

IMPACTO DA PROPRIEDADE INTELECTUAL EM MICRO E PEQUENAS EMPRESAS: UMA ANÁLISE SWOT ESTRATÉGICA

**THE IMPACT OF INTELLECTUAL PROPERTY ON MICRO AND SMALL
ENTERPRISES: A STRATEGIC SWOT ANALYSIS**

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RESUMO

Este artigo analisou o impacto do uso de propriedade intelectual em micro e pequenas empresas brasileiras através da abordagem estratégica SWOT. O objetivo central foi identificar os fatores internos e externos que influenciam a gestão desses ativos para fortalecer a competitividade e a sustentabilidade institucional. A metodologia fundamentou-se em uma pesquisa qualitativa estruturada em cinco fases, abrangendo desde a identificação de questões de planejamento até a formulação de uma matriz estratégica cruzada. Os resultados destacam como principais forças a flexibilidade organizacional e a liderança engajada dos sócios; em contrapartida, as fraquezas revelam que 83% das empresas negligenciam o registro formal de marcas por limitações financeiras ou percepção de burocracia. No ambiente externo, as oportunidades são impulsionadas por programas de fomento (SEBRAETEC/ALI) e pela inovação aberta, enquanto as ameaças envolvem riscos jurídicos severos e a competição desigual com grandes corporações. A discussão indica que a propriedade intelectual deve ser encarada como um investimento preventivo essencial e não apenas uma formalidade administrativa. Conclui-se que o sucesso competitivo das micro e pequenas empresas depende da utilização de suas capacidades dinâmicas para aproveitar o suporte externo, neutralizando vulnerabilidades técnicas. Assim, a gestão estratégica de ativos intangíveis mostra-se imperativa para a longevidade e o desenvolvimento socioeconômico dessas empresas no cenário contemporâneo.

Palavras-chave: Propriedade Intelectual; Micro e Pequenas Empresas; Análise SWOT; Gestão Estratégica.

ABSTRACT

This article analyzed the impact of intellectual property (IP) use in

Brazilian micro and small enterprises (MSEs) through a strategic SWOT approach. The central objective was to identify the internal and external factors that influence the management of these assets in order to strengthen competitiveness and institutional sustainability. The methodology was grounded in qualitative research structured in five phases, ranging from the identification of planning issues to the formulation of a cross-strategic matrix. The results highlight organizational flexibility and the engaged leadership of partners as the main strengths; conversely, the weaknesses reveal that 83% of the companies neglect formal trademark registration due to financial constraints or the perception of bureaucracy. In the external environment, opportunities are driven by support programs (SEBRAETEC/ALI) and open innovation, while threats involve severe legal risks and unequal competition with large corporations. The discussion indicates that intellectual property should be regarded as an essential preventive investment rather than merely an administrative formality. It is concluded that the competitive success of micro and small enterprises depends on leveraging their dynamic capabilities to take advantage of external support, thereby neutralizing technical vulnerabilities. Thus, the strategic management of intangible assets proves imperative for the longevity and socioeconomic development of these companies in the contemporary landscape.

Keywords: Intellectual Property; Micro and Small Enterprises; SWOT Analysis; Strategic Management.

1. INTRODUCTION

Intellectual property (IP) has become established as a strategic pillar for competitiveness in the contemporary economy, being essential for protecting innovations and creating business value (BRASIL,

1996). In the context of micro and small enterprises (MSEs), which represent the vast majority of Brazilian organizations, the efficient management of these intangible assets is determinant for their sustainability and market growth (ANDRADE, SIMÕES and SOUZA, 2025). However, the adoption of intellectual property protection mechanisms by these enterprises still faces significant challenges, oscillating between strategic necessity and operational barriers (DAL BÓ, 2022).

Innovation is classically defined as the implementation of new or significantly improved products, processes, or organizational methods (VALOIS et al., 2023). Based on the concept of “creative destruction,” economic development is driven by a dynamic process in which new technologies replace obsolete ones (VASCONCELOS, SANTOS and ANDRADE, 2021). For MSEs, most innovations are incremental in nature, aimed at adapting and improving existing assets. The success of an innovative action depends not only on creativity but also on its practical application and its capacity to generate effective value for the various stakeholders (VALOIS et al., 2023).

