. A comprehensive portrayal of Fileni is given, shedding light on its inner workings, financial processes, and strategic decision-making. A key aspect is Fileni's investment decision process, which illuminates the methods and tools employed for data collection and analysis, vital for evidence-based decision-making.

The focus is then Fileni's budgeting process, a critical facet of financial management, uncovering the intricacies of how Fileni designs and implements budgets to align with its organizational objectives and how it manages its commercial budget, production budget, timing of investments, and the final statement of investments and payback. By delving into these components, insights are gained into how Fileni strategically allocates resources to foster growth and innovation.

Lastly, it is deeply studied a specific investment within Fileni, the Track&Trace POD, explaining its practical application of managerial accounting principles. By analyzing Track&Trace POD, it is underlined its pivotal role in enhancing supply chain efficiency and contributing to a better well-informed decision-making process within Fileni.

Within the final conclusions, the challenges, and problems that companies might encounter during the construction and implementation of investment budgets are also explained, in particular: market uncertainty, resource constraints, implementation obstacles, interdepartmental conflicts and the dilemma between short and long term.

The journey into the Fileni case promises to be an insightful exploration of how managerial accounting principles and practices manifest in the real-world context of a food business. Subsequent chapters will delve deeper into the specifics of Fileni's financial management strategies, offering a comprehensive understanding of their implications and broader relevance.

CHAPTER 1 - MANAGERIAL ACCOUNTING: AN INTRODUCTION

1.1 Managerial accounting: definitions and features

Managerial accounting, also known as management accounting, is a branch of accounting that provides financial information to managers and executives within an organization in order to support their decision-making process. (Coombs et al., 2019). In particular, this information is used to make strategic decisions, plan activities, evaluate performance, and control costs. (Hansen et al.,2018).

This section will provide an overview of managerial accounting, examining its key characteristics and providing clear definitions of important concepts.

To explore deeply the most relevant characteristic of managerial accounting is useful doing it by indicating what distinguishes the same from financial accounting.

The area where they differ are their audience, the focus of the information, the timeframe of the data used to generate these information, the frequency with which information have to be communicated and the type of information (Maher et al.,2018).

Following what is just said, the first important difference between these two different branches of management is their audience, so who needs the

information. The managerial accounting has an internal focus, including managers, executives, department heads, and decision-makers inside the company (Anthony et al., 2018). It focuses on providing information to assist in internal planning, control, and decision-making to make operational and strategic decisions. Different is the financial accounting, which is geared towards providing information for external stakeholders, investors, creditors, regulators, or the public, providing them with accurate and reliable financial information about the company's performance and financial position (Horngren et al., 2018).

Secondly, financial accounting is concerned with recording, summarizing, and reporting historical financial transactions of a company. It follows Generally Accepted Accounting Principles (GAAP) or International Financial Reporting Standards (IFRS) to ensure consistency and comparability of financial statements (Chenhall et al.,1998). Unlike Managerial accounting that is focus on analyzing and interpreting financial to aid in internal decision-making, planning, and performance evaluation with a more detailed and tailored approach to meet the specific needs of management in making informed decisions (Blocher et al.,2019). It uses historical data to provide valuable context for understanding past trends and the organization's previous performance and future projections that help assess the impact of decisions on future performance and aid in business

planning (Giambalvo, J. 2017). For example, through cost analysis, managerial accounting provides data on the costs of products and services, enabling managers to make decisions regarding pricing, resource allocation, and cost reduction strategies and tools such as break-even analysis and budgeting assist managers in forecasting future financial performance and making decisions based on those forecasts (Giambalvo, J. 2017). Managerial accounting evaluates the organization's performance by providing metrics and performance indicators. For example, contribution margin analysis helps assess the profitability of products and services, identifying the most profitable ones and those that require improvement and with cost analysis, companies can assess the financial impact of different decision options, evaluating expected benefits and associated costs.

The goal is to identify the actions required to achieve long-term organizational goals comparing actual results with plans and identifying any deviations (Maher et al., 2017).

About the timeframe, financial accounting typically deals with historical data over a specific accounting period, such as quarterly or annually. The financial statements produced (like income statement, balance sheet, cash flow statement) provide a snapshot of the company's financial performance during that time. Instead, Managerial accounting timeframe of the information given can vary depending on the needs of management. It can

cover short-term and long-term periods, focusing on forecasting, budgeting, and analyzing trends and patterns (Otley, 1980).

These information has to be communicated to the audience in two different frequency as well, considering that financial accounting information or report are normally prepared annually or quarterly and are matter of interest of people that are not in the company environment, unlike the managerial accounting reports and data that are prepared as frequently as needed by management, whether it's daily, weekly, monthly, or quarterly, to address specific operational and strategic decisions (Simons, 2000).

Last but not least, financial accounting deals with monetary information like revenue, expenses, assets, liabilities, and equity, all aimed at determining the financial health and performance of a company. For Managerial accounting the scope is broader, focusing on financial information about the all company environment, every financial data that is relevant for internal decision-making (Lev et al., 2017).

To sum up, both plays a vital role for the company, just with two different data and goals and its distinctive characteristics, such as internal orientation, use of past and future information, decision focus, and future orientation, make managerial accounting an indispensable tool for planning, control, and performance evaluation, fundamental to achieve greater operational efficiency and better adapt to market challenges and opportunities.

1.2 Aims and relevance of managerial accounting in companies

As already written before, managerial accounting plays a pivotal role in providing internal stakeholders with the necessary financial information to support decision-making, optimize operations, and achieve strategic goals. Through detailed analysis and interpretation of data, managerial accountants assist management in identifying opportunities, improving efficiency, and making informed choices to enhance the company's overall performance (Merchant et al.,2007). Three are the main goal of every managerial accountant: value creation, monitoring business performance and effective resource allocation, always to plan, control and support the decision making of a business process (Hansen et al.,2018)

A managerial accountant creates value for a company providing financial insights that facilitate informed decision-making and improved performance. Some keyways in which a managerial accountant adds value to a company are Cost Analysis and Reduction, Profitability Analysis, Budgeting and Forecasting, Capital Investment Decisions, Performance Measurement and Key Performance Indicators (KPIs), Working Capital Management, Risk Management and Scenario Analysis (Ittner et al.,2003).

Managerial accountants conduct detailed cost analysis to identify areas where costs can be reduced without compromising the quality of products or services. By understanding cost structures and cost drivers, they help

management optimize resource allocation and improve efficiency (Maher et al.,2018). Through techniques like activity-based costing (ABC), managerial accountants determine the profitability of different products, services, or business segments. This analysis helps management focus on high-margin products or services and make strategic decisions to enhance overall profitability (Hansen et al., 2003). They work with various departments to create realistic budgets and forecasts, ensuring that financial goals align with the company's overall strategic objectives. Regular monitoring and variance analysis against budgets help in staying on track and making timely adjustments. Managerial accountants also evaluate potential investment projects. By assessing the financial viability and expected returns of each investment, they assist management in making informed decisions about resource allocation, also with the development and monitoring KPIs (key performance indicator) to gauge the performance of different areas of the business. These metrics help identify strengths and weaknesses, enabling management to focus on areas that need improvement and rewarding areas of excellence. By analyzing the company's working capital, including inventory, accounts receivable, and accounts payable, managerial accountants help optimize cash flow and ensure that the company maintains sufficient liquidity to meet its operational needs, also assessing and managing financial and operational risks. They identify potential risks and

work with management to implement risk mitigation strategies, safeguarding the company's assets and ensuring business continuity (Anthony A. et al.,2011). With the scenario analysis they help management evaluate various options and their potential outcomes, may also incorporating non-financial metrics, such as customer satisfaction, employee productivity, and environmental impact, into performance measurement using frameworks like the Balanced Scorecard, a strategic performance management tool that provides a comprehensive view of an organization's performance by measuring key performance indicators (KPIs) across four different perspectives: financial Perspective, Customer Perspective, Internal Process Perspective, Learning and Growth Perspective (Simons, 2000).

Interpretating financial data to provide valuable insights to management, managerial accounting can monitor business performance by Data Collection and Recording, KPI, Data Analysis and Interpretation, Variance Analysis, Performance Reporting, Benchmarking, Identifying Efficiency and Productivity Improvements, Continuous Monitoring and Feedback.

The process starts with gathering relevant data from various sources, including financial statements, operational reports, sales figures, production data, and other performance-related metrics. The managerial accountant ensures that the data is accurate, complete, and up to date. Once the data is collected and organized, the managerial accountant analyzes the information

to identify trends, patterns, and areas of concern or opportunity (Lev, 2004). They use various quantitative and qualitative analysis techniques to make sense of the data and provide meaningful insights to management. Then, variance analysis to identify discrepancies between the planned and actual results. This helps in understanding the reasons behind the variations and facilitates timely corrective actions. Based on the analysis, the managerial accountant prepares performance reports and dashboards to present the findings to management (Lynch, 1991). These reports are designed to be clear, concise, and relevant, providing a snapshot of the company's performance against its goals. Managerial accountants often use benchmarking to compare the company's performance against industry peers or best practices. This helps in identifying areas where the company is excelling or falling behind, leading to actionable insights for improvement.it also helps to identify areas where the company can improve efficiency and productivity. This could involve streamlining processes, reducing waste, optimizing resource allocation, or enhancing operational performance. But monitoring business performance is an ongoing process. The managerial accountant ensures that the performance data is continuously updated and monitored. Regular feedback and communication with management help in identifying emerging trends and making proactive adjustments to achieve desired outcomes (Datar et al.,2018).

A managerial accountant also ensures effective resource allocation for a company by employing various techniques and methodologies to optimize the use of resources. Their focus is on aligning resource allocation with the company's strategic objectives, maximizing efficiency and effectiveness.

"Efficacy" in managerial accounting refers to the degree to which a particular managerial decision, process, or strategy achieves its intended goals or objectives when implemented as planned. It focuses on how well a specific managerial action performs in achieving the desired outcomes under controlled and ideal conditions. "Effectiveness" in managerial accounting refers to the degree to which a particular managerial decision, process, or strategy achieves its intended goals or objectives when implemented in the real-world business environment. It assesses how well a managerial approach performs in achieving the desired outcomes under practical, dynamic, and uncertain conditions, where various external factors may influence the results.

A managerial accountant achieves resource allocation Budgeting and Planning, with the cost Analysis, Activity-Based Costing, resource Optimization. The managerial accountant collaborates with management to develop comprehensive budgets and strategic plans. By analyzing historical data and future projections, they determine the financial resources required for each department and activity. Budgets act as a roadmap, guiding resource

allocation decisions throughout the fiscal year. they conduct cost analysis to understand the cost structure of the company's products, services, and operations. This helps in identifying cost-saving opportunities and allocating resources more efficiently to areas that generate the highest returns. ABC is a technique used by managerial accountants to assign costs to specific activities or processes. By understanding the costs associated with each activity, management can prioritize and allocate resources based on their contribution to overall value creation and by identifying underutilized resources or areas of inefficiency, they recommend changes to optimize resource allocation and reduce wastage (Anthony et al., 2018).

In conclusion, managerial accounting is an indispensable tool for companies seeking to create value, monitor business performance, and allocate resources effectively. By providing crucial financial information to management, managerial accountants empower decision-makers to navigate challenges, seize opportunities, and drive sustainable growth. The success of modern organizations increasingly relies on the valuable insights provided by managerial accounting, making it an essential component of strategic business management.

1.2.1 Planning

Managerial accounting plays a significant role in both strategic and operational planning within companies.

In this section, we will delve into the characteristics, differences, and importance of strategic and operational planning and discuss how managerial accounting supports these processes.

Strategic planning is the process of defining an organization's long-term goals and determining the most effective ways to achieve them (Noreen et al., 2018).

It involves analyzing the external environment, assessing internal capabilities, and formulating strategies to gain a competitive advantage. Managerial accounting contributes to strategic planning providing financial data and analysis, such as cost structures, profitability, and return on investment, to help assess the viability and potential outcomes of different strategic initiatives (Kieso et al., 2019).

It assists in the development of budgets and financial forecasts that align with strategic objectives, allocating resources effectively and providing a basis for evaluating the progress towards strategic goals (Horngren et al., 2018).

It establishes performance indicators and metrics to measure the success of strategic initiatives, enabling the monitoring of key performance indicators

(KPIs) to track progress and make necessary adjustments (Hilton et al., 2019).

Operational planning focuses on translating the strategic plans into specific actions and activities to be carried out by various departments or teams within the organization (Atkinson et al., 2018).

It involves short-term planning and decision-making to ensure the efficient and effective execution of day-to-day operations (Garrison et al., 2018). Managerial accounting supports operational planning providing detailed cost information, including direct and indirect costs, overhead costs, and cost drivers, to assist in evaluating the cost-effectiveness of different operational activities (Jiambalvo et al., 2017).

