
Comparing Decision-making Strategies in Accounting Franchises and Independent Brands: A Causation and Effectuation Approach

Comparando Estratégias de Tomada de Decisão em Franquias Contábeis e Marcas Independentes: Uma Abordagem de Causation e Effectuation

Received: 05-04-2024 | Accepted: 08-05-2024 | Published: 14-05-2024

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ABSTRACT

This study examines the decision-making performance of entrepreneurs choosing between accounting franchises and independent brands through the lens of Causation and Effectuation theories. The research question addressed is: How does decision-making performance manifest when starting an accounting franchise versus an independent brand in light of Causation and Effectuation theories? This quantitative study employed a survey approach. The research population consisted of accounting enterprises—both franchises and independent brands—registered with the Brazilian Federal Accounting Council (CFC, 2023). The subjects were 718 entrepreneurs, including 312 accounting franchisees and 406 independent brand owners. The study utilized a questionnaire adapted from Chandler et al. (2011), Brettel et al. (2012), Appelhoff et al. (2015), and Neely, Gregory & Plattys (1995), with data analyzed using Structural Equation Modeling via the Partial Least Squares (PLS) approach. The findings provide crucial and practical insights for entrepreneurs who participated in the study and those facing similar decisions between launching their own brand or investing in a franchise. Both franchise and independent brand entrepreneurs can evaluate the best way to proceed by applying both the Causation and Effectuation theories.

Keywords: Decision-making process; Causation; Effectuation; Accounting Franchise; Structural equation modeling.

RESUMO

Este estudo examina o desempenho no processo decisório de empreendedores que escolhem entre franquias contábeis e marcas independentes através das lentes das teorias de Causation e Effectuation. A questão de pesquisa abordada é: Como se manifesta o desempenho decisório ao iniciar uma franquia contábil versus uma marca independente à luz das teorias de Causation e Effectuation? Este estudo quantitativo utilizou uma abordagem de pesquisa por meio de questionários. A população de pesquisa consistiu em empreendimentos contábeis—tanto franquias quanto marcas independentes—registrados no Conselho Federal de Contabilidade (CFC, 2023). Os sujeitos foram 718 empreendedores, incluindo 312 franqueados contábeis e 406 proprietários de marcas independentes. O estudo utilizou um questionário adaptado de Chandler et al. (2011), Brettel et al. (2012), Appelhoff et al. (2015) e Neely, Gregory & Plattys (1995), com dados analisados usando Modelagem de Equações Estruturais por meio da abordagem Partial Least Squares (PLS). Os resultados fornecem insights cruciais e práticos para os empreendedores que participaram do estudo e aqueles enfrentando decisões semelhantes entre lançar sua própria marca ou investir em uma franquia. Tanto empreendedores de franquias quanto de marcas independentes podem avaliar a melhor maneira de proceder aplicando as teorias de Causation e Effectuation.

Palavras-chave: Processo decisório; Causation; Effectuation; Franquia contábil; Modelagem de equações estruturais.

INTRODUCTION

In a dynamic and globalized market, both individuals and companies must be prepared to undertake substantial transformations and adaptations (Li, Su, Zhang & Mao, 2018). In this sense, governments have recognized entrepreneurship as an alternative for promoting economic and social development. The emphasis on entrepreneurship has grown significantly in recent years, significantly impacting the economic development of countries (Vuong et al., 2016).

Entrepreneurship refers to human professional efforts to transform productive and economic resources to generate profit. It involves creating new products or innovative techniques for goods and services (Peña-Ayala et al., 2020). Entrepreneurship serves as a source of profitability, driven by an entrepreneurial vision that recognizes the potential of a business – whether entirely new or improved – to address a social need, even in the face of uncertainties (Vinholis et al., 2016).

However, these studies have provided limited information regarding whether and how entrepreneurs can transition from survival to prosperity. This calls for further research into creating new opportunities through innovation and revenue-generating actions during crises (Thorgren and Williams, 2020). Taking action to create and pursue opportunities lies at the core of entrepreneurship (Björklund et al., 2020).

Unpredictability during times of crisis presents a challenge to the imagination. Resilient organizations remain open to improvisation and reorganization, equipped with

sufficient resources to withstand shocks and implement necessary changes (Mayberry et al., 2020). Along these lines, entrepreneurship literature explores various approaches to dealing with uncertainty scenarios (Olivé-Tomàs & Harmeling, 2019). As Kim and Mauborne (2014) described, some involve creating new markets. Another approach emphasizes the importance of planning and control in decision-making. Finally, the basic theories of causation and effectuation come into play. The causation perspective focuses on decisions based on prediction (Saravasthy, 2001; Jiang & Ruling, 2017), while effectuation refers to how entrepreneurs make decisions in an uncertain future (Fidelis et al., 2018).

Thus, globalization and technological advances intensify the competitive business environment, posing a significant challenge to companies' survival. Consequently, adaptation and the formulation of competitive strategies become imperative. These dynamics directly affect both franchises and independent firms within the accounting sector.

In this context, accounting organizations confront an environment of escalating competitiveness, compelling them to seek strategies that ensure survival and continuity. It is possible to assert that the bedrock of the knowledge economy lies in the professional development of specialists who focus on innovative business structures through lifelong learning. Specifically, their transversal skills play a pivotal role, enabling these specialists to facilitate the transition of enterprises into innovative organizational forms in terms of productive activities (Tolochko, Bordiug, & Knysh, 2020).

