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**The Compass of Survival: Management Accounting Practices as Maps of
Resilience in Lebanese Service and Manufacturing SMEs during the
2019–2025 Crisis.**

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DEDICATION

This work is dedicated to my parents, whose character and resilience continue to influence my choices. Their legacy remains a steady guide in my personal and academic journey.

To my fiancé, whose belief in my potential has been a source of strength throughout this process. Thank you for seeing what I could achieve long before I did.

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Abstract

Since 2019, Lebanese small and medium-sized enterprises (SMEs) have operated under continuous economic and institutional turbulence, creating persistent challenges for managerial decision-making and organizational survival. This study explores how service and manufacturing SMEs perceived and used Management Accounting Practices (MAPs) during the 2019–2025 crisis period, and how these practices supported organizational resilience across different industry contexts. A comparative multiple-case qualitative design was employed, drawing on twelve semi-structured interviews with SME decision-makers and key personnel. Data were analyzed through reflexive thematic analysis, followed by cross-case synthesis to identify shared and industry specific patterns. The findings showed that MAPs served three interrelated functions. First, they supported short-term operational continuity and financial stability through cash-flow monitoring and cost control. Second, MAPs enabled strategic and adaptive responses through informal scenario assessments and lightweight digitization. Third, they were used to signal credibility to external stakeholders in a context of institutional distrust. The industry context shaped the relative emphasis placed on each role. By providing empirical evidence from a prolonged crisis environment, the study offers practical insights for managers and policymakers seeking to strengthen organizational resilience in highly unstable settings.

Keywords: management accounting practices (MAPs), organizational resilience, prolonged crisis, small and medium enterprises (SMEs), Lebanon, qualitative multiple-case study

Chapter 1: Introduction

1.1 Background of the study:

When crisis becomes the standard rather than the exception, firms in developing countries face the challenge of adapting to ensure survival, sustainability, and growth. Management accounting practices (MAPs) provide a perspective through which this challenge can be examined.

The survival and growth of SMEs are rising to the forefront of managers' decision-making in this age of unforeseen economic volatility and uncertainty, particularly in the context of emerging countries. These enterprises are vital to Lebanon's economy by accounting for 50% of the workforce, 95% of registered businesses, and more than 40% of the country's gross domestic product (GDP) (World Bank, 2024). Nevertheless, they face a precarious environment characterized by economic disputes, political voids, and inadequate infrastructures (Ghayad et al., 2022).

Despite being a breeding ground for complex problems, Lebanon's recent history (2019–2025) has shown remarkable endurance and resilience. This period witnessed nationwide protests in 2019, the collapse of the banking sector, and a sharp devaluation of the Lebanese pound. It was further compounded by the global impact of the COVID-19 pandemic, the devastating 2020 Beirut Port explosion, and ongoing geopolitical tensions and conflicts with Israel. Together, these events highlight Lebanon's complex reality, characterized by severe hardships alongside persistent resilience. The crisis factor is evident in Lebanon, where consecutive financial, political, and health shocks since 2019 have reformed the economic landscape. These shocks have been particularly severe in the service and manufacturing industries, which together constitute nearly half of the national GDP, based on data from World Bank's *World*

Development Indicators. These challenges have tested the determination of Lebanese SMEs to their breaking point, putting their long-term sustainability in jeopardy. Specifically, according to Wahidi et al. (2024), SMEs in Lebanon face significant challenges in this competitive market. These challenges have an intense impact on their performance and accounting practices, making it more difficult for them to operate and succeed.

In these unstable times, SMEs rely on internal management systems, alongside external market dynamics, to guide managerial and operational decisions. By using MAPs such as budgeting, forecasting, cost control, and performance measurement, SMEs can effectively manage costs, monitor performance, create budgets, and make informed decisions. This enables managers to transform uncertainty into structured managerial action. Through these practices, SME leaders are able to track resource efficiency, assess resilience initiatives, and remain competitive in the face of volatile external circumstances.

Before the financial collapse of 2019, which was ranked by the World Bank as the third of the world's most severe crises since the mid-nineteenth century (World Bank, 2021), the Lebanese service sector was long dominated by the banking industry. Consequently, this pillar of the economy was destabilized as its contribution declined from 79% to 42% of GDP in 2023, according to the World Bank's *World Development Indicators* (2024). The compounding of the financial paralysis, the public distrust in the banking sector, and major social and economic shocks have collectively challenged the service industry's ability to generate growth.

In addition, the equally vital manufacturing industry was severely affected by the crisis. Its contribution to GDP declined from approximately 7% in 2019 to 1% by 2021, according to the World Bank's *World Development Indicators* (2024). The sharp decline has been through unreliable electricity, skyrocketing input costs driven by currency devaluation, and restricted access to financing (Maddah et al., 2023). The breakdown of these two sectors has intensified

unemployment and multidimensional poverty which according to World Bank's 2024 Lebanon Economic Monitor affected roughly 73% of the population, deepening Lebanon in a systemic prolonged crisis (World Bank, 2024).

By generating, communicating, and analyzing both financial and non-financial information, MAPs serve as navigational maps to assist managers in maneuvering their way through such persistent crises (Chenhall, 2003). In the Lebanese SME context, MAPs support managerial flexibility and accountability by providing structure and visibility in environments characterized by extreme uncertainty.

In this research organizational resilience is defined as operational continuity, adaptive capacity, financial stability, and strategic learning. The qualitative analysis of resilience will be conducted through managers' narratives of how MAPs promote continuity, learning, and renewal during crises, rather than through quantitative metrics. From this perspective, organizational resilience is operationalized through observable managerial actions and decisions. These include adjustments to planning routines, resource reallocation, cost management practices, and adaptive changes in internal processes or priorities. Accordingly, resilience is treated as a dynamic organizational capacity reflected in managerial use of accounting information, rather than as mere survival in the absence of adaptation.

Although MAPs in crisis contexts have been the subject of much global literature, Lebanon remains absent from this body of research. Furthermore, the industry context, specifically the distinction between service and manufacturing industries, has rarely ever been studied as a contingent factor in the design and use of MAPs. Lastly, previous research has mostly relied on quantitative survey data, ignoring the qualitative perspectives of managers who adopt and adapt these practices in real-time.

1.2 Problem Statement

This study examines how managers in Lebanese service and manufacturing firms perceive and utilize MAPs in navigating systemic crisis and fostering organizational resilience. Despite growing research on MAPs in crisis contexts, existing studies offer limited insight into how industry context shapes managerial use of these practices during prolonged crises.

What started as a nationwide protest on October 17, 2019, quickly escalated into a systemic financial collapse, which disrupted Lebanon's banking system and severely restricted firms' access to liquidity (Makdisi, 2021). The crisis was compounded by the COVID-19 pandemic, the 2020 Beirut Port Explosion, and a dramatic currency collapse. The Lebanese pound lost more than 98% of its value, reaching LBP 140,000/USD by March 2023 (World Bank, 2021). These macroeconomic shocks were accompanied by severe social pressures, with an estimated 73% of the population living in multidimensional poverty (World Bank, 2024), further destabilizing demand conditions, labor markets, and firms' operating environments. Collectively, these overlapping shocks fundamentally altered how Lebanese firms plan, allocate resources, and sustain operations, rendering traditional decision-making frameworks increasingly inadequate.

For Lebanese firms, the consequences were industry-specific. Service companies struggled with declining consumer demand, widespread layoffs, salary reductions, and declining employee morale (Makdissi et al., 2024). Manufacturing firms, in turn, faced soaring input and energy costs, unreliable electricity, and disrupted supply chains affecting their production capacity (Maddah et al., 2023). These conditions pose a significant threat to the very survival, sustainability, and competitiveness of Lebanese service and manufacturing firms, and by extension, the broader economy.

International literature widely discusses the use and the role of MAPs in crises, ranging from health crises to financial and economic crises, with findings varying across different contexts. During the Greek economic crisis, firms shifted from traditional MAPs to contemporary strategic practices (Pavlatos & Kostakis, 2015). In contrast, Russian firms regressed to short-term survival MAPs during the recession (Erokhin et al., 2019), while German management accountants reverted to forecasting and scenario planning during the global financial crisis of 2008-2009 (Schäffer et al., 2011). These findings suggest that the adoption and adaptation of MAPs are highly dependent on managerial choices and contextual factors.

Despite these insights, two critical issues remain unresolved. First, internationally, the adoption of MAPs in times of crisis is ultimately shaped by managers' perceptions and decisions, yet most studies overlook this by relying on survey-based measures of adoption before and after crises (Pavlatos & Kostakis, 2015; Pavlatos & Kostakis, 2018). Second, although industry context clearly influences the pressures firms face and the practices they use, it has rarely been analyzed as a central factor, with most studies treating it as a control variable (Messner, 2016). Consequently, our understanding of how different industry environments shape managerial use of MAPs under crisis conditions remains limited. In the case of Lebanon, the problem is even more severe as no studies have examined how managers perceive, interpret, and adapt MAPs under conditions of ongoing systemic instability, nor how differences across service and manufacturing industries shape these practices.

Accordingly, the research problem lies in the limited empirical understanding of managerial use of MAPs in Lebanon's service and manufacturing industries under prolonged systemic crisis.

1.3 Significance of the study

This study holds critical significance because it addresses overlooked questions at the intersection of MAPs, crisis, and context.

1.3.1 Theoretical Significance:

By extending existing contingency-based perspectives into a prolonged and systemic crisis setting, this study enriches context-driven theoretical research on MAPs.

While MAPs are widely explored in international crisis literature as tools to help firms survive and limit the risk of failure, most studies adopt a quantitative, survey-based approach that documents adoption rates and practices adopted before and after crises, such as during the Greek economic crisis (Pavlatos & Kostakis, 2015) and in Germany during the global financial crisis (Erokhin et al., 2019).

This approach overlooks how managers themselves perceive and interpret MAPs, even though their choices ultimately shape the adoption and implementation of these measures. To address this gap, the present study explicitly integrates multiple theoretical lenses. MAPs are examined simultaneously as (1) survival-oriented control mechanisms, (2) strategic enablers supporting adaptation and learning, and (3) symbolic practices used to maintain legitimacy under institutional uncertainty. This multi-lens framing allows the study to conceptually link managerial action with MAPs across operational, strategic, and institutional dimensions, rather than treating them as a single-function tool.

Prior research has focused on only one of these aspects in isolation, such as strategic enablers for competitiveness (Uyar, 2019), survival mechanisms during crises (Msomi et al., 2020), or symbolic practices for legitimacy (Assad & Goddard, 2006). By combining all these perspectives, a more comprehensive framework is provided for examining how businesses employ MAPs to manage operations, seize opportunities, and maintain legitimacy in

unpredictable situations. This is especially true for Lebanon, where businesses must simultaneously balance several goals due to hyperinflation, bank failure, and political paralysis.

Additionally, research on industry context as a contingent factor (rather than a control factor) influencing the implementation and adoption of MAPs remains underexplored, although Chenhall (2003) emphasizes that accounting practices are shaped by such contextual conditions. By comparing service and manufacturing firms, this study contributes to contingency-based MAP theory through a context-driven extension into prolonged and systemic crisis settings.

Finally, it extends the theoretical understanding of MAPs research into continuous systemic crisis in business environments where crisis is the new norm. Most prior studies have focused on short-term crises where eventual recovery is assumed. Empirical research remains limited even in contexts where crisis persists as a structural condition, such as Argentina and Venezuela (Wirth, 2006; Bermúdez, 2008; Parra & Cecilia, 2011). By examining Lebanon, this study strengthens theoretical understanding of MAPs in a unique context.

1.3.2 Practical Significance:

A review of the literature on MAPs in Lebanon reveals a limited body of research on MAPs examining their role in supporting managerial decision making during periods of continuous instability. This gap is prominent, given that the Lebanese business environment has been defined by a prolonged crisis, which has reshaped managers' day-to-day operational, financial, and strategic decisions. Without empirical data, Lebanese managers are left without context-specific practical guidance on how MAPs can be adapted to sustain competitiveness under such conditions.

According to earlier research, businesses in developing countries typically rely more on traditional MAPs such as budgeting and break-even analysis due to lack of experience, institutional flaws, and resource constraints that hold back the adoption of more advanced practices (Uyar, 2019). It remains unclear whether these practices provide adequate support in conditions of continuous crisis, or whether more contemporary approaches, such as scenario planning, activity-based costing, or performance measurement systems, offer greater resilience. By examining how managers in Lebanon perceive and use MAPs in practice, this study offers actionable insights into how accounting information is employed to maintain operations, manage uncertainty, and support competitiveness during sustained crisis conditions.

1.3.3 Policy and professional significance:

Lebanon's crisis context has raised the need for evidence-based recovery strategies to support firms in adapting their management practices. However, in the absence of empirical data, policymakers and consultants are at risk of relying on generalized approaches that may be disconnected from the realities of local businesses.

Evidence from this study can inform policymakers in designing tailored strategies and training programs aimed at helping firms not only to survive but also thrive in such an operationally uncertain era. Policymakers could use the study's findings to identify which MAPs are perceived by managers as the most relevant in such contexts and develop incentives that encourage their adoption.

Additionally, the industry-specific insights expected from this study may enable policymakers and professional advisors to refine their recommendations, ensuring the proposed solutions

align with the resource constraints and limitations of Lebanese service and manufacturing firms.

1.3.4 Scholarly and educational significance:

The study fills a fundamental gap in academia by producing the first empirical exploration of managers' perceptions of MAPs in Lebanon. By focusing on managerial perceptions and interpretations, it contributes to scholarly awareness of how managers in fragile and crisis-prone contexts perceive, interpret, and adapt MAPs. This focus is especially valuable because developing and crisis-hit countries remain underrepresented in theory and evidence.

The study also provides a structured foundation for future researchers who wish to examine the dynamics of MAPs in environments of systemic instability, enabling comparative studies across countries such as Argentina, Venezuela, and Greece.

For educators, the findings offer a distinctive contextual case study that can be incorporated into management accounting and crisis management curricula, introducing students to the challenges of implementing MAPs in such persistent crisis conditions.

Finally, these findings can inform international donors, who play an increasingly important role in Lebanon's recovery, about funding priorities and technical assistance programs. Such initiatives can be grounded in managers' lived experiences, practically relevant in the Lebanese context, and aimed at enhancing organizational sustainability and strategic management.

1.3 Personal Interest in the Topic

From as early as the researcher's undergraduate days until today, crisis was the constant headline of Lebanon's business landscape. Over time, while the forms of crisis changed, Lebanon did not truly recover. Rather than a temporary disruption, crisis gradually became the permanent condition shaping business decisions and managerial behavior.

This interest in the topic emerged from reflecting on Lebanon's reality of continuous crisis and connecting it to the researcher's own lived experience. Having faced a crisis that became a new normal, the researcher realized that one cannot control the external environment, but one can choose how to respond to it. This realization shaped the research focus, as Lebanese businesses continuously navigate circumstances that cannot be avoided but must be actively managed to sustain operations and adapt.

As an accounting student, the researcher noticed that one of the few areas where firms have control is in their MAPs. Unlike the external environment, MAPs are shaped by the choices and decisions of managers, allowing firms to structure decisions, reallocate resources, and signal discipline under uncertainty. Over time, this perspective shifted the researcher's attention from accounting as a technical reporting function to accounting as a managerial language through which uncertainty is interpreted, decisions are justified, and organizational direction is maintained under pressure.

1.4 Purpose Statement

The purpose of this comparative multiple-case qualitative research is to explore how managers in Lebanese service and manufacturing SMEs perceive and implement MAPs during the crises of 2019–2025 and how these perceptions relate to observable outcomes of operational resilience. Specifically, the study analyzes how managerial use of MAPs relates to continuity of operations, flexibility, adaptive capacity, and learning, while considering the influence of industry context on the adoption and effectiveness of these practices under systemic instability.

1.5 Research Questions

The primary research question that will guide this study is:

How do managers in Lebanese SME service and manufacturing firms use management accounting practices (MAPs) in fostering organizational resilience during the (2019–2025) crisis, and how does industry context shape those uses?

To address this primary research question, the study examines managers' experiences and interpretations of MAPs across both industries, focusing on how these practices support financial stability, operational continuity, and strategic adaptation in the face of systemic uncertainty. The sub-questions operationalize the primary question by examining distinct but complementary roles through which MAPs contribute to resilience. These roles range from short-term survival, to adaptive and learning-oriented responses, and symbolic or legitimacy-seeking uses. Together, they translate the overarching primary research question into specific analytical lenses that guide interview design and thematic analysis.

1.5.1 Specific Research Questions:

SQ1. How do MAPs support operational continuity and financial stability in the short-term when there is systemic uncertainty?

SQ2. How are MAPs adopted as strategic enablers to support adaptive capacity, organizational learning, and innovation-related adjustments in Lebanese manufacturing and service firms operating under prolonged instability?

SQ3. How are MAPs used symbolically by Lebanese service and manufacturing firms to maintain legitimacy and attract potential external investors, thereby fostering organizational resilience in turbulent environments?

Chapter 2: Literature Review

2.1 Introduction to Literature Review

To understand the practical and theoretical dimensions of MAPs, this literature review provides a fundamental groundwork for analyzing the Lebanese service and manufacturing industries within their turbulent business environment. The purpose of this section is to examine the historical evolution, theoretical foundations, and contextual applications of MAPs. It also links them to the concept of organizational resilience and highlights their relevance during periods of prolonged crisis.

Through the evaluation and synthesis of current studies, the review positions this research within the larger scholarly dialogue on management accounting, extends prior work on MAPs in crisis contexts, and highlights the gaps that this study seeks to address (Marshall et al., 2021). In this manner, the literature review not only provides the theoretical base for the research but also ensures that the findings will be positioned within an established academic discourse.

In qualitative research, literature reviews hold particular importance because they provide essential background information, establish the significance of the study, and identify gaps that guide future research (Parajuli, 2020; Pandey, 2024). Unlike quantitative designs, qualitative studies allow greater flexibility in the timing and purpose of the literature review, depending on the nature of the inquiry (Afiyanti, 2014). This iterative character allows the review to act as more than a summary of existing knowledge by serving as a reflective and analytical tool that shapes the improvement of research questions and methods throughout the process. In doing so, the study remains grounded in existing literature while remaining responsive to new perspectives emerging from the Lebanese setting.

This section begins by conceptualizing MAPs and their theoretical foundations, then introduces the concept of organizational resilience to clarify how firms' adaptive and survival capabilities

relate to the use and perception of MAPs during turbulent periods. It then examines the empirical function of MAPs, shifting from a broad overview of global crises to a sector-specific comparison (service versus manufacturing), finishing with a deep contextualization within Lebanon's prolonged systemic instability.

As Creswell and Creswell (2017) note, literature reviews often move from broad theoretical discussions to narrower, context-specific problems that logically inform the methodological approach. Accordingly, this review positions the present research within global debates on MAPs and organizational resilience in times of crisis while briefly highlighting three interrelated gaps. These gaps include the limited empirical evidence from Lebanon, the underexplored role of industry context in shaping MAP adoption, and the scarcity of qualitative research capturing managers' perceptions under prolonged instability. By addressing these gaps, the review clarifies the study's contribution to extending theory into environments of systemic collapse, strengthening the link between management accounting and organizational resilience, and generating practically relevant insights for managers in Lebanon's service and manufacturing industries.

2.2 Conceptualizing MAPs

2.2.1 Definition and Evolution of MAPs:

MAPs refer to a set of methods and approaches employed by organizations to provide managers with relevant financial and non-financial information for planning, controlling, directing, and decision-making purposes (Ilias et al., 2010; Nair & Yee, 2017). Drawing on Scapens (1994), MAPs assist managers in navigating complexity and maintaining operations, functioning as embedded organizational routines that enable organizational cohesion, structure how information is interpreted, and justify decisions.

These practices have undergone significant transformations over time, evolving alongside management accounting itself. For most of the 20th century, management accounting was primarily focused on internal, financial, and cost-oriented measures. By the 1980s, however, growing global competition and rapid technological change revealed the shortcomings of such approaches, which were increasingly criticized as too narrow and backward-looking (Chenhall & Langfield-Smith, 1998). In 1981, Kenneth Simmonds introduced the concept of Strategic Management Accounting (SMA), shifting attention to external and environmental factors, including competitors, customers, and long-term strategic positioning (Simmonds, 1982; Tillmann & Goddard, 2008). This marked a turning point from purely operational control to a broader strategic orientation in management accounting. The strategic focus was further strengthened by Michael Porter's ideas of value chain and cost driver analysis, which reframed MAPs as enablers of competitive advantage rather than just tools of control (Porter, 1985).

In parallel with this broader shift, MAPs have evolved over time. Early practices focused mainly on cost control and operational efficiency, including budgeting, variance analysis, and standard costing. More recent developments emphasize strategy and long-term value creation, such as Activity-Based Costing (ABC) and the Balanced Scorecard (BSC). At this stage of their evolution, MAPs integrate both financial and non-financial information, and link accounting systems with strategy, customer value, and innovation (Chenhall, 2003; Kaplan & Norton, 1992).

Despite the growing importance of these developments in the literature, research shows that firms in developing countries tend to rely more heavily on traditional practices. In their review of existing literature, Rashid, Ali, and Hossain (2021) conclude that while contemporary advanced practices gained high adoption rates in developed countries such as the UK and the USA, they remain underexplored in developing countries, with limited empirical evidence of widespread adoption. Their findings suggest that institutional, cultural, and legal environments

facilitate the utilization of innovative MAPs in developed contexts, where firms often prioritize strategic accounting application and hinder their adoption in developing countries, where more time and effort are devoted to earnings management and tax avoidance activities.

When combined, these studies show both continuity and change in the evolution of MAPs. To facilitate strategic decision-making, MAPs have significantly broadened their scope by integrating non-financial and external factors. However, traditional methods still predominate, especially in developing countries with limited resources and weak legal frameworks, where familiarity and ease of use outweigh the possible advantages of more sophisticated practices.

2.2.2 Typologies of Management Accounting Practices:

The idea of differing MAPs has its roots from early discussions on the limitations of the traditional cost accounting approaches. While formal classification into traditional and contemporary practices was later articulated by Chenhall and Langfield-Smith (1998), earlier critiques had already questioned the ability of existing practices to remain relevant in increasingly complex and technology-driven environments. In this context, Kaplan and Johnson (1987) claimed that traditional MAPs were overly focused on operational control and inadequately aligned with strategic decision-making needs. These debates shifted scholarly attention toward understanding MAPs according to their underlying purpose and strategic orientation, laying the foundation for later typologies that distinguish between different categories of MAPs.

The present study adopts a streamlined functional typology based on the practice's purpose and use, consistent with Chenhall and Langfield-Smith (1998). The typology distinguishes between cost and control-oriented, decision-support, and strategic and market-oriented practices. This typology is particularly suitable for the present research because it allows MAPs to be examined according to how managers use them in practice, rather than according to their

technical sophistication, thereby supporting comparison across service and manufacturing firms operating under prolonged instability.

Cost and Control-Oriented Management Accounting Practices

The primary purpose of MAPs such as budgeting, standard costing, variance analysis, and cost-volume-profit (CVP) analysis is to ensure financial stability and operational efficiency by monitoring and managing costs. Managers use such tools to set their financial targets, monitor variances, and achieve short-term financial stability (Chenhall, 2003). In crisis contexts, budgeting and variance analysis have become increasingly important for resource allocation, cash preservation, and liquidity control, highlighting their relevance (Becker et al., 2015; Stede, 2000). These practices are often categorized as Cost and Control-Oriented Practices because their main focus is on internal, short-term operational control and efficiency.

- **Budgeting** is one of the most common and essential traditional management accounting practices (TMAPs) that serves as both a planning and a control tool. It involves preparing detailed financial plans to coordinate activities, allocate resources, and control the company's performance by quantifying its organizational objectives over a specific period (typically annual or semi-annual). By translating strategic objectives into measurable targets, managers can compare their actual results to predetermined benchmarks, identify variances, and take corrective action when necessary (Drury, 2018; Horngren et al., 2015). Due to its adaptability, ease of use, and ability to promote accountability and coordination among businesses of all sizes and sectors, budgeting remains one of the most popular and widely used MAPs, even in the face of more sophisticated modern approaches (Angelakis et al., 2010). In volatile business environments, such as Lebanon, the role of budgeting extends beyond routine control to function as an internal management stability tool. According

to Marginson and Ogden (2005), environmental uncertainty raises the issue of role ambiguity which in turn highlights the role of budgets as a source of structure and certainty. In such settings, budgets play the “comforting” role and assist managers to cope with the external turbulence (Marginson & Ogden, 2005). Additionally, in such settings, budgets also serve as influential symbolic and communicative roles by signaling prudence, stability, and managerial responsibility to external stakeholders like lenders, donors, and investors (Malmi & Brown, 2008).

- **Standard costing** involves setting predetermined costs for materials, labor, and overhead based on efficient and productive operating conditions. Managers can compare actual and expected expenses by using these standard costs as benchmarks. This comparison enables managers to identify cost variances, assess the efficiency of operations, and effectively control spending. **Variance analysis**, as an integral part of the standard costing system, involves the analysis of differences between standard costs and actual costs and categorizing them as either favorable or unfavorable. By methodically examining these variances, managers can identify inefficiencies, assess departmental or operational performance, and implement corrective measures. In crisis contexts characterized by cost volatility, supply disruptions, and resource constraints, such comparisons become particularly important, as even small cost deviations can have significant implications for liquidity and operational continuity. Thus, in conventional costing systems, variance analysis is a crucial management control technique that enables businesses to improve their operational efficiency and control cost continually (Drury, 2018).
- **Cost-volume-profit (CVP) analysis** examines how a company's profitability is impacted by changes in prices, sales volume, and expenses (Lulaj & Iseni, 2018). By

categorizing costs into fixed and variable, CVP analysis enables managers to determine critical points, such as the breakeven volume and target profit volumes under different pricing or cost scenarios. CVP provides a straightforward yet powerful framework for short-term decision-making, especially in SMEs that may lack access to complex analytical tools (Abdullahi et al., 2017).