It helps allocate resources efficiently by analyzing resource utilization, identifying bottlenecks, and optimizing resource allocation across different operational areas (Hansen et al., 2018).

It provides real-time information on operational performance, allowing managers to track actual performance against planned targets, identify variances, and take corrective actions promptly.

It is therefore easily deducible that the two different aspects of planning present some differences based on some features of each of them, about the time horizon, scope, level of details and focus (Maher et al., 2017).

Strategic planning has a long-term perspective, typically spanning three to five years or more, while operational planning operates on a shorter time frame, usually ranging from one month to one year (Stratton et al., 2018).

Strategic planning addresses broad organizational issues, such as market positioning, mergers and acquisitions, and new product development, while operational planning deals with specific activities, tasks, and resources required to achieve strategic objectives (Blocher et al., 2019).

Strategic planning involves high-level decision-making, emphasizing the overall direction and resource allocation, while operational planning involves more detailed and granular decisions related to specific operational tasks and processes (Blocher et al., 2019).

Strategic planning focuses on external factors, market trends, competition, and long-term growth, while operational planning focuses on internal processes, resource allocation, and short-term operational efficiency (Atkinson et al., 2018).

So, to summarize, managerial accounting plays a vital role in supporting both strategic and operational planning within companies.

Strategic planning sets the long-term direction and goals of the organization, while operational planning translates those strategies into actionable steps for day-to-day operations.

Managerial accounting provides financial analysis, budgeting, performance measurement, cost analysis, resource allocation, and performance monitoring to support these planning processes.

By leveraging managerial accounting insights, companies can align their strategies with operational activities, optimize resource allocation, monitor performance, and ensure the successful execution of their plans.

1.2.2 Controlling

Controlling is an integral part of managerial accounting that involves monitoring, evaluating, and adjusting activities to ensure that organizational goals are achieved (Chen et al., 2019).

It encompasses feedback and feedforward mechanisms, which provide valuable information for decision-making and performance improvement. In this section, we will explore the characteristics, differences, and importance of feedback and feedforward mechanisms in controlling, as well as the interpretation and implications of positive and negative controlling results.

Feedback mechanisms in controlling involve evaluating actual performance against planned objectives and providing information about deviations, variances, and areas requiring corrective actions.

Key aspects of feedback mechanisms include performance measurement, variance analysis, corrective actions (Bhimani et al., 2018).

Managerial accounting establishes performance indicators and metrics to measure and evaluate actual performance.

These metrics may include financial measures (e.g., revenue, cost, profit) and non-financial measures (e.g., customer satisfaction, quality metrics) (Drury 2017).

By comparing actual performance with planned objectives, variance analysis identifies discrepancies and deviations.

Positive variances (where actual performance exceeds planned targets) may indicate success or opportunities, while negative variances (where actual performance falls short of planned targets) may signal problems or inefficiencies (Coombs et al., 2019).

Instead, Feedback mechanisms consists of comparing planned objectives against forecasted results during the implementation period of the project, enabling managers to take appropriate corrective actions to address negative variances or exploit positive variances.

It involves proactive measures to anticipate and prevent potential problems or deviations before they occur, identifying potential issues or challenges and taking preventive actions to avoid or minimize their impact, by adjusting operations, reallocating resources, revising strategies, or implementing process improvements (Govindarajan 2009).

By comparing the organization's performance with industry standards or best practices, feedforward mechanisms help identify areas for improvement and set performance targets as well.

Setting standards, anticipating deviations, and implementing strategies to ensures that the organization's operations align with its objectives are key aspects of feedforward mechanisms and they include forecasting and planning, risk management, benchmarking (Hansen, 2018).

Managerial accounting supports feedforward mechanisms by providing tools and techniques for forecasting future performance and planning actions to achieve desired outcomes.

This includes budgeting, financial modeling, scenario analysis, and risk assessment (Hilton et al., 2019).

Feedforward mechanisms involve identifying potential risks and implementing strategies to mitigate or minimize their impact.

Managerial accounting assists in risk identification, risk assessment, and the development of risk management strategies (Horngren et al., 2018).

These methods as explained has different strategies and goals and both have some pros and cons.

The feedback method allows for the identification of problems and issues after they have occurred. This enables timely corrective action to address the root causes and prevent similar issues in the future. By analyzing feedback

data, organizations can learn from past experiences, understand what went wrong, and use this knowledge to improve processes and decision-making. It facilitates real-time adjustments to address deviations from standards or targets, allowing for quick responsiveness to changing situations.

The first Cons of the feedback method is Feedback control is inherently reactive nature, as it addresses issues after they have occurred. While it is valuable for problem-solving, it may not prevent all potential issues proactively. Depending on the nature of the problem, the consequences of issues identified through feedback control may already have caused financial losses or damage to the organization's reputation. Last cons is that there might be a time lag between the occurrence of an issue and its identification through feedback, which can delay corrective actions and lead to prolonged impacts.

About the feedforward mechanism, the first pros is its is proactivity, enabling organizations to anticipate potential issues and take preventive measures to avoid or minimize their impact. By implementing feedforward mechanisms, organizations can save resources and avoid costly mistakes by preventing problems before they occur. Feedforward control helps align the organization's operations with its strategic objectives, ensuring that activities and decisions are in line with the overall vision. The cons consist in the aspect of anticipating all potential challenges accurately can be challenging,

as there might be unforeseen events or dynamic changes in the business environment. Implementing feedforward mechanisms, such as setting up robust planning and forecasting systems, may require substantial resources and effort. And lastly, the benefits of feedforward control might not be immediately evident, as its success lies in preventing problems rather than resolving existing ones.

Controlling plays a critical role in organizational success by providing valuable insights and feedback for decision-making and performance improvement. Positive and negative controlling results have different implications (Ittner et al, 2003). Positive controlling results indicate that actual performance exceeds or meets planned targets. This suggests that the organization is performing well, and the implemented strategies and actions are effective. Positive results may reinforce successful practices, provide validation for decision-making, and boost employee morale (Flamholtz 2000).

Negative controlling results occur when actual performance falls short of planned targets. This signals potential problems, inefficiencies, or deviations from desired outcomes. Negative results call for analysis and corrective actions to address the underlying issues, improve performance, and align operations with organizational goals (Stratton 2018).

Interpretation of controlling results requires a comprehensive understanding of the context, goals, and strategies of the organization. Negative results should be seen as opportunities for improvement and learning rather than as failures. They provide valuable information for managerial decision-making, prompting adjustments, and realignments to achieve better performance (Maher et al., 2017).

To conclude, feedback and feedforward mechanisms are integral to the controlling function in managerial accounting. Feedback mechanisms involve evaluating actual performance against planned targets and taking corrective actions, while feedforward mechanisms involve proactive measures to anticipate and prevent potential problems (Maher et al., 2017).

Controlling provides valuable insights for decision-making, performance improvement, and risk management.

Positive controlling results validate successful practices, while negative results prompt analysis and corrective actions. By leveraging controlling mechanisms, organizations can optimize performance, enhance efficiency (Maher et al., 2017)

1.2.3 Decision making

Managerial accounting plays a crucial role in decision-making processes within organizations. Effective decision making requires answering three

fundamental questions: What? Who? How? Additionally, the concepts of efficiency and effectiveness are essential considerations when making decisions (Langfield-Smith et al., 2020).

In this section, we will explore the significance of these questions and concepts in managerial decision making.

The "What?" question refers to identifying the decisions that need to be made and the available alternatives.

Managerial accounting provides relevant information to support decision makers in understanding the options and their potential outcomes.

It involves cost analysis, financial analysis, quantitative analysis (Horngren et al., 2018).

Managerial accounting helps evaluate the costs associated with different alternatives, including direct costs, indirect costs, and opportunity costs. This information aids in comparing and selecting the most financially viable option (Horngren et al., 2018).

It also provides financial data, such as revenue projections, cash flow analysis, and return on investment, to assess the financial implications of decision alternatives (Hansen et al., 2018).

Furthermore, it employs techniques such as cost-volume-profit analysis, breakeven analysis, and capital budgeting to assess the quantitative impact

of decisions on profitability and financial performance (Garrison et al., 2019).

The "Who?" question focuses on revolves around identifying the target markets and customer segments that an organization should focus on to maximize profitability, customer satisfaction, and overall success. Understanding and effectively serving the right customers are key factors in driving business growth and sustaining competitive advantage.

Managerial accountants contribute to market segmentation by analyzing data on customer demographics, preferences, buying behavior, and geographic locations. They help identify distinct customer groups with specific needs, allowing the organization to tailor its products or services to meet those needs effectively.

They assess the profitability of different customer segments by analyzing revenue generated, costs incurred, and the lifetime value of customers, they determine which segments contribute the most to the organization's bottom line. This information enables the company to prioritize and allocate resources to the most profitable customer groups.

They also collaborate with customer service and marketing teams to measure customer retention rates and loyalty metrics. They help identify factors that contribute to customer churn or attrition and develop strategies to enhance customer satisfaction and loyalty.

Based on customer analysis, managerial accountants help management identify and select target markets that align with the organization's strengths and strategic objectives. This involves evaluating the potential of different markets and assessing their attractiveness in terms of growth opportunities and competitive dynamics.

The "How?" question relates to evaluating the efficiency and effectiveness of decision alternatives.

Managerial accounting contributes to this evaluation through efficiency, effectiveness, cost-benefit analysis (Govindarajan 2009).

Managerial accounting provides insights into resource utilization, cost control, and process optimization.

It assists in identifying efficient alternatives by analyzing factors such as production costs, labor utilization, and inventory management (Garrison et al., 2019).

Managerial accounting helps evaluate the financial and non-financial performance measures associated with decision alternatives, such as revenue growth, customer satisfaction, market share, and return on investment.

It also facilitates cost-benefit analysis, comparing the costs incurred with the expected benefits generated by different decision alternatives, helping decision-makers weigh the financial and non-financial implications to select the option that maximizes overall benefits (Hilton et al., 2018).

To sum up, managerial accounting supports decision-making processes by addressing the fundamental questions of "What?", "Who?", and "How?", providing crucial information on costs, financial analysis, and quantitative evaluation to identify decision alternatives.

Additionally, it considers cost allocation, performance measurement, and stakeholder analysis to understand the impact of decisions on various stakeholders.

Furthermore, managerial accounting aids in evaluating efficiency and effectiveness through resource optimization, cost control, and performance measurement.

By incorporating managerial accounting into decision-making processes, organizations can make informed choices that align with their goals, optimize resource allocation, and enhance overall performance.

1.3 The role and the tasks of managerial accountants

This section will explore the identity, responsibilities, competences, and evolution of the managerial accountant within organizations.

It examines how the role of the managerial accountant has transformed over the years, adapting to changing business environments and advancements in technology.

The section also highlights the key functions and contributions of managerial accountants in driving organizational success through their financial expertise and strategic insights.

The role of the managerial accountant has significantly evolved over time, mirroring the dynamic nature of the business environment.

Initially rooted in traditional accounting practices, the managerial accountant has transitioned into a multifaceted professional with a broader range of responsibilities (Kieso et al., 2019).

The emergence of managerial accounting as a distinct discipline marked a crucial turning point in the role of the managerial accountant.

Historically, accounting was primarily focused on financial reporting and compliance, but as organizations faced increasing complexities, the need for strategic financial insights became apparent (Flamholtz 2000).

This prompted the transformation of the managerial accountant into a strategic partner, providing valuable information for decision-making and performance evaluation.

Technological advancements have significantly impacted the role of the managerial accountant.

Automation and digitalization have streamlined routine accounting tasks, allowing accountants to focus on value-added activities such as data analysis, interpretation, and strategic decision support.

Advanced analytics and business intelligence tools have empowered managerial accountants to extract meaningful insights from vast datasets, enabling more accurate forecasting and enhanced decision-making (Albrect, 2019).

Despite the evolving role of managerial accountants, they face certain challenges.

Adapting to changing regulatory requirements and ethical considerations poses ongoing challenges.

Additionally, the rapid pace of technological advancements necessitates continuous learning and upskilling to remain relevant.

However, these challenges also present opportunities for managerial accountants to contribute to organizational growth by embracing emerging technologies, expanding their knowledge base, and fostering collaboration within the organization (Jiambalvo 2017).

The role of the managerial accountant has undergone significant changes throughout history, evolving from a traditional financial reporting function to a strategic partner in decision-making processes.

Nowadays, managerial accountants bring a unique set of competences and skills to the table, enabling them to contribute to organizational success through financial planning, cost analysis, and performance evaluation. Technological advancements have further enhanced their capabilities, while

also presenting new challenges and opportunities. By adapting and embracing change, managerial accountants can continue to play a vital role in shaping the future of organizations.