In a rapidly changing world, where business is conducted globally and through electronic commerce, future accountants face increasing demands for developing a wide range of competencies (Howieson, 2003). This research focuses on the decision-making process of accounting entrepreneurs when deciding to start either an accounting franchise or an independent accounting firm, all within the context of causation and effectuation theories. The central research question guiding this study is as follows: How does the decision-making process differ when starting a new accounting franchise versus an independent firm, considering the perspectives of causation and effectuation? And what is the relationship between the chosen approach and the new company's performance?

Therefore, the general objective of this study is to analyze the decision-making process of entrepreneurs when starting an accounting franchise versus an independent firm, all within the context of causation and effectuation theories. The following specific objectives were outlined: (i) Compare the performance of accounting franchises versus

independent firms. This analysis will consider the causation and effectuation approaches employed during the decision-making process when launching a new enterprise; (ii) Examine how the adoption of causation or effectuation approaches influences the decision for the type of venture – whether a franchise or an independent firm; (iii) Evaluate the mediating effect of using causation or effectuation approaches in decision-making. Specifically, explore how these approaches impact the relationship between the type of venture initiated and its subsequent performance; and (iv) Determine which type of venture – franchise or independent firm – demonstrates superior performance.

THEORETICAL FRAMEWORK

CAUSATION AND EFFECTUATION DECISION-MAKING APPROACHES

The decision-making process in organizations is a critical component of entrepreneurship, heavily influenced by theories such as causation and effectuation, which reflect different approaches to rationality and decision-making strategies under conditions of uncertainty. Simon (1979) introduced the concept of bounded rationality, noting the human limitations in processing all available information, which sets the stage for understanding how decisions are formulated within organizational contexts. According to Bass et al. (1983), decision-making begins with the recognition of a discrepancy between the current state and desired outcomes, emphasizing an orderly process, while Kuckerstz (2011) highlights its pivotal role in entrepreneurial success. This structured approach contrasts sharply with the environments new ventures operate within, which are marked by uncertainty and a constant lack of information, necessitating a flexible approach to decision-making (Saloua et al., 2023).

In the realm of investment and entrepreneurship, decision-making is often seen as a challenge laden with high stakes, where top managers and shareholders must weigh the costs against potential benefits, particularly at the nascent stages of business development (Merida & Rocha, 2021). Frishammar (2003) question the adequacy of organizational knowledge and data in making informed decisions, especially under extraordinary circumstances lacking in technological support or prior experience, which may hinder effective decision-making. In response, Parra et al. (2023) suggest the use of distributed analytics and a shift towards service-oriented business models enhanced by artificial intelligence to support strategic decisions, thus emphasizing the evolving nature of organizational decision frameworks in adapting to technological advancements.

The causation approach to decision-making, as defined by Sarasvathy (2001), underscores a methodical and predictable process where entrepreneurs utilize existing resources and knowledge to make informed decisions aimed at achieving specific, pre-determined goals (Chandler et al., 2011; Zivdar et al., 2017). This approach is well-suited for environments where future outcomes can be anticipated and planning plays a crucial role in mitigating uncertainty (Welter & Kim, 2018; Jiang & Ruçing, 2017). Conversely, the effectuation approach, also pioneered by Sarasvathy (2001), offers a dynamic alternative that thrives on flexibility, leveraging emergent opportunities and affordable losses to navigate the unpredictable nature of new ventures. This method allows entrepreneurs to start with available means and co-create goals through interactions, adapting their strategies as new information and opportunities arise (Olivé-Tomàs & Harmeling, 2019; Galkina & Lundgren-Henriksson, 2017).

These contrasting approaches—causation with its structured predictability and effectuation with its adaptive pragmatism—reveal a spectrum of strategies that entrepreneurs can deploy depending on the degree of uncertainty and their operational context. This synthesis of decision-making theories not only advances academic understanding but also offers practical frameworks for entrepreneurs to navigate complex environments effectively. As businesses continue to evolve, the integration of these theories with technological tools promises to enhance decision-making processes, making them more responsive to the challenges of modern enterprise (Sarasvathy, 2001; Read & Sarasvathy, 2005).

The effectuation process, as an entrepreneurial decision-making logic, thrives in uncertainty, enabling entrepreneurs to adapt and evolve their goals using available resources and opportunities. This dynamic approach, detailed by Sarasvathy (2001; 2008), suggests that entrepreneurs view their ventures as projects that can shape and redefine markets and opportunities. Unlike fixed trajectories, they navigate through a process of constant adjustment and opportunity leverage, making the effectuation logic particularly suitable across all types of enterprises, as it emphasizes flexibility and the ability to respond to unforeseen challenges (Sarasvathy & Dew, 2005; Scaziotta et al., 2020). This theoretical framework contrasts with causation, which is more structured and prediction-based, highlighting a fundamental dichotomy in entrepreneurial strategies.

Chandler et al. (2011) advanced this discourse by developing and validating measures that distinctly capture the nuances of causation and effectuation. Their work illustrates causation as a unidimensional construct focused on well-defined processes,

whereas effectuation is identified as a formative construct with multiple dimensions such as experimentation, affordable loss, and flexibility, intertwined with pre-commitments found also in causation. This foundational study not only enriched the academic understanding but also provided tools for empirical investigation, showing that while causation thrives in predictability, effectuation is more aligned with navigating uncertainty.