The intellectual property system is divided into three major branches: copyright, industrial property, and sui generis protection (BRASIL, 1998). Within industrial property, trademark registration stands out as vital for MSEs, as it ensures the protection of commercial identity and mitigates legal and financial risks (DAL BÓ, 2022). However, statistics indicate that approximately 83% of small businesses neglect to formalize their trademarks with the competent authority. This lack of legal protection exposes the company to vulnerabilities, such as misuse by third parties and the

need to undertake costly rebranding efforts (ANDRADE, SIMÕES and SOUZA, 2025).

Micro and small enterprises face particular obstacles that hinder the appropriation of innovations, such as the scarcity of financial resources and the lack of a specialized management structure (VASCONCELOS, SANTOS and ANDRADE, 2021). The perception that the registration process is bureaucratic, complex, and costly acts as a limiting factor for entrepreneurs. Moreover, many managers still hold a limited view of IP, considering it a resource relevant only to large corporations. This scenario results in a mismatch between the knowledge produced and the effective technological indicators of these companies (DAL BÓ, 2022).

A firm's capacity for innovation is sustained by a set of internal resources and dynamic capabilities that allow for constant adaptation to environmental changes. Factors such as engaged leadership, people management, and information sharing are essential for developing this capacity. For small businesses, managerial and commercial capabilities are fundamental to converting technological solutions into competitive market advantages. Thus, the creation of a favorable organizational climate and an external network of contacts facilitate the flow of new knowledge (VASCONCELOS, SANTOS and ANDRADE, 2021).

The open innovation approach proposes mutual collaboration with external partners, such as universities, startups, and suppliers, to accelerate the development of solutions. This practice is especially advantageous for MSEs, as it allows them to compensate for limited internal research and development resources. The success of these collaborative models depends heavily on employee engagement

and organizational flexibility. However, cultural barriers and a lack of trust between partner institutions can still restrict the potential of this cooperation in Brazil (ARANTES, BARRICHELO and MORANO, 2026).

Sustainable innovation has emerged as a new necessity, integrating productive efficiency with environmental and social responsibility. In sectors such as textiles and apparel, the adoption of environmentally friendly practices can generate competitive differentiation and attract more conscious consumers. This ranges from the use of recycled materials to the optimization of product life cycles to minimize waste. In this way, sustainable innovation ceases to be a cost and becomes a strategic investment that improves the company's public image and profitability.

Public policies play a crucial role by offering technical support and financial incentives to stimulate innovation in small businesses. Programs such as ALI (Local Innovation Agent) and SEBRAETEC provide specialized consulting and subsidized technological extension services for MSEs. In addition, tax mechanisms such as the “Lei do Bem” (“Good Law”) aim to reduce the tax burden on innovative companies, although its use by small enterprises remains incipient. Coordination among government, academia, and businesses is vital to creating an institutional environment favorable to local technological development (GUIMARÃES, 2023).

The objective of this study was to analyze the impact of intellectual property use by micro and small enterprises through the SWOT approach (Strengths, Weaknesses, Opportunities, and Threats). By identifying the internal and external factors that influence the adoption of these rights, the study seeks to provide a strategic

overview to assist in the management of these intangible assets. Ultimately, it aims to contribute to the understanding of how intellectual protection can strengthen the competitive position and sustainability of Brazilian MSEs.

The next section of this paper addresses the methodology used to generate the results, which are described in Section 4. Finally, Section 5 presents the concluding remarks.

2. METHODOLOGY

This study adopted a qualitative methodology based on the SWOT approach (Strengths, Weaknesses, Opportunities, and Threats), a well-established tool for strategic planning and the assessment of internal and external environments (RAHMAN, MOUSA and ELWALDA, 2021). The analysis followed a structured process, adapted from the original guidelines of the model and its integrative developments, aiming to understand how MSEs manage their IP assets.

The first stage consisted of identifying the planning issues related to MSEs' use of IP. Following the logic of the original model, critical points affecting the company's current and future operations regarding the protection of trademarks, patents, and other assets were raised. In this phase, the aim was to capture the operational reality of the companies, identifying central issues that represent the link between the business and the challenges of intellectual protection in the market (PUYT, LIE and WILDEROM, 2023).

The second stage involved classifying the data collected into internal and external factors. The identified issues were qualified based on evidence: positive aspects of current operations were categorized as

Strengths, while internal shortcomings were labeled as Weaknesses. At the same time, external forces beyond the company's control were assessed and classified as Opportunities (future contexts that help achieve goals) or Threats (barriers to business success) (PUYT, LIE and WILDEROM, 2023).