They are responsible for translating financial data into actionable insights and they play a vital role in financial planning, budgeting, forecasting, and analysis. Furthermore, they contribute to cost control, performance measurement, and risk management activities (Blocher et al., 2019).

The managerial accountant collaborates with various stakeholders, providing financial expertise and supporting decision-making processes (Sahaf 2016). Their primary responsibility is to collect, interpret, and communicate financial information to assist managerial decision-making.

They serve as a bridge between the financial and non-financial functions of the organization, translating complex financial data into understandable terms for stakeholders across various departments (Atkinson 2018).

In addition to traditional accounting knowledge, managerial accountants possess a deep understanding of the organization's business operations, industry dynamics, and market trends.

They actively participate in the planning process, working closely with managers and executives to develop financial forecasts, budgets, and performance targets (Chen et al., 2019).

One of the key roles of the managerial accountant is financial analysis.

They analyze financial statements, identify trends, and assess the financial health and performance of the organization. This includes evaluating profitability, cost efficiency, and liquidity to provide valuable insights for decision-making.

By conducting variance analysis and performance evaluations, managerial accountants help identify areas of improvement and support management in making informed choices (Albrect et al., 2019).

Managerial accountants are responsible for cost analysis and control within the organization.

They examine cost structures, identify cost drivers, and implement cost management strategies.

By analyzing costs across different functions, products, or services, they contribute to optimizing resource allocation and improving overall efficiency.

This helps in identifying cost-saving opportunities, managing risks, and enhancing profitability (Govindarajan 2009).

Furthermore, managerial accountants play a vital role in risk management and internal control systems.

They design and implement internal control procedures to safeguard assets, ensure compliance with regulations, and mitigate operational risks.

Effective communication skills are essential for managerial accountants, as they must explain financial information to non-financial stakeholders, including managers, executives, and board members.

They prepare reports, presentations, and dashboards that present financial data in a clear and concise manner.

By effectively communicating financial insights, managerial accountants contribute to a shared understanding of the organization's financial performance and facilitate data-driven decision-making (Atkinson et al., 2018).

In summary, the managerial accountant plays a pivotal role in the organization by providing financial expertise, analysis, and insights.

Through their multifaceted responsibilities, managerial accountants contribute to the overall success and sustainability of the organization.

To effectively fulfill their responsibilities, managerial accountants require a diverse set of competences and skills.

These include a strong foundation in financial accounting principles, proficiency in data analysis, advanced technological skills, and the ability to communicate financial information to non-financial stakeholders. Furthermore, they must possess critical thinking abilities and a strategic mindset to contribute to the organization's long-term objectives (Hansen 2018).

Managerial accountants are instrumental in driving organizational success and through their involvement in strategic planning, budgeting, and forecasting, they provide financial insights that assist in setting realistic goals and aligning resources accordingly.

Additionally, managerial accountants contribute to performance measurement and evaluation, identifying areas of improvement and supporting informed decision-making (Horngren et al., 2018).

CHAPTER 2 - THE BUDGETING PROCESS: A FOCUS ON THE BUDGET OF INVESTMENTS

2.1 The budgeting process: an introduction

A budget is a formalized financial plan that outlines a company's expected revenues, expenses, and financial performance over a specified period, typically a fiscal year. It serves as a comprehensive framework for allocating resources, setting financial goals, and monitoring the financial health of the organization. Budgets are designed to facilitate strategic decision-making, resource allocation, and performance evaluation, providing a basis for comparing actual financial results with planned figures. They encompass various components, such as income statements, balance sheets, cash flow projections, and detailed breakdowns of expenses and revenues, all aimed at helping a company achieve its financial objectives while ensuring efficient resource utilization and fiscal responsibility (Anthony et al., 2018). The process of constructing a budget in a company is a fundamental aspect of financial planning and control. It involves a comprehensive analysis of financial data, setting operational objectives, and allocating resources to achieve organizational goals effectively. A well-constructed budget provides a roadmap for management to make informed decisions, optimize resource utilization, and monitor financial performance (Anthony et al., 2018).

A budget is not merely a financial document but a tool that aids management in setting priorities, optimizing resource utilization, and evaluating performance (Hansen et al., 2018). By systematically planning revenue and expense projections, companies can align their activities with long-term objectives and adapt to changing market conditions. Moreover, budget construction facilitates effective communication and coordination among different departments and stakeholders, fostering a unified approach to achieving organizational success (Barfield, 2016).

Its construction requires a thorough analysis of various factors that influence a company's financial performance. Key considerations include historical financial data, market trends, industry benchmarks, and internal operational capabilities. Additionally, companies need to assess potential risks and uncertainties, regulatory compliance, and the impact of macroeconomic conditions on budget projections. A robust budget should also incorporate contingency plans to address unexpected events and changes in the business landscape (Hansen et al.,2003).

The budgeting process involves collaboration among various stakeholders within the organization (Barfield et al., 2016). Senior management sets the strategic direction and financial objectives, while department heads and managers provide essential input on resource requirements and operational needs. Finance department play a central role in analyzing financial data,

preparing budget drafts, and ensuring accuracy and compliance. Effective communication and cooperation among stakeholders are vital to ensure that the budget reflects the collective vision and goals of the company (Flamholtz et al., 2000).

The timing of budget construction depends on the company's fiscal cycle and the industry's specific characteristics. Most organizations undertake budget construction annually, coinciding with the start of the fiscal year. However, in rapidly evolving industries or during periods of significant change, companies may implement rolling budgets with more frequent updates. Early budget construction allows for comprehensive planning and a smoother budget approval process (Simons, 2000).

Budget construction should align with the company's strategic planning cycle, considering short-term and long-term objectives. Additionally, the budget should be consistent with the company's overall vision, mission, and values. Contextual factors such as organizational culture, risk appetite, and stakeholders' expectations influence the budgeting process and the level of detail and flexibility required (Lynch et al.,1991).

There are certain specific steps for the budget construction and the first one is obviously the collection of financial data from various sources within the organization. This data includes historical financial statements, sales figures, expense reports, operational costs, and any other relevant financial

information. Accurate and up-to-date data forms the foundation for effective budgeting, enabling managers to make informed projections and allocations. Then setting clear and achievable financial goals is imperative for the budgeting process. Company management needs to establish specific objectives, which may include revenue targets, profit margins, cost reductions, or investment plans. These objectives serve as benchmarks against which actual financial performance is measured, ensuring alignment with the organization's overall strategic direction (Lev, B. 2004).

Constructing a budget requires accurate sales and revenue projections. These estimates are based on historical data, market analysis, and future trends. Careful consideration is given to factors that may influence sales performance, such as changes in customer demand, economic conditions, and competition. Accurate sales projections provide a realistic foundation for budgeting revenue streams.

Accurate as to be also the expenses estimation, a critical aspect of budget construction. Operating expenses, including fixed costs (e.g., rent, utilities, salaries) and variable costs (e.g., raw materials, production costs), are carefully analyzed. By identifying and quantifying expenses, companies can make informed decisions about resource allocation and cost management strategies (Myers et al.,1984).

These expenses are also the capital expenditures, such as investments in equipment, technology, or infrastructure, which are essential for long-term growth and competitiveness. Budgeting for capital expenditures involves assessing the organization's future needs, evaluating investment opportunities, and aligning spending with strategic priorities. Capital expenditure planning ensures that the company allocates resources efficiently to support its expansion and improvement endeavors.

Once the company has a clear idea of how much the expenses will be it has to allocate the budget and to distribute the available resources across different departments, projects, or cost centers. This step often involves negotiations between department heads and top-level executives to ensure that resources are allocated in line with strategic priorities. Once the budget is agreed upon and approved, it serves as a financial blueprint for the company during the budget period (Datar et al., 2018).

Budgeting is an ongoing process that requires continuous monitoring and control. Actual financial performance is compared to the budgeted figures regularly. Deviations from the budget are analyzed, and appropriate corrective actions are taken to keep the company on track. Monitoring allows management to identify potential financial issues early and implement timely solutions.

It is clear that in a dynamic market the budget has to be flexible to adapt to changing circumstances. Business environments are dynamic, and unexpected events can impact financial performance. Companies may need to adjust their budgets during the budget period to accommodate unforeseen changes and maintain financial stability (Hansen et al., 2003).

The process of constructing a budget in a company is a systematic and strategic endeavor. By gathering financial data, defining objectives, projecting sales and expenses, and allocating resources, companies can create a comprehensive financial plan to guide their operations. Budgeting enables companies to manage financial resources efficiently, make informed decisions, and pursue their long-term goals effectively. Moreover, continuous monitoring and adjustments provide companies with the agility needed to navigate an ever-changing business landscape. Overall, a well-constructed budget is an indispensable tool for achieving financial stability and success in today's competitive business environment (Lev et al., 2017).

2.2 The master budget

The master budget is a vital financial planning tool that integrates various individual budgets to present a comprehensive overview of an organization's financial performance for a specific period (Harris et al., 1991). Understanding the master budget and its components is crucial for

companies aiming to achieve effective resource allocation, performance evaluation, and strategic decision-making.

The master budget is an essential financial planning and control mechanism that consolidates all functional budgets within an organization. It provides a detailed outlook on expected revenues, expenses, and profitability, enabling management to make informed decisions and assess the company's financial health. The master budget serves as a blueprint for resource allocation, performance evaluation, and achieving long-term objectives (Hansen, et al. 2003).

It comprises several interrelated components, including operating budgets, financial budgets, and cash budgets. Operating budgets encompass sales, production, and expense budgets, outlining the anticipated revenues and costs associated with core business activities. Financial budgets include the capital expenditure budget and the budgeted balance sheet, focusing on long-term investments and the company's financial position. Cash budget is used to forecast and track the inflow and outflow of cash over a specified period, typically on a monthly or quarterly basis and its primary purpose of a cash budget is to ensure that an entity has enough cash on hand to meet its short-term financial obligations and operational needs.

The process of constructing a master budget involves collaboration among various departments and stakeholders. It begins with gathering historical

data, market trends, and sales forecasts to project future revenues. Subsequently, the operating budgets are prepared, incorporating cost estimates for production, labor, and overheads. Financial budgets are constructed by evaluating capital investment needs and the company's financial structure (Hansen et al.,2003).

There are four main type of master budget depending on its level of flexibility and adaptation during the budgeting period: static master budget, the flexible master budget, the zero-based master budget, the incremental master budget (Hansen et al.,2003).

A static master budget is fixed and remains unchanged throughout the budget period, irrespective of actual performance. It provides a benchmark for performance evaluation and aids in cost control. However, it lacks flexibility to adapt to dynamic business conditions.

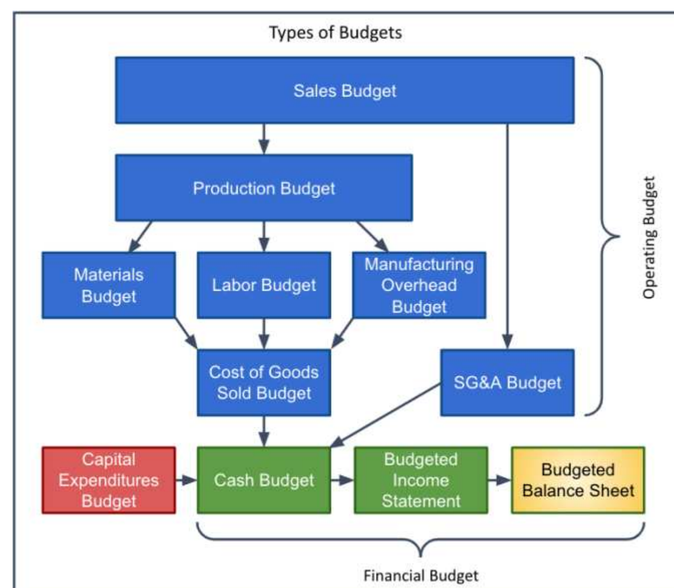
A flexible master budget adjusts to actual performance levels, accommodating changes in revenues and expenses. It enables more accurate performance evaluation and facilitates decision-making in fluctuating environments.

The zero-based master budget starts from scratch, requiring each activity or department to justify its budget needs from the ground up. This method ensures resources are allocated efficiently based on current priorities and needs.