In the realm of research and development, Brettel et al. (2012) extended the application of effectuation to include specific scales that capture its essence within R&D projects, differentiating it from conventional causation strategies. This adaptation reflects the broader applicability of effectuation beyond startups to more structured corporate settings, offering insights into its effectiveness in fostering innovation within established parameters. Furthermore, Appelhoff et al. (2015) explored the impact of decision-making styles on the dynamics between entrepreneurs and investors, discovering that effectuation might influence perceptions of task conflict, thereby deepening our understanding of how entrepreneurial choices affect stakeholder relationships.

These studies collectively advance our understanding of how entrepreneurial decision-making can vary from rigid adherence to predictive models to more adaptive and emergent strategies, depending on context and need. The literature now suggests that causation and effectuation are not mutually exclusive but are part of a continuum where entrepreneurs might employ both depending on situational demands (Da Rocha et al., 2017; Grégoire & Cherchem, 2020). This nuanced view encourages a more flexible application of decision-making theories, recognizing that in the real world, entrepreneurs often blend these approaches to navigate the complex landscape of business creation and development.

STARTING A NEW VENTURE: ACCOUNTING FRANCHISES AND INDEPENDENT ACCOUNTING FIRMS

Entrepreneurship plays a pivotal role in driving global economic growth, with businesses varying in structure from sole proprietorships to corporations, each with distinct legal and operational frameworks (Bar-Yosef, D'Augusta, & Prencipe, 2019). This structural variety impacts corporate governance and decision-making processes, which are crucial for enhancing organizational performance. Entrepreneurs, characterized by their initiative and risk-taking capabilities, are central to this dynamic, continually adapting to changing markets and leveraging new opportunities to establish and grow

their enterprises (Hisrich et al., 2014). As technology advances, accounting professionals face both disruptive challenges and opportunities, necessitating adaptability in skills and roles to remain relevant and effective (Kroon, Alves, & Martins, 2021).

The interplay between entrepreneurship and accounting is particularly evident as entrepreneurs increasingly rely on sophisticated accounting services to navigate the complexities of economic globalization. The challenges faced by small and medium-sized enterprises (SMEs), such as intense competition and a high rate of early closures, underscore the importance of robust and transparent decision-making processes to ensure survival and growth (Naradda et al., 2020). In Brazil, where the accounting profession is well-regulated, professionals aspiring to establish their own firms must navigate extensive legal and procedural requirements to ensure compliance and profitability (Brazilian Federal Accounting Council, 1983).

Furthermore, the evolving role of management accountants reflects a shift towards more strategic responsibilities, moving from traditional reporting to proactive organizational performance assessment and decision support (Appelbaum et al., 2017). This shift is facilitated by technological advancements that not only improve the efficiency and accuracy of accounting practices but also enhance the strategic decision-making capabilities of firms (Dahlia & Aman, 2018). These advancements enable accountants to adapt their roles and contribute more significantly to business strategy and long-term planning.

In the context of franchising, a well-established business model offers entrepreneurs a less risky path to market entry, benefiting from established brand recognition and operational know-how (Croonen & Brand, 2015). Franchising not only facilitates rapid business expansion but also promotes economic development by creating jobs and fostering global integration, particularly in emerging markets like Brazil (Alon, 2014). The success of franchising depends on a collaborative relationship between franchisors and franchisees, who must align their unique capabilities with the franchisor's model to optimize financial performance and sustain growth (Wu, 2015; Hanafiah et al., 2023).

Hypothesis 1 was developed based on the literature review of causation and effectuation in decision-making processes. It considers the options analyzed in this research, specifically the choice between starting an accounting franchise and establishing an independent accounting firm. The study will subject the hypothesis to empirical non-parametric tests to identify the relationship between decision-making using

the causation approach and the decision to start a new accounting franchise. Hypothesis 1 is:

H1: The causation decision-making approach is more likely to result in starting a franchise.

The decision-making process using the effectuation approach is expected to more frequently result in the choice to start an independent venture company. Hypothesis 2 was formulated based on this reasoning:

H2: The effectuation decision-making approach is more likely to result in starting an independent company.

The hypotheses H3 and H4 refer to the types of ventures and their performance. They will be discussed in the following subsection.

PERFORMANCE OF THE ACCOUNTING FRANCHISES AND INDEPENDENT ACCOUNTING FIRMS

The discourse on performance measurement in business and franchising intricately connects traditional views with contemporary applications, underscoring its multifaceted roles in enhancing organizational effectiveness, controlling processes, and facilitating inter-organizational comparisons (Teague & Eilon, 1973). Neely, Gregory, and Plattys (2005) highlight the complex relationship between measurement, quantification, action, and performance, framing performance measurement as a fundamental process that quantifies actionable insights into meaningful data that drive performance. In the specific context of franchising, the theory extends to embody the dual roles of franchisors and franchisees, where the franchisors distribute opportunities across diverse locations while franchisees localize these opportunities to optimize performance, suggesting a dynamic interplay of strategic management and localized execution that is crucial for franchising success (William, Gillis, & Xiaoli, 2020).