Decision-Support Management Accounting Practices

Common decision-support MAPs include rolling forecast model and cash-flow dashboards, which go beyond the limitations of static control measures. These practices are forward-looking and flexible, providing managers with real-time monitoring to support timely decision-making. By enabling managers to revise expectations, simulate alternative scenarios, and reallocate resources as conditions change, decision-support MAPs enhance organizational responsiveness in dynamic business environments (Hope & Fraser, 2003; Simons, 1994).

- **Rolling Forecast Model (RF)** is a dynamic planning approach that constantly projects a company's future performance across a predetermined time range, replacing the rigidity of traditional forecasting. The forecast “rolls forward” by dropping completed periods and adding new future periods, enabling speedy modifications to company plans. This model supports flexible resource allocation and the revision of business goals by allowing managers to update assumptions as conditions change. While it may incorporate simplified assumptions linked to key operational drivers, it is not necessarily implemented as fully formalized driver-based planning systems. Through continuous updating, the rolling forecast model helps managers incorporate historical data and adjust to the ever-changing business conditions of the firm by giving them continuous real-time insight and ongoing visibility (Ekholm & Wallin, 2011; Henttu-Aho, 2018).

- **Cash flow dashboards.** A cash-flow dashboard is a visual management tool that provides real-time information about key financial metrics into a single easily comprehensible interface. It helps managers to track their cash inflows and outflows instantly and run some short-term projections. The dashboard functions as an interactive control system (Simons, 1994) in an agility-focused framework, allowing management to remain closely engaged with evolving financial conditions and promoting proactive decision-making to adjust spending, working capital, and investment decisions as conditions change. In Lebanon's hyperinflationary environment, cash dashboards enable managers to react promptly to exchange-rate fluctuations and preserve solvency (Elgammal et al., 2016).

Strategic and Market-Oriented Management Accounting Practices

At the strategic end of MAPs, Activity-Based Costing (ABC) and the Balanced Scorecard (BSC) represent the evolution of MAPs from internal short-term cost control toward long-term, strategic, market-oriented management. The Balanced Scorecard (BSC) and Activity-Based Costing (ABC) connect accounting data to consumer value, innovation, and strategic goals by integrating financial and non-financial data (Chenhall, 2003; Kaplan & Norton, 1992).

- **ABC** is a management accounting practice that allocates overhead and indirect costs to activities based on their consumption of resources rather than relying on traditional volume-based cost drivers such as direct labor hours or machine hours. By tracing costs more accurately to products or services, ABC is particularly suitable for firms with diverse products and complex cost structures (Darabi et al., 2015). Compared to traditional costing systems, which are more effective in homogeneous production settings, ABC supports more informed pricing and managerial analysis. Overall, ABC represents a shift toward more precise and activity-focused cost management (Shanmugam, 2022).

The adoption of ABC differs significantly between developed and developing countries, with adoption rates generally greater in developed countries compared to developing nations (Alsayegh, 2020). Key barriers to adoption in developing countries, such as Lebanon, include a lack of employee training, management support, high implementation costs, difficulties in collecting data, and the need for cultural change (Elgammal et al., 2016). Nevertheless, firms that implement ABC gain cost transparency and process control, thereby enhancing their financial buffering and strategic flexibility during prolonged crises (Waweru, 2010).

- **BSC** is a dynamic and comprehensive strategic performance management tool introduced in 1992 by Robert Kaplan and David Norton. It translates an organization's mission and strategy into measurable performance indicators by integrating both financial and non-financial objectives. At the structural level, the BSC provides a holistic view of organizational performance through four interrelated perspectives: financial, customer, internal business processes, and learning and growth. Each perspective contains objectives, measures, targets, and initiatives that translate strategy into measurable outcomes (Kaplan & Norton, 1992; Madsen, 2025). The BSC extends beyond traditional financial performance measures and focuses more on long-term goals including customer satisfaction, innovation, staff development, and product quality. Through this linkage, performance indicators across the four perspectives are connected in a cause and effect logic that relates non-financial factors to financial outcomes (Kaplan & Norton, 1992).

In turbulent contexts, it acts as both a diagnostic and interactive control, ensuring that organizational learning and customer engagement continue despite financial crises

(Malagueño et al., 2018). Due to its adaptability, the BSC can be employed in SMEs as well as large corporations (Silalahi, 2023). Moreover, effective implementation requires senior management commitment and support, a precise determination of critical success factors, and the integration of reward systems tied to strategic objectives (Pandey, 2005).

2.3 Theoretical Foundations of Management Accounting Practices:

In the world of management accounting, the development, adoption, and use of MAPs have been examined through multiple theoretical lenses. To guide this analysis, the present study draws on three theoretical perspectives, each offering a distinct yet complementary understanding of how MAPs operate.

Contingency Theory is used to explain how MAPs are shaped by contextual conditions. Institutional Theory provides insight into how external pressures and legitimacy concerns influence MAP adoption and use. Strategic management accounting theory is employed to capture the strategic and forward-looking role of MAPs in supporting competitive positioning. Together, these perspectives offer an integrated framework for understanding how MAPs operate in organizations facing prolonged instability.

2.3.1 Contingency Theory: Fit and Adaptation

The Contingency Theory in management accounting is a foundational framework asserting that there is no universally "best" design for management accounting systems and practices. It examines how various internal and external factors influence the effectiveness of adopting and implementing specific MAPs (Chenhall, 2003; Otley, 2016).

A core belief of the theory is that organizational performance is improved when the management accounting system and practices are appropriately tailored to the specific conditions of the firm, including contextual variables such as strategy, environment,

technology, and organizational structure and size, as demonstrated in empirical contingency based studies (Ismail et al., 2010; Aliu, 2025). For example, several studies reveal that the perceived level of environmental uncertainty tends to encourage the use of contemporary tools, such as the Balanced Scorecard and Activity-Based Costing, while more stable settings rely on traditional cost-control-oriented practices (Ayadi & Affes, 2014). This pattern reflects differences in contextual fit rather than a direct progression toward more advanced tools, highlighting how firms adjust their use of MAPs to match prevailing conditions and decision-making demands.

Key Contingency Factors

Key contingency factors identified in the literature include environmental uncertainty, technology, organizational size, and strategy (Amara & Benelifa, 2017; Ayadi & Affes, 2014). In addition to these factors, research in transitional economies, such as Estonia, reveals additional contingencies, including the legal and accounting environment, as well as the shortage of qualified accountants (Haldma & Lääts, 2002). Each of these factors is discussed below in turn.

- **Environmental uncertainty**, characterized by the dynamism and complexity of external market conditions, is a key contextual variable in management accounting. Studies show that firms operating in highly uncertain or problematic environments need more externally focused and sophisticated management accounting systems. These systems prioritize non-financial information and forward-looking forecasts over traditional, internally focused financial data (Gordon & Miller, 1976; Khandwalla, 1972).
- **Organizational strategy** indicates that businesses that prioritize cost leadership or defensive tactics tend to favor more formal performance measurement systems (PMS)

and TMAPs that prioritize financial metrics. In contrast, those that prioritize innovation or prospecting need more varied PMS and contemporary MAPs that incorporate non-financial metrics (Nassou & Bennani, 2024; Otley, 1980).

- **Technology** also plays a crucial role as a contingent factor influencing MAPs. Prior research consistently indicates that greater utilization of information technology correlates with more sophisticated and complex management accounting systems. This relationship affects both the scope and refinement of accounting processes (Haldma & Lääts, 2002; Handayani et al., 2023). Sector-specific studies support this pattern, with research in Brazilian hotels identifying technology as one of the most influential contingency factors affecting MAP adoption and use (Sobrinho & Callado, 2025).
- Lastly, multiple studies confirm that organizational size and structure affect the adoption and effectiveness of MAPs, with larger firms obtaining higher benefits from the utilization of both contemporary and traditional practices (Ayadi & Affes, 2014; Nimtrakoon & Tayles, 2010).

Evidence from different national contexts further supports this pattern, with studies across both developed and developing economies showing that technology, strategy, organizational size, environmental uncertainty, and structural characteristics interact to shape the adoption and use of MAPs (Haldma & Lääts, 2002; Šiška, 2016; Amara & Benelifa, 2017; Shahzadi et al., 2018). Taken together, these findings reinforce the broad applicability of contingency theory in explaining MAP adoption and adaptation across different country settings.

Although Contingency Theory emphasizes the significance of MAPs' contextual fit, it has been criticized for offering an incomplete explanation of effectiveness when applied in isolation. Critics argue that, beyond contextual factors, elements such as organizational design, behavioral dynamics, and internal power relations also play a critical role in shaping the

effective implementation of MAPs (Ismail et al., 2010). Moreover, the theory's assumption of a static and rational "fit" between systems and context has been questioned, as it overlooks how businesses continually adapt their MAPs in response to prolonged crises and institutional constraints (Jesmin Islam, 2012) .

2.3.2 Institutional Theory: Legitimacy and Symbolism

Contingency Theory emphasizes the alignment and effectiveness of MAPs with organizational contexts, while Institutional Theory highlights that such practices are shaped not only by technical efficiency but also by institutional pressures that promote conformity, stability, and legitimacy (Scapens, 1994). According to Institutional Theory, organizational behavior is influenced by three interrelated pillars: the regulative, normative, and cultural-cognitive dimensions (Järvenpää, 2009; Guerreiro et al., 2006).

The regulative pillar refers to formal rules and enforcement mechanisms, such as accounting standards, laws, and corporate governance requirements, that organizations are required to comply with. The normative pillar reflects professional norms, values, and expectations that shape appropriate behavior, often transmitted through education, professional bodies, and industry standards. The cultural-cognitive pillar represents the shared beliefs and *taken-for-granted* assumptions that become deeply embedded within organizations and industries, influencing how practices are understood and enacted.

Within this framework, MAPs may also serve as institutionalized practices, persisting not only because they are efficient but also because they enable organizational cohesion and legitimacy (Scapens, 2012; Assad & Goddard, 2006).

The institutional theory framework's symbolic application of MAPs can be viewed in a number of unique organizational actions that prioritize external appearance over internal function such as:

1. **Decoupling:** Decoupling or “loose coupling” occurs as an institutional reaction to conflicting demands such as the requirement for internal flexibility alongside external conformity. It occurs when a MAP is adopted formally for “ceremonial” purposes to satisfy powerful external stakeholders (such as banks, regulators, or donors) while the organization’s actual day-to-day operations rely on different, informal practices.

For instance, a company could provide an official budget each year to show external stakeholders that it is prudent and reasonable with money. Internal managers would simultaneously adopt a more flexible budgeting or non-financial KPIs in order to maintain internal operational agility in a volatile setting. In this manner, a firm effectively maintains outward credibility without compromising its internal technical operations (Covaleski & Dirsmith, 1983).

2. **Mimetic Isomorphism:** Mimetic isomorphism refers to the tendency of organizations to copy the practices of other firms that appear to be successful or legitimate, particularly in highly unstable environments. Under such conditions, organizations may adopt advanced MAPs, such as ABC and the BSC, not only to address internal performance needs but also because these practices are commonly associated with professionally managed and internationally recognized firms. Through imitation, organizations seek to reduce uncertainty and align themselves with prevalent organizational models. For example, adopting the BSC may help a firm enhance its credibility when engaging with foreign investors or other external stakeholders (DiMaggio & Powell, 1983).

3. **Coercive Isomorphism:** The symbolic function of MAPs is also apparent in the compliance of some firms motivated by the demands of strong external entities, such as the government, regulating bodies, or international accounting standards, such as the International Financial Reporting Standards (IFRS) or Generally Accepted Accounting Principles (GAAP). To meet the disclosure requirements, management devotes efforts to producing particular formal reports, such as comprehensive business segment reports, complex cost allocations, or IFRS-compliant statements. While these reports satisfy the requirements and expectations of external parties, they are often not that useful or practical for internal use, as the reports are often too complicated or issued too late. As a result, external compliance is prioritized over internal usefulness, reinforcing the symbolic role of MAPs under coercive institutional pressures (Daske et al., 2008).

2.3.3 Strategic Management Accounting (SMA): Market, Competitor, and Long-Term Orientation

Strategic management accounting sits at the intersection of management accounting, strategic management, and marketing management (Roslender & Hart, 2003). The growing competition and technological advancements in the business environment drove the need for SMA. These developments exposed the insufficiency of traditional management accounting's narrow focus on internal cost control and short-term financial data (Guilding et al., 2000; Simmonds, 1982).

The fundamental theoretical contribution of SMA is the transition of management accounting from an internal, historical, and cost-focused direction towards an outward, future-focused, and strategic emphasis. This is accomplished by integrating market and competitive data into accounting practices. By doing so, SMA distinguishes itself from conventional cost-cutting approaches.

Guilting et al. (2000) explicitly summarized that a management accounting practice qualifies as an SMA technique if it possesses at least one of the following features: a market orientation, a focus on competitors, or a long-term orientation. This multidisciplinary framework enables SMA to act as a strategic decision-making tool, aiming to enhance a firm's long-term competitive advantage and shift the role of the management accountant from scorekeeper to a strategic business partner involved in market positioning and competitive analysis (Ma & Tayles, 2009; Roslender & Hart, 2003).

By integrating these three frameworks, the study offers a comprehensive multi-lens perspective on how MAPs, as both functional and symbolic mechanisms, support organizational resilience. Contingency Theory explains the 'fit' between the MAP and contextual crisis pressures; Institutional Theory sheds light on how firms seek out legitimacy by conforming to norms and industry-specific expectations; and SMA presents MAPs as tools for strategic adaptation and competitive positioning. Together, these lenses form an integrated analytical framework that guides the interpretation of MAP use across cases, as illustrated in Figure 1 in the following section.

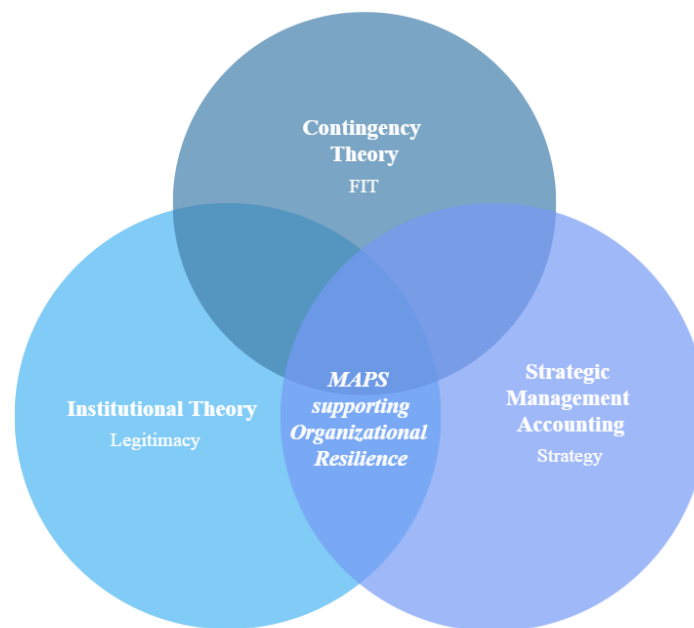


Figure 1.

Venn diagram showing the tri-theoretical alignment of Contingency, Institutional, and strategic management accounting theories

Working propositions derived from theory and prior evidence:

P1. In prolonged crisis, SMEs prioritize cash-centric MAPs, such as rolling cash forecasts, cash dashboards, and tight budgeting, to sustain continuity.

P2. Manufacturing cases emphasize cost management and variance analysis, whereas service cases emphasize customer-oriented KPIs and pricing or offering agility.

P3. Symbolic or legitimacy use of MAPs intensifies when firms face external financing pressures or key-account scrutiny.

P4. Lightweight digitalization facilitates a shift from static to interactive, real-time control and monitoring.

2.4 Conceptualizing Organizational Resilience

Organizational resilience, a concept extensively studied across disciplines, is a crucial quality that allows organizations to endure, adjust, and expand in the face of uncertainty. Early definitions emphasized that an organization is resilient if it can maintain its core identity and functions in the face of both internal and external shocks and disruptions (Cumming, et al., 2005). Building on this foundational view, Budak et al. (2021) conceptualize resilience as the ability of organizations to adapt and overcome disturbances arising from complex and interrelated technical, financial, and socio-economic systems through learning and continuous adjustment. In this study, we treat resilience as an umbrella construct. It is operationalized through observable outcomes such as continuity of operations, adaptive flexibility, financial buffering, and organizational learning, which can be traced to specific MAPs.

Resilience, however, is not limited to the capacity to withstand disruption. It also captures how organizations make use of their internal capabilities and managerial action to balance continuity with adaptation over time. According to Kozcu and Özmen (2023), organizational resilience enables companies to leverage their own strengths, manage conflicts, and cultivate an environment that is conducive to both continuity and innovation. Similarly, Coutu (2002) stated that resilience improves organizational competency and flexibility in the face of ever-changing markets. From a broader systems perspective, organizational resilience is understood as a capability that supports both stability and evolution within complex social and technical systems, enabling firms not only to withstand disruptions but also to adapt, learn, and grow over time (Godschalk, 2003; Ma et al., 2018). Together, these perspectives present resilience as both stabilizing and transformative. In continuous crisis settings such as Lebanon, this dual role is critical: resilience depends on how effectively managers adapt decision-making routines and MAPs under systemic uncertainty.

From a process-oriented perspective, organizational resilience includes the ability to endure stress while maintaining core functions and adapting to setbacks over time (Kahn et al., 2018). Rather than being purely reactive, resilience unfolds through anticipatory, responsive, and adaptive phases. These phases involve preparation, recovery, and adjustment while sustaining essential operations and long-term objectives (Dickson, 2025). Consistent with this process view, Ping and Jiazhe (2021) identify three tiers of resilience. The first involves basic recovery or “bouncing back,” where firms restore normal operations. The second, “implicit bouncing forward”, occurs when firms unintentionally improve as a result of crisis experience. The third, “explicit bouncing forward”, represents purposeful transformation, where firms emerge stronger, more adaptive, and more competitive after disruption (Ping & Jiazhe, 2021). Organizational learning underpins all three tiers, as it connects preparation, response, and longer-term change (Evenseth et al., 2022).

Although there is no agreed-upon definition of resilience, scholars generally agree that it is an adaptable skill that organizations may try to improve with time (Ahmed et al., 2021; Yang & Smyrnios, 2018). The ability to turn challenges into opportunities via proactive planning, responsive adaptation, and positive change is increasingly recognized as a quality (Ruiz-Martin et al., 2018). This way of thinking is especially useful in contexts of protracted crises like Lebanon's, where resilience is an essential competency that organizations need to help them maintain stability and rejuvenate themselves even when faced with constant change and uncertainty.

Translating resilience into practice requires organizational mechanisms through which adaptability, precaution, and learning can be enacted. MAPs serve as the structural, informational, and behavioral infrastructure for translating resilience into observable outcomes. Traditional cost and control-oriented practices support the continuity of operations by maintaining cash flow stability, monitoring costs, and ensuring liquidity under pressure.

Decision-support practices, including rolling forecasts and cash-flow dashboards, enhance adaptive flexibility and financial stability by enabling managers to revise targets, reallocate resources, and make real-time adjustments in response to market volatility. Finally, strategic and market-oriented tools such as the BSC and ABC assist organizational learning and renewal, helping firms integrate customer, market, and internal insights into long-term strategic adaptation. In this way, MAPs form the informational backbone of organizational resilience, linking short-term operational control with long-term strategic redevelopment in times of crisis.

2.5 Management Accounting Practices in Times of Crisis

Periods of financial and economic crisis have attracted significant attention in the management accounting literature, as they place exceptional pressure on organizational control systems and managerial decision-making. International literature studies extensively the role of MAPs during financial and economic crises across different contexts. Emerging research indicates that crises serve as essential facilitators of change and innovation, particularly in developed countries with stronger governance and resources such as Germany and Spain, driving organizations to shift toward continuous budgeting and superior roles for management accountants (Endenich, 2014).

At the managerial level, field based evidence reported by Hayne et al. (2022) suggests that managers tend to utilize and pay more attention to the adoption and development of MAPs when facing discontinuous and unpredictable environmental changes. This increased managerial engagement helps explain the shift from rigid, limited-scope practices to flexible, communicative, and learning-oriented processes that support resilience.

Across diverse global contexts, economic and financial crises have consistently reshaped the adoption and adaptation of MAPs. During the Greek sovereign debt crisis, Pavlatos and Kostakis found that firms shifted away from traditional cost accounting practices toward

strategically oriented tools, such as ABC, SMA, and the BSC. Budgeting remained important before and after the crisis for liquidity control. Larger firms, benefiting from greater resources, adopted multiple management accounting innovations simultaneously, confirming contingency theory's view that environmental turbulence stimulates adaptation (Pavlatos & Kostakis, 2015). In contrast to these adaptive patterns, Russian firms facing the 2014–2018 recession regressed toward short-term survival tools such as rolling forecasts, breakeven analysis, and variance control while abandoning long-term strategic practices (Erokhin et al., 2019). This regression highlighted how weak institutional environments and liquidity shortages can limit innovation.

On the other hand, research in Germany during the 2008–2009 global financial crisis revealed that management accountants successfully blended traditional cost control with new strategic functions, such as forecasting and scenario planning, thereby establishing themselves as strategic business partners. Consistent with these findings, Groh (2014) showed that effective crisis management necessarily blends tactical cost measures with strategic, long-term reform and governance alignment (Groh, 2014).

Outside Europe, empirical evidence on MAPs in crisis contexts remains comparatively limited, particularly in Latin America, despite the region's exposure to prolonged systemic instability. Existing studies suggest significant variation in MAP adoption across organizational types. In Venezuela, for example, differences in MAP use across private, SME, and public organizations have been linked to legal and economic transformations since 1999 (Bermúdez, 2008), while practical case evidence points to challenges in implementing contemporary tools such as the Balanced Scorecard (Parra & Cecilia, 2011). Evidence from Argentina is even more limited, consisting primarily of historical and academic reviews rather than empirical studies of current organizational practices (Maria Wirth, 2006).

Taken together, these studies show that economic crises accelerate the evolution of MAPs from traditional static control mechanisms into contemporary adaptive practices for decision-making and sustainability. Budgeting and cash control remain the backbone of crisis management, but strategic, customer-focused, and learning-oriented tools increasingly define firms' ability not only to survive crises but to thrive in them. However, the direction of change whether towards innovation or regression depends on contextual variables such as firm size, resource availability, and institutional support. Table 1 summarizes the main MAPs observed during financial and economic crises across international contexts.

Table 1

Summary of Management Accounting Practices in Times of Economic/Financial Crisis

Practice	Typical Use During Crisis	Empirical Evidence & Context
Budgeting and Cash Control	Maintenance of operations and short-term survival through financial control, expenditure reduction, and resource allocation.	Remained crucial for Greek companies' liquidity management both before and after crises (Pavlatos & Kostakis, 2015); German and Russian companies likewise placed a strong emphasis on cash stability and preservation (Erokhin et al., 2019; Groh, 2014).
Variance Analysis & Breakeven (CVP) Tools	Support for short-term survival through cost tracking, scenario analysis, and inefficiency evaluation.	Russian firms (2014–2018) regressed from strategic tools and focused heavily on variance and breakeven analysis (Erokhin et al., 2019).
Rolling Forecasts & Scenario Planning	Provided flexibility through real-time modifications, allowing managers to anticipate liquidity or market shocks and make dynamic plan revisions.	During the 2008–2009 financial crisis, it was widely adopted in Germany; it promoted managerial agility and reframed the duties of accountants in the context of strategic partnerships (Endenich, 2014; Groh, 2014).
Activity-Based Costing (ABC)	Enhanced resource optimization, pricing accuracy, and cost visibility in complex cost structures.	Post-crisis adoption increased in Greek firms as part of strategic shift away from traditional cost systems towards more precise cost allocation (Pavlatos & Kostakis, 2015).
Balanced Scorecard (BSC)	Used to maintain competitiveness by integrating financial and non-financial information and coordinating short-term crisis responses with long-term strategy.	Adopted by businesses looking for comprehensive frameworks for performance and recovery in Venezuela (Parra & Cecilia, 2011) and Greece (Pavlatos & Kostakis, 2015).
Strategic Management Accounting (SMA)	Emphasis on market positioning, competitor analysis, and long-term strategic renewal, with limited adoption in established institutional contexts.	Evident in Spain and Greece, where market-oriented, strategic methods to maintaining competitiveness were prompted by crises (Endenich, 2014; Pavlatos & Kostakis, 2015).

Note. MAPs = management accounting practices; CVP = cost–volume–profit; ABC = activity-based costing; BSC = balanced scorecard; SMA = strategic management accounting. Sources summarized from prior empirical studies.

2.6 Industry Context: Service vs. Manufacturing Firms

Despite growing knowledge that accounting practices are shaped by the environments in which they are enacted, the industry context as a distinct and central contingent factor remains underexplored. Most studies continue to refer to industry primarily as a control factor rather than examining it as an explanatory variable on its own. Building on this view, Messner (2016) claims that management accounting cannot be fully understood without considering the

organizational and institutional environment in which it operates, highlighting that primary operational processes differ essentially across industries.