An incremental master budget involves minor adjustments to the previous period's budget. It is simple to implement but may lead to inefficiencies due to a lack of thorough analysis. One of the primary benefits of an incremental master budget is its efficiency. It allows organizations to quickly create a new budget by building upon the existing one, saving time and effort in the budgeting process. By using the previous period's budget as a starting point, an incremental budget takes into account historical data and trends. This can be beneficial when past performance provides a reasonably accurate basis for future projections. Incremental budgets can provide a sense of stability and consistency because they don't introduce drastic changes. This can be reassuring for both employees and stakeholders who may be resistant to major budget overhauls. But as already written it can lead to inefficiencies due its tendency to stifle thorough analysis. Since it relies heavily on the previous budget, it may not encourage a fresh evaluation of business operations or the identification of inefficiencies. An incremental approach may perpetuate inefficiencies or outdated practices from the previous budget period. Without a critical review of each budget line item, unnecessary expenses or underutilized resources may go unnoticed. While an incremental budget can be based on historical data, it may not adequately account for changes in the business environment, market conditions, or internal factors. This can lead to inaccurate projections and financial planning. Lastly, its

focus on minor adjustments may cause organizations to overlook new opportunities for revenue growth or cost savings.

The master budget possesses several key characteristics, including comprehensiveness, accuracy, flexibility, and alignment with the company's strategic objectives. By consolidating all budgets into a single framework, the master budget promotes coordination and communication across departments. It aids in identifying potential financial issues early, enabling proactive measures to address challenges. Additionally, the master budget facilitates the allocation of resources based on priorities, ensuring optimal utilization and cost management (Anthony et al., 2018).



Garrison, R. H., Noreen, E. W., & Brewer, P. C. (2018) "Managerial Accounting"

The master budget serves as a fundamental financial planning and control tool, integrating all functional budgets to provide a holistic view of a company's planned performance. By understanding the different types and

characteristics of the master budget, companies can tailor their budgeting approach to suit their specific needs and enhance their financial stability and success in a dynamic business environment.

2.2.1 Operating budgets

Operating budgets are the core components of the master budget, projecting the expected revenues, expenses, and profitability of the organization. They provide detailed information on the day-to-day business activities and form the basis for other budgeting elements. The primary operating budgets include the sales budget, the production budget, the direct material budget, the direct labour budget, manufacturing overhead budget and the selling and administrative budget.

The sales budget forecasts the expected sales revenue for the budget period. It is typically based on historical sales data, market analysis, and sales forecasts provided by the sales department. The sales budget sets the tone for the entire master budget, as all other budgets depend on the sales projections. The production budget estimates the number of units or services to be produced during the budget period. It considers the desired ending inventory levels, beginning inventories, customer demand, and sales projections from the sales budget. The production budget helps plan the resources needed for production, including raw materials, labor, and overhead costs.

The direct material budget outlines the quantity and the cost of raw materials required for production. It is derived from the production budget and takes into account the amount of raw materials needed for each unit of output.

The direct labor budget estimates the labor hours and associated costs required for production. It considers the labor requirements based on the production budget and the labor rates for different job roles. The manufacturing overhead budget plans the indirect production costs that are not directly tied to specific units of output. These costs may include utilities, maintenance, and factory rent.

The selling and administrative expenses budget outlines the expected costs associated with marketing, selling, and administrative activities. It includes expenses such as advertising, salaries of sales staff, office supplies, and other general administrative costs. The relevant departments, such as marketing and administration, collaborate in preparing this budget.

The construction of the operating budget involve several steps and requires collaboration among various departments and stakeholders. The process typically follows key stages (Barfieldet al.,2016).

All these steps have to ensure the operating budget will present some fundamental features (Lev et al., 2017):

a. specificity: the operating budgets are highly detailed and specific, providing a breakdown of revenues and expenses related to various business

activities. It enables management to identify areas of potential improvement or cost reduction.

b. time-specific: the operating budgets are time-bound and generally covers a specific period, often aligning with the fiscal year or another relevant accounting period.

c. dynamic: the operating budget may be subject to changes throughout the budget period, especially in response to shifts in market conditions, customer demands, or unexpected events.

d. strategic Alignment: the operating budget are aligned with the company's strategic objectives and business plans, ensuring that financial resources support the organization's long-term goals.

e. performance benchmarking: the operating budget serve as a benchmark against which actual financial performance is measured. Variances between budgeted and actual figures help identify strengths and weaknesses in the company's operations.

To summarize, all the company environments collaborate to create the operational budget with different approach.

Department heads play a pivotal role in the operating budget process. They provide input on sales projections, resource needs, and expenses for their respective departments.

The finance department is responsible for collecting and analyzing data, preparing budget drafts, ensuring accuracy and compliance, and consolidating the various operating budgets into a cohesive plan.

The sales and marketing department provide crucial inputs for the sales projections, helping to determine the expected revenue streams for the budget period.

The production department contribute to the production budget, estimating production volumes, labor requirements, and related expenses.

These teams are involved in preparing the direct material budget, estimating the required quantity and cost of raw materials.

The human resources department contributes to the direct labor budget, estimating labor hours and costs associated with production

Depending on the company's structure and activities, other departments such as administration, facilities management, and IT may also be involved in preparing specific components of the operating budget.

In conclusion, the operating budget are a comprehensive and dynamic financial plan that focuses on the organization's core business activities. It involves multiple departments and stakeholders working collaboratively to estimate revenues and expenses, helping the company to set and achieve its operational objectives and maintain financial stability. As a vital component of the master budget, the operating budget provides a roadmap for the

company's day-to-day operations, guiding resource allocation and supporting effective decision-making at the operational level (Barfield et al., 2016).

2.2.2 Financial budgets

Financial budgets focus on the organization's long-term financial plans and capital expenditure (Graham et al., 2005). These budgets provide insights into the company's financial position and financing needs. The key financial budgets include the capital expenditure budget, the cash budget, the budgeted income statement, and the budgeted balance sheet.

The capital expenditure budget outlines the company's planned investments in long-term assets such as machinery, equipment, and facilities. It evaluates the financial viability of these investments and their alignment with the company's growth strategy.

The scope of a cash budget encompasses various aspects related to managing an entity's cash flow effectively. It involves detailed planning, monitoring, and control of the cash-related activities within a specific time frame, typically covering a short to medium-term horizon, such as a month, quarter, or fiscal year.

The budgeted income statement summarizes the expected revenues and expenses for the budget period, resulting in projected net income. It

incorporates data from the operating budgets and provides an overview of the company's financial performance.

The budgeted balance sheet provides a snapshot of the company's financial position at the end of the budget period. It includes projected assets, liabilities, and equity, reflecting the impact of the budgeted activities on the company's financial health.

The construction of the financial budgets involves combining data from the operating budgets with additional financial information to create a comprehensive financial plan for the organization (Penman, S. H. 2013).

The preparation of the financial budgets should meet some fundamental features (Beaver, W. H. 1968):

a. long-term focus: the financial budgets encompasses the company's long-term financial plans and capital investment decisions, looking beyond the budget period.

b. capital allocation: they guide the allocation of financial resources towards capital expenditures that support the company's strategic goals and growth initiatives.

c. cash management: the cash budgets component helps the company plan for cash needs and ensures sufficient liquidity for smooth operations.

d. investment decision support: the capital expenditure budgets assist in evaluating potential investment projects and determining their financial feasibility.

e. financial position Analysis: the budgeted balance sheet provides insights into the company's financial position at the end of the budget period, helping assess its solvency and leverage.

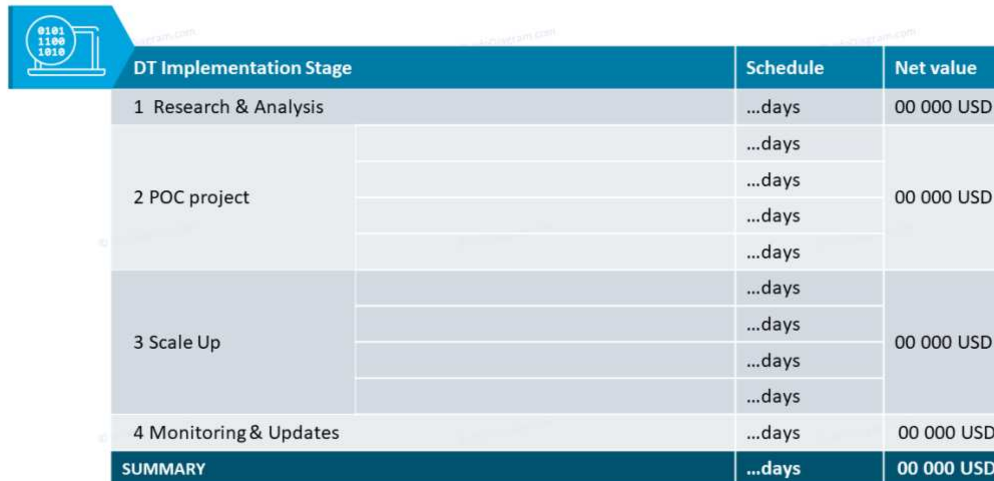
To conclude is deducible that financial budget is a critical component of the master budget, providing a comprehensive view of the company's long-term financial plans, capital expenditure, and financial position. It integrates data from the operating budgets, capital expenditure plans, cash budget, budgeted income statement, and budgeted balance sheet to facilitate strategic decision-making, resource allocation, and financial planning. The financial budget helps organizations make informed investment decisions, assess financial viability, and align financial resources with long-term objectives. Effective collaboration among the various company’s department is crucial in constructing a robust and accurate financial budget that supports the organization's growth and financial stability (Graham et al.,2005).

2.3 A focus on the investment budget: process, benefit, challenges

The investment budget is a financial planning tool that focuses on allocating resources for capital investments and major projects within an organization

(Modigliani et al.,1958). This section explores the concept of the investment budget, its creation process, the key stakeholders involved, and the benefits and challenges associated with its implementation. The investment budget plays a pivotal role in the financial management of a company, enabling effective resource allocation for capital projects and long-term investments. It provides a framework for evaluating potential ventures, estimating their financial implications, and aligning investment decisions with the organization's goals. The investment budget is a fundamental aspect of the master budget, guiding the allocation of financial resources and capitalizing on growth opportunities (Myers et al.,1984).

The investment budget is a subset of the master budget that focuses exclusively on capital expenditures and major projects. It involves financial planning for ventures that extend beyond the budget period, often covering several years. It includes funding for initiatives such as acquiring new assets, expanding facilities, implementing new technologies, or launching new products.



DT Implementation Stage		Schedule	Net value
1 Research & Analysis		...days	00 000 USD
2 POC project		...days	00 000 USD
		...days	
		...days	
		...days	
3 Scale Up		...days	00 000 USD
		...days	
		...days	
		...days	
4 Monitoring & Updates		...days	00 000 USD
SUMMARY		...days	00 000 USD

Hansen, S. C., Otley, D. T., & Van der Stede, W. A. (2003). "Practice developments in budgeting: an overview and research perspective."

The creation of the investment budget involves several steps (Pike, 2006):

a. Identifying Investment Opportunities: The process begins with identifying potential investment opportunities aligned with the company's strategic objectives. These opportunities can be generated through research, market analysis, and internal project proposals.

b. Project Evaluation: Each investment opportunity is subjected to a comprehensive evaluation that considers factors such as the projected return on investment (ROI), risk assessment, payback period, and strategic fit, to estimate the financial implications of each project.

c. Prioritization: The investment budget involves ranking and prioritizing projects based on their financial viability, strategic significance, and available resources.

d. Resource Allocation: After prioritization, resources are allocated to approved projects based on the available capital and the company's risk appetite.

e. Budget Approval: The investment budget is presented to senior management and the board of directors for approval.

Each step in the process requires the collaboration of various parts of the company. Senior management plays a crucial role in setting strategic priorities, approving the investment budget, and providing guidance on resource allocation. Managerial accounting is responsible for financial analysis, modelling, and preparation of the investment budget, collaborating with other departments to assess financial feasibility. Project managers provide essential input on project proposals, cost estimates and timing of investment opportunities. The board of directors reviews and approves the investment budget, ensuring alignment with the company's long-term vision and goals (Harris, et al., 1991).