Further studies such as those by Brand et al. (2017) delve into the nuances of measuring performance in franchised units, highlighting the importance of non-financial indicators alongside traditional financial metrics to gauge comprehensive franchise performance. The research recognizes that structural, resource, and relational dynamics between franchisors and franchisees significantly influence outcomes, presenting varying impacts across different performance tiers. This inclusion of franchise performance as a contingency variable reveals the layered complexity of franchise operations and the critical need for tailored performance strategies that consider unique franchise

characteristics. Additionally, Wu (2015) emphasizes the importance of factors like knowledge sharing, trust, and brand reputation, which are instrumental in fostering a conducive environment for franchisees, thereby enhancing their commitment and financial performance within the system.

The rigorous evaluation and control processes integral to franchising demand that franchisees not only conform to standardized performance metrics but also innovate within their operational scope (Lavieri et al., 2016). This requirement for a balanced approach to performance evaluation helps in steering franchising ventures towards achieving set goals and improving business processes. Moreover, the prevalent entrepreneurial trend towards franchising as a business model reflects its appeal due to the lower risk and established market presence it offers, especially appealing in volatile economic climates where established business models provide a safer investment compared to new ventures (Madanoglu et al., 2011).

In essence, franchising exemplifies a strategic model that encapsulates both the causation and effectuation approaches in entrepreneurial decision-making, where systematic planning and adaptability converge to optimize performance outcomes (Lee et al., 2015). This synthesis of approaches highlights the adaptive nature of franchising as a business strategy, particularly suitable for entrepreneurs seeking geographical expansion and market penetration with minimized risk. The ongoing evolution of performance measurement practices, from traditional financial assessments to more integrated, multi-dimensional evaluations, reflects a broader trend towards more strategic, informed, and responsive business management practices that cater to the diverse needs of modern enterprises (Neely et al., 1995; Sarasvathy, 2001). These developments underscore the necessity for ongoing research to refine and adapt performance measurement systems to better suit the dynamic needs of businesses operating in an increasingly complex and competitive global market.

Thus, Hypothesis 3 emerges from this theoretical perspective:

H3: The causation approach has a mediating effect on the relationship between the type of venture created and its performance.

The recent COVID-19 pandemic impacted businesses, including accounting ventures. The unpredicted circumstances led to widespread efforts to redesign business models to maintain financial sustainability. This event emphasizes the elements of the effectuation theory, which leads to Hypothesis 4 regarding a mediating effect in the relationship between the type of accounting venture and performance.

H4: The effectuation approach has a mediating effect on the relationship between the type of venture created and its performance.

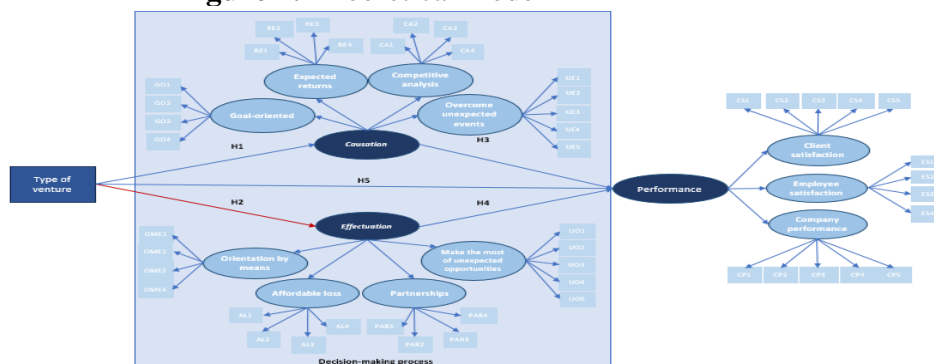
Therefore, it is reasonable to assume that the types of ventures initiated as a result of decision-making processes rooted in causation or effectuation exhibit different performance levels. Franchises, which typically emerge from processes aligned with the causation approach, demonstrate superior performance. Based on this, Hypothesis 5 can be stated as follows:

H5: The types of ventures present different performance levels, with franchises showing higher performance compared to independent companies.

The section below presents the methodological procedures adopted to test the hypotheses that emerged from the theoretical discussion.

Figure 1 illustrates the hypotheses of this study, offering the complete theoretical model to be tested. The hypotheses were tested by adjusting the model based on inputs obtained in the literature.

Figure 1: Theoretical model



Source: Research data

METHODOLOGY

Quantitative research often involves testing hypotheses (Morgan, 2015), and the themes addressed extend beyond purely descriptive or categorical aspects (Morse, 2008). From a quantitative perspective, purely descriptive themes closely relate to isolated variables, specifying measurable content (Morgan, 2015).

PRE-TEST, POPULATION, SAMPLE, AND SURVEY

In early 2023, a pre-test involving managers and owners from six accounting firms—three franchises and three independent—was conducted to refine a survey instrument aimed at evaluating decision-making processes within these enterprises. The pre-test, carried out in February, scrutinized the clarity and potential misinterpretations

of the survey questions, leading to adjustments based on feedback (Howard, 2019). This meticulous validation ensured that the final questionnaire, administered from May to July 2023, accurately captured the nuances of decision-making in these settings. The study targeted a diverse pool of accounting businesses registered with the Brazilian Federal Accounting Council (CFC, 2023), drawing participants through an online survey distributed via the CFC's academic research webpage and additional outreach through emails and social media by the Union of Accounting Offices of Pará (SESCON).