Manufacturing firms are known for their tangible outputs, standardized production cycles, and inventory-driven operations. MAPs therefore tend to focus on cost control, production efficiency, and inventory management. Service firms, by contrast, are characterized by intangible outputs where customer satisfaction is essential and business value is more strongly linked to human engagement and service quality. In these firms, reliance is more on non-financial information, capacity utilization, and customer-driven performance indicators. Prior research discusses how such contextual differences lead to distinct managerial priorities and control mechanisms. For example, product design costing and capital budgeting dominate manufacturing as shown by Miller and O'Leary (2007), whereas service settings rely more on flexible, people-oriented controls (Ahrens & Chapman, 2007).

Moreover, Messner (2016) highlights that industry-specific regulations and technologies further affect how MAPs evolve, producing standardized, similar practices within each industry, yet significant variation across them. Unlike the broader contingency factors discussed earlier, these influences operate at the industry level, embedding accounting practices within sector-specific production logics and institutional arrangements.

2.7 The State of Manufacturing and Service SMEs in Lebanon

2.7.1 Defining Small and Medium Enterprises in Lebanon

Different definitions of small and medium enterprises (SMEs) exist across international frameworks, reflecting differences in regulatory settings, data reliability, and economic structure. Despite this variation, there is broad consistency in the classification of micro and small enterprises. The European Union, the World Bank, and Lebanon all define micro-enterprises as firms employing fewer than ten workers and small enterprises as those employing

up to fifty employees. Differences in classification exist primarily at the level of medium-sized enterprises. While the EU classifies medium enterprises as firms employing fewer than 250 employees and the World Bank applies a threshold of up to 300 employees, the Lebanese SME Strategy adopts a more restrictive definition, classifying medium enterprises as those employing fewer than 100 workers (European Commission, 2005; Ministry of Economy and Trade, 2014).

Turnover ceilings also differ across frameworks. In the Lebanese context, enterprises are classified as micro firms with turnover below LBP 500 million, small firms below LBP 5 billion, and medium firms below LBP 25 billion (Ministry of Economy and Trade, 2014). These limits were set based on the past official exchange rate of LBP 1,507.5 per US\$1 and should therefore be interpreted with caution when assessing firm size and economic capacity under current economic conditions.

Although SME definitions and classifications vary across frameworks, their significant role in the Lebanese economy remains undisputed. This economic significance is reflected in World Bank estimates, indicating that SMEs make up most of Lebanon's productive landscape and account for the majority of firms and a substantial share of employment (World Bank, 2018). SMEs foster entrepreneurship, attract investment in both manufacturing and services, and serve as essential drivers of social and economic resilience (Ndiaye et al., 2018). Nevertheless, their growth is constrained by persistent structural challenges such as political and economic instability, weak institutional support, administrative burdens, and long-lasting financing shortages (Makdissi & Tannous, 2020; Malaeb, 2018; Naimy, 2011). Even so, research suggests that good governance and sound management practices can enhance SME performance and crisis endurance (Nasrallah & Khoury, 2021).

For the purpose of this research, SMEs are defined according to the classification of the Lebanon SME Strategy issued by the Ministry of Economy and Trade (2014). This framework remains the most widely cited and context-specific for the Lebanese market. Accordingly, the study focuses on firms employing up to 100 workers, with annual turnover below the thresholds specified in the Strategy. This definition is chosen because it reflects Lebanon's economic structure and aligns with the criteria used by national SME support programs.

2.7.2 Obstacles in the face of Lebanese Service and Manufacturing SMEs due to the crisis

The challenges confronted by Lebanese SMEs during the 2019-2025 crisis have been widely explored in various literary works. In several studies, limited access to financing consistently appears as one of the most dominant obstacles. Ghayad et al. (2022) identified financing shortages as the primary challenge facing Lebanese SMEs, followed by corruption, competition pressures, high labor costs, and insufficient financial resources. These financial limitations are further compounded by the broader environment of economic fragility. Malaeb (2018) similarly argues that financing impairments, coupled with political, administrative, and structural weaknesses, pose the most significant threats to SME growth in Lebanon. In crisis contexts, Popa (2013) further asserts that the lives of crisis involved SMEs are in danger unless these challenges are investigated and resolved immediately.

In the global context, international evidence reinforces the systemic nature of such challenges, highlighting how institutional and economic conditions shape SME vulnerability. Studies from South Africa point to managerial capacity limitations, limited access to capital, restricted exposure to international markets, outdated technology, and regulatory complications as key constraints of SME development (Dasan, 2013). Similarly, SME owners in Russia faced severe credit restrictions due to banking and governmental regulations, limiting both direct investment and access to secure funds. In Nigeria, Onugu (2005) reports overlapping obstacles, including

immense regulatory requirements, infrastructure deficiencies, marketing limitations, excessive bureaucracy, and policy inconsistencies. Together, these global cases show that financial constraints frequently coexist with institutional and managerial weaknesses, particularly in environments characterized by regulatory complexity and limited state support.

On the other hand, Shaghadi (2017) emphasizes that SME development, in addition to being constrained by financial and institutional limitations, is also shaped by management styles, firm-specific characteristics, market conditions, and broader growth contexts. In the Lebanese context, Khoury (2013) provides a comprehensive account of SME obstacles, identifying political and security instability, macroeconomic uncertainty, weak infrastructure, high production costs, and limited access to markets and financing. Additional constraints include ineffective administrative and legal frameworks, weak enforcement of intellectual property rights, limited awareness of support programs, and persistent skills mismatches between education systems and business needs. These constraints highlight the structural and institutional fragility within which Lebanese SMEs operate, often pushing many firms toward informality.

Institutional weakness is further observed in Lebanon's administrative history. The country's public administration has been severely damaged by the prolonged civil war (Salameh, 1991), which has prompted reform efforts such as the establishment of the Office of the Minister of State for Administrative Reform (OSMAR) under UNDP supervision. However, limited political will and inconsistent implementation have delayed meaningful administrative modernization, constraining accountability, innovation, and effective governance (Office of the Minister of State for Administrative Reform, 2011). Consequently, Lebanese reports continue to stress the need for performance evaluation mechanisms and simplified bureaucratic procedures to improve the business environment.

Taken together, the literature portrays Lebanese SMEs as operating within a high-friction environment where financial scarcity, institutional weakness, and managerial constraints reinforce one another, particularly during periods of crisis. Building on this, this study argues that internal organizational mechanisms such as MAPs become critical for SME survival and adaptation when external support systems are fragile. Accordingly, it proposes that different categories of MAPs support distinct dimensions of organizational resilience. This conceptual linkage between MAP categories and resilience outcomes provides the analytical foundation for the research design, which is detailed in Chapter 3.

Chapter 3: Research Methodology

3.1 Research Design

This qualitative study explored how managers in Lebanese service and manufacturing SMEs perceived the role of MAPs in fostering organizational resilience throughout the economic and financial crises of 2019–2025. A qualitative approach was essential for this research because the study sought to understand managers' interpretations, meanings, and lived experiences rather than measure predefined variables. As Creswell and Creswell (2017) state, qualitative inquiry is the best approach when examining complex social phenomena, since it allows researchers to examine the narratives of individuals from many angles and piece together their meaning. When studying managerial behaviors in uncertain economic times and when formal data is scarce or unreliable, a qualitative approach offers more flexibility than quantitative methods (Merriam & Tisdell, 2015). Lebanon's instability characterized by hyperinflation, currency collapse, financial standstill, and infrastructure deterioration presents a unique environment that aligns closely with the strengths of qualitative inquiry, as it requires contextual sensitivity and interpretive depth rather than statistical generalization. To thoroughly examine the industry-based differences and commonalities in the use of MAPs

among Lebanese service and manufacturing SMEs during the turbulent period of 2019-2025, this study adopted a comparative multiple-case study approach. In contrast to single case studies, which offer an in-depth understanding of a particular controlled environment, multiple-case designs enhance analytical generalization through replication logic (Yin, 2017; Eisenhardt, 1989). Each case functions as a separate experiment that either supports or contradicts new theoretical claims (Baxter & Jack, 2010). The multiple-case study approach is a useful qualitative research technique that enables not only an in-depth examination of complex phenomena in various contexts, but also the asking of “why” and “how” questions in organizational, leadership, and management research (Halkias & Neubert, 2020).

The methodological value of multiple-case research is in its analytical depth and theoretical transferability. Scholars such as Yin (2017) and Eisenhardt (1989) highlight that cross-case comparison facilitates theory formation through literal and theoretical replication and enhances explanatory power. Gustafsson (2017) further notes that multiple-case designs improve external validity. Accordingly, every case was handled as a separate analytical unit, examined separately at first, and then systematically compared to find patterns, contrasts, and contextual processes (Baxter & Jack, 2010).

By comparing manufacturing and service industries, two industries facing the same macro crisis but with different value creation logics, the study examines how contextual variables shape MAP adaptation and operational resilience outcomes. The approach is in line with contingency theory, which theorizes that MAPs must fit their organizational environment (Chenhall, 2003). This enhances the explanatory power of findings.

In addition to semi-structured interviews, the study sought to support interviews with internal organizational documents, such as anonymized budgets, internal dashboards, or performance summaries. However, access to such materials was limited, reflecting common documentation

practices among Lebanese SMEs and confidentiality concerns during crisis conditions. As a result, the empirical analysis relied primarily on interview data, which provided rich, experience-based insights into managerial decision-making and MAPs' usage during the crisis period.

Integration of the Balanced Scorecard Framework

The study adopted the Balanced Scorecard as an analytical mapping tool, connecting each perspective/element to MAP use and, in turn, to conceptual indicators of operational resilience. The Balanced Scorecard was selected because it integrates financial and non-financial dimensions of performance and aligns well with the multidimensional nature of organizational resilience. Table 2 presents the analytical mapping between Balanced Scorecard perspectives, resilience outcomes, and management accounting practices.

Table 2*Mapping Balanced Scorecard Perspectives to Organizational Resilience Outcomes*

BSC perspective	Resilience outcome	Interview focus and indicators	Relevant MAPs
Financial	Continuity of operations	<p>Managers' accounts of maintaining core operations during cash shortages</p> <p>Experiences related to payroll and supplier payments</p> <p>Decisions involving delayed payments, renegotiation, or downsizing</p>	Budgeting, variance analysis, standard costing
Internal Process	Adaptive flexibility	<p>Reallocating staff and shifting work roles</p> <p>Revising production schedules and resource use</p> <p>Simplifying processes or digitizing reports</p>	Rolling forecasts, scenario planning
Customer	Customer Value Preservation and Reputation Resilience	<p>Balancing price adjustments with retaining the same quality to customers.</p> <p>Maintaining transparent communication and reliability to protect reputation.</p> <p>Adjusting contracts or payment terms of customers.</p>	Budgeting integrated with customer-oriented KPIs, profitability analysis, and decision-support dashboards.
Learning & Growth	Strategic learning and renewal	<p>Lessons learned from the crisis.</p> <p>Introduction of new KPIs or dashboards post-crisis. Innovation or efficiency improvements inspired by the crisis.</p>	BSC, Activity-Based Costing, Strategic management accounting

Knowledge sharing from similar firms.

Changes in management style.

Note. MAPs = management accounting practices; BSC = balanced scorecard

Semi-structured interviews were organized into role-specific groups so that each functional area could provide insights and ensure data triangulation. Targeted interviewees included owners, general managers, financial controllers, sales managers, and other personnel with direct decision-making authority or operational oversight.

The preliminary semi-structured interview protocol was later adjusted to make the questions more understandable by reducing academic terminology and focusing on the functional roles of the MAPs, as reflected in the revised version attached in Appendix A:

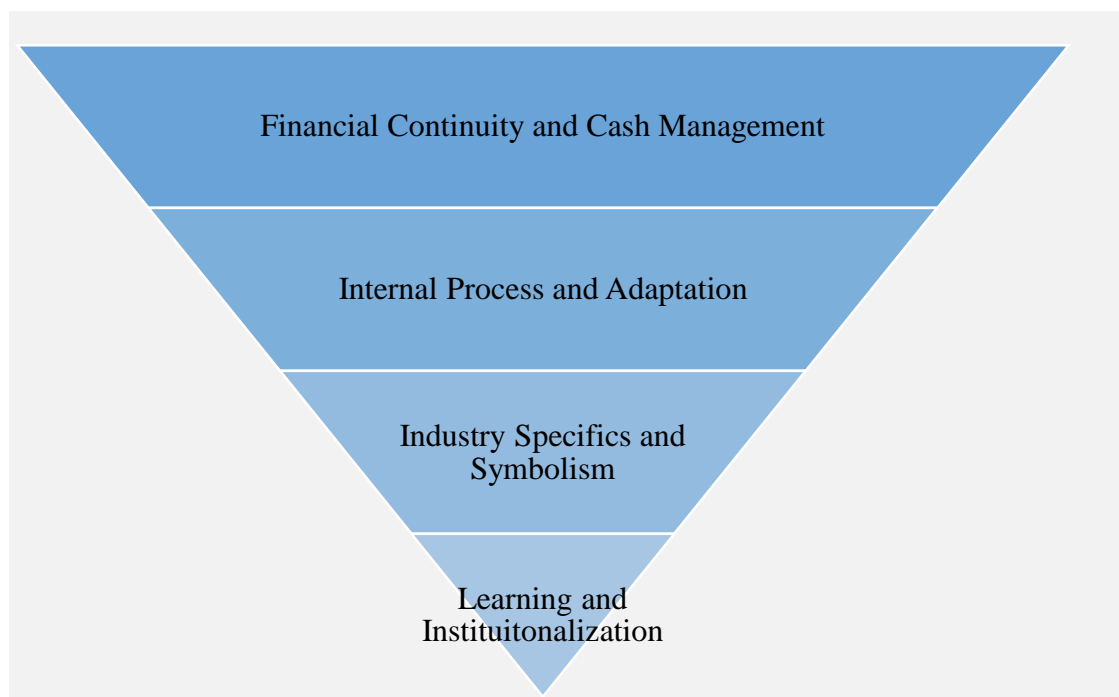


Figure 2.

The Interview Funnel: From Financial Continuity to Organizational Learning

Since MAPs are more than just accounting tools, they are instruments for organizational resilience and strategic renewal. The qualitative design guarantees a contextually grounded and multi-layered comprehension of them. This research helps close the gap between organizational resilience theory and management accounting practice in economically crisis-stricken countries, such as Lebanon, by revealing the organizational culture (the unwritten norms, values, routines within an organization), contextual conditions, and managerial cognitive aspects of MAP implementation.

3.2 Setting, Sample, and Access to Participants

The comparative multiple-case study gathered data from participants of two distinct industries (service and manufacturing) in their typical work environment. This approach enabled the capture of rich contextual insights, consistent with qualitative research guidance (Creswell & Creswell, 2017). Participants were purposively selected because they held roles directly involved in the design, implementation, or use of MAPs, including owner-managers, financial controllers, sales managers, and key operational personnel. These roles provided direct insight into how MAPs informed day-to-day decisions and resilience-related actions during the crisis period.

The choice of two different industries was made to include different business models sharing the same macro-crisis (Eisenhardt, 1989; Yin, 2017). The focus on service and manufacturing is intentional. Together, these two industries account for almost 43% of Lebanese GDP according to the latest figures from the World Bank's *World Development Indicators (2024)*. The service industry specifically has suffered an unprecedented contraction by falling from roughly 79% of GDP in 2019 to about 42% following the collapse of the banking sector and the wider financial breakdown. Manufacturing industry, though smaller, has also faced severe operational disruptions driven by currency depreciation, rising input costs, and unreliable infrastructure. Studying SMEs in these two sectors specifically therefore provides the richest

insight into how firms in Lebanon's most affected economic pillars adapted their MAPs to sustain resilience during prolonged instability.

The following items demonstrate the inclusion criteria used to identify SMEs and participants:

- Lebanese SMEs operating in Lebanon were included, in line with the national SME definition by the Ministry of Trade and Economy (2014), that had weathered significant economic storms, such as the recent financial/economic crisis.
- Organizations that had been in continuous operation in Lebanon for a minimum of seven years, with no closures during that period, were eligible for inclusion. A minimum of 7 years ensures that the firm operated before the 2019 crisis, allowing comparison between pre-crisis and crisis-era MAPs.
- Individuals with a minimum of five years of experience in roles that provided either decision-making authority or direct involvement in operational or strategic processes related to MAP use were included.

The following were excluded:

- Large firms, defined as organizations employing more than 100 employees or reporting annual turnover exceeding 25 billion L.L., in accordance with the national SME classification issued by the Ministry of Economy and Trade (2014).
- Startups or newly established firms, defined as businesses operating for fewer than three years, as they lacked sufficient pre-crisis and crisis-period experience.

In line with qualitative research principles, the researcher's role was to interpret managerial experiences by constructing meaning from participants' accounts, organizational structures, and contextual conditions (Creswell & Poth, 2013). Participants were selected using purposive sampling, targeting individuals with decision-making authority or direct involvement in the implementation and use of MAPs. Access was obtained through professional networks,

targeted organizational outreach, and industry groups, while recruitment was shaped by participant availability and confidentiality considerations under prolonged crisis conditions.

After a comprehensive search, candidates were contacted by phone or email and were provided with a formal Letter of Participation (see Appendix B) and a Letter of Consent (see Appendix C) to explain the research, its goals, and the need to maintain anonymity.

Data collection was initially planned to continue “until repeating patterns began to emerge and data saturation was reached”, following the conventional guidance of Charmaz (2014) and Creswell and Poth (2013), who describe saturation as a point beyond which no new insights emerge. However, during the actual study, it became evident that the traditional notion of data saturation was not methodologically suitable for this type of exploratory qualitative research. Malterud et al. (2016) argue that saturation is rooted in Grounded Theory and is often misapplied in studies that do not aim to exhaustively map all possible variations of a phenomenon. They further note that in contexts where knowledge is partial, situated, and co-constructed, such as managerial perspectives during systemic crisis, reaching saturation is neither realistic nor conceptually meaningful.

Accordingly, the study adopted information power as the guiding principle for sample adequacy. Information power suggests that the more relevant and specific the information provided by participants, and the stronger the interview dialogue, the fewer participants are required. Recruitment therefore ceased once the collected cases provided sufficient information power to address the research aim, taking into account the specificity of the sample, the clarity of the narratives, and the theoretically informed cross-case analysis strategy.

Regarding the minimum number of participants required for qualitative research studies (Morse, 1995) mentions six. It is worth noting that Creswell and Crewell (2017) suggests doing 5–25 interviews for this particular study type. Although these numerical guidelines were considered in the planning stage, the final sample size was ultimately guided by the concept of

information power rather than fixed minimums. Sampling remained flexible to accommodate access and scheduling constraints while ensuring balance across industries.

Additionally, Aakkar, North, Mount Lebanon, Baalbeck, Bekaa, Nabatiyeh, and South Lebanon are the eight governorates that make up Lebanon. We focused on the perspectives of decision-makers and key personnel in two governorates near the capital, Beirut and Mount Lebanon, since these areas are linked to the largest concentration (around 80%) of SMEs and because they have been bearing the brunt of the prolonged economic uncertainty (Ministry of Trade And Economy of Lebanon, 2014). Other governorates were included because SME density is significantly lower, making them less suitable for the comparative design of this study.

3.3 Case Selection Rationale

While the preceding section explains how participants and data were accessed, the following section clarifies the analytical logic guiding the selection of firms as cases.

The unit of analysis in this study is the firm-level use of MAPs, as adopted and interpreted by managers within their organizational context. While data was collected through interviews with managers and key personnel, the analysis focused on how MAPs were utilized, interpreted, and adapted within each firm as an organizational case. This approach allowed managerial accounts to be interpreted as expressions of shared practices, routines, and decision logics rather than as individual opinions.

The case selection was designed to capture meaningful variation across industry context, firm size, and resource constraints rather than statistical representativeness. The inclusion of both service and manufacturing SMEs enabled comparison across distinct value creation logics, cost structures, and operational pressures, while variation in firm size and ownership structure allowed examination of differences in MAP formality and decision-making capacity under crisis.

Certain organizational types were excluded to preserve analytical focus. Large enterprises were excluded due to their distinct governance structures, access to financing, and formalized control systems, which differ significantly from SME realities. Firms established after the 2019 crisis were also excluded, as they lacked pre-crisis operating experience and could not provide insights into how MAPs evolved across different phases of instability. These boundaries ensure that cross-case comparisons remain theoretically coherent and grounded in sustained organizational exposure to crisis conditions.

3.4 Data Collection Methods

Research participants were selected using a purposeful sampling strategy. This approach ensured that the research topic, research questions, and interview questions were all appropriately addressed. Although the proposal originally planned to include four service firms and four manufacturing firms (a 50%–50% distribution), the final sample consisted of six firms, three service and three manufacturing, because two firms withdrew during recruitment. This distribution still provided balanced industry representation and analytic depth. As stated by Black (1994), units and points of analysis are chosen by purposeful sampling if they are relevant to the study and may provide light on the research topic. Essential criteria included a minimum of seven years of continuous operation in the Lebanese market by the selected enterprises, with no closures during that period. The study therefore recorded a diverse array of approaches to MAPs and organizational resilience from businesses of varying sizes and in both the service and manufacturing industries. For this study, semi-structured interviews were the primary technique for collecting information while aligning with the Balanced Scorecard perspectives used as an analytic conceptual framework. In semi-structured interviews, structure and flexibility are combined, as stated by (Britten, 1995). By relying on the opinions and answers of participants, the

researcher was able to uncover hidden themes. In order to address the primary research questions, this approach was useful since it captured data that is both rich and particular to the environment. Prior to the main data collection phase, two pilot interviews were conducted to calibrate the wording, flow, and timing of the interview questions while keeping the core constructs unchanged.

Each interview followed a structured sequence, beginning with background questions about the firm and the participant's role, followed by questions about financial control, internal processes, and learning or adaptation mechanisms successively. Probing questions were used selectively to deepen explanations and clarify examples, while preserving comparability across cases. Interview duration ranged from 50 to 60 minutes, allowing sufficient time for reflection while remaining sensitive to participants' time constraints.

At the design stage, the study intended to complement interview data with internal organizational documents (such as anonymized budgets, internal dashboards, KPI reports, or procedural memos) to support data triangulation. However, access to such materials was limited, reflecting the absence of formal documentation in smaller firms and confidentiality concerns among medium-sized enterprises during the crisis. As a result, interviews constituted the primary empirical data source, with variation in organizational roles serving as an internal form of triangulation across perspectives.

The researcher conducted interviews with decision-makers as well as key personnel holding direct operational or strategic involvement in the use of MAPs, including owner-managers, financial controllers, and functional managers. During the interviews, the researcher adopted an active interpretive role during interviews, facilitating dialogue, encouraging reflection, and remaining attentive to how meanings were constructed by participants within their organizational and crisis contexts (Creswell & Poth, 2013).

Data analysis relied on reflexive thematic analysis (Braun & Clarke, 2006), supported by cross-case synthesis (Yin, 2017). This approach required ongoing reflexivity and dynamic engagement with the data, rather than mechanical coding reliability tests. Coding proceeded through cycles in which deductive categories (categories of management accounting practices, resilience outcomes) guided the initial analytical structure, while inductive themes emerging from participants' narratives refined and extended the analysis. Systematic comparison across cases was used to enhance analytical thoroughness and transparency.

With respect to practical and logistical considerations, interviews were conducted either in person or online (via secure platforms such as Zoom or Microsoft Teams), depending on participant availability and preference. All interviews were audio-recorded with informed consent, professionally transcribed, and anonymized to ensure confidentiality and data integrity.

3.5 Data Analysis

Data collection and analysis are closely related in qualitative research. After accurate data collection, it was necessary to evaluate, classify, and edit the data repeatedly (Merriam & Grenier, 2019). Patterns (themes) in research data can be examined and understood through the application of the qualitative technique known as thematic analysis. This study followed Braun and Clarke's (2006) reflexive thematic analysis framework.

Firstly, the researcher became familiarized with the data by reading the interview transcripts or other gathered data several times to fully absorb the information and make mental notes of anything that stands out, such as first impressions, recurring ideas, or intriguing patterns. The second step involved generating initial codes by methodically reviewing the data and marking important sections, phrases, or points. At this stage, NVivo 15 was used solely to assist with the organization of initial codes. Coding proceeded in cycles that combined deductive nodes

and inductive theme development. Deductive nodes were anchored in the literature and study design—specifically: (i) MAP categories, (ii) resilience dimensions (continuity, adaptation, learning). Inductive themes were then created from patterns emerging in participants' narratives. Then, based on the meaning of these data components, codes (or labels) were assigned to them. The thematic analysis itself was conducted manually following a reflexive thematic approach, whereby codebooks and memos exported from NVivo15 served as the basis for comparing patterns across cases.

Step three involved identifying overarching themes by analyzing the codes and clustering related ones. Important trends in the dataset were reflected by the themes. Fourth, the themes were identified, checked for accuracy in representing the data, and were compared across multiple data sources (i.e., interviewees) to guarantee consistency. Some of these topics needed merging, refining, or separation into subthemes, according to the researcher. Fifthly, the themes were verified to ensure that they were distinct yet clearly related to the research topic, and then were defined and named by providing a clear description of what they represent. Throughout, the researcher maintained reflexivity to document analytic decisions, evolving assumptions, and theme boundaries. In the end, the researcher produced explanation tables of the results, citing the data directly, making connections to the study goals and previous literature, and presenting the findings in an organized manner.

To address the comparative nature of the research questions, the study also conducted a cross-case synthesis (Livne-Tarandach et al., 2015). This cross-case analysis directly supported the study's aim of examining how industry context shaped the usage of MAPs and resilience pathways. Specifically, the analysis allowed the researcher to (a) identify combinations of factors that may have contributed to observed outcomes within cases; (b) construct explanations for why one case was similar to or different from others; and (c) express and refine concepts, propositions, or theoretical insights generated from the original cases (Livne-

Tarandach et al., 2015). Practically, this was operationalized through a comparative cross-case analysis contrasting service vs. manufacturing cases on MAPs utilized, adaptive responses, and resilience outcomes, followed by interpretive explanations of the observed similarities and differences.