The investment budget ensures that capital expenditure and investment decisions are aligned with the company's strategic objectives by providing a structured framework for evaluating potential projects, allowing companies to focus on initiatives that directly support their long-term growth and competitiveness. Prioritizing investment opportunities enables companies to allocate financial resources efficiently and helps identify high-potential

projects with the most favorable returns on investment, maximizing the utilization of available capital. It also involves a comprehensive risk assessment of potential projects, and by evaluating the risks associated with each investment opportunity, companies can make informed decisions to mitigate potential financial uncertainties and safeguard their financial health. It also provides a systematic approach for evaluating projects based on their financial feasibility, expected returns and strategic importance, providing decision-makers with critical information to evaluate investment options objectively, allowing companies to plan for long-term growth and development (Modigliani et al., 1958). By considering multi-year investment horizons, organizations can develop a clear roadmap for their future growth initiatives, allocating funds to projects that have the potential to create the greatest value for the company. By incorporating investment budgeting into the capital budgeting process, companies can improve the evaluation of capital expenditure decisions. This leads to a more effective allocation of resources, avoiding unnecessary expenditure and focusing on projects with the greatest returns (Graham, 2005). The investment budget, therefore, helps companies identify projects that promote sustainable growth and long-term profitability, enabling organizations to invest in initiatives that create lasting value and contribute to their competitive advantage. A well-constructed investment budget provides transparency and clarity on the company's

investment plans, fostering greater confidence from stakeholders, including investors, lenders, and board members, who can see that the organisation's financial resources are being used wisely. Through strategic investment decisions, companies can position themselves to increase competitiveness in their markets, enabling them to adapt to changing industry trends and take advantage of emerging opportunities. (Hansen et al., 2018). But there are also some challenges that must be taken into account when constructing the investment budget, because many aspects considered among the benefits may not go as planned. One of the main challenges in creating an investment budget is market uncertainty. Economic conditions, customer preferences and industry trends can change rapidly, affecting the financial performance of investment projects. Companies may find it difficult to accurately forecast cash flows and returns on investment due to unpredictable market dynamics. Limited financial resources can be a significant challenge in implementing investment budgets. Although there are several promising investment opportunities, the second challenge may be the lack of sufficient capital to finance all projects at the same time. As a result, difficult decisions have to be made on which projects to pursue, which could lead to the delay or cancellation of some initiatives. Unforeseen project delays and cost overruns may jeopardies the financial performance of investment projects, or slippage in project completion may lead to prolonged cash outflows without

corresponding revenue generation, affecting the expected return on investment. Furthermore, cost overruns can put a strain on the allocated budget, affecting the financial sustainability of the project. (Graham, 2005). The third challenge to be faced when constructing an investment budget is the fact that such projects may involve several interconnected factors, making it difficult to accurately estimate costs, revenues and risks, and advanced financial models and specialized expertise may be required to properly assess them, as investment projects involve inherent risks, ranging from market risks to operational and regulatory uncertainties. The investment budget must effectively address and manage these risks. Failure to do so may result in unforeseen financial losses and a negative impact on the financial health of the company. Different departments in the organization may have conflicting priorities when it comes to decision-making and each department may defend its own projects, making it difficult for top management to align the investment budget with overall strategic objectives (Holthausen et al., 1983). The fourth challenge concerns the possibility that some investment projects may offer attractive short-term returns but are not sustainable in the long term. It is therefore crucial for companies to consider the long-term impact of their investments in order to ensure steady profitability and growth, while paying attention to external changes that could affect the success of their investments. Changes in

external factors, such as government policies, tax regulations or industry standards, can affect the financial performance of projects. A final consideration that needs to be taken into account is the possible abandonment of other potential projects for various reasons: the concept of opportunity cost is crucial in investment budgeting, as companies need to evaluate the potential benefits and trade-offs of the foregone opportunities. Over time, it may be necessary to re-evaluate the assumptions made when creating the investment budget as market conditions, customer behavior and technological advances may change, necessitating adjustments to budgeted financial projections (Watts, 1986).

To conclude, the investment budget is a critical financial planning tool that guides capital allocation, project selection, and long-term growth for organizations. It involves a comprehensive evaluation process, engaging key stakeholders, and aligning investment decisions with strategic objectives. While the investment budget offers numerous benefits such as resource optimization and risk management, it also poses challenges in uncertain market conditions and resource constraints. By understanding and effectively implementing the investment budget, companies can make informed investment decisions that drive sustainable growth and success.

CHAPTER 3 - ANALYSING THE BUDGET OF INVESTMENT IN FILENI ALIMENTARE S.P.A

3.1 Operating in a food business: an overview

Working in the alimentary business, often referred to as the food industry, offers a dynamic and captivating professional landscape (A. Zein et al., 2018). This sector encompasses a vast array of activities, from agricultural production and food processing to distribution, marketing, and culinary arts. Companies operating in the alimentary business play a pivotal role in satisfying one of humanity's most fundamental needs: nourishment. This can have various implications for a company. Some of the key implications include Regulatory Compliance, Quality Control, Supply Chain Management, Brand Reputation, Consumer Preferences and Trends, Price Sensitivity, Seasonality and Perishability, Environmental and Social Impact, Marketing and Advertising, Competition, Food Safety Incidents and Recalls, Economic Factors (Samir dani, 2015).

Regulatory compliance in the food industry encompasses a wide range of laws and standards, depending on the country or region of operation. Companies must follow guidelines related to food safety, hygiene, labeling, packaging, and advertising. For instance, the United States Food and Drug Administration (FDA) sets regulations such as the Food Safety

Modernization Act (FSMA) to prevent foodborne illnesses, while the European Food Safety Authority (EFSA) governs food safety regulations in the European Union (Marsden et al., 2014)).

Quality control involves establishing and maintaining specific standards for all aspects of the food production process. This includes assessing raw materials for freshness and safety, monitoring production processes to identify and correct defects, and performing thorough testing on finished products. Advanced quality control methods may involve technologies like DNA testing, spectroscopy, and machine vision to identify contaminants or deviations from standards. In the event of a quality issue, companies need to conduct root cause analyses to prevent recurrence and implement corrective actions promptly (Marsden et al., 2014).

Effective supply chain management is critical for a smooth flow of materials and products. In the food industry, supply chain challenges can arise due to perishability, seasonality, and transportation constraints. Companies may opt for vertical integration, where they control multiple stages of the supply chain, or collaborate with reliable suppliers and distributors. Digital technologies such as blockchain can enhance supply chain transparency and traceability, helping companies track products' journey from source to consumer and improve responsiveness to disruptions.

Maintaining a positive brand reputation requires not only consistent quality but also transparent and ethical practices. Companies should communicate their commitment to food safety, sustainability, and responsible sourcing to build consumer trust. Responding promptly and transparently to any issues or recalls is essential to demonstrate a commitment to customer well-being. Companies can also leverage certifications and third-party audits to verify compliance with industry standards and showcase their dedication to quality. Staying attuned to consumer preferences and trends involves continuous market research and monitoring of social, cultural, and technological developments. Health and wellness trends, such as plant-based diets, gluten-free options, and clean label products, influence consumer choices. Adapting to these trends may require reformulating products, adding new menu items, or introducing innovative packaging solutions to meet changing consumer demands (Samir Dani, 2015)

In the food industry, consumers often seek value for their money. Balancing competitive pricing with maintaining profitability can be challenging, especially for small businesses with tight margins. Companies may adopt various strategies, such as offering premium and budget product lines or exploring cost-saving measures in their supply chain.

Dealing with seasonality and perishability requires efficient inventory management and production planning. Companies may collaborate with

local producers to access fresh, seasonal ingredients or implement techniques like freezing, canning, or vacuum packaging to extend shelf life. By anticipating seasonal fluctuations and adjusting production accordingly, companies can optimize operations and minimize waste (Marsden et al., 2014).

Consumer awareness of environmental and social issues has grown significantly in recent years. Corporate Social Responsibility (CSR) for a food company involves a commitment to balancing profit generation with ethical, environmental, and social considerations. In today's socially conscious world, consumers are increasingly scrutinizing the behavior and values of the companies they support, making CSR an essential aspect of a food company's business strategy. To address these concerns, companies can implement sustainable practices, such as reducing packaging waste, sourcing ingredients from eco-friendly suppliers, supporting fair trade practices, and investing in renewable energy. Transparency in disclosing sustainability efforts can enhance a company's reputation and attract conscious consumers. Food marketing requires creativity and effective communication to capture consumers' attention. Companies may engage in social media campaigns, influencer marketing, and product sampling to increase brand visibility. It is vital to adhere to advertising regulations to avoid potential legal issues resulting from misleading or false claims. Utilizing customer feedback and

data analytics can help refine marketing strategies and tailor messages to target audiences effectively (Samir Dani, 2015).

Competing successfully in the food industry requires continuous innovation. Companies can differentiate themselves by introducing unique flavors, premium ingredients, or eco-friendly packaging. Collaborating with chefs, nutritionists, or food scientists can lead to innovative product development and offer a competitive advantage. Continuous market research and analysis of competitors' strategies are essential for identifying gaps and opportunities within the industry.

In the event of a food safety incident, companies must act swiftly to contain and resolve the issue. This may involve halting production, conducting product recalls, and conducting thorough investigations to determine the root cause. A well-prepared crisis management plan can help guide actions during such critical situations. Transparent communication with consumers, regulatory authorities, and the media is vital to manage public perception and rebuild trust (Samir Dani, 2015).

The food industry is sensitive to economic fluctuations. During economic downturns, consumers may seek more affordable options, leading companies to focus on cost-effective product offerings and promotions. During economic growth periods, companies may invest in research and development, expand into new markets, or upscale their product lines to

capitalize on increased consumer spending. Understanding macroeconomic trends and consumer behaviors can help companies adapt their strategies accordingly.

In conclusion, the alimentary business presents multifaceted challenges and opportunities. Companies must demonstrate compliance with regulations, ensure consistent quality, adapt to consumer preferences, manage supply chains effectively, and protect their brand reputation. Staying ahead of the competition and meeting sustainability expectations requires innovation and a customer-centric approach. Successful food companies prioritize food safety, stay agile in a dynamic market, and maintain a strong commitment to meeting consumer needs (Samir dani, 2015).

3.2 The relevance of the supply chain in a food business

The food industry's unique characteristics, such as perishability, seasonality, and stringent regulatory requirements, necessitate a well-orchestrated supply chain. The section highlights the key challenges faced by alimentary companies and emphasizes the critical role of SCM (supply chain management) in ensuring food safety, quality, cost-efficiency, and sustainable practices. As already written, companies in this sector face numerous complexities, such as strict food safety regulations, consumer preferences, perishable nature of products, and volatile market demands, so

in this context efficient supply chain management emerges as a strategic imperative to address these challenges effectively. Several are the implications of the SCM in an alimentary business: the unique characteristics of the alimentary business, food safety and quality assurance, cost efficiency and inventory management, adaptability to seasonal and market demand, regulatory compliance and traceability, sustainability and ethical sourcing, case studies and best practices, future trends and challenges (G. C. L. Lin, 2016).

The alimentary business operates within a distinctive framework defined by factors such as perishability, seasonality, and consumer demand patterns. Perishability necessitates efficient logistics and cold chain management to ensure product freshness. Seasonal variations impact ingredient availability, requiring agile supply chain strategies that accommodate fluctuations in production and demand. The food industry's sensitivity to consumer preferences and trends calls for adaptable supply chain networks capable of rapid adjustments to meet evolving market demands (Samir Dani, 2015).

Ensuring food safety and quality is paramount in the alimentary business. Supply chain management involves stringent quality control measures at each stage – from sourcing raw materials to distribution. This includes adhering to food safety regulations, conducting rigorous testing, and implementing traceability systems.

Cost-efficient supply chain management involves optimizing inventory levels, production processes, and transportation. Just-in-time inventory practices help reduce holding costs while ensuring products are available when needed. Leveraging data analytics and predictive modeling can aid in demand forecasting, enabling accurate inventory planning and minimizing waste. Collaborative relationships with suppliers can lead to volume discounts and cost savings (Samir Dani, 2015).

Adapting to seasonal and market demand fluctuations requires flexible supply chain strategies. Companies may employ demand-driven production and inventory management to align with peak seasons while avoiding overproduction during slower periods. Effective communication and collaboration with suppliers enable agile responses to change in demand, ensuring the availability of products without excessive inventory buildup.

Regulatory compliance is integral to the alimentary business, given the need to uphold food safety and labeling standards. Supply chain management involves ensuring all suppliers and partners adhere to relevant regulations. Establishing traceability systems helps track products' journey, making it easier to identify and address issues promptly. In the event of recalls, traceability aids in pinpointing affected batches and minimizing consumer health risks (Samir Dani 2015).

As sustainability gains prominence, supply chain management plays a pivotal role in promoting ethical sourcing and reducing environmental impact. Companies may engage in responsible sourcing practices, such as partnering with suppliers who adhere to sustainable farming methods or fair labor practices. Minimizing waste through optimized distribution and packaging, as well as exploring alternative energy sources for transportation, aligns with sustainability goals.

Successful companies may employ technology-driven solutions like IoT sensors to monitor temperature during transportation, ensuring food safety. Collaborative partnerships with local farmers or producer cooperatives can enhance traceability and support sustainable sourcing practices. Companies can also implement demand sensing systems that leverage real-time data to adjust production and inventory levels in response to shifting consumer preferences (Samir Dani, 2015).

The future of supply chain management in the alimentary business lies in embracing advanced technologies like artificial intelligence and robotics for streamlined operations. Blockchain's potential to enhance traceability, transparency, and trust across the supply chain continues to gain traction. Challenges include addressing complexities arising from global supply chains, managing regulatory changes, and aligning supply chain strategies with evolving consumer values.