The comprehensive data collection reached 718 managing owners—312 from accounting franchises and 406 from independent firms—adequately meeting the sample size requirements for robust multigroup analysis as suggested by Kock and Hadaya (2018). The structured questionnaire was designed to delve into the decision-making processes characterized by causation and effectuation logic (adapted from Appelhoff et al., 2015) and organizational performance (adapted from Neely, Gregory, & Plattys, 1995), employing a 7-point Likert scale to measure agreement levels. This approach facilitated a detailed examination of the strategic orientations that influence operational efficiencies in franchised versus independent accounting operations, providing insights into the distinct managerial perspectives within the accounting sector.

DATA ANALYSIS AND DISCUSSION

The data set comprised 61 variables, of which 13 were intended to characterize the subjects, while the remaining 48 were associated with 11 first-order constructs (goal-oriented, expected returns, competitive analysis, overcoming unexpected events, orientation by means, affordable loss, partnerships, make the most of unexpected opportunities, client satisfaction, employee satisfaction, and company performance). Additionally, there were 3 second-order constructs (causation, effectuation, and performance). The research counted 718 respondents, of which 406 were managing owners of independent accounting companies, and 313 were managing owners of accounting franchises.

The data was analyzed using partial least squares structural equation modeling (PLS-SEM). As mentioned before, causation, effectuation, and performance were second-order constructs, meaning they were not directly formed by their items but rather through latent variables (indicators). The Two-Stage approach was adopted to deal with this characteristic of the measurement structure. This approach uses the scores of the first-order constructs as items of the second-order construct (Hair et al., 2021). Therefore, first,

the scores of the first-order latent variables were calculated using factor analysis, and subsequently, the structural equation model was adjusted.

The analysis addressed reliability, dimensionality, and convergent validity to assess the quality and validity of the first-order constructs. In the assessment of the constructs' reliability, two metrics widely recognized in the literature were applied: Cronbach's alpha (CA) and composite reliability (CR), as proposed by Chin et al. (1998). As highlighted by Tenenhaus et al. (2005), both CA and CR must present values above 0.70 to indicate satisfactory reliability of the construct.

The dimensionality of the constructs was assessed using Kaiser's criterion (1958). This criterion determines the number of factors to be maintained in the exploratory factor analysis, which, in turn, indicates the number of dimensions of the construct. In assessing convergent validity, the average variance extracted (AVE) criterion was applied, as proposed by Fornell and Larcker (1981). AVE represents the average proportion of shared variance between the latent construct and its items. Henseler et al. (2009) recommend AVE values greater than 50% to ensure convergent validity.

When using the factorial solution, evaluating its adequacy to the research data is essential. For this purpose, the Kaiser-Meyer-Olkin (KMO) sample adequacy measure was used. The measure indicates the proportion of variance shared between the variables and ranges from 0.0 to 1.0. The closer the KMO value is to 1.0 (unit), the more appropriate the sample will be for applying exploratory factor analysis. In general, it is adequate to conduct exploratory factor analysis when the KMO value exceeds 0.50.

To verify the validity of the measurement model, which evaluates the ability of the indicators of each construct to represent their respective concept accurately, reliability, dimensionality, and convergent validity were evaluated again, in addition to discriminant validity.

The Bootstrap method also played an important role in calculating the confidence intervals of the measurement model weights and the structural model coefficients. Thus, it was possible to assess the variability of the estimated parameters, thereby validating the stability of the results obtained (Hair et al., 2021).

The structural model's adjustment quality was evaluated using the R² coefficient and goodness of fit (GoF) statistics, as proposed by Tenenhaus et al. (2004). Path modeling was used to verify the mediating role of the causation and effectuation approach in the relationship between the type of venture resulting from the decision-making process

and the performance of the created enterprise, based on the methodology proposed by Baron and Kenny (1986).

Spearman correlation was used to compare the indicators extracted from the model with the ordinal variables, whereas the Mann-Whitney and Kruskal-Wallis tests were used to compare indicators with categorical variables (Hollander, Wolfe, & Chicken, 2013). Multiple comparisons of the Kruskal-Wallis test were made using the Mann-Whitney test with Holm correction (Holm, 1979). The analyses were performed in R, version 4.3.1 (R Core Team, 2023).

DESCRIPTIVE ANALYSIS CHARACTERIZATION VARIABLES

Below is a descriptive analysis of the respondent's characterization variables:

35.10% of respondents were between 35 and 40 years old. Regarding gender, 50.28% were female, and 38.30% were male. Furthermore, 53.48% were married, and 95.26% had higher education. 98.75% of all respondents stated they were entrepreneurs, and 56.55% of all respondents stated they started their independent firm. Among the 98.75% who identified as entrepreneurs, 57.24% were sole owners. 13.37% of respondents were from the Brazilian state of Pará, and 38.86% had 6 to 10 years of experience in accounting. 67.55% of respondents had 1 to 5 employees, and 51.53% had an average investment of BRL 31,000.00 to BRL 40,000.00. Furthermore, 84.76% stated they had only one company, and 50.14% had a gross monthly revenue of BRL 41,000.00 to BRL 50,000.00.