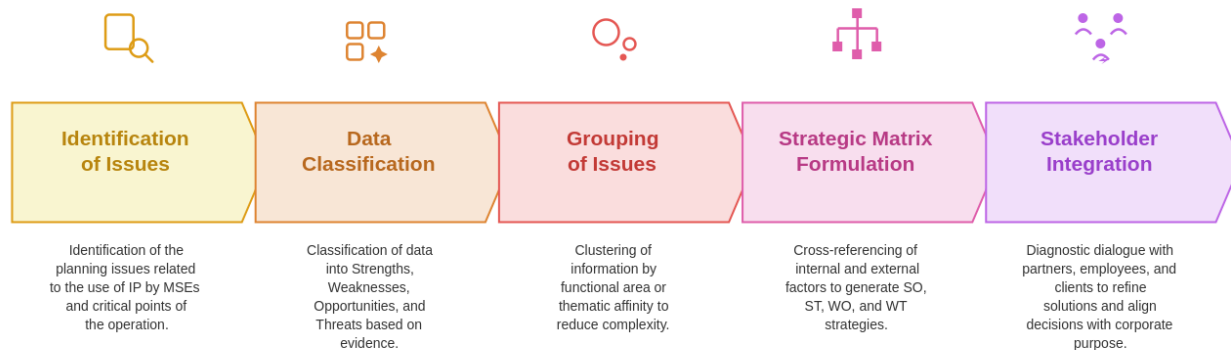
The third stage was dedicated to grouping the issues into problem clusters to reduce the complexity of the analysis. After eliminating duplicates, the information was clustered by functional area or thematic affinity, such as “registration costs,” “identity protection,” or “product innovation.” This process allowed IP management to be viewed holistically, facilitating the identification of interrelationships in which a single strategic solution could address multiple points of vulnerability or competitive advantage.

The fourth stage comprised the formulation of the Strategic Matrix, cross-referencing internal and external factors to generate actionable guidelines. Through this cross-referencing, SO strategies (using strengths to seize opportunities), ST strategies (using strengths to avoid threats), WO strategies (reducing weaknesses through new opportunities), and WT strategies (minimizing weaknesses to avoid threats) were developed. This procedure was essential to ensure that MSEs not only list factors but also convert the diagnosis into a specific action plan for their intangible assets.

The fifth stage focused on diagnostic dialogue and stakeholder integration, aiming to mitigate the subjectivity inherent to the tool. The proposed solutions were refined by analyzing the needs and expectations of the various stakeholders, such as partners, employees, and clients, ensuring that IP decisions were aligned with the corporate purpose. This final phase ensured that the SWOT

analysis was not a merely descriptive exercise, but a managerial learning process that underpins safe and transparent strategic decisions for the sustainability of the small business (GHALEB, 2024). Figure 1 illustrates all the SWOT stages described above.

Figure 1. Summary of this study's SWOT methodology.



Source: Authors (2026).

3. RESULTS AND DISCUSSION

The analysis of the results, based on the data collected and the theoretical framework of the sources (described in the Introduction), made it possible to identify the impact of IP on MSEs from the strategic perspective of the SWOT matrix. The application of this tool revealed a scenario in which, despite the recognized importance of innovation for competitiveness, the management of intangible assets still oscillates between the agility inherent to small size and severe limitations in resources and formal knowledge.

In terms of Strengths, MSEs stand out for their flexibility and quick response to market changes, facilitated by simple organizational structures and fluid communication. The direct engagement of partners in leading innovative actions emerges as a central pillar, allowing the innovation culture to permeate the organization more

organically than in large corporations. In addition, closeness to the customer acts as a relevant commercial strength, generating constant feedback that fuels incremental innovations in products and processes.

Weaknesses, on the other hand, expose the institutional vulnerability of these businesses. A critical finding reveals that approximately 83% of MSEs neglect the formal registration of their trademarks, often due to technical unfamiliarity or the mistaken perception that the process is excessively costly and bureaucratic. The scarcity of financial resources and the lack of specialized personnel to manage IP result in reactive, ad hoc innovation management, leaving valuable assets unprotected and subject to copying by competitors.

Externally, Opportunities are catalyzed by public policies and support programs, such as SEBRAETEC and the ALI Program, which offer subsidized technological extension and personalized guidance to mitigate managerial gaps. The adoption of open innovation models allows MSEs to compensate for their limited R&D (Research and Development) resources through partnerships with universities, startups, and research centers. Another promising area is sustainable innovation, which, in addition to reducing environmental impacts, acts as a competitive differentiator that adds value to the brand and attracts conscious consumers.