Through this, products' journey from farm to fork ensures that each step upholds the standards that consumers demand and deserve (Samir Dani, 2015). However, with progress comes challenges – global supply chains must grapple with geopolitical shifts, and the industry must anticipate and adapt to changing consumer behaviors, which are increasingly shaped by health considerations, sustainability values, and cultural trends. In closing, the relevance of supply chain management for companies in the alimentary business transcends mere logistics. It is a strategic imperative that encapsulates food safety, quality assurance, adaptability, sustainability, and consumer satisfaction. The alimentary business is not merely about sustenance; it is an intricate dance of processes and relationships, with SCM as the choreographer orchestrating the harmony of flavors, safety, and responsible practices. Those who engage in this field find themselves at the intersection of tradition and innovation, taste and nutrition, and business and conscience. The alimentary supply chain is a journey that nourishes not only bodies but also the aspirations of an industry striving to create a healthier, more sustainable, and more delightful world of food (Marsden, 2014).

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3.3 Fileni Alimentari S.p.A: company overview

Fileni Alimentari S.p.A was founded by Giovanni Fileni, the last of three brothers in a family of sharecroppers from Vallesina (Jesi), in 1979. Fileni's interest in poultry breeding began in 1965 with the first breeding experiments in the courtyard of the family home; later in 1966 he built a first shed for breeding 5,000 chickens to be sold door-to-door to the inhabitants of Vallesina. A year later he opened a first direct sales shop in Jesi with the help of his wife Rosina, followed in 1968 by the first slaughterhouse. Over the years the business expanded thanks to the closure of the poultry meat

production cycle with the opening of a factory for ready-made products in Cingoli in 1989 and a new production plant in Castelplanio in 2008. After having experimented with organic production since the 1990s, also carrying it out for other companies, in 2014 Fileni launched Fileni BIO, the first organic meat line in Italy. In 2022 the company took part in Expo 2020 in Dubai as part of the presentation of the Marche Organic District and in the same year the company received the B Corporation certification, awarded by the US non-profit organization B Lab.

Nowadays the company is the leading Italian and European producer of organically raised poultry meat and the third player in the domestic poultry and rabbit sector. Over the years, the company has greatly expanded its sources of income, also entering the egg, cattle, and turkey businesses, through the acquisition of other small companies.

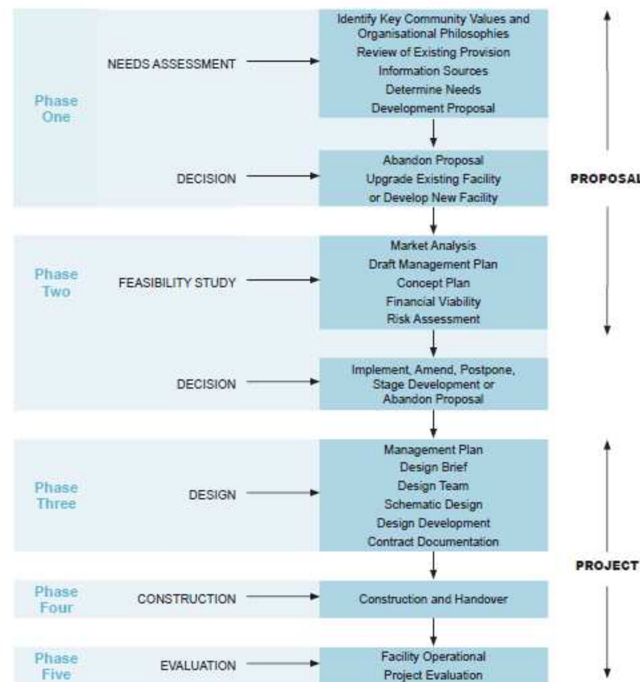
Through continuous technological and implementation innovation aimed at optimizing all breeding, production, and distribution processes, Fileni Alimentare S.p.A has managed to consolidate its leading position among Italian food and livestock companies, thanks also to the numerous investments made each year by the company to enable it to offer its consumers quality products and services. In the following chapters is explained how a new investment is managed within Fileni Alimentare S.p.A, the people and departments involved in the decisions to be taken to evaluate

the possibility and profitability of a new investment. In particular, as an example of investment, the next chapters will illustrate the company's implementation of an iCloud service in support of logistics, the aim of which is to track the end-to-end process of the supply chain in order to track products and vehicles in real time, to always ensure flawless deliveries and to provide customers with all the required information on the status of shipments. In the last chapter, more details about the process, its structure, how it was incorporated and dealt with within the investment budget will be given.

3.4 The decision to invest: main steps of the process

The research process is the phase that precedes the actual budgeting of an investment and follows very specific steps aimed at evaluating future implementation. The steps to be followed in sequence are identifying investment opportunities, preliminary research, feasibility study, market analysis, financial analysis, risk assessment, technical assessment, stakeholder engagement, methodology, decision framework, budgeting process, presentation, and approval.

Aswath Damodaran (2022): "Investment Valuation: Tools and Techniques for Determining the Value of Any Asset"



In Fileni, this initial step involves brainstorming sessions, market scans, and discussions with internal teams to identify potential investment opportunities. These discussions help align investment options with the company's strategic goals and core competencies. For the development of a new food product for example, collaborate with product development teams to brainstorm new food concepts, taking into account current food trends, dietary preferences, and health considerations, searching for emerging culinary techniques, ingredients, and cuisines that could align with the company's offerings. They explore opportunities for vertical expansion, such as sourcing new ingredients directly from farms or producing new packaging in-house. During the second phase the company conducts a high-level

analysis of each investment opportunity. This might involve gathering general information about market trends, potential customer demand, and competitive landscape. The goal is to filter out options that do not align with the company's objectives or show early signs of infeasibility. Fileni is focused in collecting data on market dynamics, including growth rates, customer segments, and market shares of key players in the food industry. Important is also to analyze historical sales data to identify patterns and potential gaps in the company's product portfolio and monitoring social media, food blogs, and industry publications to identify emerging consumer preferences and food trends. The feasibility study takes a more detailed approach to assessing technical, operational, financial, legal, and other factors related to each investment option. This stage involves collaboration between each department to ensure that the investment aligns with the company's capabilities and resources. Fileni's R&D team assess the technical feasibility of new product ideas, considering factors like ingredient availability, recipe formulation, and production processes, evaluating operational feasibility by discussing potential impacts on existing production lines, staffing requirements, and supply chain logistics. It also uses financial modeling to estimate upfront costs, ongoing operational expenses, and potential revenue streams for each investment option. Market analysis instead involves gathering data about the target market's size, growth rate,

segmentation, and dynamics. Understanding customer preferences, needs, and buying behavior is crucial. The analysis may also involve looking into macroeconomic factors that could impact market demand. Fileni normally analyzes consumer surveys, focus group discussions, and online reviews to gain insights into customer perceptions and needs, trying to identify niche markets and underserved segments that the company could tap into with its investment. Detailed financial models are now developed to estimate capital expenditures, operational expenses, revenue projections, and profit margins. Metrics such as NPV (Net Present Value), IRR (Internal Rate of Return), and payback period are calculated to assess the investment's financial attractiveness. For a company working in an alimentary business this means developing detailed financial projections that account for factors such as ingredient costs, packaging expenses, production costs, and marketing expenditures. Sensitivity analysis is needed to understand how variations in sales volumes, pricing strategies, and production costs would impact the investment's profitability, comparing financial metrics across different investment options to prioritize those with the highest potential returns. Risk assessment identifies and evaluates potential risks that could impact the investment's success. These risks could be related to market volatility, technological changes, regulatory shifts, or even unexpected events like pandemics or geopolitical tensions. Mitigation strategies are developed to

address these risks. Fileni collaborates with food safety experts to identify potential foodborne hazards associated with new products or production methods. Also working with legal advisors to assess regulatory compliance and potential challenges related to labeling, nutritional claims, and allergen declarations, analyzing potential reputational risks if the investment doesn't align with the company's values or if customers have negative reactions to the new offerings. For investments involving technology or infrastructure, a technical assessment is performed. This assesses the feasibility of implementing the required systems, the technical challenges involved, and the timeline for deployment. Any technical barriers or limitations are identified and addressed. For Fileni this means engaging with food scientists and chefs to develop prototypes and conduct taste tests to ensure that new products meet quality and taste expectations. Evaluate the feasibility of scaling up production, considering factors such as batch sizes, cooking techniques, and preservation methods. Determine if any specialized equipment or processes are required and assess the associated costs and timelines. Throughout this process, stakeholders' input is crucial. Engaging with various teams, departments, and external experts provides diverse perspectives and helps in gathering feedback and refining the investment proposal based on practical insights and concerns. At this point Fileni collaborates with culinary experts to ensure that new products meet culinary

trends and align with the company's brand identity. It involves marketing teams to gather insights on consumer preferences, packaging design, and messaging that will resonate with the target audience, engaging with suppliers and distributors to understand potential challenges in sourcing ingredients and delivering products to market. Finally, a decision framework outlines the criteria used to evaluate investment options. This framework is based on the company's strategic priorities, financial objectives, risk tolerance, and other relevant factors. It provides a structured approach to comparing different options objectively.

At this point, the budgeting process is a preliminary allocation of the financial resources to the selected investment option conduction before the real budgeting construction. This allocation considers the projected costs and expected returns, as well as any potential contingency funds for addressing unforeseen challenges. The financial department allocates funds for product development, including recipe testing, prototype creation, and formulation adjustments, considering costs related to equipment upgrades, production line modifications, and additional staffing requirements. The budget for marketing expenses to launch and promote the new products effectively is also considered. The last stage is well-structured presentation is prepared to communicate the findings and recommendations of the decision to invest. This presentation includes the methodology used, key outcomes, financial

projections, risk assessment, and the proposed budget. The goal is to obtain senior management or board approval for moving forward with the investment. In the Fileni company, the last approval must be given by Giovanni Fileni, that can accept or refute the investment developed as the company president.

In conclusion, the process and methodology before the budgeting process for an investment involve a systematic and thorough analysis of various factors. These steps ensure that the investment decision is well-grounded, aligned with the company's goals, and supported by data-driven insights.

3.5 The investment budgeting process

In the Fileni Alimentare S.p.A the investment budgeting process starts with the review of the research findings to gain a clear understanding of the investment's financial implication, considering the projected costs, revenue potential, and risk factors associated with the investment. The budgeting process must be aligned with the company's strategic objectives and ensure that the investment aligns with its mission and long-term goals. Then all the departments work closely with to gather accurate cost estimates. The collaboration with R&D to determine product development costs, production teams for manufacturing expenses, marketing teams for promotional costs, and finance teams for administrative and overhead expenses is fundamental

if the goal is a new product. Then a detailed budget document that itemizes all projected costs and revenues is created by the managerial accountant team. If the company has multiple investment options is prioritized them based on quantitative and qualitative factors, assessing the potential return on investment (ROI), market demand, strategic fit, and competitive advantage of each option. Resources are allocated based on the order of priority and the available budget and then the costs of the investment are broken down into different categories:

1. capital expenditures include estimated costs for equipment, facility upgrades, and initial inventory, and operating expenses to estimate ongoing costs such as raw materials, labor, utilities, marketing campaigns, distribution, and rent/mortgage. Accurate cost estimation ensures that the budget reflects the true financial requirements of the investment.
2. Then a contingency fund into the budget to account for unexpected events or challenges is incorporated. This fund provides a safety net to address unforeseen expenses that could arise during the investment process. The potential financial impact of identified risks is evaluated and funds to mitigate or manage those risks are allocated as well.
3. Based on the market analysis and consumer demand, then it’s estimated the potential revenues that the investment is expected to

generate. Factors like pricing strategies, sales forecasts, and market share are considered and monitored during all the budgeting period. These revenue projections are realistic and achievable based on the current market conditions.

4. After this the managerial accountant and all the financial department calculate the investment's attractiveness and feasibility. As already written, different methods used to evaluate a new investment are the net present value (NPV) that measure the investment's profitability by considering the present value of future cash flows, the internal rate of return (IRR) that calculate the annualized rate of return the investment is expected to generate, and the payback period that determine how long it takes for the investment to recoup its initial costs and the profitability index that evaluate the investment's value by comparing the present value of future cash flows to the initial investment. The method used is different depending on the type of investment and its priority.
5. After this it is created a comprehensive presentation that communicates the budget proposal, including cost breakdowns, revenue projections, financial metrics, and risk considerations, clearly articulate the rationale behind each budget allocation and how it aligns with the company's overall strategy. This is presented to the senior

management, that is composed by Giovanni Fileni and his children Massimo and Roberta, for the approval. During the presentation are expressed feedback from the decision-makers and addressed any questions or concerns they may have about the budget proposal. If necessary, are made adjustments to the budget based on feedback while ensuring that the investment's financial viability remains intact and reevaluate financial metrics to assess the impact of potential changes. Once everything is defined, the funds from relevant departments and teams responsible for executing different aspects of the investment are allocated, monitoring the spending to ensure that expenditures align with the approved budget and establishing clear oversight mechanisms to track expenses and prevent budget overruns. Clear is that regularly comparation between actual expenses against the budget to identify any variances are conducted to promptly address deviations. If necessary, are adjusted spending plans or reallocated funds to manage unexpected costs or changes in project scope.

