Documentação de Projeto - Empreendedorismo

Project Team Members

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1. Summary

Brazil's foodservice sector, dominated by small and medium-sized enterprises (SMEs), faces significant operational and financial management challenges. Many entrepreneurs lack the resources or expertise to fully leverage modern management tools, leading to inefficiencies, financial strain, and missed growth opportunities. That Leads to the question: “Is it possible to manage a small business without a deep knowledge of management tools and metrics?” . This project seeks to address this gap by proposing an integrated Artificial Intelligence (AI) system designed to simplify and automate key managerial, fiscal, and operational processes for small restaurants. The goal is to serve Brazilian SMEs a tool that is responsible for their finance, granting them more time to be strategic rather than purely operational, as maintaining an ERP fed with invoices, bills and many more management tools can be time consuming. In this case, entrepreneurs see themselves drowning in to-do’s, processes and accounting, leaving them no time to study their business health, opportunities and their market considering they often operate on small teams. To achieve this goal we will firstly need a guinea pig, a small business that will serve as a way to map current state, problems, inefficiencies and opportunities, as to find a solution for the main question requires a deep understanding of the user, his pains and the fitness of the solution’s design and features.

2. Research Text Enhanced with Market Segmentation and Focus on Small Entrepreneurs

2.1. Research Goals

The main goal of this research is to understand the challenges faced by small and medium-sized enterprises (SMEs) in Brazil's foodservice sector regarding the adoption and effective use of management technologies, particularly ERP (Enterprise Resource Planning) systems. The study aims to identify the barriers that hinder digitalization in these businesses, such as high acquisition and maintenance costs, lack of technical knowledge, limited infrastructure, and regional disparities. By mapping these obstacles, the research seeks to support the development of an AI-powered management solution tailored to the operational reality of Brazilian SMEs, with the potential to increase efficiency and enable data-driven decision-making (SILVA; ALMEIDA; COSTA, 2024; SANTOS; SILVA; LIMA, 2025). This is especially relevant considering that SMEs represent 98.5% of all businesses in Brazil but contribute only 20% to the national GDP, highlighting a significant gap in productivity and technological integration (SEBRAE, 2024).

2.2. Market Segmentation

The Brazilian foodservice sector, predominantly composed of SMEs, presents a market segment with distinct characteristics that justify the development of an AI-powered management solution specifically tailored to small entrepreneurs. The value proposition of the proposed AI solution—which emphasizes an intuitive interface, ease of implementation, automation of routine administrative and operational tasks, and the delivery of clear, actionable insights with minimal

prerequisite technical expertise—is uniquely positioned to address the acute needs of these smaller businesses, rather than larger enterprises.

Small businesses, as consistently highlighted in studies such as those by SEBRAE (2024), operate under significant constraints, most notably limited financial resources and lean human capital. The often prohibitive costs associated with the acquisition, customization, and ongoing maintenance of traditional ERP systems represent a primary barrier to technology adoption for this segment (SEBRAE, 2024; SILVA; ALMEIDA; COSTA, 2024). Furthermore, these small enterprises typically lack dedicated IT departments or personnel with specialized technical or data analysis knowledge. This absence makes the adoption, integration, and effective day-to-day utilization of sophisticated software solutions a considerable, often insurmountable, challenge (SANTOS; SILVA; LIMA, 2025). The owner-manager in a small business environment is frequently consumed by daily operational demands, leaving scarce time or cognitive bandwidth to engage with complex data interpretation or manage cumbersome software interfaces that are not designed for immediate, practical application (SILVA; ALMEIDA; COSTA, 2024).

In stark contrast, larger enterprises generally command more substantial financial capabilities and possess specialized human resources, including dedicated IT support staff, business analysts, and data science teams. They are more likely to have already implemented complex, deeply integrated ERP systems and often require highly customized, scalable solutions capable of handling vast datasets and intricate organizational workflows. While AI technologies offer significant benefits to large organizations, their specific needs often revolve around integrating advanced AI functionalities into existing complex infrastructures or undertaking sophisticated big data analytics. These requirements diverge considerably from the proposed AI solution's core focus, which is to alleviate the fundamental operational, financial, and managerial burdens faced by resource-constrained small entrepreneurs through simplicity and automation.

The proposed AI-driven management solution, by its very design, aims to democratize access to effective, modern management technology. It specifically targets the segment of the market that remains largely underserved by existing complex and costly systems: the small entrepreneur. This individual requires a

practical, affordable, and straightforward tool that empowers them to gain robust control over their business operations, make timely and informed decisions based on reliable data, and, crucially, free up valuable time from mundane administrative tasks to focus on strategic growth initiatives and customer-facing activities (SANTOS; SILVA; LIMA, 2025). Therefore, the strategic decision to primarily focus on small entrepreneurs is deeply aligned with the solution's fundamental value proposition, which centers on providing accessibility, efficiency, and operational empowerment to those businesses most constrained by the current offerings in the technology market.

3. Research and Conclusions That Will Drive the Development

Analysis of the Brazilian context reveals that the vast majority of SMEs encounter substantial difficulties in implementing and fully utilizing ERP systems. The high costs associated with these technologies are a major barrier, as SMEs typically operate with limited financial resources and find it challenging to justify or sustain such investments (SEBRAE, 2024). Even when these systems are acquired, a lack of technical expertise and digital literacy among both business owners and their teams often leads to partial or ineffective use, with many relying on basic features or reverting to manual spreadsheets for daily management (SILVA; ALMEIDA; COSTA, 2024). The complexity of existing ERP solutions, combined with insufficient internal process definition and a lack of strategic planning, further impedes their integration into everyday operations (SANTOS; SILVA; LIMA, 2025).

Additionally, research indicates that 70% of Brazilian SMEs report difficulties in integrating digital tools into their routines, and 60% cite the lack of qualified personnel as a primary obstacle (SEBRAE, 2024). In less developed regions, infrastructure limitations and restricted access to technical support exacerbate the digital divide, making comprehensive digital transformation even more challenging. As a result, many SMEs are unable to leverage the full potential of ERP systems to streamline operations, improve financial oversight, and support strategic growth.

Given this scenario, it is clear that for an AI-driven management solution to be effective, it must be intuitive, easy to implement, and specifically adapted to the operational context of Brazilian SMEs. Continuous support and training are essential to ensure adoption and maximize the benefits of digitalization. The solution should focus on automating routine processes, providing actionable insights, and reducing the administrative burden on entrepreneurs, thereby empowering them to focus on strategic business management.

4. References

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