CONSTRUCT VARIABLES

In the constructs goal-oriented, expected returns, competitive analysis, overcoming unexpected events, orientation by means, partnerships, make the most of unexpected opportunities, client satisfaction, employee satisfaction, and company performance, individuals tended to agree with all items. In the construct affordable loss, individuals neither agree nor disagree with items AL3 (“We carefully considered the potential risk for the creation of the company”) and AL4 (“Investment decisions were based mainly on potential risks of losses”) and disagree with items AL1 (“Considerations about potential losses were decisive for the company”) and AL2 (“The selection of options for our company was based mainly on minimizing risks and costs”).

Respondents tended to agree more with the items of the construct performance, where the average ranged from 6.01 to 6.67. For the items of the causation and effectuation constructs, the lowest and highest means were 4.83 and 5.00, and 3.79 and 5.09, respectively.

FACTOR ANALYSIS

In the factor analysis carried out for the first-order constructs, all items presented adequate factor loadings with values greater than 0.70. In their validation, the values of Cronbach's alpha, composite reliability, number of factors, AVE, and KMO were satisfactory, demonstrating the reliability, unidimensionality, convergent validation, and adequacy of the factor analysis adjustment.

STRUCTURAL EQUATION MODELING (SEM)

MEASUREMENT MODEL (OUTER MODEL)

In the measurement model, all items presented adequate factor loadings with values greater than 0.70. Furthermore, bootstrap confidence intervals (CI – 95%) showed that all weights were significant, thus highlighting the importance of all items for forming indicators to represent the constructs.

All constructs reached the required levels of reliability, given that the CA or CR indices were greater than 0.70. According to Kaiser's criterion, all constructs were unidimensional. The AVE values were greater than 0.50 in all constructs, thus demonstrating their convergent validation. According to the criteria of Fornell and Larcker (1981), there was discriminant validation in all constructs, given that the maximum shared variance was lower than their respective AVEs.

In the measurement model, all items presented adequate factor loadings with values greater than 0.70. Furthermore, through the bootstrap confidence intervals, it was possible to verify that all weights were significant, thus highlighting the importance of all items for forming the indicators. In their validation, the values of Cronbach's alpha, composite reliability, number of factors, AVE, and VCM were satisfactory, demonstrating reliability, unidimensionality, convergent validation, and discriminant validity.

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(1981) criteria, all constructs had discriminant validation, given that the maximum shared variance was lower than their respective AVEs.

STRUCTURAL MODEL (INNER MODEL)

Table 1: Structural model

| Endogenous | Exogenous | B | SE(β) ¹ | CI -95% ² | P-value | R ² |
|--------------|--------------------------------|--------|--------------------|----------------------|--------------|----------------|
| Causation | Type = Franchise / Independent | 0.947 | 0.012 | [0.93; 0.96] | <0.001 | 89.62% |
| Effectuation | Type = Franchise / Independent | -0.913 | 0.015 | [-0.93; -0.89] | <0.001 | 83.30% |
| | Type = Franchise / Independent | 0.325 | 0.093 | [-0.12; 0.73] | 0.001 | |
| Performance | Causation | 0.831 | 0.074 | [0.57; 1.09] | <0.001 | 58.97% |
| | Effectuation | 0.461 | 0.059 | [0.02; 0.79] | <0.001 | |

Source: Research data

Regarding causation, There was a significant difference (p-value < 0.001) in causation between the types of ventures. When the company was a franchise, causation was 0.947 [0.93; 0.96] units higher than when it was an independent firm. In other words, franchise respondents tended to rate causation higher than independent respondents, indicating that causation is more associated with franchises. The type of venture accounted for 89.62% of the variability in causation. The results suggest that the accounting franchise is more frequently associated with the causation decision-making process among the two business models studied, implying that entrepreneurs who invest in accounting franchises align with the causation theory. Welter and Kim (2018) emphasize that the theoretical foundations of the causation decision-making model are based on the predictable aspects of an uncertain future; that is, planning before execution improves human action in the face of uncertainty.

Regarding Effectuation: There was a significant difference (p-value < 0.001) in effectuation between the types of ventures. When the company was a franchise, effectuation was -0.913 [-0.93; -0.99] units lower than when it was an independent accounting firm. In other words, respondents from accounting franchises tended to rate effectuation lower than those from independent firms, indicating that effectuation is more associated with the latter. The type of venture accounted for 83.30% of the effectuation variability.

In other words, it can be said that the entrepreneur who chooses to invest in the independent type of business follows the guidelines established in the effectuation approach. In accordance with this logic, uncertainty is now seen as a resource and a process on which decision-making takes place. In association, the initial ambiguity of