Depending on the need of the senior management the managerial accounting team is responsible for the generation of regular reports that provide a comprehensive overview of financial performance related to the investment. The goal is to analyze actual expenses, revenue generation, and financial

metrics and to understand the reasons behind any significant variances from the budgeted figures and take corrective actions if needed.

In the context of alimentary business, the budgeting process ensures that the company allocates resources effectively to achieve its growth objectives while maintaining financial stability and sustainability. It also helps the company adapt to changing market conditions and consumer preferences by providing a clear financial roadmap for the investment's success.

3.6 The content of the budget of investment

The investment budget in a company is a financial plan that outlines the anticipated costs and expenditures associated with a specific investment project. This budget provides a comprehensive overview of how funds will be allocated to support the initiation, development, and execution of the investment. It is a critical tool that helps the company ensure that resources are used efficiently and effectively to achieve the desired outcomes of the investment. Constructing a budget for an investment involves creating both a commercial budget and a production budget. These budgets work together to ensure the investment's success by aligning sales and production efforts and Fileni management always develop them together to have a clear and complete idea of the investment.

The commercial budget focuses on the revenue and sales aspects of the investment. It outlines the expected sales volume, pricing strategies, marketing expenses, and revenue projections. Barely, the most important factors to considering during the construction of the commercial budget are sales projection, pricing strategy, marketing and advertising expenses, distribution and sales channels, sales team expenses, trade shows and events, and revenue projections.

The production budget focuses on the costs associated with producing the new product. It outlines the expenses related to raw materials, labor, production processes, and quality control. Here, the most important aspect to consider are the costs related to raw materials, labor costs, production equipment and supplies, packaging costs, quality control, production facility, contingency fund, inventory management, sustainability considerations, compliance and regulatory costs, production timeline.

By constructing both the commercial budget and the production budget, the company can effectively manage its investment, ensuring that revenue generation aligns with production costs. Close collaboration between the sales and production teams is crucial to maintain a balanced approach that supports the investment's success. Regular monitoring and adjustments to both budgets based on actual performance are essential for achieving

financial goals and operational excellence. In the next sections a focus on the features of both commercial and productive budget are given.

3.6.1 The commercial budget

As already introduced, Fileni's commercial budget serves as a cornerstone in the financial planning of any strategic investment, providing a roadmap for revenue generation, market penetration and brand growth. It is a dynamic framework that outlines how the company will invest resources to develop, sell and promote or effectively utilise its products or services. In the second case, by meticulously detailing sales projections, pricing strategies, marketing initiatives and distribution channels, the commercial budget acts as a compass, guiding the company towards the achievement of its investment goals while maintaining a competitive advantage in the marketplace. In its essence, the commercial investment budget represents a comprehensive financial strategy, finely tuned to the ever-changing dynamics of consumer preferences, industry trends and market conditions. This budget not only aids in the proper allocation of resources, but also fosters a deep understanding of the market landscape in which the project is to be embedded. It enables Fileni's decision-makers to make informed choices that optimise revenue streams and create lasting bonds with customers. In this context, the business investment budget becomes a growth

project, acting as a bridge between a company's operational efforts and its revenue generation, ultimately leading to sustainable success and increased market presence.

Estimating the sales volume or future benefits of the investment requires a thorough analysis of historical sales data, market trends and potential consumer demand, while also considering factors such as seasonal fluctuations, industry growth rates and unique selling points of the product. To create a reliable sales forecast, the management accounting team uses both quantitative data and qualitative insights. Choosing the right pricing strategy involves assessing the perceived value of the product, the competition and the cost structure, especially in an industry as rich in competition as the food industry. Price elasticity has to be taken into account in order to find the balance between maximising revenue and maintaining affordability for customers; in addition, different price levels can be considered according to market segments or distribution channels. Resource allocation for marketing campaigns, if the investment requires it, is crucial to create awareness and generate interest in the new product, including appropriate budget for various activities such as social media ads, influencer partnerships, content creation and traditional advertising, ensuring that marketing efforts align with the target audience and product positioning. If the objective of the investment is to generate revenue, it is crucial to identify

the most effective sales channels to reach target customers, allocating funds for distribution costs, including packaging, transport, storage and any potential fees associated with the use of specific sales platforms or distributors. Fileni always intelligently participates in trade fairs and industry events that can provide exposure to potential new customers, partners or investors. It is necessary to budget for all rentals, travel expenses, promotional materials and any commissions associated with attending these events. This is really useful for Fileni because it gives it the opportunity to meet customers up close and explore new potential producers or breeders to collaborate with.

In conclusion, the business investment budget is more than just a financial document that summarizes everything that is needed for the new project; it is a strategic compass that guides the company's journey through the intricate landscape of sales, marketing and consumer engagement. By meticulously planning and allocating resources to drive revenue growth, the commercial investment budget ensures that Fileni's products or services not only reach their intended audience, but also resonate deeply with them. The commercial investment budget enables companies to navigate the ever-changing currents of consumer behavior, market trends or technological innovations, and transforms data and insights into actionable strategies, fostering agility and adaptability in the face of change. It goes beyond numbers, aligning financial

goals with customer needs, company possibilities, preferences, and aspirations, building lasting relationships, and cultivating brand loyalty.

3.6.2 The production budget

The production investment budget delineates how resources will be allocated, transformed, and harmonized to bring the new products or services to life. Depending on the type of the investment, the company could face with raw material costs, labor expenses, manufacturing processes, quality control measures, implementation costs, or service charges if the developing process is carried out by an external company, etc. The Fileni's productive investment budget transcends numbers and equations, embodying a symphony of coordination, precision, and operational excellence. It ensures that the company's investment capabilities are synchronized with consumer demand, industry standards and needs, and economic realities, eliminating inefficiencies and forge a path toward sustainable growth and profitability.

In Fileni, accurately estimation of the quantities and costs is essential for managing production costs, in particular when we are talking about food investment where the 90% of final product's cost is composed by the ingredients. Fundamental is to consider variations in ingredient prices and ensure a reliable supply chain to prevent disruptions. The budget for labor expenses is associated with production, including wages, salaries, benefits,

and training of the people that take part to the investment process. It considers the number of workers required for each stage of the development process and allocate resources accordingly. Also costs for purchasing, maintaining, and upgrading the equipment and machinery are included and this might involve one-time costs for ongoing maintenance and repair expenses. The allocation of funds for quality control measures, testing, and inspections has to be done to ensure that the implementation meets high standards, and regular testing can prevent costly recalls and maintain customer satisfaction or efficiency. If required by the investment, the utilities, such as electricity, gas and water are considered production costs as well, and the budget for rent, utilities, maintenance, and other expenses related to the facility has to be constructed, considering whether any facility modifications or upgrades are necessary to accommodate the new product's development. An aside contingency fund within the production investment budget is crucial to address unexpected challenges, such as equipment breakdowns or supply chain disruptions, providing flexibility to manage unforeseen expenses. The allocation of resources for managing inventory, including storage costs, tracking systems, and stock management tools are important, helping to prevent stockouts and excess inventory costs. In Fileni sustainability is a priority, so if the investment concerns packaging, also the allocation of resources for initiatives such as eco-friendly materials, waste

reduction efforts, or energy-efficient production processes have primary importance, and these efforts have to align with modern consumer values and industry trends. Funds for costs associated with safety regulations, certifications, and industry standards has to be considered because non-compliance can lead to legal issues and damage the company's reputation. Everything has to be done with the best timing possible as the production timeline and funds allocation for each phase of production, from the investment decision to its quality control, follow a precise chronological scale. Also considering lead times and potential bottlenecks that could affect the production schedule can help to have production delays.

The production investment budget signifies a commitment to precision, quality, and efficiency. It bridges the gap between theoretical business plans and the practical world of manufacturing implementation, ensuring that every resource is allocated with purpose, every process is optimized for excellence, and every product resonates with the values of the brand. As industries evolve and consumer demands shift, the production investment budget guides Fileni company toward the shores of adaptability and innovation.

3.7 Timing of investments

For Fileni the timing of an investment involves deciding when to initiate and complete the investment project and can largely differentiate for market conditions, consumer demand, industry trends, seasonal factors, and economic cycles, and the animal’s lifecycle. The investment budget includes a timeline that outlines when various expenses will be incurred throughout the investment project. It breaks down expenditures over the project's duration, showing when funds are needed for capital expenditures, operational expenses, marketing, and other activities. The budget ensures that resources are allocated effectively to support different phases of the investment. The investment budget is typically created during the planning phase of the investment project, that Fileni’s senior management normally set at October. But this planning phase may occur at any time of the year, depending on the company's strategic planning cycle and the urgency of the investment. It's important to align the budget creation with the company's fiscal year and strategic goals. The expected time for the return on investment depends on the nature of the investment, market conditions, and the investment's revenue generation potential. In the alimentary business, the return of investment (ROI) timeline can vary widely. Some investments, such as equipment upgrades, might yield a relatively quick ROI, while others, like product development and market expansion, might take longer.

As working with living animals, timing for Fileni’s success is crucial, starting to the market trends analysis and understanding seasonality, considering that certain food products experience higher demand during specific seasons or events. Timing an investment to align with these trends can help maximize sales and revenue. For instance, launching a new product before a peak season can capitalize on increased consumer interest. The timeline for product development can vary based on complexity, required testing, and compliance with food safety regulations. Properly allocating time for these stages ensures that the final product is safe, of high quality, and meets consumer expectations. The time spent sourcing ingredients and materials should be factored into the investment timeline. For this, the department of animal husbandry try to always guarantee an adequate lead time to prevent production delays and ensure a consistent supply of raw materials. Unexpected disruptions in the supply chain, such as ingredient shortages or delays, can impact production schedules, so planning is crucial. Investing time in quality control measures and food safety checks is non-negotiable for the company, ensuring the safety and integrity of the product is paramount. Factor like rigorous testing, inspections, and adherence to regulatory standards are considered part of the investment timeline. Rushing through quality control can lead to costly recalls and damage the company's reputation. Expanding to new markets or distribution channels requires

careful planning: market research, establishing partnerships, and setting up distribution networks all take time and engrave on investment timeline. Entering a new market without proper preparation can lead to missed opportunities or challenges in reaching customers effectively. The adequate resources allocation for marketing and promotion efforts is essential for a successful product launch or investment. Building awareness, creating a buzz, and generating demand among consumers cannot be rushed. Strategically timed marketing campaigns can drive interest and anticipation, leading to a strong start for the new product. If the investment involves new processes, technology, or equipment, allocating time for employee training is crucial. Properly trained staff ensures smooth operations, reduces errors, and maintains safety protocols and rushing through training can lead to inefficiencies and compromise product quality. Being aware of competitors' actions and analyzing market trends can help to time the investment to gain a competitive advantage. Being the first to introduce a unique product can establish your brand as an innovator and capture consumer attention before competitors. For example, in 1967 Fileni was the first to start selling ready to eat products to meet the new consumption needs of Italian families, the result of the social transformations taking place in those years, real reason for its success. Considering company's financial objectives when deciding on the timing of an investment, evaluating the availability of funds, cash flow

projections, and potential sources of financing to align the investment timeline with financial capabilities ensures a stable implementation process. Consumer preferences, health and wellness trends, and sustainability considerations evolve over time. Being attuned to these changes and incorporating them into the investment strategy can enhance consumer appeal and ensure the investment remains relevant. Also factors like regulatory requirements to obtain necessary permits, certifications, and adhere to food safety standards can often have their own timelines and can impact the overall project schedule.

By carefully considering these factors and aligning them with the specific needs and goals of the alimentary business, Fileni can strategically time the investment for its success. Each factor contributes to a well-rounded approach that ensures the investment meets consumer demands, industry trends, and the company's financial capabilities.

3.8 Final statement of investments and payback

The culmination of rigorous analysis, strategic planning, and financial foresight done by all the Fileni’s departments involved manifests in a critical document, the final investment statement. This stands as a testament to the company's dedication to prudent decision-making, encapsulating a wealth of information, insights, and projections that culminate in a verdict on the

potential success of an investment endeavor. The final investment statement serves as both compass and anchor, guiding stakeholders through the complexities of risk and opportunity, and grounding them in a tangible assessment of potential returns.

