

# FROM TRADITION TO TRANSITION: A QUALITATIVE METASYNTHESIS OF SUSTAINABILITY APPROPRIATION IN ARTISANAL CACHAÇA MICRO-DISTILLERIES

## INTRODUCTION

Artisanal cachaça, also known as *alambique* cachaça, represents a pillar of Brazilian cultural identity and an asset of notable economic prominence. Its artisanal segment, comprising thousands of family-based micro-distilleries, constitutes the fundamental economic matrix in several micro-regions of the country (IPEA, 2017). However, beyond this romantic facade, a series of pressing socio-environmental challenges manifest, notably the management of high volumes of vinasse—an effluent with high polluting potential—and the inadequate disposal of sugarcane bagasse (Pessoa et al., 2015). Although the technical literature presents a consolidated range of solutions (Nogueira & Seabra, 2016), the mere existence of a technology does not ensure its effective appropriation at the organizational level. A gap, therefore, persists in the management and organizational studies literature: the absence of a deep theoretical understanding of the managerial, institutional, and behavioral dynamics that elucidate the decision-making processes of distillery managers regarding engagement in sustainability practices. Explanations for the sector's inertia are often limited to common-sense justifications, such as "scarcity of financial resources," lacking a structured analysis that unveils the real driving forces and systemic barriers. To address this analytical gap, this article is guided by the following research question: How do cachaça micro-distilleries appropriate sustainability, considering the complex interplay between their underlying motivations, the practices effectively adopted, and the persistent forces of institutional inertia?

## THEORETICAL FOUNDATION

For this study, appropriation is defined as the process through which an organization incorporates sustainability principles into its routines and strategies (Bansal & Roth, 2000). The literature indicates that this process is marked by tensions, such as the conflict between short-term financial goals and long-term socio-environmental responsibility (Hahn et al., 2015; Smith & Lewis, 2011). Three core factors underpin the analysis: motivations, practices, and institutional inertia.

Motivations are organized into three categories. Instrumental motivations align with the *business case for sustainability*, which, although formulated in seminal works (Porter & van der Linde, 1995), remains a central driver for the pursuit of efficiency and market access. Relational and legitimacy motivations, grounded in classic Institutional Theory (DiMaggio & Powell, 1983), are updated here by contemporary discussions that analyze the role of values and ethics as drivers of compliance and the quest for legitimacy (Aguinis & Glavas, 2012). Finally, ethical and axiological motivations, stemming from an intrinsic value system, engage with the growing literature on organizational purpose and are identified as a key factor in the sustainability transition, as recent studies in the sector suggest (Martins, 2022).

Practices, in turn, are analyzed along two axes. The *nature* axis distinguishes between symbolic and substantive actions (Hahn & Lülfs, 2014). The *depth* axis assesses the degree of integration, which progresses from the operational-functional level to the regenerative level, actively seeking to generate a positive impact—a concept aligned with advanced discussions on regenerative cultures (Wahl, 2016) and already observed in pioneering practices within the sector (Neves & Andrade, 2024).

Finally, institutional inertia (Hannan & Freeman, 1984) is divided into three types: regulative, normative, and cognitive-cultural. The latter, which can lead to path dependence (Sydow et al., 2009), is frequently identified as a critical barrier in recent case studies on environmental management in family-owned distilleries (Pereira, 2022).

## METHODOLOGY

This study adopted the qualitative metasynthesis method, which aims to re-analyze and integrate the findings of primary qualitative studies to generate a new theoretical interpretation (Finfgeld, 2003). The metasynthesis model proposed by Room (2002) was applied, as this approach allows for the identification of recurring patterns across cases while respecting the particularity of each. The "argumentative synthesis" of Noblit and Hare (1988) was also employed, wherein the concepts from each study are "translated" and compared to construct a unifying argument. The selection of studies was conducted between January and March 2025 across the SciELO, Scopus, Web of Science, and the Brazilian Digital Library of Theses and Dissertations (BDTD) databases. Inclusion criteria were: qualitative case studies focusing on cachaça micro-distilleries in Brazil, published between 2000 and 2024, containing substantive data on the topic. The selection process yielded a final sample of 14 studies (5 articles, 6 master's dissertations, and 3 doctoral theses). Data analysis proceeded in two phases: an intra-case analysis to extract and organize evidence from each study into an analytical matrix, and an inter-case analysis to compare the 14 cases, identify patterns, and inductively build a typology of "ideal types" representing different appropriation trajectories.

## ANALYSIS AND DISCUSSION OF RESULTS

The inter-case analysis revealed that the appropriation of sustainability in micro-distilleries is organized around four archetypes. The **Reactive Traditionalist** is motivated by fear of regulatory enforcement, exhibiting minimal practices and strong cognitive inertia. The **Instrumental Optimizer**, the most prevalent profile, views sustainability through a purely instrumental lens, focusing on eco-efficiency. This archetype, though representing an advancement, tends to stagnate on an "eco-efficiency plateau," where the tension between tradition and innovation becomes evident (Ferreira & Gomes, 2021) and managerial perception is limited to short-term gains (Rocha, 2021).

The third archetype is the **Sustainable Niche Entrepreneur**. This profile leverages sustainability as a strategic pillar. Recent studies vividly illustrate its practices: sustainable tourism is used to induce environmental practices (Carvalho, 2023), and the adoption of regenerative agriculture in sugarcane cultivation becomes a competitive differentiator (Neves & Andrade, 2024). Finally, the **Regenerative Visionary** emerges as an aspirational archetype, aligned with contemporary concepts of regenerative cultures (Wahl, 2016).

The discussion of these findings, informed by current literature, reveals that the sustainability journey in the sector is non-linear. The primary challenge is the leap from the Optimizer to the Niche Entrepreneur. The data suggest that the catalyst for this transition is the confluence of leadership with strong ethical values and a clear market opportunity. This synergy is a central point in recent analyses of the transition in elite distilleries (Martins, 2022). This substantiates the proposition that the transition to strategic practices is catalyzed by the interplay between ethical motivations and relational pressures. Additionally, the ambivalent role of "tradition" is observed: for the Traditionalist, it is a source of inertia; for the Entrepreneur, it is re-signified as a symbolic asset. This process of strategic reframing, aligned with the concept of

institutional work (Lawrence & Suddaby, 2006), is crucial for overcoming management challenges in family firms (Pereira, 2022). Based on these insights, a theoretical model is proposed that highlights the "eco-efficiency plateau" as a point of stagnation and the synergy between values and market forces as the primary trigger for surmounting it.

## CONCLUDING REMARKS

This study originated from a theoretical gap and, through a qualitative metasynthesis, sought to unravel how sustainability is appropriated by cachaça micro-distilleries. The outcome is the construction of a middle-range theory, articulated in a four-archetype model, which explains the transition between them as a non-linear and paradoxical process. The principal theoretical contribution lies in the identification of the "eco-efficiency plateau" and the postulation that overcoming it depends on a catalytic synergy between leadership values and market opportunities. The practical implications are direct: for managers, the typology serves as a diagnostic tool; for public policymakers, the model highlights the need for differentiated support tailored to each archetype. The reliance on data from primary studies is acknowledged as a limitation. A future research agenda should include longitudinal studies, ethnographic research, and quantitative studies to test the propositions developed herein. It is hoped that this work will serve as a map for navigating the complex landscape of sustainability in the sector, contributing to a future where cachaça is celebrated not only for its flavor but also for its profound respect for people and the planet.

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