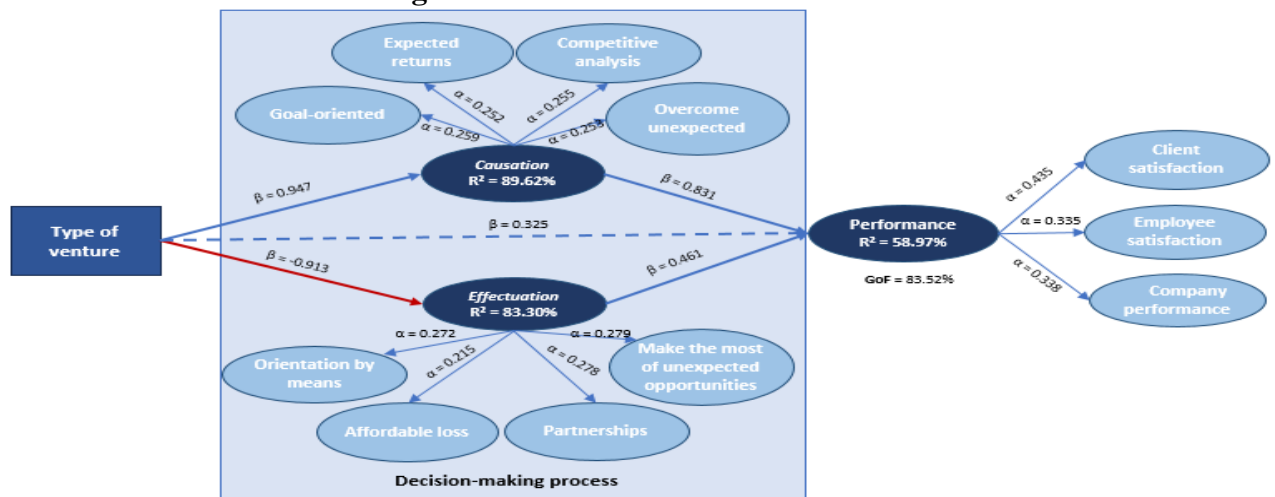
objectives is seen as a factor of creativity that generates opportunities as the entrepreneur is more open to taking advantage of the contingencies that arise during the creation of the new venture (Sarasvathy & Dew, 2005).

Regarding performance: There was a significant difference (p -value = 0.001) in performance between types of ventures when the company was a franchise. In this case, performance was 0.325 [-0.12; 0.73] units higher than when it was an independent accounting firm. However, the confidence interval for this effect was non-significant, highlighting a lack of validity in these results. The results showed that starting an accounting franchise is more profitable than running an independent firm.

It is also worth noting that the model presented a GoF of 83.52%, and the bootstrap confidence intervals were in agreement with the results found via p -value, thus demonstrating greater validity of the results presented, except for the relationship between the type of venture and performance.

Thus, an improvement in organizations' performance toward finding a balance is more likely to occur when the decision-making is structured and formalized in a detailed, consistent, and transparent manner (Zivdar et al., 2017). Figure 2 presents the study's structural model.

Figure 2: Structural model



Source: Elaborated by the authors

Although the analysis indicated a lack of validity in the relationship between the type of venture and performance (the bootstrap interval was not significant), the indirect and total effects revealed that both constructs were significant. This implies that, when observing the total effect, the performance was 0.692 [0.62; 0.78] units higher when the company was an accounting franchise compared to when it was an independent firm. Therefore, respondents from accounting franchises tended to rate performance higher

than respondents from independent companies, indicating that franchises generally have higher performance.

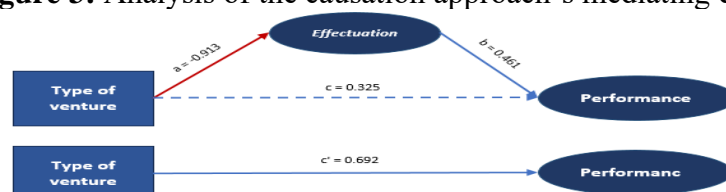
Presents the model's direct, indirect and total effects. It shows that although the analysis indicated a lack of validity in the relationship between the type of venture and performance (the bootstrap interval was not significant), the indirect and total effects revealed that both constructs were significant. This implies that, when observing the total effect, the performance was 0.692 [0.62; 0.78] units higher when the company was an accounting franchise compared to when it was an independent firm. Therefore, respondents from accounting franchises tended to rate performance higher than respondents from independent companies, indicating that franchises generally have higher performance.

MEDIATING EFFECT

There was a mediating effect of Causation and Effectuation on the relationship between the type of venture and performance according to the methodology proposed by Baron and Kenny (1986).

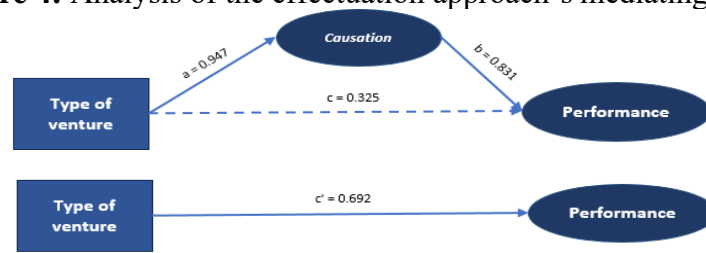
Figures 3 and 4 below present the analysis of the mediating effect of causation and effectuation in the relationship between the type of venture and performance using path modeling. Thus, there was a mediating effect of causation and effectuation in the relationship between type of venture and performance, since: (i) The type of venture significantly influenced the causation and effectuation constructs (relationship "a"). (ii) The type of venture significantly influenced the performance construct in the absence of mediating variables (relationship "c"). (iii) The mediating variables significantly and exclusively affected performance (relationship "b"). This means that even after controlling the effect of the independent variable, the mediators demonstrated a direct and statistically significant impact on performance, and (iv) The effect of type of venture on performance weakened, ceasing to be significant in the bootstrap interval, when the mediating variables were added to the model (relationship "c").