Threats are represented mainly by aggressive competition from large companies and the high mortality rates of new businesses in scenarios of economic instability. The absence of intellectual protection exposes the company to severe legal risks, such as the need for forced rebranding and the payment of damages for the misuse of others' trademarks, which can compromise the venture's

financial survival. In addition, institutional barriers known as the “Custo Brasil” (“Brazil Cost”) and the backlog in patent examinations by INPI (National Institute of Industrial Property) act as environmental barriers to long-term success. Frame 1 summarizes the SWOT matrix described and proposed in this study.

Frame 1: SWOT Matrix of IP Use in MSEs.

Internal Environment	Strengths	Weaknesses
	Flexibility and adaptive agility.	Low IP formalization rate.
	Engaged leadership of partners.	Limited financial and human resources
	Strong customer relationships.	Perception of bureaucracy and complexity in registration
External Environment	Opportunities	Threats
	Support programs (like SEBRAETEC/ALI)	Unequal competition with large companies
	Open innovation and external partnerships	Legal and financial risks due to lack of protection
	Differentiation via sustainable innovation	Excessive bureaucracy and slowness of the system (INPI)

Source: Authors (2026).

It should be noted that the results point to a positive correlation between innovation capacity and the commercial performance of MSEs, but this relationship is often weakened by the lack of legal protection for the assets produced. When entrepreneurs adopt a strategic stance of registering their trademarks and patents, they

create a legal “shield” that facilitates business expansion, enabling, for example, the creation of franchises and the appreciation of intangible assets.

The SWOT analysis shows that MSEs that make use of external support tools are able to convert their financial weaknesses into growth opportunities. Support from technical consulting services helps demystify IP, transforming trademark registration from a “bureaucratic cost” into an essential preventive investment. The integration of sustainable practices has also proven to be an effective way for MSEs in traditional sectors, such as apparel, to overcome informality and modernize their production processes.

However, heterogeneity among sectors is striking: the furniture and apparel industries show greater ease in developing managerial and commercial capabilities geared toward innovation, whereas the construction materials segment shows greater difficulty adapting. This disparity reinforces the need for regionalized, sector-specific public policies that not only encourage the creation of new ideas but also specifically assist in their legal appropriation and market protection.

The impact of IP use by MSEs is determinant for their sustainability. The cross-referencing of the SWOT factors suggests that the strategy for success lies in using Strengths (agility and leadership) to seize Opportunities (support programs and sustainable innovation), while neutralizing internal technical-knowledge Weaknesses to prevent market Threats from resulting in irreversible losses. Intellectual protection thus ceases to be an administrative option and becomes a strategic imperative for survival in the dynamic business ecosystem.

4. FINAL CONSIDERATIONS

The concluding remarks of this article summarize the findings on the impact of IP on MSEs, fulfilling the objective of analyzing this dynamic through the SWOT approach. The research demonstrated that, although IP is a strategic pillar for competitiveness and value creation, its management in MSEs is still marked by a strong contrast between innovative potential and operational barriers.

The analysis of the internal environment revealed that the main strengths of these companies lie in their organizational flexibility and the engaged leadership of their partners, which facilitates the dissemination of a culture of incremental innovation. However, the most critical institutional weakness is the high degree of neglect regarding asset formalization. This scenario is fueled by the perception that these processes are bureaucratic and costly, reflecting a limited view of IP as a resource restricted to large corporations.

Regarding the external environment, the study found that leveraging opportunities such as the SEBRAETEC and ALI programs is vital to mitigating the managerial and financial gaps faced by MSEs. In addition, the adoption of open innovation models and sustainable practices emerges as a relevant competitive differentiator in today's market. Conversely, the threats posed by aggressive competition and the risk of legal sanctions due to lack of protection make the financial survival of these enterprises vulnerable.

The application of the strategic SWOT matrix led to the conclusion that intellectual protection should not be regarded merely as an

administrative formality, but as an essential preventive investment. The cross-referencing of internal and external factors demonstrated that MSEs that leverage their dynamic capabilities to access external technical support are able to convert vulnerabilities into competitive market advantages.

In sum, the integration of intellectual property into business strategies is determinant for the sustainability of Brazilian small businesses. To strengthen the entrepreneurial ecosystem, the evidence points to the need for public policies that not only foster innovation but also simplify the legal appropriation of these rights. Only through the strategic management of intangible assets will MSEs be able to ensure their longevity and effective contribution to the country's economic and regional development.

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