3.6 Human Subject Considerations

An ethical researcher, according to Yin (2017), must execute such studies with careful consideration. Therefore, ethical concerns and standards formed the basis of the research, particularly because they received the endorsement of Haigazian University. Recognizing and honoring the participants' values, desires, demands, and rights was the utmost ethical consideration in research. These principles guided all stages of the study, from participant recruitment to data analysis and reporting.

Outlined are main key points from Merriam (1998) and Spradley (1980) that summarize the safeguards that guarantee informants' rights: clearly communicating the research objectives to the participant, both verbally and in writing, ensuring that they understand how their data will be used, getting written consent to proceed, explaining all data collection activities and devices, giving the participant access to verbal transcriptions and interpretations, prioritizing the participant's interests and rights before reporting any data, and emphasizing on the informant's anonymity.

In accordance with the latter set of precautions, the researcher respected the interviewees' right to remain anonymous, ensured confidentiality, and obtained their informed consent about the study's purpose, methods, and voluntary nature. To ensure anonymization, all participants and organizations were assigned pseudonyms, and any identifying details were removed from transcripts and reports. Audio recordings, transcripts, and consent forms were stored securely on password-protected devices accessible only to the researcher. A proper ethical review was

conducted before the study began, and data were validated by providing participants with an opportunity to check their transcripts and to ensure their opinions were accurately reflected.

3.7 Research Quality

Qualitative research requires careful attention to methodological rigor in order to ensure that findings are credible, transparent, and analytically sound. Given the interpretive nature of this study and its reliance on in-depth semi-structured interviews, specific procedures were adopted to enhance the trustworthiness of the research process. In line with established qualitative research criteria, this study addresses research quality through four key dimensions: credibility, dependability, confirmability, and transferability. As emphasized by Ahmed (2022), these dimensions establish the core pillars of trustworthiness in qualitative research and provide a systematic framework for evaluating how findings are generated, how interpretations are grounded in the data, and the extent to which results can be meaningfully understood within their contextual boundaries.

- **Credibility:** Credibility was enhanced through dynamic interaction with the data and systematic theme verification. A second-pass coding process was conducted, following initial coding and theme development, ensuring internal consistency and clear distinction between categories. Emerging themes were checked across all six cases rather than being derived from few of the accounts. Ongoing discussions with thesis supervisors also functioned as informal peer debriefing, supporting critical reflection on interpretations.
- **Dependability:** Throughout the analysis process, a transparent audit trail was maintained to support dependability. Coding decisions, theme development, and subsequent revisions were documented, including cases where codes were merged, refined, or redefined as patterns became clearer. The use of NVivo15 facilitated

systematic tracking of coding changes, while manual review ensured consistency between data segments and final themes. This transparent process allows the analytical steps of the study to be followed and assessed.

- **Confirmability:** Reflexive awareness and methodical analytical techniques were used to address confirmability. Given the researcher's background in management accounting, careful attention was paid during the analysis. To minimize confirmation bias, interpretations were grounded in participants' own words through the extensive use of direct quotations. Cross-case comparison and attention to different or less dominant views further ensured that findings reflected the data rather than pre-existing assumptions.
- **Transferability:** Transferability was supported through detailed contextual description rather than statistical generalization. The study is specifically limited to Lebanese service and manufacturing SMEs operating between 2019 and 2025, during the systemic crisis. Firm size, ownership structure, and crisis exposure are clearly specified to allow readers to evaluate the relevance of findings to other contexts characterized by institutional breakdown, resource constraints, and sustained uncertainty.

Chapter 4: Presentation of Findings and Thematic Analysis

4.1 Sample Description

The qualitative sample consisted of twelve participants drawn from six Lebanese SMEs operating in the service and manufacturing industries, with an equivalent distribution across the industries. Participants held roles directly involved in, or closely supporting, managerial decision-making related to financial planning, cost control, and operational monitoring. Two participants were interviewed within each firm, allowing each organization to be treated as a distinct analytical case. This design also supported data triangulation by capturing complementary perspectives on MAPs within the same organizational context.

According to the publication “Lebanon SME Strategy: A Roadmap to 2020” of the Lebanese Ministry of Economy and Trade (2014), 73% of Lebanese enterprises are micro-enterprises, representing the most recent official national estimate available at the time of this study. This structural characteristic was reflected in the composition of the study sample. Such enterprises generally have minimal formal hierarchy, with decision-making in the hands of the general managers or owners. Accordingly, in such firms the second interviewee was often a staff member who was not a primary decision-maker, but who supported the implementation or day-to-day functioning of MAPs.

The final sample therefore included three service SMEs and three manufacturing SMEs, representing diverse subsectors such as travel and tourism, electronics retail/wholesale, insurance brokerage, food processing and manufacturing, agricultural manufacturing, and household goods production. Participants held roles ranging from owners/general managers to sales managers, finance controllers, customer relations, and sales personnel. All firms met the definition of Lebanese SMEs (fewer than 100 employees depending on sectoral classification), and all had been operational before 2019, qualifying them as crisis-experienced organizations.

For confidentiality and to preserve the anonymity of the participants as stated in the signed letter of consent, interviewees are labeled using a case-based code: S1–S3 for service firms and M1–M3 for manufacturing firms, with letters “A” and “B” distinguishing participants within the same firm (e.g., S1-A, S1-B). Table 3 summarizes participants’ characteristics.

Table 3*Profile of Interview Participants*

Code	Industry	Role	Business Segment	Approximate Firm Size
S1-A	Service	general manager/owner	insurance brokerage firm	3
S1-B		customer relations and claims coordinator		
S2-A	Service	general manager/owner	travel agency	5
S2-B		senior travel consultant		
S3-A	Service	general manager/owner	electronics wholesaler and retailer	9
S3-B		sales personnel		
M1-A	Manufacturing	financial controller	manufacturing of mattresses and nylon products	80
M1-B		sales manager		
M2-A	Manufacturing	managing partner	food processing and manufacturing	100
M2-B		sales manager		
M3-A	Manufacturing	general manager/owner	zaatar manufacturing	10
M3-B		sales personnel		

Note. Firm size refers to the approximate number of employees at the time of data collection. Participants sharing the same firm code (e.g., S1-A and S1-B) are drawn from the same organization.

Interviews were held in November 2025, during a period when Lebanese society continued to struggle with the cumulative effects of more than six years of instability. Although the 66-day Lebanon–Israel war had ended, the Lebanese Pound seemed to have been stabilized against the dollar at 89,500 L.L., and public discussion about banking reforms had resurfaced, the business environment remained in a state of uncertainty. The lingering aftermath of all the multilayered crises pushed Lebanese SMEs to constantly remain cautious and adaptable to whatever might arise next.

Within this context, interviewees were invited to reflect and share insights on how they used MAPs, formally or informally, as they navigated the 2019-2025 period, and what allowed their firms to persist despite severe and recurring shocks.

The sample includes a broad range of managerial perspectives by the contrasting realities of service and manufacturing industries. Service-industry participants (S1–S3), whose work depended heavily on customer interaction and behavior, frequently discussed challenges with constantly changing demand patterns, heightened price sensitivity of consumers, and the need for frequent operational adjustments. In contrast, manufacturing-industry participants (M1–M3) highlighted challenges related to escalating input costs, utilities' bills, inventory risks for perishable goods, and the need to maintain production continuity despite electricity shortages and infrastructure breakdowns due to the Lebanon-Israel conflict.

All participants shared their survival stories of 2019-2025, unfolding how they faced the crisis without fully understanding, at times, how they managed to keep their firms operating. Almost all SMEs showed limited awareness of the role that MAPs could play in navigating such crisis contexts. Many of them only recognized their importance as the situation worsened in time when they were somehow forced to budget to remain financially stable, monitor cash with meticulousness, track the collection of receivables closely, and reevaluate every operational expenditure. For several participants, the crisis acted as a wake-up call that revealed the necessity of MAPs they had previously viewed as secondary or optional. Before 2019, MAPs were largely informal and embedded in the intuition and experience of traditional practical managers who “produced and sold” without systematic tools. The prolonged state of instability shifted this mindset, pushing SMEs to adopt more cautious management accounting and control practices as part of their day-to-day survival.

The sample revealed diverse tenure profiles, with some participants serving as founders/general managers with long-standing ties to their firms and others occupying managerial or operational roles in which they had accumulated several years of experience. Access to SMEs was facilitated through professional networks, and although eight firms initially agreed to participate, two later withdrew due to operational constraints, leading to a final sample of six firms. While demographic information was not formally collected, most of the decision-makers interviewed were men, with only 4 women out of 12 represented in the sample, and only two of them occupying general managerial roles. This gender imbalance is part of a bigger leadership pattern within Lebanese SMEs and may have affected how participants described informal power dynamics within their organizations. Each interview lasted around 45–60 minutes, providing participants space to describe their decisions, actions, perceptions, emotions, and adaptations throughout the last six years. These narratives formed the empirical foundation for the thematic analysis presented in the next section.

4.2 Presentation of Interview Data

This section outlines the main findings obtained from the three sub-questions that underpin this research. Themes and sub-themes were formulated to explain the use of MAPs by SMEs during the 2019–2025 crisis, supported by direct citations to illustrate the unique circumstances of service and manufacturing sectors. The analysis examines across both industries the MAPs used and how managers utilized them to achieve operational continuity, financial stability, strategic adaptability, and legitimacy during extended uncertainty. Employing a reflexive thematic methodology as outlined by Braun and Clarke (2006), the coding process, initially facilitated by NVivo15 and subsequently refined through manual review. This process generated recurring patterns in participants' responses, which were organized into clearly defined themes.

Accordingly, the findings are presented around three overarching themes aligned with the study's sub-questions: (1) the use of MAPs as tools for operational continuity and financial stability, (2) the role of MAPs in supporting strategic adaptation and learning, and (3) the symbolic use of MAPs to maintain legitimacy under crisis conditions.

4.2.1 MAPs as Survival Tools for Operational Continuity and Financial Stability Under Systemic Uncertainty (SQ1)

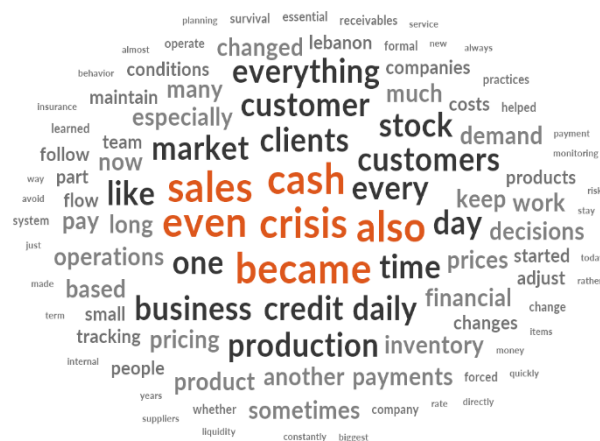
The first sub-question looked into “*How do MAPs support operational continuity and financial stability in the short-term when there is systemic uncertainty?*” Across the interviews, MAPs did not appear as formalized managerial systems but rather as practical, everyday tools that helped SMEs withstand the continuous pressures of crises. To secure survival, managers relied primarily on cost and control-oriented MAPs, including daily cash-flow monitoring, strict credit control, and faster collection efforts. They also used decision-support MAPs in simplified ways, drawing on basic cost information, sales figures, and cash availability to adjust operations quickly, safeguard profit margins, and decide which activities to maintain, scale back, or suspend. This pattern addresses SQ1 directly by showing how MAPs functioned as essential survival instruments for sustaining basic operations, preserving short-term financial stability, and navigating unpredictable conditions.

Under this question, three core themes with their corresponding sub-themes were identified, each capturing a distinct way SMEs used MAPs as survival tools. These themes are *(1) Cash Control, (2) Cost Management, and (3) Crisis-Driven Operational Adjustment*. Each theme is presented below and supported with quotations from interviewees to illustrate how these practices contributed to short-term continuity and financial stability under SQ1.

A. Theme 1: Cash Control

Across all SMEs, maintaining tight control over cash appeared as a dominant and recurring practice for ensuring short-term survival. This theme reflects the use of cost and control-oriented MAPs focused on liquidity preservation and short-term operational continuity. Participants repeatedly described cash as “*the only thing that mattered*” during the crisis, emphasizing that MAPs were applied in practical, routine forms rather than formal practices to protect liquidity and preserve operational continuity. The unpredictability of changes in sales volumes, customer behavior, and the constantly fluctuating exchange rate led managers to rely heavily on MAPs to plan for their daily cash needs, prevent further losses, and avoid exposing the firm to additional financial risk. Cash became both a strategic and operational pillar, guiding decisions on purchasing, production, collections, and even staffing. The data clearly show that cash control played a central role in sustaining operational continuity and financial stability, especially when access to bank financing and credit markets had vanished. This theme directly supports SQ1 by highlighting the centrality of cash control in SMEs in organizing their daily operations around protecting liquidity.

- **Sub-theme: Cash Monitoring and Liquidity Control.** Across the sample, one of the most frequently repeated words was “Cash,” as shown below in the word cloud extracted from NVivo15.



Looking through the sample, it was evident that daily cash monitoring became a dominant practice within both industries, replacing annual budgeting or long-term strategic planning practices. Managers considered their cash on hand as one of the most important determinants of their business continuity and survival. Most of them described checking their cash position first thing every morning because cash dictated what could be paid, purchased, produced, or postponed. As one manufacturing manager explained, *“The first number we look at every morning is how much cash we have on hand because it dictates what we can import, what dues we can settle, and what we must postpone. This short-term cash visibility guides nearly every operational decision we make”* (M1-A). Similarly, another reinforced this by stating, *“Daily cash position is the only stable compass I have. Without it, we cannot make production choices, purchase raw material, or plan even the smallest investment”* (M3-A).

Service-industry participants shared similar experiences to those reported in manufacturing firms: *“Tracking cash precisely isn’t just good practice; it’s what keeps our agency alive”* (S2-A), while another added that *“monitoring cash became a daily routine, especially during the crisis when the inflows we saw “on paper” didn’t translate into real cash in hand”* (S3-A).

What was noticeable was that rather than relying on formal dashboards or automated forecasting tools, SMEs of both industries monitored liquidity through simple but disciplined MAPs such as Excel sheets, daily sales files, invoice records, and basic accounting software. These basic tools were used as decision-support and control tools for daily liquidity management and to generate real-time information managers needed to make immediate decisions. For instance, S1-B described her cash monitoring routine as follows: *“I enter everything into Excel and keep all digital copies of receipts”*.

Manufacturing firms reported similar practices grounded in daily operational data. *“We rely on in-house Excel cash flow statements that are updated regularly, and our software gives real-time figures on inventory, receivables, and payables”* (M2-A).

Taken together, evidence from both manufacturing and service firms indicates that daily cash monitoring became a shared basis for operational decision-making across industries. Although the methods were simple, their disciplined use allowed firms to maintain short-term financial stability and directly addressed SQ1.

- **Sub-theme: Tight credit control and active collection.** With the fluctuating exchange rate and the deterioration of customers’ purchasing power due to inflation, many customers struggled to settle their payables on time. Several participants explained that customers relied on their credit facilities merely to postpone their dues and manage their own cash shortages. This situation pushed firms to treat credit management as a critical cash-control MAP rather than a routine commercial practice. As M2-A explained, *“When the crisis hit, customers stopped paying. Some negotiated to settle their old receivables at the outdated LBP 1,500 rate, and many simply couldn’t pay at all”*. With the absence of the banking sector to provide overdrafts, credit lines, or even timely access to deposits, firms could no longer rely on financial institutions to absorb delays in receivables’ collection or support working-capital needs. Consequently, the broader economy shifted toward a primarily cash-based system, a change that many SMEs described as initially favorable because it allowed them to reduce exposure to uncollectible receivables and stabilize daily cash inflows. *“The shift to a cash economy actually helped us because suddenly all sales became cash-based”* (M2-A).

Similarly, service-industry participants described the situation as urgent, noting that delayed payments created immediate cash shortages that could stop operations within

days. In firms where daily transactions sustain liquidity, any interruption in collections quickly becomes a threat to continuity. As S1-A stated, *“I sometimes had to go myself, take the car, and drive around to collect payments... even during blocked roads or unrest”*.

While service firms managed credit risk primarily through pricing, *“We adjust prices slightly higher when dealing with clients who request credit facilities to compensate for the increased risk”* (S2-A), manufacturing firms had to face the same risks under far tighter competitive constraints. Most of them weren't able to stop credit facilities entirely. Instead, they continued extending very limited and short-term credit to old, reliable, and loyal customers to remain competitive in markets where clients expected at least minimal flexibility. As M1-A noted, *“Almost all of our business became cash-based, with only a tiny number of major clients still receiving one- or two-week credit terms”*.

These accounts demonstrate that both manufacturing and service firms viewed credit as a major threat to liquidity and used cost and control-oriented MAPs, such as receivable tracking, credit limit enforcement, and risk-based pricing, to tighten control over cash and maintain short-term financial stability.

In conclusion, this theme illustrates how cash-control MAPs provided SMEs with the immediate, high-frequency information required to cope with volatility, reflecting the Contingency Theory view that practices must adapt to environmental pressure. This alignment strengthens the theoretical link to SQ1 by showing how these practices enabled firms to maintain liquidity and short-term continuity, with a deeper integration of these insights discussed further in Chapter 5.

B. Theme 2: Cost Management

Cost management appeared as a second major MAP supporting short-term survival, particularly among manufacturing firms whose operations were heavily exposed to rising input prices, raw material costs, utilities, and import-related expenses. While service firms faced fewer production-related costs, they similarly relied on cost and control-oriented MAPs to manage staffing expenses, marketing and promotional expenses, and other non-essential expenditures.

In an environment characterized by liquidity shortages, SMEs had no choice but to inspect their spending far more carefully and focus on the expenditures that were essential for operational continuity. Participants discussed reviewing expenses, differentiating between essential and non-essential costs, identifying expenses that could be postponed, replaced, or eliminated, and adjusting their operations accordingly. In this case, cost management acted as a practical MAP-driven response to limited cash availability, enabling SMEs to reduce excessive spending, control overhead, and maintain basic operational continuity under severe financial pressure. This further addresses SQ1 by showing how cost-related MAPs supported operational continuity when financial buffers and external financing disappeared.

- **Sub-theme: Cost Evaluation and Expense Prioritization.** During the crisis, SMEs adopted cost evaluation as a proactive management accounting practice to coordinate their spending with increasingly limited cash conditions and fluctuating exchange rates. Managers made use of practices such as thorough expense reviews, frequent cost-

tracking routines, and short-term reactive budgeting to identify which expenses were essential for operational continuity and which imposed additional strain on liquidity. These practices helped firms to prioritize the expenses that supported immediate continuity while reducing or eliminating non-essential expenditures.

This approach was mostly visible in manufacturing firms, whose cost structures were heavily subject to rising raw-material prices, volatile electricity and diesel expenses. These firms also faced the financial strain of maintaining production capacity during demand instability and escalating government-imposed dues. Across the manufacturing cases, managers explained that before the crisis, production and sales volume dominated managerial logic, and cost structures were not formally reviewed. As one manager from M2-B reflected, *“Before the crisis we used to budget but not that much... now the only thing we look at is the cash”*, indicating that budgeting previously hadn't been that analytical. The crisis changed this. As liquidity pressures escalated, cost evaluation became a disciplined MAP through which managers identified where money was being spent. Instead of relying on habitual spending patterns, managers examined cost variances, tracked actual costs against cash availability, and reassessed whether specific outflows could be sustained.

Cost evaluation helped manufacturing firms to detect the financially unjustifiable activities embedded in their operations. A manager from M3-A explained how MAP-informed cost–margin analysis exposed a routine activity that had become not viable: *“The cost of the electricity to run the fridge was more than the profit margin on the items. I preferred to stop this”* (M3-A). This shows how cost evaluation enabled firms to put an end to activities that drained liquidity even if they had been longstanding parts of the business.

Energy expenditures were another area subject to evaluation. Increases in diesel and electricity costs pushed firms to explore renewable energy alternatives such as solar energy, only to conclude, through cost evaluation, that these options were not financially feasible. As a manufacturing manager acknowledged, *“We tried using renewable energy sources like solar energy, but for our machinery they were not that efficient”* (M1-A) showing both the limitations of renewable energy innovations that save money and the fact that such overhead costs are inevitable. Labor costs were also assessed through affordability rather than operational capacity. In one firm, salaries were reduced because they could no longer afford to keep paying them during the crisis. As M1-A noted, *“Salaries were also heavily impacted. At one point, employees were earning barely half of what they did before the crisis”*. However, cost evaluation did not always translate into labor layoffs and salary reductions. In one manufacturing case, the decision-making process extended beyond cost logic. As the manager explained, *“Unlike other businesses, we refused to lay off staff because this is a family business, and we consider our employees part of the family”* (M2-A). This shows that while MAPs provided visibility over wage-related financial strain, managerial choices were sometimes shaped by relational and emotional commitments characteristic of family-owned SMEs.

Budgeting and cash-flow projections became essential tools for prioritizing expenditure. As M2-A stated, *“After the collapse, we needed precise projections to know ... what we could produce and sell and how to manage cash shortages”*, underscoring how these MAPs helped managers to manage cash shortages. This shift represented a distinct transition from pre-crisis methodologies, establishing budgeting as a crucial survival mechanism rather than a periodic administrative exercise.

While cost-reduction practices were most evident in manufacturing, service firms employed similar logic to evaluate which expenses were essential to maintaining core services. Their cost structures were different, less tied to raw materials and machinery, but equally vulnerable to declining sales and tightening liquidity. Through regular expense reviews and cost-tracking routines, service-sector managers identified staffing costs, marketing materials, and miscellaneous expenses as key areas requiring immediate adjustment. As S1-A noted, *“We tracked costs line by line and cut everything that wasn’t absolutely necessary, from printing flyers to other marketing materials”*.

Similar to the manufacturing firms, cost information also guided adjustments to workforce models for service firms. *“Operations shrank dramatically, and we began laying off staff based on necessity and financial pressure”* (S2-A).

These adjustments were primarily reactive and short-term responses to liquidity pressure rather than long-term strategic redesigns. Across both sectors, a consistent pattern appeared in which cost reduction served as the filtering mechanism that enabled firms to adjust their cost structures to match the reality of the situation. Within this context, such practices correspond to the cost and control-oriented category of MAPs discussed in Chapter 2, illustrating how they are used to align expenditure decisions with short-term liquidity constraints during the crisis.

- **Subtheme: Frequent Price Adjustments and Margin Flexibility.** With instability and uncertainty becoming the new business norm, pricing of tangible and intangible products shifted from a periodic managerial decision to an ongoing act of crisis navigation. Managers of firms across both sectors relied on MAPs such as cost-tracking reports, contribution margin analysis, cash forecasts, and systematic competitor price monitoring to adjust prices responsively while protecting both liquidity and operational

continuity. They utilized these practices to be able to make decisions about whether to pass the cost increases onto customers or to compress profit margins to preserve their operations.

For manufacturing firms, MAP-enabled cost visibility led to frequent price adjustments following fluctuations in the costs of raw material and energy. As one manager described, *“When plastic raw materials increased in price, we had to adjust nylon product prices almost immediately to avoid selling at a loss”* (M1-A). At the same time, pricing decisions became increasingly externally oriented. With market competition tightening and customers growing price-sensitive, firms complemented internal cost assessments with systematic competitor benchmarking. This marked a shift from internal cost-plus pricing toward a MAP-supported competitive pricing logic. As M1-A noted, *“Price comparison across competitors became more systematic because we couldn’t afford losing clients over small price differences”*. By integrating competitor benchmarking with cost data, managers attempted to strike a risky balance. This balance involved maintaining acceptable contribution margins without pricing themselves out of a weakened market.

Margin flexibility was equally important. During the crisis, firms regularly accepted reduced margins, or even negative margins, just to be able to protect liquidity or prevent inventory write-offs. This was especially evident for perishable and subsidized goods. *“For perishable items, we had no choice but to drop prices aggressively to liquidate before the products expired. Sometimes we even sold below cost just to avoid total loss”* (M2-B). For subsidized goods, on the other hand, the government set price limits, which meant that companies had to work within those limits even if their real costs were higher. *“For subsidized goods, we were forced to*

follow the government pricing system, whether or not the subsidy system worked reliably or whether payments came in late” (M2-B). In these cases, pricing decisions were not guided by profitability but by compliance pressures, forcing firms to operate with margins that were often misaligned with actual input costs.

In contrast, service firms saw pricing pressures mostly due to changes in market structure, consumer price sensitivity, and diminishing purchasing power, rather than variations in input costs. The crisis eliminated many smaller competitors, leaving a narrower market dominated by firms with greater capacity to adjust prices aggressively. This increased price-based competition and reduced profit margins across the sector. As S1-A explained, *“Profit margins became so thin that even a small fluctuation required us to revisit our financial decisions”*. Some firms were forced to compress margins to retain market presence: *“We didn’t have the luxury of keeping high profit margins anymore, so we reduced them significantly just to continue selling” (S3-A).* At the same time, pricing had to adapt to exchange-rate fluctuations, making price and quote revisions a daily necessity. *“Adjusting tariffs when the exchange rate moves” (S1-A).*

Across sectors, the logic was consistent: frequent pricing changes and flexible margins became a survival-oriented MAP instead of a long-term strategic policy. Cost information, competitor benchmarking, and customer reactions formed the data managers drew on to make rapid adjustments. In practice, pricing became a continuous act of balancing cash preservation with market relevance, with firms compressing margins, revising quotations, and absorbing losses where necessary to continue operations in an unstable environment. These pricing adjustments were primarily short-term and reactive responses rather than planned long-term strategic repositioning.