Constructed with meticulous attention to detail, the final investment statement weaves together data from diverse domains, such as market trends, financial forecasts, competitive analysis, and risk assessment. Through this assembly, it paints a comprehensive picture that allows decision-makers to transcend mere numbers to understand the investment's potential impact on the company's future trajectory.

It shows not only financial projections and calculations but also the art of anticipating market dynamics, understanding consumer behavior, and envisioning potential disruptions. By scrutinizing its contents, it reveals how an investment aligns with the company's core values, ambitions, and overarching strategies, embodying the strategic foresight, intellectual rigor, and calculated risk-taking. It empowers decision-makers to make informed choices that have far-reaching implications, shaping the company's future trajectory and its role within the market landscape. Through its intricate layers of analysis and insight, the final investment statement stands as a testament to a company's commitment to embracing the unknown,

harnessing opportunity, and forging a path toward sustainable growth and enduring success.

The final investment statement is typically prepared by a team that includes financial analysts, project managers, market researchers, and relevant department heads. This interdisciplinary team collaborates to gather data, conduct analyses, and synthesize findings into a cohesive document. The final statement is then reviewed by senior management, executives, and stakeholders who make the ultimate decision on whether to proceed with the investment based on the presented information and recommendations.

The final investment statement of a Fileni's investment is typically constructed as a formal document or presentation and consists of the following key components: executive summary, investment objectives, project details, market analysis, financial projections, risk assessment, investment appraisal methods, recommendation, implementation plan, conclusion. Everything starts with a concise overview that highlights the purpose of the investment, key findings, and the main recommendations. Then, are clearly defined the goals and objectives of the investment, whether it's expanding market share, launching a new product, or improving operational efficiency. After this more detailed about its scope, timeline, resources required, and opportunities are provided to demonstrate an understanding of the market dynamics influencing the investment. The

financial projections include projected revenue, costs, and expected cash flows over a specified period. In Fileni this is managerial accounting's matter, and its projections help evaluate the potential return on investment and profitability. It also identifies and assess potential risks and uncertainties associated with the investment including external factors (e.g., economic changes, regulatory shifts) and internal factors (e.g., operational challenges, technological limitations). To calculate the profitability and the potential of the investment the managerial accountant team of Fileni use different approach depending on the type of the investment and the information that has to be presented to the senior management, such as net present value, return of investment and payback period, asl already written. All assess the potential profitability of projects or investments focusing on different aspects and providing different insights. Based on the analysis and assessment, the senior management and the Fileni's family give a clear recommendation regarding whether the investment should be pursued or not. This recommendation is supported by the financial analysis and alignment with company objectives. If the investment is accepted, are outline also the steps and resources required to execute the investment project successfully, including milestones, responsibilities, and any necessary adjustments based on the analysis.

3.9 The investment on Track&Trace POD

Considering the importance of the supply chain for a company working in the alimentary business interesting is the Fileni's Track&Trace POD investment, that is a software that the company introduced on 2021 in support of logistics, developed by the tech-company Axylog with the objective of tracking the end-to-end supply chain process of products and vehicles in real time, to ensure flawless deliveries and provide customers with all the required information on the status of shipments. The structure of the software consists mainly of 4 parts: a web portal, a mobile application, integration services, and business intelligence. The web interface was developed using the latest technology, resulting in a high usability of information and a formidable user experience. The QrDelivery App, available for IOS and Android, supports mobile operatives to collect the needed information naturally and intuitively. The system is open to and from the outside with a complete set of data interchange services to communicate via file or web-services. Already active interfaces to and from the most well-known TMSs (transportation management systems), WMSs (warehouse management systems) and ERPs (enterprise resource planning system) of national and international standing. The huge amount of collected data is analyzed to immediately and intuitively bring out the necessary indicators.

The functionalities and benefits of the new investment are geolocation of deliveries on a map, management of single or simultaneous document outcomes, possibility to attach notes, photographs, and signatures, management of cash on delivery, delivery status, management of deliveries with anomalies, possibility to use off-line, online outcome feedback so that customer service can query a customer's delivery status on-time and dashboard with statistics.

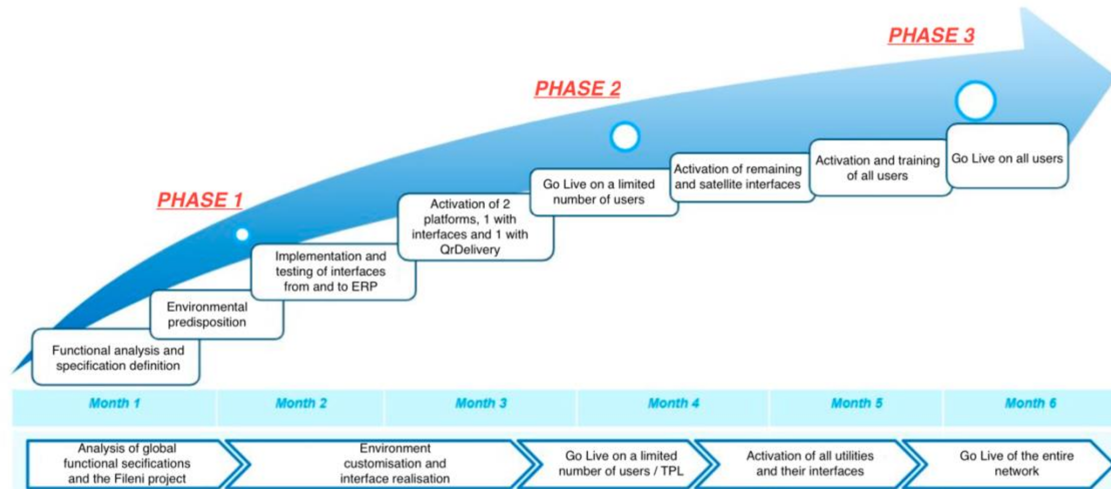
The steps that the company had to follow in order to reach its goal started from the implementation of a Track & Trace process. It allowed an exchange of useful information between customer, driver and central logistics, with the implementation of an electronic delivery device (POD) to control, improve processes and dematerialize documents for product collection and delivery. This has also enabled compliance with SLAs, an agreement between the company and the customer that defines how the relationship will work in the future, and the monitoring of KPIs, key performance indicators chosen to assess performance against agreed standards. This is a crucial initial step in improving the efficiency and effectiveness of a company's logistics and supply chain operations. The company had to integrate data from various sources, including GPS systems, RFID tags, barcodes, collecting data from trucks, warehouses, and other relevant points in the supply chain. Establishing efficient communication channels between customers, drivers,

and the central logistics team was vital. The logistics team, as responsible for managing the movement of goods and ensuring they reach their destinations efficiently, took the lead in implementing a Track & Trace process, in collaboration with other departments such as the information technology (IT) one, responsible for the implementation of the electronic delivery systems and the digitalization of documents, creating the technical infrastructure and tools required, and the sales and account management teams, who negotiated the agreements and responsible for understanding customer needs and ensuring these were met.

Its design and implementation were divided into 3 phases for a period of six months. The first phase involved the analysis of the Fileni project's functional specifications with subsequent customization and implementation of the interfaces. The phase 2 started with the creation of an initially limited number of users, extended to all remaining users at a later stage, while the third phase involved the 'Go Live' of the entire network. Understandable from the nature of the investment, the responsible department of these phases was again the IT department, for analyzing functional specifications and customizing interfaces, working on the technical aspects of the project, ensuring that the software and systems meet the requirements. They play a vital role also in the user rollout, creating user accounts, setting up access permissions, and providing technical support to users. Also, after the

implementation the IT department has to ensure the network and systems are functioning correctly and that any issues are promptly addressed.

Fileni (2021): "Track&Trace POD: The design approach"



The total investment cost was €250,000, representing 1.24% of Fileni's total 2021 budget of investment which stood at €20,160,000 in total. This led to assigning this investment a medium-low priority considering the presence in the budget of other production implementations with a greater economic benefit, such as the construction of the new slaughterhouse for turkeys (5 million € in the budget). This because, considering Fileni's rapid expansion phase, the goal of this investment was more strategic than economic. The benefits were more qualitative than quantitative: a gain in economic terms was the reduction of charges for delays or non-deliveries, reducing outgoings from the company's coffers, but above all the gain was greater customer satisfaction and reliability itself, increasing the company's brand awareness and customer loyalty. In the second instance, then, there was an economic return due to the fact of more orders and the arrival of new customers. For

these reasons, the investment economic feasibility was conducted using the Net Present Value method, without constantly considering the discounting of the cash flows generated by the investment assessing the investment's profitability without factoring in the time value of money. This approach is often taken when the primary goal of the investment is strategic, qualitative, or non-financial in nature, as opposed to solely focusing on maximizing financial returns as in the given Fileni's business case given. The conclusion is that the Track&Trace Pad has been treated in different way compared to the normal gain-based investments, as ignoring the time value of money focusing on the future opportunity revenues importance, to achieve strategic objectives or non-financial benefits that may not be easily quantified in monetary terms. For this the Fileni's company accepted to wait for an extended period to realize the strategic benefits rather than expecting immediate financial returns. Here the senior management of the company primary look at factors like reputation, customer trust, market positioning, and alignment with long-term goals to proceed with the investment. When the investment has been presented to the stakeholders, the emphasis was on explaining the strategic rationale and non-financial benefits of the investment. It required clear communication about how the investment aligns with the company's broader vision and mission, and the correctness and importance of the investment has been assessed with the non-quantitative

results, precisely considering no more delays, more orders received, fewer penalties to pay for late deliveries, more reliability and security, thus achieving what were the ultimate aims of this implementation.

CONCLUSIONS

In this comprehensive exploration of managerial accounting and its practical application in the context of the Fileni case, it was delved into the fundamental aspects of managerial accounting, the budgeting process with special emphasis on investments, and the intricate details of Fileni's budgeting practices as well as into the implementation of Track&Trace POD technology.

Managerial accounting was defined, and its characteristics clarified, highlighting its fundamental role in helping organizations plan, control and make informed decisions. It was established that managerial accounting is an indispensable system of tools for modern companies, especially in today's dynamic and competitive landscape.

The budgeting process was analyzed, revealing its multifaceted nature. The Master Budget, comprising operational and financial budgets, is the linchpin of the budgeting process. It was illustrated how budgets are not only financial plans, but also tools that guide a company's actions and resource allocation. In addition, the investment budgeting process was examined, shedding light on its complexities, advantages, and challenges.

In the Fileni chapter, it was delved into the complexities of operating in the food industry. The importance of the supply chain in this context was

emphasized, highlighting its role in ensuring the timely and efficient delivery of products to customers. Through a detailed overview of the company, it was analyzed Fileni's budgeting process. The investment budget was the focus of attention, dissected into its most important features: the commercial budget, the production budget, the timing of investments and the final statement of investments and payback. In addition, possible challenges that could occur during its creation were addressed, in particular: market uncertainty, resource constraints, implementation obstacles, interdepartmental conflicts and the dilemma between short and long term. The first is an ever-present adversary in the creation of investment budgets, as rapid and unpredictable changes in economic conditions, together with changing customer preferences and dynamic industry trends, make it difficult to accurately forecast cash flows and investment returns. The second explains the impossibility of funding all projects at the same time, necessitating careful decisions on which initiatives to priorities, causing potentially viable projects to be postponed or cancelled, making it essential to strike a delicate balance between ambition and reality. The third challenge is unforeseen delays and cost overruns, which loom over the investment landscape. For this reason, projects may encounter unexpected setbacks, altering their financial performance and causing delays in project completion that can lead to prolonged cash flows without commensurate revenue

generation, affecting expected investment returns and putting a strain on the allocated budget. Interdepartmental conflicts mean that different segments of the organization may espouse conflicting priorities and support their own projects, complicating the alignment of the investment budget with overall strategic objectives. The last major challenge companies face when constructing their investment budgets is of course the dilemma between short-term and long-term sustainability of investments: while projects may promise attractive short-term returns, their long-term viability requires careful scrutiny. As explained, external factors such as government policies, tax regulations or industry standards can have a significant impact on project outcomes, necessitating a prudent approach that balances immediate gains with lasting profitability.

Finally, the introduction of Track&Trace POD technology through a business case exemplified the practical application of these budgeting concepts.

In conclusion, it was provided a holistic understanding of managerial accounting and its application in the corporate world, using the Fileni case as a practical illustration.

The Fileni case study has illuminated how these concepts and practices come together in the real world, demonstrating their relevance and impact on a company's operations and competitiveness.

In an ever-changing business landscape, the knowledge and skills explained within this exploration of managerial accounting, in general, and budgeting, in particular, are undoubtedly valuable tools for business professionals and companies, who, with the right application of these tools, are able to adapt, prosper and make informed choices in the face of dynamic challenges and opportunities.

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