Figure 3: Analysis of the causation approach's mediating effect



Source: Elaborated by the authors

Figure 4: Analysis of the effectuation approach’s mediating effect



Source: Elaborated by the authors

DISCUSSION OF HYPOTHESES TESTS

This study confirmed structural loads across its hypotheses, indicating distinct decision-making strategies in entrepreneurship, particularly in accounting franchises versus independent firms. Hypothesis H1 was supported, demonstrating that entrepreneurs inclined towards a causation decision-making process are more likely to start accounting franchises. Jiang and Ruìng (2017) articulate that causation logic is advantageous in predictable and stable environments, where clear objectives and detailed planning precede action, thereby facilitating decision-making under certainty (Welter & Kim, 2018). In contrast, the effectuation process, as supported by H2, is favored for initiating independent firms. This approach utilizes emergent strategies that adapt to and exploit arising opportunities, with entrepreneurs focusing on controllable aspects using the resources at hand and their imagination (Galkina & Lundgren-Henriksson, 2017; Sarasvathy, 2001).

The study's findings elucidate the role of decision-making approaches in shaping the entrepreneurial journey. Entrepreneurs employing causation logic are predisposed towards franchises, which demand systematic planning and predictability. Conversely, those who adopt effectuation are more likely to succeed in the dynamic, uncertain environment of independent ventures. This dichotomy emphasizes the adaptability of effectuation in navigating the unpredictable elements of the business landscape, where strategic flexibility and resourcefulness prevail.

Furthermore, the confirmation of H3 highlights the mediating role of the causation approach in enhancing business performance, particularly when entrepreneurs opt for a franchise model. The results suggest that the type of venture not only influences the decision-making logic but also significantly impacts the enterprise's performance. The interaction between the choice of venture and its subsequent success underscores the practical implications of aligning decision-making strategies with business models, thus

providing valuable insights for potential entrepreneurs in choosing between franchising and independent operations. These insights extend the understanding of how strategic orientations in decision-making can directly influence business outcomes, reinforcing the need for tailored approaches in different entrepreneurial contexts.

The study's analysis of hypotheses H3, H4, and H5 revealed significant insights into the decision-making strategies of entrepreneurs, particularly when examining the mediating effects of causation and effectuation approaches and their impact on venture performance. The results confirmed a distinct performance differential between accounting franchises and independent firms, with franchises consistently outperforming the latter. This outcome not only fulfilled the specific objectives of comparing performance across different business models but also highlighted which venture type—franchise or independent firm—yields superior results within the frameworks of causation and effectuation decision-making processes.

Furthermore, the findings challenge the notion that causation and effectuation are mutually exclusive, proposing instead that they can coexist or be employed simultaneously, adapting to the entrepreneur's context and choices (Harms & Holger, 2012). The prevalent use of causation strategies in higher-performing franchises underscores this approach's relevance in structured and predictable environments where detailed planning enhances performance outcomes (Zivdar et al., 2017). These insights extend the understanding of entrepreneurial decision-making, suggesting that while no single model fits all scenarios, the strategic selection of causation or effectuation can significantly influence the success of new ventures. Thus, the study not only supports Sarasvathy's (2001) theory but also enriches the discourse on entrepreneurial strategies in varying contexts.

CONCLUSION

This study critically examines the decision-making processes underpinning the establishment of accounting franchises versus independent accounting firms, drawing on Sarasvathy's (2001) theories of causation and effectuation. By integrating these conceptual frameworks, the research juxtaposes the structured, predictable approach of causation with the adaptive, opportunistic strategies of effectuation, exploring their impacts on business performance. This comparative analysis addresses whether the decision-making styles of accounting entrepreneurs align more closely with the establishment of franchises or independent firms and how these choices correlate with the

enterprises' operational success. The research methodology included structured questionnaires completed by 718 accounting entrepreneurs across Brazil, analyzed through descriptive statistics, factor analysis, and structural equation modeling, providing a comprehensive view of the entrepreneurial preferences and their consequences on business outcomes.

The findings reveal distinct preferences in decision-making approaches based on the type of business initiated. Entrepreneurs opting for franchises tend to favor the causation approach, indicative of a preference for structured planning and predictable outcomes. Conversely, those starting independent firms are more inclined towards effectuation, suggesting a propensity for flexibility and adaptability in less predictable environments. The study confirmed all five hypotheses, with significant implications for understanding the mediating effects of these decision-making approaches on the relationship between business type and performance. Notably, franchises demonstrated superior performance compared to independent firms, underscoring the potential benefits of a causation approach in franchised ventures.

The research contributes to the broader discourse on entrepreneurship by highlighting how specific decision-making frameworks can influence the success of different business models within the accounting sector. While the findings are particularly relevant to the accounting industry, they also offer valuable insights for other sectors considering the causation and effectuation theories for entrepreneurial ventures. The study's results, while robust, are based on self-reported data, which may introduce bias and limit the generalizability of the findings. Despite these limitations, the research provides a solid foundation for future studies to explore these decision-making processes in other contexts or through longitudinal studies to minimize retrospective bias.

Future research directions could include a qualitative examination of the decision-making processes to gain deeper insights into how entrepreneurs navigate the complexities of starting new ventures. Additionally, applying the causation and effectuation theories to other business sectors or through longitudinal approaches could provide a broader understanding of their applicability and effectiveness. This study not only enriches the existing literature on entrepreneurial decision-making but also serves as a catalyst for further scholarly exploration, potentially leading to more refined strategies that entrepreneurs can employ to enhance their chances of success in various economic landscapes.

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