In conclusion, this theme illustrates how SMEs relied on pricing and margin adjustments as short-term responses to tightening liquidity rather than as part of a long-term strategic repositioning. Analytically, these practices draw on cost and control-oriented as well as decision-support management accounting practices, consistent with the typology outlined in Chapter 2. The findings support SQ1 by showing how cost evaluation, expense prioritization, and margin flexibility became essential mechanisms for sustaining operational continuity under severe resource constraints. The broader implications of how such cost-focused practices may evolve into more adaptive capabilities are discussed further in Chapter 5.

C. Theme 3: Crisis-Driven Operational Adjustment

Upon recognizing that typical demand patterns, dependable access to operational inputs and external finance, and consistent workflow routines were unlikely to resume in the foreseeable future, SME managers began the restructuring of their operations to align with this new long-term reality. This required changes not only in cash control and cost management but also in the very structure of daily activities, such as how much to produce, what to produce, what to stock, and where to concentrate their limited operational capacity.

Within this process of operational adjustment, MAPs became the primary source of guidance for managers, shaping how daily operations were reviewed, evaluated, and modified under crisis conditions. This theme reflects the use of decision-support and cost-control MAPs to guide operational adjustments under prolonged uncertainty, enabling managers to identify which operational routines could be sustained and which no longer made sense in a disrupted environment. This resulted in three operational adjustments: *(1) Demand-Aligned Operations*, *(2) Inventory Management*, and *(3) Resource Reallocation*. Together, these adjustments show

how MAP-informed operational changes enabled SMEs to preserve continuity and protect short-term financial stability throughout extended volatility.

- **Sub-theme: Demand-Aligned Operations.** Consistent volatility significantly affected consumer demand across Lebanese SMEs. The decline of consumer purchasing power due to hyperinflation, along with sudden political and security shocks, led to unpredictable demand patterns that could no longer be anticipated through historical trends or seasonal expectations.

This unpredictability made traditional operational planning routines ineffective. As a result, firms in both manufacturing and service industries had to restructure their daily operations based on the most immediate market indicators, such as daily sales figures, product movement reports, booking levels, and service requests. These MAPs became the primary foundation for determining how much operational activity firms could safely maintain. In manufacturing, demand indicators mostly shaped production volume and product mix, replacing the pre-crisis assumption that continuous production was always sustainable. As one manager stated, “*We reduced production capacity from around 15 tons daily to 8–9 tons, simply because sales could no longer support higher levels*” (M1-A). Cost margin and product line performance data also guided decisions about which items remained profitable and which had to be discontinued. This applied to luxury or hotel-dependent goods whose markets disappeared, “*Demand disappeared for high-end beef and seafood meant for 5-star hotels...*” (M2-A). It also applied to product lines where electricity or storage costs exceeded contribution margins, “*I look at which sizes, thicknesses, or roll types moved the most because that tells me where demand is shifting*” (M3-A).

Service firms, in contrast, used demand indicators not to adjust production capacity but to modify service availability, workload, and offering structures. Declining purchasing

power and rapid changes in client preferences pushed managers to shorten operating hours, narrow the range of services offered, and shift attention toward activities that generated immediate cash flow. As one participant explained, “*During the harshest phases of the crisis, we reduced our working days to two or three per week because operating full-time wasn’t financially viable*” (S2-A). Across the sector, managers responded to falling demand by prioritizing lower-cost, high-turnover services and redirecting effort toward services that customers were still willing or able to pay for. Overall, these patterns indicate that demand-aligned operations, supported by decision-support MAPs, became essential survival tools, enabling SMEs in both industries to scale operations to market realities and protect liquidity under volatile conditions.

- **Sub-theme: Inventory Management.** As manufacturing firms began aligning their production to match real demand, they soon realized that inventory itself had become a major point of financial exposure. In an unstable market, holding excess stock was no longer a buffer; it was a risk. Inventory management therefore emerged as a critical MAP for survival, with firms relying on stock-rotation data, turnover indicators, and real-time visibility into inventory positions to avoid holding up limited liquidity and to maintain operational continuity.

Managers across firms emphasized that overstocking no longer signaled preparedness but instead threatened liquidity. As one participant explained, “*Instead of keeping six months’ worth of stock like before, we reduced it to three months because inventory is now equivalent to cash*” (M2-A). This logic was echoed in other manufacturing cases, where excess inventory was viewed as a financial risk rather than an operational buffer: “*Overstocking could destroy us faster than undersupplying*” (M3-A).

To protect liquidity, firms adopted shorter stock renewal cycles, connected purchasing more closely to real-time turnover indicators, and monitored stock levels daily to avoid

tying up cash in slow-moving items. This pattern indicates a collective shift from traditional, volume-driven inventory logic toward a cost control–oriented and decision-support approach to inventory management. In an environment where excess inventory could quickly turn into a financial burden, inventory decisions became tightly linked to liquidity protection, reinforcing the argument of SQ1 regarding how survival-oriented MAPs shaped operational routines.

- **Sub-theme: Resource Reallocation.** Having aligned their operations to real demand and tightened inventory management practices to protect liquidity, SMEs ultimately faced a deeper challenge: how to reallocate their remaining resources to sustain operations under shrinking capacity. These reallocations were guided by decision-support and cost-control MAPs, which generated information about sales movement, cash constraints, and demand patterns to assist managers in determining where resources could yield the greatest survival value.

Labor reallocation was the most common response across both industries. Firms shifted employees into functions that directly supported liquidity. As one manufacturing manager described, “*We went from focusing on selling to focusing 80% on collecting, and it changed the entire nature of our work*” (M2-B), a shift driven by MAP insights showing that overdue receivables had become a major threat to continuity. Service firms exhibited the same pattern. Staff were reassigned to operational bottlenecks, as shown by the comment, “*Everyone had to take on extra responsibilities... helping with packaging, checking stock, and coordinating deliveries when needed*” (S3-A). These examples reflect a shared logic: labor was reallocated toward the activities that sustained immediate cash flow or preserved service capacity.

Reallocation also occurred through market channel changes, particularly in firms where wholesale demand became irregular and risky. In these cases, managers redirected effort toward cash-based retail transactions, explaining that “*retail became stronger than wholesale*” (S3-A), which pushed daily routines and manpower toward faster-turnover channels that generated immediate liquidity.

Finally, some firms carried out market/location relocation when security conditions deteriorated. For instance, the zaatar manufacturer M3 relocated its shop from a conflict-affected area (Kfarhouna) to a more stable urban market (Ashrafieh), allowing it to maintain customer access and operational safety during a period of instability. This relocation was undertaken as a risk-avoidance and continuity measure rather than as a strategic market expansion.

Together, these cases show that resource reallocation was a practical and necessary survival mechanism. By moving workers across departments, redirecting operations toward retail, and relocating physical outlets, SMEs used MAP-supported insights to reallocate their limited resources to areas where they could maintain continuity and financial stability.

In conclusion, this theme explains how SMEs restructured their operations through MAP-informed adjustments to demand alignment, inventory control, and resource allocation. These operational shifts reflect the contingency logic that firms must redesign routines to match environmental pressures, addressing SQ1 by showing how MAPs supported the continuity of core activities under prolonged instability. Further theoretical integration of these patterns is developed in Chapter 5.

Table 4:

Summary of Themes for SQ1 – MAPs as Survival Tools for Operational Continuity and Financial Stability Under Systemic Uncertainty (SQ1)

Themes	Sub-Themes	Illustrative Quotes
Cash Control	- Cash Monitoring and Liquidity Control.	○ “daily cash position is the only stable compass I have.” (M3-A) ○ “We adjust prices slightly higher when dealing with clients who request credit facilities.” (S2-A)
	- Tight Credit Control and Active Collection	
Cost Management	- Cost Evaluation and Expense Prioritization	○ “We tracked costs line by line and cut everything that wasn’t absolutely necessary.” (S1-A)
	- Frequent Price Adjustments and Margin Flexibility	○ “When plastic raw materials increased in price, we had to adjust nylon product prices almost immediately.” (M1-A)
Crisis-Driven Operational Adjustment	- Demand-Aligned Operations	○ “we track product line performance to determine which items should be prioritized” (M2-A)
	- Inventory Management	○ “Overstocking can tie up cash we can’t afford to freeze.” (M1-B)
	- Resource Reallocation	○ “We went from focusing on selling to focusing 80% on collecting.” (M2-B)

Interpretation: *The findings of SQ1 show that during the 2019–2025 crisis, Lebanese SMEs relied on a bundle of practical MAPs that became the backbone of daily survival. Core cost and control-oriented practices such as daily cash monitoring, tight credit and receivables control, disciplined cost and expense evaluation, and frequent price and margin adjustments were combined with simple decision-support practices such as daily sales indicators, product-movement reports, stock and turnover indicators, and short-term cash projections. Together, these practices formed the basis of the three themes identified in SQ: cash control, cost management, and crisis-driven operational adjustment, enabling firms to manage liquidity pressures and navigate the crisis by exerting tighter control over cash and receivables, evaluating which costs were essential or dispensable, aligning their operations with real demand, operating with leaner inventories, and reallocating scarce resources toward collections, high-turnover products, and cash-generating channels. Even though these MAPs were mostly informal and highly short-term, they provided managers with just enough visibility to avoid overexposure, continue operations, and preserve short-term financial stability in an environment where traditional long-term planning had broken down. However, because they*

remained reactive in nature, these MAPs primarily supported immediate continuity rather than building deeper, forward-looking forms of resilience.

4.2.2 MAPs as Strategic Enablers for Adaptation, Learning, and Organizational Renewal (SQ2)

The second research question posed: “*How are MAPs adopted as strategic enablers promoting adaptive capacity, learning, and innovation in Lebanese manufacturing and service firms under prolonged instability?*”. Unlike SQ1, where MAPs appeared as survival tools for short-term financial stability and operational continuity, the evidence in SQ2 shows that managers also made use of MAP insights to guide longer-term adjustments in their market positioning, product and service offerings, internal learning processes, and proactive decision-making. These practices assisted managers in interpreting strategic market signals, updating internal processes, and preparing for new business risks in ways that gradually reshaped the business’s strategic direction. In this way, MAPs functioned not only as tools for coping with immediate pressures but also as mechanisms through which firms adapted, learned, and positioned themselves for continuity in the evolving crisis environment.

Two main themes have appeared from the interview data that show how MAPs supported firms in developing adaptive capacity, organizational learning, and strategic responsiveness in a prolonged crisis. These themes are (1) ***Market Adaptation and Strategic Realignment*** and (2) ***Organizational Learning and Strategic Foresight***.

A. Theme 1: Market Adaptation and Strategic Realignment

Firms began relying on MAP-informed insights to make strategic operational adjustments as the crisis progressed from its initial stages of shock. Managers gradually realized that financial and economic instability was becoming the new norm. While early responses focused on survival, such as tightening cash control, reducing redundant expenses, adjusting prices to protect margins, and making short-term operational adjustments to cope with demand

fluctuations, as the crisis persisted, SMEs had to consider their long-term market position and the long-term sustainability of their businesses. To determine which activities still fit with the company's future and which needed major changes, managers considered analyzing the company's financial performance throughout time, reflecting on product-level profitability, and assessing market demand. In this context, strategic and decision-support MAPs therefore enabled managers to make structural rather than short-term operational adjustments and explore new revenue channels aligned with longer-term strategic goals. These changes reflected a deeper market adaptation and strategic realignment driven by MAP-informed evaluations. This theme captures how MAPs enabled two related processes *(1) Shifts in Market Positioning and Customer Segments, and (2) Strategic Realignment of Products and Services Portfolios*.

- **Sub-theme: Shifts in Market Positioning and Customer Segments.** As the crisis continued to intensify, SMEs gradually moved from reactive survival-oriented adjustments toward more planned, MAP-informed strategic repositioning. Managers interpreted recurring demand patterns, customer behavioral changes, and insights from sales and service data to determine which segments still held long-term potential. Service firms showed more changes that are evident in their customer focus, relying on strategic and decision-support MAPs to guide market repositioning. In travel and retail, for example, managers reassessed the profitability and exposure of different customer groups and shifted toward segments with more predictable cash flows. One manager explained that group travel was abandoned altogether because “*these experiences forced me to stop organizing group trips*” (S2-A). MAP evaluations revealed strategic misalignment under prolonged instability, characterized by heavy upfront payments and high cancellation losses, risks not present with individual travelers who paid directly. Similarly, service firms operating at the wholesale–retail interface redirected

their focus toward retail customers once sales tracking showed that “*retail became stronger than wholesale*” (S3-A), reflecting a deliberate move toward a segment with steadier demand and immediate cash collection.

Notably, such customer segment-level shifts were largely absent in manufacturing firms. Instead, they changed their product lines to respond to changes in market demand. Manufacturing firms faced greater constraints in shifting customer segments due to long-standing buyer relationships, fixed distribution channels, and production-related operational rigidities. As a result, MAP insights were utilized to improve their product lines, not whom they serviced. This highlights a difference in strategic flexibility between service businesses, which could easily change their market positioning and customer segments, and manufacturers, who had to stay within the limits of their already established client base.

- **Sub-theme: Strategic Realignment of Products and Services Portfolios.** The ongoing disruptions in the business environment pushed SMEs into a position where they could no longer maintain their pre-crisis range of offerings. SMEs found that the portfolios they carried into the crisis gradually became strategically misaligned with what the transformed market could sustain. Insights given by strategic and market-oriented MAPs provided a practical framework to identify this misalignment by indicating which product or service lines persisted, which completely failed, and which presented intolerable financial risk. Managers looked at sales trends, consumer behavior, turnover indicators, and risk assessments related to the expense of providing specific products or services. These insights were used to decide which lines should be kept, dropped, or selectively reintroduced as conditions changed. Under these circumstances, decisions about product/service portfolios were no longer just operational choices, they were strategic decisions about relevance, viability, and the

firm's future market positioning. In this way, MAPs helped move companies away from making changes in response to problems and toward intentionally redesigning their product and service portfolios.

In manufacturing firms, MAP insights initially played a defensive role. When sales and margin data made clear that certain product lines were no longer sustainable, managers reduced their portfolios to focus only on items with consistent turnover. As one manager noted, production cuts were unavoidable when "*sales could no longer support higher levels*" (M1-A). At this stage, portfolio adjustments were survival-driven. Firms eliminated products that tied up cash, consumed costly energy, or faced collapsing demand. As conditions gradually stabilized, however, MAP indicators began revealing new patterns, such as modest recovery in mid-range consumer spending or shifts in customer preferences. Manufacturers then used the *same* MAPs for more forward-looking decisions. In one case, the return of some purchasing power encouraged managers to selectively bring back previously discontinued items once "*the middle class returned a bit*" (M2-A). This shift illustrates a clear evolution in the strategic role of MAPs. They moved from helping firms cut back to survive to helping them rebuild strategically as conditions gradually improved. In other situations, MAP analysis urged permanent restructuring. For instance, one manufacturer discontinued an entire product line after concluding that its turnover was no longer worthwhile, noting that "*the mattress line eventually became unsustainable... we stopped producing them and shifted to importing ready-made models*" (M1-B). In this case, MAP-informed analysis supported a decisive long-term repositioning rather than a temporary survival response. Service firms also worked on restructuring their portfolios for strategic realignment, but their adjustments centered less on production sustainability and more on customer affordability and service relevance. The insurance brokerage firm (S1), for example,

provided additional options of insurance coverages to customers based on affordability and desired risk coverage. *“Insurance companies introduced multiple tiers: bronze, silver, gold, platinum ... clients choose based on what they can afford”*. Meanwhile, the electronics store/wholesaler (S3) added services like OMT Money Transfer Service to keep foot traffic steady in the shop and make up for falling wholesale sales. *“During COVID, having the OMT service inside the shop allowed us to remain legally open when others closed, which kept customer flow steady and gave us an unexpected operational advantage”* (S3-A). Across both sectors, MAP-enabled strategic assessments guided SMEs in redesigning their portfolios in ways that aligned with long-term adaptability rather than short-term survival.

In conclusion, this theme shows how MAPs acted as strategic enablers under SQ2, supporting SMEs as they shifted from short-term coping to more deliberate market adaptation. By informing changes in customer focus and adjustments to product and service portfolios, MAPs enabled firms to align their strategic choices with evolving demand and risk. This reflects organizational resilience as both stabilizing and adaptive, consistent with prior literature. The deeper theoretical implications of this transition, and how it connects to the broader evolution of MAP use across SQ2, are further developed in Chapter 5.

B. Theme 2: Organizational Learning and Strategic Foresight

With the state of uncertainty stretching over years rather than months, SMEs learned that survival required more than just reacting day by day. Consequently, they adopted MAPs not only to navigate the present crisis state but also to better prepare themselves for the future. Managers started to assess indicators such as sales patterns, customer behavior, cost trends, and changing market conditions meticulously to strategically prepare themselves for the next wave of crisis. This learning process was informal and intuitive rather than formal, model-

driven one, yet it expanded the role of MAPs beyond short-term survival. MAPs and the insights that they provided gradually became tools for forecasting risks, analyzing potential future scenarios, and preparing organizational responses ahead of time. Under this theme, two future-oriented practices consistently emerged across cases *(1) Informal Scenario Analysis and Predictive Learning, and (2) Strategic Precaution.*

- **Sub-theme: Informal Scenario Analysis and Predictive Learning.** Managers of both industries reported that they analyzed consistently client renewal trends, changes in product movement, cost changes, and persistent behavioral indicators to predict future developments in the business environment. These practices were not formal scenario analysis models but rather mental simulations based on the facts they evaluated daily. The insurance brokerage manager explained this clearly, *“We didn’t conduct formal scenario analysis... but mentally, we were running scenarios all the time” (S1-A)*, capturing how MAP inputs fed into continuous sense making.

Across the sample, early warning signals appeared through MAP-driven indicators. In service firms, delays in client payments served as predictive indicators of financial stress. As S1-B explained, *“When a client delays, it’s rarely intentional... it’s usually a sign they’re struggling,”* a signal that guided pricing discussions, credit decisions, and decisions about which clients to prioritize.

Manufacturing firms, on the other hand, used similar logic but through operational indicators. For example, the zaatar manufacturer relied on product movement data as an early market warning, *“when people buy fewer items, it usually means uncertainty is rising” (M3-B)*. These behavioral indicators, combined with constant monitoring of exchange rate fluctuations, allowed managers to anticipate downturns and adjust production or stock accordingly. As one manager stated, *“if the exchange rate looks like it will rise, we try to sell as much stock as possible before prices jump. If a supplier*

is late on a shipment, we think about which clients might be affected and prepare them” (M3-B). These observations highlight how MAPs enabled managers to develop a forward-looking mindset. They learned to interpret trends and weak signals not simply as reflections of current conditions but as clues about what might come next, allowing them to form expectations, question planned activities and stock levels, and prepare adaptive responses in advance.

- **Sub-theme: Strategic Precaution.** As the exchange rate began to stabilize after years of volatility, SMEs cautiously reintroduced strategic options that had previously been closed off. Yet this renewed effort was not an attempt to restore pre-crisis operating conditions. Rather, it reflected strategic and market-oriented MAP-informed strategic precaution, where decisions were deliberately filtered through risk assessments rather than growth expectations.

In manufacturing, MAP-based evaluations often led managers to postpone or scale down new initiatives whose recovery potential was uncertain. The zaatar producer, for example, delayed launching a new spices line because *“the investment would not be recoverable in such instability”* (M3-A). Continuous monitoring of sales movement, input costs, and margin pressures revealed that even seemingly attractive projects carried unacceptable downside risks. The same firm described maintaining contingency readiness, *“We already have a contingency plan... but if something new happens, we have no idea what would happen”*, illustrating how MAPs supported a disciplined, risk-aware approach rather than optimistic expansion.

Strategic precaution also shaped the selective reintroduction of credit facilities, a pattern observed across industries. Manufacturing firms, pressured by competition, reopened credit only for highly reliable customers and only for very short periods. As one manager explained, *“we had to reintroduce limited credit facilities of one to two*

weeks for our most reliable clients” (M2-A). Both emphasized that credit was short-term and restricted, indicating that even when the environment seemed to be stabilizing, decisions remained risk-aware.

Service firms presented a similar pattern of MAP-guided restraint. After years of monitoring customer payment behavior and cancellations, the travel agency adopted a strict “*pay on the spot*” model, offering credit only to a very small number of long-standing, low-risk customers. As S2-A explained: “*All payments are now on the spot; well most of them. Only a few of them I still give credit facilities due to their long history with us.*” This selectivity reflects a MAP-informed assessment of customer reliability, where past payment behavior served as a risk filter for determining which clients could safely be extended minimal credit.

Across cases, MAPs functioned as early-warning and decision-filtering tools, enabling SMEs to decide when to proceed, when to hold back, and when to adjust the scale of their commitments. This careful calibration of risk, grounded in financial and behavioral indicators, demonstrates SQ2’s core dynamic: MAPs evolving from survival tools into strategic enablers that support foresight, risk discipline, and long-term stability.

In conclusion, this theme reveals how MAPs supported a shift from reactive, survival-driven crisis decision-making toward more measured and risk-aware strategic behavior, directly addressing SQ2. This reflects the resilience literature’s view of organizations not only maintaining continuity but also learning to anticipate challenges and adapt proactively. The broader theoretical implications of this transition, from short-term coping toward informed strategic foresight, are further developed in Chapter 5.

Table 5

Summary of Themes for SQ2 – MAPs as Strategic Enablers for Adaptation, Learning, and Organizational Renewal (SQ2)

Themes	Sub-Themes	Illustrative Quotes
Market Adaptation and Strategic Realignment	- Shifts in Market Positioning and Customer Segments.	○ <i>“these experiences forced me to stop organizing group trips,” (S2-A)</i>
	- Strategic Realignment of Products and Services Portfolio	○ <i>“The mattress line eventually became unsustainable” (M1-B)</i>
Organizational Learning and Strategic Foresight	- Informal Scenario Analysis and Predictive Learning	○ <i>“if the exchange rate looks like it will rise, we try to sell as much stock as possible before prices jump.” (M3-B)</i>
	- Strategic Precaution	○ <i>“we had to reintroduce limited credit facilities of one to two weeks for our most reliable clients” (M2-A)</i>

Interpretation: In addressing SQ2, evidence suggests that as the crisis prolonged for over a year, MAPs assisted SMEs in extending short-term survival strategies towards strategic adaptation and learning, which progressively redefined their long-term course. Managers adopted MAP-derived indicators, including demand patterns, cost habits, and customer payment metrics, not only to make immediate reactive adjustments but also to reevaluate market positioning, enhance product and service offerings, estimate opportunity costs, and foresee potential dangers. These practices contributed to an informal yet methodical approach to predictive learning and strategic caution, enabling organizations to evaluate the viability of opportunities, disengage from operationally risky initiatives, and reallocate resources to areas with enduring potential. This MAP-enabled approach, while principally intuitive and limited by resources, indicates a transition from reactive survival to proactive measured adaptation, equipping organizations to accurately manage an ever-changing crisis landscape with enhanced strategic insight and readiness.

4.2.3 MAPs as Symbolic Tools for Legitimacy, Credibility, and External Stakeholder Confidence (SQ3)

The research's third sub-question investigated "*How are MAPs used symbolically by Lebanese service and manufacturing firms to maintain legitimacy, attract potential external investors, and foster organizational resilience in turbulent environments?*". Despite the limited involvement of external investors in Lebanese SMEs, the data indicated that MAPs significantly assisted companies in preserving their credibility, meeting institutional standards, and presenting themselves as organized and legitimate throughout the crisis when they were under severe external scrutiny. In this context, MAPs served primarily as instruments for firms to influence their image with auditors, government entities, and overseas suppliers, rather than solely as technical decision-making tools. The symbolic aspect primarily arose from attempts to standardize information, customize reporting formats for external stakeholders, and utilize documentation as proof of reliability during crises that challenged the firm's credibility.

In both service and manufacturing industries, a predominant theme highlighted the symbolic function of MAPs, labeled as *Institutional Legitimacy and Symbolic Reporting Practices*.

A. Theme 1: Institutional Legitimacy and Symbolic Reporting Practices

In an environment marked by legal uncertainty, institutional vulnerability, and diminishing trust in organizational procedures, Lebanese SMEs became more aware of the presentation of their financial and operational data. The data shows that MAPs not only helped with internal monitoring and decision-making, but also the reporting of these practices had an essential representational purpose. Managers were not only preparing information to run their businesses, they were preparing information to demonstrate that their business remained credible, orderly, and compliant at a time when the wider economic environment reflected skepticism on all Lebanese organizations' credibility. Many SMEs used reporting to show

auditors, ministries, and foreign partners their seriousness, transparency, and financial discipline. Under this theme, two subthemes emerged that illustrate how SMEs made use of their reporting practices to establish external confidence: *(1) Consistency as a Signal of Professionalism, and (2) Reporting Tailored to External Audiences.*

- **Sub-theme: Consistency as a Signal of Professionalism.** Managers across both industries frequently claimed that having a uniform and unified reporting system made their companies seem disciplined, dependable, and well-controlled. External stakeholders respected consistency not just because it helped avoid mistakes, but also because it conveyed information about the firm's internal order.

In manufacturing firms, managers repeatedly emphasized that uniformity reduced inconsistencies that could raise doubt. As one manager explained, their shift to a single structured reporting system “*worked for production, sales, accounting, and auditing without unnecessary complexity,*” highlighting how clarity itself became a symbolic asset. Software-generated reports further reinforced this effect. The underlying logic was the belief that a unified dataset projected reliability. As another manager (M2-A) noted, using one system for both internal and external reporting “*ensures consistency across the board,*” implicitly minimizing any space for auditors to question accuracy.

The same pattern was observed in the service sector, notably at S2. The travel agency relied on IATA's standardized statements as its core-reporting tool. The owner emphasized, “*we essentially use the IATA report internally as well because it gives the clearest picture of our obligations and cash flows*” (S2-A), using the same authoritative dataset to brief the internal team and to satisfy external requirements. This reliance on one consistent reference point not only simplified internal tracking but also signaled to auditors and regulatory bodies that the business remained organized and transparent during crisis.

Together, these findings showed that consistency, whether achieved through accounting management software or the disciplined use of standardized external statements, functioned as an indirect but powerful symbolic signal of professionalism.

- **Sub-theme: Reporting Tailored to External Audiences.** In addition to the content of the reports, SMEs relied on the formatting of reports when responding to external scrutiny. Some managers reported that there was a clear difference between internal reporting, which focused on speed and practicality, and external reporting, which needed to be structured, formal, and follow certain standards depending on the audience. This change in format helped companies meet the demands of auditors, local ministries, and international organizations, even when their internal processes were still unstructured.

Internally, SMEs relied on simple worksheets, summaries, and informal notes, formats suited to their size, resource constraints, and need for speed. As one service manager explained, “*Inside our office, everything we prepare is simple and practical... But when the auditor or government authorities need documents, I rewrite everything in a cleaner and more formal format*” (S1-A). This shift captures a deliberate differentiation between internal documents that are designed for operational clarity and external documents that are designed for reputational assurance.

Manufacturing firms showed the same logic. A participant from M3 described preparing straightforward daily sales summaries and stock requirements for management because “*clarity matters more than fancy layouts,*” yet external reports were formalized and handled differently to meet auditor expectations. This contrast shows how MAP-based reporting practices were redesigned to align with stakeholder demands for structure and consistency.

In some cases, the strategic use of formal documentation extended beyond auditors and regulators. The food manufacturer (M2) relied on official third-party documents to reassure foreign suppliers during the banking freeze. As the manager explained, suppliers feared “*something suspicious was going on,*” so the firm assembled government statements and chamber of commerce letters to prove the legitimacy of payment delays. Here, reporting became a diplomatic tool, essential for sustaining trust and protecting supply continuity amid systemic disruption.

Together, these examples show that by adjusting the structure and formality of MAP-related outputs according to the expectations of auditors, regulators, and international partners, SMEs were able to reinforce their professional image and navigate institutional skepticism in a volatile environment.

In conclusion, this theme addresses SQ3 by showing how SMEs used MAP-related reporting not only as an internal management tool but also as a symbolic response to institutional pressures. By producing consistent, formalized, and audience-specific reports, firms aligned their practices with the normative expectations and coercive pressures described in Institutional Theory. The broader theoretical implications of these findings, and how symbolic MAP use evolves under SQ3, are further elaborated in Chapter 5.

Table 6

Summary of Themes for SQ3 – MAPs as Symbolic Tools for Legitimacy, Credibility, and External Stakeholder Confidence

Theme	Sub-Themes	Illustrative Quotes
Institutional Legitimacy and Symbolic Reporting Practices	- Consistency as a Signal of Professionalism - Reporting Tailored to External Audiences	<ul style="list-style-type: none"> ○ <i>“We use the same digital system for internal and external reporting.” (M2-A)</i> ○ <i>“... We had to send them government statements, chamber of commerce letters, and news articles just to prove the situation.” (M2-A)</i>

Interpretation: The findings of SQ3 indicate that MAPs attained a symbolic representational value that surpassed their operational function. In a context of crisis characterized by institutional distrust and increased external scrutiny, SMEs recognized that the presentation of information was as significant as the information itself. Firms employed MAP-related practices through consistent datasets, formalized reporting formats, and strategic use of official documentation to demonstrate stability, credibility, and compliance to auditors, regulators, and foreign suppliers. Thus, MAPs emerged as symbolic instruments that assisted SMEs in sustaining legitimacy and safeguarding organizational resilience in a context where reputational signals held considerable importance.

4.3 Integration of the Findings (Cross-Sector Synthesis)

After presenting the thematic findings of each research question, this section integrates insights across the six SMEs. It aims to identify broader patterns in how MAPs contributed to organizational resilience during the prolonged Lebanese crisis (2019–2025). The synthesis examines four comparative layers: (1) alignment between participants within each firm, (2) similarities and differences across firms within the same industry, (3) cross-industry contrasts between service and manufacturing SMEs, and (4) contextual factors shaping MAP use beyond industry context. Despite all firms operating under the same national crisis conditions, MAPs did not manifest uniformly across industries. Instead, structural constraints, resource availability, leadership approaches, and ownership dynamics shaped how MAPs were adopted, adapted, and interpreted across cases.

4.3.1 Triangulating Perspectives:

The six SMEs' paired interviews showed strong internal alignment between the two participants on MAPs' perception and implementation, with variances mostly due to position and level of association with financial or customer-focused pressures. General managers consistently interpreted MAPs through a financial and strategic lens, prioritizing liquidity preservation, risk containment, and resource reallocation. While frontline employees experienced these same practices operationally through demand fluctuations and daily adjustments in sales or service delivery. This complementarity shows that MAPs supported a unified crisis logic across organizational levels, reinforcing the mechanisms outlined in SQ1 regarding how these practices sustained financial and operational continuity under systemic uncertainty.

4.3.2 Within Industry Comparison: Manufacturing Firms: M1–M2–M3

a) Common Threads:

- ***Cash Monitoring as the Primary MAP Function:*** A common pattern among all of the manufacturing SMEs is the adoption of continuous monitoring of the firm's cash position as the primary MAP to ensure operational continuity and financial stability. Managers based their decisions on real-time liquidity, using the available cash balance as a limit for authorizing purchases, initiating production runs, or committing to supplier payments. Under volatile conditions, where input prices fluctuated rapidly and cash inflows were uncertain, this MAP function acted as an effective control mechanism, ensuring that the manufacturing firms remained solvent and sustained operations.
- ***Inventory Minimization Driven by Continuous Stock Visibility:*** Across the three manufacturing firms, managers constantly prioritized minimizing inventory levels by adopting straightforward yet regular assessments of stock movement, item turnover,

and sales to inform production and restocking decisions. During the continuous state of crisis, maintaining surplus inventory proved to be both financially burdensome and risky. Although the operational pressures differed, such as perishability in M2 or conflict-related disruptions in M3, the outcome was similar: inventory shifted from being a protective buffer to a potential liability. This shift led all three manufacturers to adopt disciplined, movement-based inventory management practices to prevent locking scarce cash in unsellable products.

- ***Demand-Driven Production Based on Sales and Order Signals:*** All three manufacturers moved from a production strategy based on expected demand to one that strictly responds to actual sales and confirmed orders. Managers showed that they depended on indicators such as daily shop sales (M3), client order volumes (M1), and consumption rate (M2) to determine production quantities and timing. This shift to demand-driven production reflected a wider crisis logic. Producing more than what the market could absorb risked restricting already limited cash, accumulating waste, or incurring unnecessary losses. By basing production decisions on real-time sales and order data, this demand-driven approach replaced pre-crisis forecasting and established a common operational basis across M1, M2, and M3.
- ***Stricter Credit Practices Guided by Close Monitoring of Customer Payments:*** Another consistent pattern across the three manufacturers was the tightening of credit terms and closer monitoring of receivables' collection. With the collapse of the banking sector and as shift to a cash-based economy, firms either shifted fully toward cash transactions or extended short-term credit selectively to long-standing, loyal clients. This shift was driven by the growing risk of delayed or defaulted payments, which could immediately strain already-limited liquidity. Managers described routinely checking outstanding balances, payment histories, and the pace of collections

to decide whether to approve a sale on credit or insist on upfront payment. Across M1, M2, and M3, controlling credit exposure became essential to protecting cash reserves and sustaining production activities.

- ***Product-Line Rationalization Informed by Cost and Sales Indicators:*** All three manufacturers reassessed the profitability of their product lines by observing cost fluctuations, margin pressure, and sales movement, leading them to discontinue or scale back items that no longer justified their resource requirements. Despite operating in different product markets, they shared the same crisis logic. With limited cash, scarce resources, and unstable demand, none of the firms could afford to commit materials, labor, or energy to slow-moving or low-profit margin items. Whether in plastics, perishables, or specialty food products, this evaluation process functioned in the same way. Performance indicators served as a practical framework, pushing each firm to concentrate on more financially resilient products.

b) Differences:

- ***Cost Structure Pressures:*** M1 differs sharply from the other manufacturers because its production lines consume exceptionally high levels of diesel and electricity, operating machinery that draws 400–500 amperes and requiring 10 tons of diesel per week just to keep the factory running. The intensity of these costs made energy the firm's largest and most volatile expense, forcing managers to evaluate margin feasibility before approving any production batch. Even a small change in diesel pricing could eliminate profits, making cost verification a prerequisite for action. In contrast, M2's decisions were mostly driven by perishability and speed, while M3's were shaped by security disruptions. M1 was therefore the only manufacturer where cost assessments functioned as a strategic gatekeeping MAP, directly determining which products could be produced under crisis conditions.

- ***Contrasting Product Natures:*** The differences in product natures resulted in distinctly different decision-making approaches among the three manufacturers. The highly perishable goods of M2 necessitated rapid turnover and ongoing monitoring of movement to prevent spoilage, pushing managers to prioritize speed and loss prevention. The non-perishable premium zaatar blend from M3 facilitated more selective, experience-oriented choices that emphasized quality and brand positioning. In contrast, M1's commodity products focused on cost efficiency, with margin discipline serving as the primary decision-making standard. The differing product natures influenced each firm's interpretation of performance signals and dictated the pace, urgency, and criteria for operational decisions.
- ***Conflict-Zone Operations:*** M3's production factory is located in Kfarhouna in South Lebanon, an area repeatedly affected by conflict. This creates a level of operational uncertainty not directly experienced by M1 or M2. This geographic exposure forced M3 into an exceptionally conservative operating position, including production in small batches, minimal inventory, and strict liquidity preservation. With supply routes, staffing, and customer demand all vulnerable to sudden disruption, M3 relied on MAPs' indicators primarily to limit exposure. In this case, the function of these practices shifted toward preserving liquidity. They also ensured that the firm did not commit to activities it could not sustain during conflict escalation. Consequently, conflict proximity produced the most defensive and risk-averse decision logic in the zaatar manufacturing firm (M3).
- ***Different Levels of Practice Formality:*** The three manufacturers revealed varying degrees of formality in their decision-making processes, influenced primarily by organizational maturity and process capability rather than firm size. M2 adhered to ISO standards and implemented digital systems, facilitating structured monitoring of costs,

turnover, and operational performance. M1 employed a semi-formal methodology that integrated fundamental tracking instruments with managerial judgment, indicating a transitional phase in process development. M3 employed informal, reactive practices influenced by daily cash availability and immediate sales trends. These variations portray how internal capabilities and accumulated experience, as opposed to size alone, shape the complexity and consistency of MAPs under crisis conditions.

- ***Ownership Dynamics:*** The ownership dynamics of each company affected their decision-making. In the family-owned manufacturers (M1 and M2), owners demonstrated significant continuity commitments by injecting personal savings to meet the firm's obligations and retaining employees they viewed as "family." This resulted in higher risk tolerance and a willingness to sustain operations despite short-term pressure. In contrast, M3, not a family enterprise, adopted a more defensive posture, avoiding additional personal investment and prioritizing liquidity preservation. These differences indicate that ownership structure influenced how firms interpreted MAPs' indicators, particularly regarding financial exposure, workforce stability, and long-term strategic commitment.

4.3.3 Within Industry Comparison: Service Firms: S1–S2–S3

a) Common Threads:

- ***Cash Monitoring as the Primary MAP Function:*** Similar to the manufacturing firms, service firms also relied on daily monitoring of their cash position to determine which expenses could proceed and whether ongoing obligations could be met without jeopardizing liquidity. In a context of unstable inflows and restricted bank access, cash became the primary operational constraint.
- ***Cost Control & Expense Reduction:*** All service firms reassessed their cost structures and switched their focus onto spending on activities essential to maintaining

operations. Managers frequently reduced costs that were inessential for operations' continuity, such as marketing, promotions, and non-essential subscriptions. Even mundane overheads were reconsidered as cash tightened and margins narrowed. This resulted in a disciplined, survival-oriented approach in which cost control became one of the primary MAPs for reducing financial pressure and securing short-term continuity.

- ***Strong Dependence on Customer Relationships & Service Quality:*** Service firms relied heavily on customer relationships as a fundamental source of operational stability in an increasingly volatile market. Because their offerings are intangible and easily substituted, maintaining trust, responsiveness, and consistent service quality became essential for retaining existing loyal clients. This relational dependence shaped how firms interpreted MAP indicators, prioritizing decisions that protected customer satisfaction and minimized service disruptions. In a contracting and highly competitive environment, relational capital functioned as a key resilience mechanism.
- ***Adaptive Pricing Based on Market Conditions:*** Pricing in the service firms became highly adaptive, driven by continuous monitoring of exchange rates, supplier terms, and customer purchasing power. Price flexibility, therefore, acted as a practical control mechanism. It allowed firms to protect shrinking margins, avoid losses, and stay competitive in volatile markets. In this sense, adaptive pricing functioned as an informal yet critical MAP practice supporting financial sustainability under crisis conditions.

b) Differences:

- ***Degree of Operational Disruption:*** The degree of operational disruption varied considerably across the service firms, shaping how MAPs were interpreted and applied. S2 was affected the most, with travel restrictions during COVID and

geopolitical turmoil in the region stopping flights and forcing the firm to constantly adjust its financial position. On the other hand, S3 faced abrupt drops in demand, particularly after losing a significant portion of its customer base in Beirut suburbs during periods of heightened insecurity. S1, whose insurance brokerage business kept running during the crisis, had the least trouble. These discrepancies affected how intensively each firm relied on cash-flow monitoring, cost containment, and short-term operational decision-making.

- ***Nature of Revenue Model:*** The revenue model of each company determined which performance indicators they prioritized. S1 earned commissions on insurance policies, making client retention and portfolio renewal the main drivers of revenue. S2 generated income from travel bookings, so revenue was highly sensitive to booking volumes, cancellations, and refund obligations that could immediately wear away expected income. S3 relied on wholesale and retail margins, making sales turnover and pricing competitiveness central to sustaining revenue. These distinct revenue logics directed each firm toward different MAPs' indicators to protect cash flow and financial stability.
- ***Different Approaches to Credit Facilities:*** With banks applying capital controls and no longer providing credit facilities, extending credit to customers became a direct threat to liquidity. Consequently, S2 and S1 adopted an almost fully cash-based model with certain exceptions to long-standing loyal and reliable customers. In contrast, S3 maintained its credit facilities because holding the excess inventory they had pre-crisis risked rapid value loss. Extending limited credit became a calculated risk the firm was willing to take to keep stock moving. This helped sustain cash inflows under volatile market conditions.

4.3.4 Cross Industry Comparison

a) Commonalities:

- **Primary MAP Function:** Both manufacturing and service firms relied mostly on frequent monitoring of their cash position to determine short-term operational sustainability and liquidity preservation.
- **Intensified Cost Discipline:** Both sectors tightened expenditure control, eliminating non-essential spending and reassessing cost structures under severe margin pressure and restricted liquidity.
- **Short-term Planning & Informal Scenario Analysis:** Long-term planning was replaced by short-term adjustments informed by immediate signals such as market movement, customer behavior, and cost volatility. Managers also engaged in informal discussions of different scenarios based on experience and intuition.
- **Restrictive Credit Practices & Stronger Receivables Collection Efforts:** Both sectors mostly limited credit extension and intensified their collection efforts to reduce exposure and protect their liquidity and solvency.
- **Increased Dependence on Market Movement Indicators:** Whether through sales movement (manufacturing) or customer behavior (services), both sectors relied on real-time market signals to make the necessary operational decisions to navigate the crisis and prepare for what's next to come.

b) Differences:

- **Nature of Operational Costs:** Operational cost structures differed across the two industries, shaping which MAPs firms prioritized. Manufacturers were driven mostly by input prices, energy consumption, and procurement cycles, making cost unpredictability and production feasibility central decision concerns. Service firms, by contrast, carried cost structures dominated by labor, rent, overheads, and supplier

commissions, which required continuous monitoring of staffing costs, sector-specific fees, and administrative burden. These structural differences influenced which financial indicators mattered most and how firms assessed exposure during the crisis.

- ***The Role of Inventory in Manufacturing Firms:*** Manufacturers actively minimized inventory and aligned production closely with demand. Service firms, by contrast, did not manage physical inventory. Their “capacity risk” resulted from fluctuations in customer activity, cancellations, and demand uncertainty. As a result, they focused on managing customer behavior changes and cash exposure rather than stock levels, reflecting essentially different operational constraints.
- ***The Role of Customer Relationships in Service Firms:*** Service firms relied heavily on customer relationships, loyalty, and trust as a primary resilience mechanism, whereas manufacturers focused more on managing cost, production feasibility, and cash cycles.
- ***Adaptive Flexibility:*** Service firms revealed greater adaptive flexibility because their offerings were intangible and less tied to fixed production structures. Their primary constraints were relational arising from shifts in customer behavior, purchasing power, and service expectations. This allowed them to adjust prices, service bundles, and customer interactions quickly in response to MAP indicators. On the other hand, manufacturers faced structural constraints rooted in their dependence on machinery, production cycles, and raw material availability. These process-related limitations slowed their ability to adjust operations in response to the same signals. As a result, service firms could adapt more quickly and broadly during the crisis, while manufacturers were bound by operational structures that inherently restricted their adaptive capacity.

4.3.5 Contextual Factors:

Several contextual factors beyond industry shaped how firms adapted their MAPs. Across the cases, firm size appeared to influence decision speed, the level of MAP sophistication, and the frequency of monitoring. Smaller firms relied on faster and more informal MAPs. Larger SMEs, by contrast, adopted more structured practices and engaged in more regular monitoring. These patterns remain indicative rather than formally testable within the scope of this study. Leadership style also played a central role, as intuitive, entrepreneur-led firms utilized MAPs more informally, whereas managers with corporate experience applied them more systematically. The ownership model affected risk tolerance, with family firms showing greater willingness to absorb short-term pressure compared to non-family firms. Additionally, exposure to external shocks heightened operational caution, and dependence on external stakeholders introduced reporting and compliance demands that shaped how MAPs were interpreted and applied. These factors, in turn, reflect the core principles of contingency theory, which argue that the effectiveness of MAPs depends on their alignment with organizational characteristics and environmental conditions.

4.3.6 Cross-Case Synthesis Conclusion:

The cross-case evidence shows that MAPs were not applied uniformly but were shaped by the interaction of the firm's structural, relational, and contextual realities under prolonged crisis. Manufacturing firms' fixed cost structures and operational rigidity limited their adaptive flexibility, while service firms, shaped by customer-driven volatility, were able to adapt more quickly and strategically to shifting market conditions. This contrast is in line with contingency theory, which argues that effective MAP design depends on the nature of organizational constraints. Across cases, MAPs also evolved in line with established understandings of organizational resilience. At first, they responded to survival needs such as liquidity control,

then supported adaptive decision-making, and in some cases functioned symbolically to maintain credibility when external scrutiny intensified - an outcome consistent with Institutional Theory perspectives. Strategic management accounting further explains why firms increasingly relied on real-time market signals, customer insights, and product-line profitability to guide strategic choices as instability persisted. Together, these factors show that MAPs operate as tools enabling control, learning, adaptation, and legitimacy, depending on the pressures managers navigate. This synthesis provides the analytical foundation for Chapter 5, where these patterns are interpreted through the study's theoretical framework to explain further how MAPs supported resilience across industries.

Chapter 5: Discussion of Findings

This chapter extends the empirical insights from Chapter 4 to examine the underlying logic of how managers interpreted and adapted MAPs to navigate one of the most prolonged economic crises in Lebanon's recent history. By revisiting the literature and using the theoretical lenses developed in Chapter 2, Contingency Theory, Institutional Theory, and strategic management accounting, it explains how managerial perceptions shaped the use of MAPs. It also examines how these practices supported different dimensions of organizational resilience and how industry context influenced their application across service and manufacturing firms. The discussion is structured around the three sub-research questions. It interprets how continuous instability shaped the evolution of MAP use, from initially informal and reactive responses to more formalized, proactive, and often hybrid approaches that combined elements of both. By doing so, it establishes how the data-driven themes extend and refine the insights from prior literature and evaluates the study's working propositions accordingly. These interpretations establish the study's conceptual contribution and set the stage for the concluding insights and recommendations presented in the next chapter.

5.1 Interpretation of Research Questions:

5.1.1 Interpreting SQ1: MAPs as Survival Tools for Operational Continuity and Financial Stability Under Systemic Uncertainty.

The evidence suggests that Lebanese SMEs initially relied on a narrow set of practical, cash and control-oriented MAPs to maintain daily operations and short-term financial stability. Managers described early crisis responses centered on close cash monitoring, aggressive cost cutting, and delayed commitments, indicating a focus on liquidity and immediate continuity rather than long-term redesign. This pattern aligns strongly with the crisis literature reviewed in Chapter 2, which emphasizes that in turbulent environments, traditional, cash and control-oriented MAPs become the backbone of organizational response. Stede (2000) and Becker et al. (2015) note that budgeting and variance analysis gain intensified relevance in periods of uncertainty by providing structure, clarifying spending priorities, and maintaining short-term liquidity control. The Lebanese cases reflect this pattern precisely. Consistent with Marginson and Ogden's (2005) argument that budgets can serve as stabilizing mechanisms in uncertain contexts, Lebanese SME managers used informal budgeting as a way to impose structure, prioritize spending, and create a sense of operational certainty during instability.

The dominance of cash-focused tools is also consistent with global evidence showing that developing economies depend more heavily on traditional MAPs. Rashid et al. (2021) report that weak institutional environments, limited capabilities, resource constraints, and managerial familiarity reinforce continued reliance on basic cash and cost-control tools rather than contemporary, strategically advanced MAPs. Despite acknowledging the potential benefits of advanced MAPs, Lebanese SME managers' initial crisis responses centered on cash preservation, liquidity control, and immediate operational continuity, echoing patterns observed in Russia during periods of deep recession, where firms reverted to survival-oriented

MAPs (Erokhin et al., 2019). This finding reinforces the notion that in fragile environments, survival routines surpass innovation.

Contingency theory helps explain why Lebanese SMEs reshaped their MAPs during the crisis, but the findings show both alignment and contradiction with prior research. The theory argues that performance improves when accounting practices are tailored to contextual factors such as strategy, technology, environment, and organizational size (Ismail et al., 2010; Aliu, 2025). Classic studies suggest that high environmental uncertainty generally drives firms toward more sophisticated, externally focused, and non-financial MAPs like ABC and the BSC (Khandwalla, 1972; Gordon & Miller, 1976; Ayadi & Affes, 2014). The Lebanese cases contrast with this prediction. Institutional breakdown and resource scarcity led firms to simplify rather than innovate, relying on basic, cash and control-oriented tools that supported immediate survival.

The data indicates that this non-adoption of advanced MAPs was driven primarily by capability constraints rather than by a measured strategic choice to reject more advanced tools. Managers reported lacking trained staff, reliable data, time, and IT infrastructure to implement complex systems in the middle of a crisis. At the same time, several participants questioned whether advanced MAPs would yield sufficient added value in an environment where even basic cash visibility was difficult to maintain, reflecting a secondary layer of crisis-driven strategic prioritization.

This finding extends Contingency Theory by showing that, under prolonged systemic breakdown, “*fit*” is bounded not only by environmental conditions and strategy but also by capability constraints and persistent strain of instability. As Ismail et al. (2010) highlight, Contingency theory underestimates the behavioral and political constraints that limit a firm’s ability to implement structured system changes. Lebanese SMEs were operating under extreme

resource shortages and continuous crisis. Under such pressures, adopting practical and traditional MAPs was not a symptom of weakness but a rational adaptation; they were fast, flexible, and immediately deployable.

However, the results remain consistent with other contingency pathways. Defensive organizational strategies led to stricter financial monitoring in line with Otley (1980) and Nassou & Bennani (2024). Limited technological capacity constrained MAP sophistication, supporting evidence from Haldma & Lääts (2002), Handayani et al. (2023), and Sobrinho & Callado (2025). Larger firms were able to formalize processes more than micro-SMEs, reinforcing findings by Ayadi & Affes (2014) and Nimtrakoon & Tayles (2010). Taken together, these patterns confirm the broader principle of contextual fit while challenging the assumption that uncertainty necessarily leads to more advanced MAP systems. Instead, in this setting, “fit” emerged through the intensified and improvised use of basic tools.

In the Lebanese SME context, these patterns reinforce the resilience literature, which highlights adaptability, learning-in-action, and improvisation as central survival mechanisms (Coutu, 2002; Ma et al., 2018). For Lebanese SME managers, MAPs enabled exactly these behaviors. With the insights and data gathered through MAPs, managers could reallocate resources quickly, avoid overexposure to risk, and maintain continuity despite repeated shocks. Practices such as continuous cash reviews, CVP-type reasoning, and improvised receivable controls acted as resilience practices that helped SMEs absorb stress, maintain functioning, and adapt in the face of setbacks (Kahn et al., 2018). This shows how even basic MAPs can serve as resilience-building mechanisms when institutional and financial infrastructures are weak.

5.1.2 Interpreting SQ2: MAPs as Strategic Enablers for Adaptation, Learning, and Organizational Renewal.

As the crisis transitioned from its early stages into a sustained period of volatility, Lebanese SMEs gradually expanded their use of MAPs beyond short-term survival. The findings show that managers began to use MAPs to support adaptation, learning, and strategic renewal, behaviors that reflect the underlying logic of strategic tools such as scenario analysis, ABC, and the BSC, rather than their formal implementation. Although none of the SMEs adopted these practices formally due to cost, capability, and data constraints, they revealed decision patterns consistent with their core principles. This reinforces the interpretation that, when crises extend over long periods, managers in resource and capability-constrained environments rely on simplified or selectively adapted forms of advanced MAPs to guide strategic adaptation.

ABC is often presented in literature as a sophisticated method for improving cost accuracy and identifying inefficiencies (Darabi et al., 2015; Shanmugam, 2022). However, adoption in developing economies is typically low because of training gaps, data limitations, and cultural resistance (Elgammal et al., 2016; Alsayegh, 2020). The Lebanese cases reflect this broader pattern. Instead of formal ABC, managers used ABC-like reasoning, eliminating low-margin products and reallocating resources toward higher-value lines. These informal practices aligned with Waweru's (2010) observation that ABC enhances strategic flexibility during extended volatility.

A similar pattern appeared with BSC-related thinking. While SMEs lacked the infrastructure and capacity to implement a full BSC, their decision-making naturally broadened to include customer satisfaction, service quality, and workforce capability, dimensions central to the BSC's four perspectives (Kaplan & Norton, 1992). These broader performance considerations helped firms diversify offerings and refine processes. Prior research shows that the BSC supports learning and communication in turbulent periods (Malagueño et al., 2018), and

Lebanese SMEs achieved these effects informally through frequent discussions, informal scenario analysis, and collective problem-solving. This supports the interpretation that strategic MAP benefits can materialize through intuitive managerial behavior, even in the absence of formal frameworks.

Strategic management accounting complements this interpretation. SMA emphasizes competitor awareness, market orientation, and long-term positioning (Guilding et al., 2000; Roslender & Hart, 2003). The findings reveal several SMA-type behaviors: tracking competitors informally, monitoring changes in demand, reassessing pricing, and evaluating product profitability. These actions show that SMA principles were present in practice, even if not labeled as such, and they supported strategic repositioning under uncertainty. This challenges the assumption that SMA necessarily requires advanced and complex data systems. Instead, the findings suggest that SMA can function as a managerial mindset, shaped by how information is interpreted and used, rather than as a toolkit.

Contingency theory offers a further explanatory lens for the progression of MAPs' roles observed in SQ2. As firms moved deeper into prolonged crisis, their informational needs evolved beyond liquidity preservation toward learning, market sensing, and forward planning. Contemporary MAPs typically address these needs (Ayadi & Affes, 2014), yet Lebanese SMEs lacked the resources for structured implementation. Instead, they modified their existing tools. This finding supports critiques that Contingency theory underestimates capability constraints (Ismail et al., 2010). In Lebanon's systemic collapse, adaptation occurred through incremental, unstructured modifications rather than standardized adoption.

From an organizational resilience perspective, MAPs helped SMEs shift from short-term stabilization toward *bouncing forward*, purposeful transformation (Ping & Jiazhe, 2021). MAPs enabled firms to sense changes, reallocate resources, refine processes, and pursue new

opportunities, aligning with resilience literature emphasizing learning and renewal as foundations of long-term sustainability (Ma et al., 2018; Budak et al., 2021). The data emphasizes that even simple MAPs, when used consistently, can help firms evolve during enduring cycles of instability.

In sum, while Lebanese SMEs did not adopt advanced MAPs such as scenario analysis, ABC, or the BSC, they used MAPs in ways that contributed to adaptation, learning, and strategic renewal. Strategic value emerged less from tool sophistication than from disciplined use and contextual reinterpretation of basic MAPs, combined with the intuitive application of strategic principles that enabled SMEs to evolve despite systemic constraints. This highlights that, under systemic and capacity constraints, resilience and strategic renewal are driven by depth and discipline of use rather than by technical complexity.

5.1.3 Interpreting SQ3: MAPs as Symbolic Tools for Legitimacy, Credibility, and External Stakeholder Confidence

Since 2019 Lebanese SMEs have been operating in an environment where formal institutions, most remarkably the banking sector, could no longer provide reliability, protection, or financial support. Deposit freezes, capital controls, and fluctuating exchange rates undermined banks' role as trusted intermediaries and created a credibility vacuum. As a result, firms became responsible for demonstrating their own stability to auditors, regulators, and international partners who viewed Lebanese businesses with heightened skepticism. Institutional Theory helps explain why, under such conditions, SMEs relied on consistent reporting, formal documentation, and standardized formats as signals of reliability and legitimacy, compensating for the lack of trust in the broader institutional environment.

As discussed in Chapter 2, organizational behavior is shaped by the regulative, normative, and cultural-cognitive pillars of Institutional Theory, each influencing not only how firms operate but also how they choose to present their operations (Järvenpää, 2009; Guerreiro et al., 2006).

In environments marked by institutional erosion, these pressures promote the symbolic value of MAPs. Practices are judged as much for the credibility they project as for the decisions they inform (Scapens, 2012; Assad & Goddard, 2006). The Lebanese SMEs reflected this dynamic clearly, with both manufacturing and service firms using MAP outputs to signal stability, discipline, and professionalism in the absence of trustworthy external institutions.

The regulative pillar of Institutional Theory, which stresses adherence to formal rules, documentation requirements, and standardized reporting expectations (Järvenpää, 2009; Guerreiro et al., 2006), aligns closely with the behaviors observed in Lebanese SMEs. As auditors, ministries, and foreign suppliers intensified their scrutiny in the wake of the banking collapse, firms responded by formalizing the presentation of their MAPs' outputs, even though their internal processes remained highly flexible. This pattern is consistent with coercive isomorphism (Daske et al., 2008), where organizations adopt formal structures or reporting formats to satisfy influential external stakeholders. It also reflects decoupling, as described by Covalski and Dirsmith (1983), whereby firms maintain informal internal practices while producing externally acceptable outputs to project compliance and stability. In the Lebanese cases, formalized reporting served primarily as a credibility signal rather than a reflection of internally sophisticated systems, reinforcing the contrast between external formality and internal practicality.

Although Institutional Theory emphasizes the role of normative and mimetic pressures, where professional norms and imitation of successful peers typically drive firms toward more sophisticated reporting (Järvenpää, 2009; Guerreiro et al., 2006; DiMaggio & Powell, 1983), the Lebanese cases showed limited evidence of either mechanism. Managers did not formalize MAPs to align with professional identity, nor did they imitate sector leaders. Instead, their adjustments were almost entirely reactive, driven by the demands of external stakeholders during a period in which institutional trust had collapsed. Participants consistently noted that

the crisis left no clear model to mimic. Every firm was equally overwhelmed and improvising. This double deviation from the literature suggests that, under severe systemic breakdown, both normative and mimetic forces weaken considerably. MAP-related behaviors become shaped primarily by coercive pressures and the need to show reliability to external stakeholders. In this context, symbolic reporting did not function to signal professionalism or imitation, but rather served as a substitute for missing institutional guarantees.

The symbolic use of MAPs also intersected directly with organizational resilience. When institutional trust is low and formal governance structures fail, credibility becomes a critical resource for survival. By producing consistent financial information, adopting formal reporting formats, and attaching government statements or chamber of commerce documents to validate their claims, SMEs preserved essential relationships with suppliers, regulators, and auditors. This form of symbolic signaling helped maintain access to key resources in an environment where reputational signs replaced missing institutional guarantees. Taken together with the earlier findings, SMEs used MAPs as tools not only for compliance but for resilience-building.

5.2 Evaluation of Working Propositions in Light of the Findings:

This section examines the study's four working propositions that were derived from theory and prior evidence by comparing them to the empirical findings of the data. The propositions reflected expected patterns based on Contingency Theory, Institutional Theory, and strategic management accounting. Examining them clarifies which expectations were supported, which require refinement, and how the findings extend existing theory within the Lebanese crisis context.

In evaluating the working propositions, the study applies the following criteria. A proposition is considered supported, when consistent evidence is observed across most cases with a clear theoretical fit. A proposition is partially supported, when evidence exists but is dependent on

sectoral conditions, resource constraints, or appears only in some cases. A proposition is considered not supported, when evidence is limited.

5.2.1 Proposition 1: In prolonged crisis, SMEs prioritize cash-centric MAPs, such as rolling cash forecasts, cash dashboards, and tight budgeting, to sustain continuity.

The findings support Proposition 1.

Contingency Theory and crisis research suggest that under extreme uncertainty, organizations revert to traditional cost-and-control management accounting practices such as rolling cash forecasts, tight budgeting, and liquidity monitoring (Stede, 2000; Becker et al., 2015). Empirically, all Lebanese SMEs relied heavily on cash-centric MAPs, including daily cash monitoring, informal budgeting, and simple variance checks, to sustain operations. These practices were used consistently across both service and manufacturing firms as primary mechanisms for maintaining operational continuity during the crisis. The findings refine this proposition by showing that the effectiveness of cash-centric MAPs stemmed not from technological sophistication but from their disciplined and frequent use in a context of sustained instability.

5.2.2 Proposition 2: Manufacturing cases emphasize cost management and variance analysis, whereas service cases emphasize customer-oriented KPIs and pricing or offering agility.

The findings support Proposition 2.

Contingency Theory predicts that the design and use of MAPs reflect industry characteristics, with manufacturing firms prioritizing cost management and variance analysis, while service firms rely more heavily on customer-oriented indicators and pricing agility. Empirical evidence from the cases shows that manufacturing firms emphasized cost pressures, raw material volatility, and margin control, consistent with their production-driven cost structures (Miller & O'Leary, 2007; Messner, 2016). In contrast, service firms adjusted prices and offerings in

response to shifts in customer behavior and demand, reflecting greater reliance on customer-oriented KPIs and pricing flexibility (Ahrens & Chapman, 2007). These patterns indicate that sector structure remained a strong contingency factor shaping MAP orientation even under shared crisis conditions.

5.2.3 Proposition 3: Symbolic or legitimacy use of MAPs intensifies when firms face external financing pressures or key-account scrutiny.

The findings support Proposition 3.

Institutional Theory suggests that symbolic or legitimacy-oriented uses of MAPs intensify when firms face coercive pressures from auditors, regulators, financiers, or key partners (Daske et al., 2008; Covalleski & Dirsmith, 1983). Empirically, amid the collapse of institutional trust, Lebanese SMEs formalized MAP outputs through standardized datasets, documented reports, and authoritative attachments prepared to satisfy external scrutiny. These practices were primarily oriented toward external audiences and became more pronounced when firms faced financing constraints or key-account monitoring. The findings refine this proposition by showing that under conditions of systemic breakdown, coercive pressures dominated while normative and mimetic drivers weakened, making symbolic reporting a functional substitute for institutional assurance.

5.2.4 Proposition 4: Lightweight digitalization facilitates a shift from static to interactive, real-time control and monitoring.

In this thesis, **lightweight digitalization** refers to the use of simple, low-cost digital tools to support MAPs and day-to-day monitoring. This includes Excel-based tracking sheets, basic accounting software, digital financial documentation, and real-time communication channels used to share and update information. These tools improved accuracy, speed, and managerial

responsiveness. This definition does not extend to advanced interactive dashboards, ERP systems, automated analytics, or fully integrated business intelligence platforms.

The findings partially support Proposition 4.

Drawing on the literature on decision-support MAPs and interactive control systems, technology-enabled tools such as rolling forecasts and dashboards are expected to move firms from static, periodic reporting toward more continuous, real-time oversight (Simons, 1994; Ekholm & Wallin, 2011; Henttu-Aho, 2018). Empirically, SMEs adopted Excel-based tracking, basic software, digital documentation, and real-time communication channels that enhanced accuracy and responsiveness of monitoring activities. However, these tools did not result in advanced interactive dashboards or fully integrated control systems. The findings indicate that digitalization strengthened the informational foundation of MAPs and accelerated managerial reaction time, but consistent with the IT contingency factor, limited technological capabilities, infrastructure constraints, and digital skills restricted its transformative potential.

5.3 Integrated Interpretation of the Sub-Questions and Working Propositions

A clear pattern emerges when the three sub-questions are viewed alongside the working propositions: Lebanese SMEs relied on a core set of practical MAPs to sustain resilience throughout the crisis. The value of these practices increased as managers used them more routinely over time.

Rather than shifting toward sophisticated contemporary tools, firms deepened their use of budgeting, cash monitoring, basic cost analysis, informal scenario thinking, and lightweight digitalization. These familiar practices were flexible enough to deploy under pressure, which allowed managers to impose structure on an environment where external stability was absent.

During the early stages of the crisis, rapid environmental shifts, limited organizational capacity, and scarce resources meant that SMEs depended on simple, immediately actionable MAPs. As systemic uncertainty persisted, these tools were no longer perceived as temporary survival routines but as essential information systems that anchored decision-making. Managers became more disciplined in their application by monitoring more frequently, discussing results more systematically, and interpreting trends with increasing depth. From a contingency perspective, this pattern suggests that under prolonged instability, effectiveness was achieved not through system sophistication but through tighter alignment between practices, managerial capabilities, and environmental constraints. What began as reactive coping gradually evolved into proactive preparedness. This evolution represented how learning occurred through repeated exposure rather than formal system redesign.

Synthesizing these insights across SQ1, SQ2, and SQ3 shows that resilience developed parallel to the evolution of the crisis through three interdependent pathways. SQ1 demonstrated, in line with Propositions 1 and 2, that traditional cash-centric and cost-control practices underpinned operational continuity. SQ2 revealed that as the crisis endured, these same tools supported adaptation and forward-looking learning, partially confirming Proposition 4 by showing that light digitalization enhanced information flow without transforming MAPs' sophistication. SQ3 showed that MAPs also gained symbolic relevance, confirming Proposition 3: Symbolic or legitimacy uses of MAPs intensify when firms face external financing or key-account scrutiny.

Taken together, the findings point to a central contribution: in sustained crisis conditions, resilience is not a function of advanced systems but of adaptive depth, disciplined use, and symbolic signaling, all grounded in the realities of capability constraints and institutional

fragility. SMEs strengthened resilience by deepening the informational and symbolic value of the MAPs they could reliably sustain.

5.3.1 Boundary Conditions and Contextual Limits

The findings of this study are most likely to hold in environments characterized by prolonged systemic breakdown, impaired financial infrastructure, high levels of informality, and limited access to external financing. In such contexts, firms cannot rely on stable institutions or formal credit markets and therefore internal MAPs become central to sustaining operations, guiding adaptation, and signaling legitimacy. By contrast, the patterns observed may be less pronounced in settings where financial institutions function effectively, access to credit is reliable, and regulatory enforcement is stable, as firms in those environments may depend more heavily on external financing and formal governance mechanisms. Accordingly, the use of MAPs as cash-centered, adaptive, and symbolic tools should be interpreted as context-dependent responses to sustained institutional fragility rather than universal crisis behaviors.

5.4 Implications for Theory, Practice, and Policy

The findings of this study hold important implications for accounting scholars, managers, and policymakers, specifically for SMEs dealing with continuous state of crisis. The results help refine academic understanding of how MAPs function in turbulent environments, offer practical guidance for managers seeking to strengthen decision-making and organizational resilience, and inform policymakers aiming to design support systems that reflect the realities of Lebanese SMEs. The following section outlines these implications in a structured and integrated way.

5.4.1 Implications for Theory:

- **Extension of Contingency Theory:** The findings challenge the long-standing presumption that environmental uncertainty naturally leads firms to adopt more advanced MAPs (Khandwalla, 1972; Gordon & Miller, 1976). Lebanese SMEs operated under extreme uncertainty yet continued relying on simple and practical MAPs, applying them more intensively and frequently rather than replacing them. This supports critiques by Ismail et al. (2010) and Haldma & Lääts (2002) that capability constraints and weak institutional environments shape what is realistically adoptable.
- **Refinement of Institutional Theory:** The study shows that during systemic collapse, normative and mimetic pressures lose influence. Instead, coercive pressures from auditors, regulators, and suppliers become the main drivers of formal reporting. This is consistent with literature on coercive isomorphism and decoupling (Covaleski & Dirsmith, 1983; Daske et al., 2008) but extends the theory by demonstrating how SMEs formalize outputs according to the audience while keeping internal practices flexible.
- **Contribution to SMA Literature:** The findings indicate that strategic behaviors, such as competitor sensing, product profitability evaluation, and customer-focused adjustments, can emerge informally without formal SMA tools (Guilding et al., 2000; Ma & Tayles, 2009). This suggests that SMA principles may be embedded in managerial behavior rather than dependent on formal system adoption.
- **Overall Theoretical Insight – “Structured Adaptability under Constraint”:** Across the cases, SMEs achieved organizational resilience not by adopting advanced MAPs but by using simple tools in more disciplined and flexible ways. Managers adapted budgeting, cash monitoring, and basic analysis to support operations, guide strategic decisions, and meet external reporting needs. This shows that in prolonged crises, managerial learning and contextual fit matter more than system sophistication.

5.4.2 Implications for Practice:

- **Effectiveness of Basic MAPs:** The findings indicate that advanced systems are not a prerequisite for sound decision-making in unstable environments. Strengthening routine budgeting, cash monitoring, and simple cost analysis can significantly improve visibility and control.
- **Discipline over Sophistication:** SMEs that embedded regular monitoring cycles, structured performance discussions, and basic documentation of key indicators were better prepared for subsequent disruptions than those relying on periodic MAP use.
- **Capability Development Aligned with SME Realities:** Early in the crisis, many firms struggled because the pace of change exceeded their internal capacity. Over time, firms that built small, steady improvements into their MAP routines developed more resilience.
- **Balance of Formal Routines and Informal Agility:** Across the cases, resilience was strengthened when firms combined formal MAP routines with informal managerial agility. Practical tools such as cash dashboards, reporting templates, and regular reviews provided clarity and control, while informal discussions, rapid scenario thinking, and cross-team coordination preserved responsiveness.
- **Institutionalization of Learning:** Resilience among the cases was reinforced when learning from crisis experience was captured and institutionalized. Documenting what worked, updating procedures, and maintaining contingency plans helped SMEs convert crisis experience into operational readiness for future crises.

5.4.3 Implications for Policy:

- **Foundational MAP Capability Support:** Many SMEs lack the resources to adopt sophisticated tools. Training focused on formal applications of budgeting, cash-flow

management, simple forecasting, CVP, and scenario analysis would deliver more immediate value for resource-constrained SMEs.

- **Accessible Digital Enablement:** Light digitalization improved accuracy and responsiveness in SMEs. Therefore, policy programs targeting basic accounting software adoption and foundational digital literacy could therefore strengthen this capability base.
- **Sector-Specific Policy Support:** Manufacturing firms face greater cost and inventory pressures, while service firms need tools for customer demand monitoring and pricing flexibility. Sector-sensitive guidance is likely to be more effective than uniform SME training programs.
- **Standardized Transparency and Reporting:** Because symbolic reporting became essential in a weak institutional environment, policymakers could support SMEs through standardized reporting templates, clearer reporting expectations, and low-burden compliance tools targeted at external stakeholders.

5.5 Strengths and Limitations of the Study

A thorough evaluation of the study's strengths and limitations helps to clarify on how confidently the findings can be interpreted and how far they may be applied. Several features strengthen the results of this research. First, the study addresses a clear gap in the management accounting literature by examining how SMEs utilize MAPs under a prolonged, multi-layered crisis, an environment that has received limited empirical attention. Most existing studies focused on recoverable short-term crisis, therefore, capturing the Lebanese SME context offers novel and relevant insights. At the same time, the specificity of this context necessarily constrains the extent of generalization that can be derived from the results.

A key strength of the study lies in its qualitative, multiple-case design, which facilitated the in-depth examination of how MAPs were interpreted, adapted, and utilized by managers in real

organizational settings. Another strength is the use of semi-structured interviews conducted throughout the crisis, which allowed the researcher to examine real-time managerial perspectives and decision-making with limited hindsight bias. The depth of the interviews generated rich, context-specific accounts of how MAPs were used and adapted across different firms. The cross-sector comparison between service and manufacturing SMEs further improves the analysis by highlighting how industry context shapes MAPs use and adaptation while also revealing shared crisis-driven patterns.

Methodologically, the study followed a systematic, theory-informed thematic approach. Coding and theme development were grounded in established literature yet remained sensitive to the data, enhancing internal validity. This structure allowed the findings to meaningfully connect back to Contingency Theory, Institutional Theory, and SMA, while still capturing the lived realities of SME managers.

Despite these strengths, several limitations should be acknowledged. The qualitative nature of the study and the reliance on a small purposive sample limit the transferability of the findings beyond the selected firms (Yin, 2017). While purposeful sampling ensured participation from knowledgeable participants (Creswell & Creswell, 2017), it also limited the diversity of managerial perspectives represented in the data.

By focusing exclusively on service and manufacturing SMEs, the study does not reflect the experiences of firms in other industries, such as healthcare, or agriculture. It also does not capture the dynamics of large corporations or early-stage startups, which operate under different resource constraints, governance structures, and MAP adoption patterns.

In addition, the use of semi-structured interviews introduces subjectivity. Because the topic centers on managers' personal experiences with MAPs, the data reflects individual

interpretation, memory, and sense-making. Some responses relied on recollection of earlier crisis phases, increasing the risk of retrospective rationalization. Researcher subjectivity is also inherent in qualitative coding and interpretation, even though accuracy was supported through systematic analysis and peer debriefing.

Finally, the unique characteristics of the Lebanese crisis, a combination of financial breakdown, institutional impairment, and prolonged political instability, limit the generalizability of the findings to other contexts. MAP adaptations observed in such an extreme environment may look different in shorter, more predictable crises or to economies with stronger institutional support.

Overall, the study's strengths ensure that the core phenomena were examined with depth, relevance, and theoretical grounding. At the same time, the limitations highlight the need for complementary research using larger samples, comparative designs, or longitudinal approaches to expand and validate these insights in different crisis settings.

Chapter 6: Conclusion and Recommendations

6.1 Conclusion – Synthesis of Key Findings

Building on the interpretations presented in Chapter 5, this chapter synthesizes the findings across all cases and research questions to provide an integrated understanding of how managers in Lebanese service and manufacturing SMEs used MAPs in fostering organizational resilience during the (2019-2025) crisis, and how industry context shaped these uses.

The synthesis reveals a fundamental pattern in how organizational resilience operates under crisis conditions. In such contexts, resilience did not arise from the adoption of advanced or sophisticated accounting systems. Instead, it emerged through the disciplined, adaptive, and context-sensitive use of foundational management accounting practices. These practices

functioned not merely as technical tools, but as stabilizing mechanisms that supported continuity, adaptation, and credibility in an environment marked by persistent uncertainty.

One of the major insights from the cases was that resilience developed gradually and progressively alongside the evolution of the crisis itself. Early responses were reactive and focused on immediate operational continuity and survival. This pattern is consistent with Contingency Theory, which suggests that management practices initially align with immediate environmental pressures before evolving as conditions stabilize or become more predictable.

Over time, as the crisis became a long-term condition rather than a temporary shock, managers used the same core MAPs to anticipate developments and support organizational learning. These practices enabled more cautious strategic choices, consistent with strategic management accounting logics that emphasize learning through use rather than formal system adoption. In parallel, these practices evolved from being simply operational routines into flexible informational structures that supported stability and guided adaptation. They also provided reassurance to external partners, reflecting the symbolic and legitimacy-oriented role of MAPs emphasized in Institutional Theory. Resilience was therefore not a single capability but an accumulation of repeated and disciplined use of these reinforcing practices.

This progression revealed that resilience in prolonged crisis stemmed less from technical sophistication and more from managerial judgment, learning, and contextual fit. In an environment of restricted resources, weak institutions, unstable markets, and technological constraints, advanced contemporary MAPs were neither realistic nor necessary. The critical factor was managers' ability to create clarity, where the environment offered none. Even modest tools, when used consistently, enabled firms to maintain operational efficiency, support adaptive decision-making, and signal legitimacy to key external stakeholders.

Another key pattern was revealed in how firms interpreted information gathered by the MAPs adopted. Managers relied greatly on real-time indicators, such as cash flow movements, customer behaviors, stock rotation, and cost trends, treating them as signals for both threats and opportunities. Even when the practices themselves were basic, their use reflected an intensified sensitivity to risk and change. This shows that resilience depended on informational discipline more than methodological complexity.

The cross-industry comparison reinforces this insight. Although manufacturers and service firms faced similar crises context, the implications for their operations differed. Manufacturers felt the shock through rising input costs, production constraints, and supply volatility, which shifted their attention on cost control and efficiency. Service firms, on the other hand, faced fast shifts in customer demand and pricing sensitivity, pushing them toward flexible offerings and rapid adjustments following customer behavior KPIs. Yet despite these differences, the foundation of resilience in both industries rested on the same baseline MAPs: controlling liquidity, maintaining clear cost visibility, aligning resources with real-time demand conditions, and presenting reliable information to stakeholders. Industry context influenced the emphasis, not the underlying concept of organizational resilience.

Drawing on these conclusions, the evidence presented in Chapter 4 directly informs the recommendations that follow. The cases showed that MAPs acted as practical navigation tools by bringing order to instability, supporting learning, and grounding managerial judgment in accessible information. Their contribution to resilience stemmed not from technical sophistication but from disciplined, adaptive use under prolonged uncertainty. These insights, summarized through the Balanced Scorecard resilience framework presented in Appendix D, offer direct implications for managerial practice. Together, they form the foundation for the

recommendations outlined in the next section, ensuring a coherent progression from empirical findings to actionable guidance.

6.2 Recommendations for Service SME-s

Service SMEs face the ongoing challenge of maintaining financial discipline while identifying limited but sustainable growth opportunities. The following recommendations are designed as practical forward-looking actions that can be implemented quickly and adjusted to fit each firm's operational realities. They aim to support more structured, opportunity-oriented decision-making.

1. Evaluate Opportunity Cost of Restrictive Credit Policies: Under prolonged liquidity pressure, rigid cash-only credit policies may limit service SMEs' ability to capture sustainable sales opportunities. Instead of regularly rejecting short-term credit requests, owner-managers can introduce a simple contribution margin review to assess the potential value of selected sales that are currently forgone. On a periodic basis, managers can review refused transactions and estimate whether the expected margin outweighs the short-term liquidity risk. Where justified, firms can pilot tightly controlled credit windows, such as limited amounts or very short payment periods, while documenting outcomes and revisiting terms if payment behavior weakens. This approach requires only basic margin awareness and simple tracking tools, yet it allows firms to cautiously expand beyond a shrinking base of long-standing customers. The main risk lies in weakened collections discipline. However, this can be mitigated by strict caps, predefined stop rules, and continuous monitoring.

2. Develop New Revenue Streams: Service SMEs may benefit from developing new revenue streams to offset ongoing crisis pressures. Instead of relying primarily on cutting low-margin activities, owner-managers can conduct a simple opportunity mapping exercise to identify which current services generate reliable margins and to explore new services that require

similar capabilities, customer relationships, or digital tools. On a periodic basis, managers can review existing service offerings and assess whether adjacent services could generate additional income with limited investment. Where feasible, firms can pilot these additions by bundling them with existing offerings or testing them with a small group of customers. This approach requires limited financial resources and primarily managerial time, yet it allows service firms to shift from defensive survival toward strategic renewal, even within a stagnant economy. The main risk lies in spreading managerial attention too thin. However, this can be mitigated by testing one initiative at a time and discontinuing options that do not show clear potential.

3. Strengthen Brand Reputation and Customer Expansion: Sustaining growth under prolonged uncertainty requires service SMEs to move beyond heavy reliance on a narrow base of loyal customers. Rather than depending primarily on repeat business alone, sales and marketing managers can adopt a more proactive approach by communicating expectations clearly, explaining pricing changes, and maintaining regular updates through WhatsApp or social media to signal reliability. On an ongoing basis, these communication practices help reinforce transparency and consistency in everyday customer interactions. Where appropriate, service SMEs can design small initiatives to attract new customers, such as referral incentives, targeted digital messages, or loyalty points-based rewards. This approach requires limited financial resources and focuses mainly on disciplined communication practices, yet it allows firms to expand their customer base while strengthening trust. The main risk lies in inconsistent messaging or unmet expectations. However, this can be mitigated by aligning communication closely with actual service capacity and maintaining a clear and honest tone.

6.3 Recommendations for Manufacturing SME-s

1. Introduce Activity-Based Costing Features: Protecting profit margins under prolonged cost volatility requires manufacturing SMEs to move beyond basic unit-cost tracking toward a

clearer understanding of underlying cost drivers. Instead of relying solely on traditional costing methods, owner-managers and production or financial controllers can introduce simplified ABC features that build on practices already in place, such as tracking raw material usage and unit costs. Using a lightweight ABC approach focused on key activities, such as machine hours, power use, inventory turnover, and labor hours, firms can develop an Excel-based model to estimate how overheads are consumed across products. On a periodic basis, managers can use these insights to review product profitability, pricing decisions, and capacity allocation. This approach requires moderate analytical effort but limited financial investment, and it helps firms identify which product lines absorb disproportionate overheads and which generate stronger contribution margins. The main risk lies in overcomplicating the model or relying on imprecise allocations. However, this can be mitigated by limiting the number of activities included and using ABC insights.

2. Design Formal Budgeting Routines and Real-Time Cash Dashboards: Maintaining operational discipline under instability requires manufacturing SMEs to formalize primary MAPs such as budgeting and cash monitoring through dashboards, that are often managed informally. Rather than relying on ad hoc budgeting practices, owner-managers and financial controllers can prepare structured monthly budgets covering procurement, production, and cash-flow planning. These budgets can be supported by simple real-time cash dashboards that integrate daily sales, collections, supplier payments, and upcoming import dues into a single view. On an ongoing basis, such dashboards allow managers to monitor liquidity and adjust production schedules, postpone purchases, or renegotiate supplier terms in response to short-term pressures. This approach builds directly on existing cost awareness and operational discipline and can be implemented using basic accounting software or Excel. The main risk lies in inconsistent updating or limited use of the information generated. However, this can be

mitigated by assigning clear responsibility for dashboard maintenance and embedding review into regular managerial routines.

3. Inclusion of External Advisors or Board Members with Operational and Financial

Expertise: Strengthening strategic decision-making in manufacturing SMEs may require introducing external perspectives beyond owner-managed or family-centered governance structures. Instead of relying exclusively on internal experience, owner-managers can involve external advisors or board members with expertise in financial planning, costing, or supply chain management. These advisors do not need to be full-time executives. Even periodic involvement on a monthly or quarterly basis can provide structured review of product-line performance, inventory strategies, pricing decisions, and capital allocation. This arrangement requires financial commitment but depends on openness to external input and basic financial transparency. The main risk lies in misalignment between advisors and owners or resistance to external scrutiny. However, this can be mitigated by clearly defining advisory roles, maintaining decision authority with owners, and focusing discussions on operational and financial priorities. Beyond decision quality, such governance arrangements also signal professionalism to suppliers, auditors, and potential partners, reinforcing legitimacy during prolonged uncertainty.

6.4 Policy Level Recommendations for Support Institutions

1. Expand SME Access to Digital Accounting and Operational Systems: Improving informational visibility under prolonged instability requires targeted support from public institutions, donor agencies, and SME support organizations operating in Lebanon. Rather than promoting advanced digital transformation, support institutions such as the Ministry of Economy and Trade, Chambers of Commerce, and international donors can focus on expanding SMEs' access to basic digital accounting and operational systems. This can be achieved by subsidizing entry-level accounting software, negotiating group licenses, or partnering with

local FinTech providers to supply affordable and user-friendly tools. Priority should be given to systems that track receivables, margins, cash balances, and production volumes, as these directly support short-term decision-making under liquidity pressure. This approach requires public funding and builds on digital practices already adopted informally by SMEs. The main risk lies in misuse due to limited digital skills or low adoption levels from SMEs. However, this can be mitigated by coupling access initiatives with basic onboarding support and simplified system design, recognizing that institutional stability and enforcement capacity are still limited.

2. Provide MAP-Driven Training for SME Managers: Strengthening managerial decision-making under crisis conditions requires training that reflects the realities of Lebanese SMEs rather than universal financial education. Support institutions, including Chambers of Commerce, universities, professional bodies, and donor-funded programs, can address this gap by offering training focused on practical MAPs and strategic decision-making. Such programs can target core areas where SMEs face persistent challenges, including costing, pricing, cash-flow management, scenario analysis, and customer credit risk. Workshops delivered through existing institutional platforms can emphasize hands-on application using simple tools and industry-specific examples, particularly under conditions of hyperinflation, liquidity shortages, and unstable demand. This approach doesn't need a lot of resources and relies primarily on existing institutional infrastructure. The main risk lies in low participation or limited relevance. However, this can be mitigated by customizing content to industry-specific needs and by framing training as a practical support rather than a formal compliance requirement.

3. Enhance Regulatory Transparency for SME Operations: Reducing operational uncertainty for SMEs requires improvements in regulatory clarity rather than comprehensive institutional reform. Public authorities responsible for taxation, customs, and municipal administration can support SMEs by publishing clearer guidelines, standardizing

documentation requirements, and gradually digitizing routine administrative processes. Even limited improvements in transparency surrounding import rules, municipal fees, and tax procedures can reduce uncertainty and enable SMEs to plan procurement, pricing, and cash-flow decisions more effectively. This approach is feasible within existing institutional constraints and does not require structural reform. The main risk lies in inconsistent implementation across agencies. However, this can be mitigated by prioritizing high-impact procedures and coordinating communication through centralized public platforms.

6.5 Recommendations for Future Research

Future research can enhance the findings of this study by expanding the empirical and contextual dimensions through which the role of MAPs in fostering organizational resilience in continuous state of crises is investigated.

This research focused on SMEs in the manufacturing and service industries. Future studies may investigate the application of MAPs in other industries belonging to the primary economic sector, such as agriculture and other raw-material extraction activities. These industries present different customer dynamics, cost structures, and regulatory requirements, which may reveal different methods to be resilient and other ways to employ MAPs. In addition, future research could consider studying a sample of larger companies. Examining larger firms may also reveal how greater resource availability, institutional capabilities, formal structures, and professionalized accounting departments influence the adoption and adaptation of advanced sophisticated MAPs during crises. Future research could also explore how ownership structures or governance arrangements shape the use of MAPs and resilience-building processes in turbulent environments.

Beyond expanding the sample and firm-size boundaries, future research may improve generalizability by adopting a quantitative research design to measure MAPs adoption and

resilience outcomes on a broader scale. While this study relied on qualitative interviews to uncover managerial perceptions and patterns in how managers use MAPs during prolonged crisis, these themes can be converted into measurable survey questions. For example, the most common practices adopted by Lebanese SMEs during crises, such as budgeting, cash-flow monitoring, informal scenario discussions, or symbolic reporting for external stakeholders can be converted into Likert-scale items that respondents rate based on importance or frequency. A nationwide survey using these measures would enable researchers to see how common these practices are across Lebanese SMEs and to statistically test whether certain MAPs are linked to stronger organizational resilience outcomes. In this way, the qualitative insights generated by this study can serve as the foundation for a structured quantitative model that validates and extends the findings across a much larger population. In addition, mixed-methods designs allow quantitative and qualitative approaches to complement one another, capturing both generalizable trends and the underlying meanings that explain them. By combining surveys alongside follow-up interviews, researchers can capture both the commonness of specific MAPs and the interpretive decision-making processes behind them. As a further step, comparative cross-country research, particularly in economies with experiences similar to Lebanon's prolonged instability (e.g., Argentina, Venezuela), would also help determine whether the crisis-induced adaptations observed in Lebanon reflect broader patterns in fragile environments or are context-specific.

Future research could also benefit from examining MAPs over a period of time, namely adopting a longitudinal research design. This approach would allow researchers in tracing how MAPs evolve over time, from survival-focused routines to more formalized, digitalized, or strategically oriented practices as firms move from surviving crisis toward adapting to it and rebuilding. Such kind of analysis would clarify how resilience capabilities emerge, stabilize, or transform across different phases of prolonged crisis.

Digitalization also emerged in this study as an enabling force for improved information visibility and decision agility. Future research could examine how low-cost technologies or real-time dashboards enhance MAPs' effectiveness in resource-constrained settings. This kind of a study is particularly relevant for SMEs and sectors without access to advanced ERP or accounting systems.

Finally, future studies could also explore policy-level and institutional influences on MAPs adoption. Investigating how government programs, donor-funded initiatives, industry associations, or professional bodies support or hinder MAP development would generate practical insights for Lebanon's recovery efforts. By finding the structural factors that enhance MAP adoption, scholars can inform evidence-based policies that strengthen managerial decision-making in volatile economies.

Together, these research directions offer multiple opportunities to extend this study's contributions and enrich the theoretical and practical understanding of MAPs and organizational resilience in prolonged crisis environments.

6.6 Final Reflection

Conducting this research after six years of Lebanese SMEs operating under prolonged economic and institutional collapse offered a unique opportunity to observe how organizations make decisions when stability is no longer expected. What began as an exploration of MAPs ultimately provided insights on the daily decision-making realities of SMEs operating with limited resources, shifting regulations, fluctuating prices, and deeply constrained institutional support. Their ability to sustain operations, adapt and continue serving customers revealed a form of resilience that although is not strategically planned, but deeply practical and rooted in lived experience.

A consistent pattern across cases was the deep mistrust of the banking sector. The collapse of financial institutions forced firms to abandon long-standing financial routines, reduce their reliance on credit lines, and develop entirely new methods of cash management. Paradoxically, the shift to a cash-based economy, while born out of crisis, provided many SMEs with greater control over liquidity and protected them from additional losses tied to trapped deposits or uncollectible receivables. This unintended advantage illustrates how resilience can emerge not only from adaptive managerial action but also from systemic failures that reshape economic behavior.

Similarly, the state's slow adjustment of official exchange rates for taxes, municipal dues, and rent obligations created windows in which several SMEs were able to temporarily ease financial pressure. Paying obligations at outdated rates reduced financial pressure at critical moments, allowing some firms to redirect resources toward core operations and retain employees. These dynamics do not diminish the severity of the crisis, rather they show that even in collapse, weaknesses in the institutional environment can provide temporary relief that indirectly supports business continuity.

This study also reinforced the idea that meaningful managerial insight often arises under pressure. In environments where access to capital and stable markets are limited, SMEs turn to whatever information they have, sometimes imperfect, often simple, and use it to make rapid, important decisions. The firms in this research demonstrated that resilience is not only a matter of having sophisticated systems, but also of developing the discipline to learn from crisis, tighten routines, refine judgment, and gradually transform informal practices into more structured ones.

The research also highlighted the human dimension of managerial decision-making. Behind every adjustment in pricing, every cut to a product line, and every effort to retain customers

was a manager balancing personal uncertainty with professional responsibility. Their stories underscore that resilience is ultimately a collective effort shaped by leadership, employee commitment, and the ability to preserve purpose during prolonged instability. This recognition serves as a reminder that accounting information even in its simplest form becomes meaningful when it enables people to act with clarity in moments of uncertainty.

As Lebanon approached another year of uncertainty, the insights from this research offer both caution and optimism. SMEs remain vulnerable, yet their ability to adapt, improvise, and innovate under extreme constraints reflects a basis upon which more structured and sustainable practices can be built. If institutional reforms remain slow, resilience will continue to depend on the managerial choices made inside firms. The hope is that the lessons derived from this study contribute, in some way, to supporting those choices and helping SMEs transition from coping with crisis to navigating it with greater confidence, intention, and strategic awareness.

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Appendices:

Appendix A

Semi-structured Interview Guide

Introduction (5 minutes)

- Thank you for taking the time to participate in this interview. This interview is part of a qualitative study examining how managers in Lebanese service and manufacturing SMEs use management accounting practices (MAPs) to maintain continuity, adaptability, and organizational learning during the 2019–2025 crisis period.
- The discussion focuses on your experiences and managerial decisions rather than on technical accounting details.
- Before we begin, may I confirm that you have read and agreed to the informed consent form?

Section 1: Company and Managerial Background (5–10 minutes)

1. Could you briefly describe your company's operations, size (number of employees), and the main products or services you provide?
2. What is your current position, and what responsibilities do you hold in financial or strategic decision-making?

Section 2: Financial Perspective — Continuity of Operations (10–15 minutes)

3. How often do you end up changing your plans or budgets? What usually forces you to make changes — like the dollar rate moving, suppliers increasing prices, or customers buying less?

Clarifying probe:

I mean when something suddenly changes, what makes you say: '*We need to adjust our plan*'?

Elaborating probe:

Can you tell me about a specific time when you had to revise your plan and what caused it?

4. Do you follow your cash situation on a short-term basis (weekly/monthly)? How do you track it in practice?

Clarifying probe:

I mean the routine you use to know how much cash is coming in and going out soon — how do you normally check it?

Elaborating probe:

Can you walk me through how you update this sheet or dashboard? Who sits with you to review it?

5. When running the business day to day, what numbers or information do you check the most to make sure things keep moving?

(Sales, cash on hand, collections, supplier costs, production issues...)

Clarifying probe:

Which figures do you look at first thing to understand if today will go smoothly?

Elaborating probe:

Why are these specific numbers the ones you rely on the most? What do they tell you?

6. Since 2019, did you have to change the way you handle money coming in and money going out — for example collecting from customers faster, delaying some payments, negotiating with suppliers, or changing how you manage inventory? How did these decisions affect your ability to keep operating?

Clarifying probe:

I mean things you changed to manage cash better — like getting paid earlier or postponing some payments. Did anything like that happen?

Elaborating probe:

Can you give me a specific example of a payment or cash decision that helped you get through a tough moment?

Section 3: Internal Process Perspective — Adaptive Flexibility (10–15 minutes)

7. How did you adjust your internal work processes during unstable periods to keep the business running?

(For example, changing staff roles, reducing waste, speeding up certain processes, or digitizing reports.)

Clarifying probe:

I mean the small or big changes you made in how people work or how tasks flow—what changed in practice?

Elaborating probe:

Can you give me an example of a specific change you made inside the company—like shifting roles, cutting steps, or moving something to digital—and explain how it helped?

8. When things become uncertain, how do you explore different options before deciding what to do?

(Do you prepare different what-if situations—like if the dollar changes, costs rise, or demand drops? How do you prepare these options, who reviews them with you, and do you use any templates or dashboards to compare scenarios?)

Clarifying probe:

I mean when you're unsure what will happen—how do you check the possible outcomes before making a decision?

Elaborating probe:

Can you walk me through a recent situation where you compared two or three possible paths? What tools or tables did you use, and who was involved in reviewing them?

9. During volatile periods, how do you decide when to move resources around?

(For example, shifting staff responsibilities, adjusting production schedules, reducing some activities, or changing spending priorities.) What helps you make these decisions?

Clarifying probe:

I mean choices like moving people to different tasks, slowing some activities, or increasing others. How do you usually decide?

Elaborating probe:

Can you tell me about a moment when you had to reassign staff, change schedules, or cut certain spending—and what information or tools guided that decision?

10. How have you changed your pricing decisions during the crisis? What information do you rely on when deciding to adjust prices while still keeping customers loyal and maintaining product quality?

(For example, balancing cost increases with customer expectations or adjusting payment terms.)

Clarifying probe:

I mean when you needed to change prices—what factors did you look at before deciding?

Elaborating probe:

Can you share a situation where you had to adjust prices but also make sure customers stayed satisfied and trusted your quality?

Section 4: Industry Context and Symbolic versus Technical Use (10–15 minutes)

11. From your experience, do manufacturers and service companies adapt their financial and planning routines in different ways during unstable times? How do you see these differences?

Clarifying probe:

I mean the way each sector reacts or what they pay attention to first — do you feel it's different?

Elaborating probe:

Can you give me an example of something manufacturers usually focus on, and something service firms focus on instead?

12. Can you tell me about one challenge in your industry that had the biggest impact on the way you plan, monitor, or report your numbers?

Clarifying probe:

I'm referring to something specific to your line of work — raw materials, suppliers, customer expectations, seasonality...

Elaborating probe:

How did this challenge change the way you track costs, demand, or performance?

13. How has your industry's nature — like your cost structure, production cycle, or customer relationships — influenced the tools or routines you rely on for planning and decision-making?

Clarifying probe:

I mean the habits or methods you use because of how your industry works.

Elaborating probe:

Can you give me an example of a tool or routine you use because your industry requires it?

14. When you prepare reports for different audiences — like your team inside the company versus banks, partners, or key clients — do you usually use different formats or templates depending on who will read them? What kind of adjustments do you typically make?

Clarifying Probe:

I mean things like changing the layout, adding summaries, or making the report more formal depending on who will see it. Do you do anything like that?

Elaborating Probe:

Can you give me an example of a report you adjusted for an outside audience? What did you highlight, and what impression did you want the recipient to get?

15. Have you learned or adopted any good practices from other companies in your sector or even other sectors during these past years? What ideas or routines do you think could be shared to help firms cope better with uncertainty?

Clarifying probe:

I mean things you saw others doing (dashboards, follow-up routines, pricing ideas, digital tools...)

Elaborating probe:

Can you tell me about a specific practice you saw somewhere else and decided to adopt or adapt?

Section 5: Learning and Growth Perspective — Strategic Renewal (10–15 minutes)

16. After 2019, what new indicators or performance measures did you start following that you weren't paying attention to before? How did these indicators change over time? Do you use any simple report or dashboard to track them?

Clarifying probe:

I mean numbers you started checking regularly because the situation forced you to (like cash movement, customer behavior, delays, costs...)

Elaborating probe:

Can you show or describe a template or dashboard you used to track these indicators? What made these measures important at that moment?

17. During the crisis, many routines and tools were introduced just to survive. Which of these new practices have stayed with you and become part of your regular way of working?

Clarifying probe:

I mean things that started as a temporary fix during the crisis but became part of your routine (like weekly check-ins, simple dashboards, daily cash tracking...)

Elaborating probe:

Why did these practices stay? What value did they add that made you keep them even after conditions changed?

18. Looking back, what are the most important lessons your organization learned from the crisis? How are you using these lessons today to prepare for future uncertainty?

Clarifying probe:

I mean changes in the way you think, plan, or monitor the business because of what the crisis taught you.

Elaborating probe:

Can you give me an example of something you now do differently—an analysis, a routine, a tool—that came directly from a lesson learned?

Closing (5 minutes)

19. Looking back since 2019, which MAP or decision practice do you believe was most valuable for your firm's survival?
20. What advice would you give to other SME leaders seeking to strengthen their planning and adaptability?

Appendix B

Letter of Participation



Letter Requesting Participation

Dear Mr/Mrs.,

Lebanese small and medium-sized enterprises (SMEs) have shown remarkable resilience in the face of continuous economic turbulence. Between 2019 and 2025, many have been compelled to find new ways to adapt, plan, and survive amid uncertainty. I am conducting a research study to understand *how managers in Lebanese SME service and manufacturing firms use management accounting practices (MAPs) in fostering organizational resilience during the (2019–2025) crisis, and how does industry context shape those uses.*

This study forms part of my MBA thesis in Accounting at Haigazian University, under the supervision of Dr. Alexan Hagopian and Dr. Rida Elias. Its aim is to explore how management accounting practices—such as budgeting, standard costing and variance analysis, cost–volume–profit (CVP) analysis, rolling forecasts, cash-flow dashboards, activity-based costing (ABC), and the balanced scorecard (BSC)—support operational continuity, financial stability, and adaptive capacity and learning during periods of systemic uncertainty.

Your experience as a manager in the (service/manufacturing) industry can provide valuable insights into how Lebanese firms continue to operate, adapt, and plan under pressure. Through your participation, you will contribute to generating practical lessons that can benefit other SMEs navigating similar conditions.

I will conduct a semi-structured interview of approximately 45 to 60 minutes, either online or in person, depending on your preference. With your permission, the interview will be recorded for transcription accuracy. Your identity will be kept confidential and anonymous; known only to me, and no identifying information of your organization will be disclosed. Only pseudo names will be used for participants and their organizations. The only document matching actual and pseudo names will be password secured and kept on my personal laptop. As a token of appreciation, you will receive a concise executive brief summarizing the key findings and highlighting how your organization’s experiences compare (without disclosure of identities) with patterns observed across other Lebanese SMEs.

I sincerely hope you will consider contributing to this important research. Your insights will not only enrich academic understanding but also help strengthen the practical foundations of resilience among local businesses. Please feel free to contact me at angiekirejian@gmail.com or +961 70 31 88 57 for any clarification or to schedule a convenient interview time.

Warm regards,
Angie Vartan Kirejian
MBA Candidate – Accounting; Haigazian University
Supervisors: Dr. Alexan Hagopian & Dr. Rida Elias

Appendix C

Consent Form

Consent Form

Research Project Title: The Compass of Survival: Management Accounting Practices as Maps of Resilience in Lebanese Service and Manufacturing SMEs during the 2019–2025 Crisis.

I have read and understood the letter of information regarding the above study. The nature and purpose of the study have been explained to me, and I agree to participate voluntarily. I understand that my identity and that of my organization will remain confidential and that I may withdraw from the study at any time without consequence. All questions have been answered to my satisfaction.

Name (please print)_____

Signature_____

Date_____

Person Obtaining Consent_____

Signature_____

Date_____

Thank you for your valuable contribution to this research.

Appendix D

Balanced Scorecard–Resilience Framework for Lebanese SMEs

Table 7

Balanced Scorecard–Resilience Framework for Lebanese SMEs

BSC Perspective	Resilience Outcome	Data Indicators / Interview Focus	Relevant MAPs
Financial	Continuity of operations & liquidity stability	<ul style="list-style-type: none"> • “Monitoring cash on a short-term, almost real-time basis is one of our biggest concerns.” (M2-A) • “All payments are now on the spot... “ (S2-A) • “If I had to choose the most important practice for our survival, it would definitely be the strict tracking of receivables, cash control, and detailed expense management.” (S2-A) 	<ul style="list-style-type: none"> • Daily cash monitoring • Tight budgeting logic • Receivables tracking • Inventory Management
Internal Process	Operational flexibility & efficiency under constraints	<ul style="list-style-type: none"> • “We reduced production capacity from around 15 tons daily to 8–9 tons.” (M2-A) • “Everyone started handling broader tasks to keep things running.” (M1-B) • “Digitization became more important.” (M1-B) 	<ul style="list-style-type: none"> • Rolling operational adjustments • Inventory rotation monitoring • Cost control routines • Use of simple digital systems

Customer	Customer value preservation & reputation resilience	<ul style="list-style-type: none"> • <i>“The first thing I check every morning is the daily sales file.” (M1-B)</i> • <i>“We had to adjust our communication constantly.” (S1-B)</i> 	<ul style="list-style-type: none"> • Informal customer KPIs • Product-level profitability reasoning
Learning & Growth	Strategic learning, renewal & adaptation	<ul style="list-style-type: none"> • <i>“These experiences forced me to stop organizing group trips.” (S2-A)</i> • <i>“review whether to adjust production or delay imports.” (M1-B)</i> • <i>“routines we adopted during the crisis have now become our daily way of doing things.” (S2-A)</i> 	<ul style="list-style-type: none"> • ABC-like reasoning • Informal scenario thinking • Learning from MAP trends over time