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# CONNECTIONS BETWEEN ENTREPRENEURIAL BEHAVIOR, TECHNOLOGICAL DISRUPTION, AND THE INNOVATOR'S DILEMMA

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**Abstract**

Recurring technological transformations challenge the adaptability of entrepreneurs and organizations, especially in contexts marked by disruption. The literature indicates that established companies tend to face difficulties in incorporating disruptive innovations without compromising their consolidated business models, a phenomenon described as the innovator's dilemma. Studies show that entrepreneurial behavior can be decisive in overcoming these impasses. This article aims to propose a theoretical model that integrates elements of entrepreneurial behavior with the main characteristics of technological disruption, offering an analytical and practical framework to guide the overcoming of the innovator's dilemma. The study adopts a qualitative and exploratory approach, based on semi-structured interviews with entrepreneurs operating in sectors impacted by disruptive innovations. Content analysis was guided by Filion's Metamodel (vision, mental model, energy, leadership, and relationship system) and the principles of Christensen *et al.* (2015), which include lower initial performance, reduced margins, customer resistance, and the emergence of new markets. The results indicate that the intentional and articulated mobilization of the five behavioral elements proposed by Filion (1993) favors the reconfiguration of business models, the overcoming of resistance, and the exploration of emerging opportunities. The theoretical model developed constitutes the main contribution of this article by offering an integrated and operationalizable framework for

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application in disruption contexts. It is concluded that entrepreneurial behavior acts as a catalyst for strategic adaptation, continuous innovation, and value generation in unstable technological environments.

**Keywords:** entrepreneurial behavior; technological disruption; innovator's dilemma; innovation strategy; entrepreneurial leadership.

## CONEXÕES ENTRE O COMPORTAMENTO EMPREENDEDOR, DISRUPÇÃO TECNOLÓGICA E O DILEMA DO INOVADOR

**Resumo**

Transformações tecnológicas recorrentes desafiam a capacidade de adaptação de empreendedores e organizações, especialmente em contextos marcados por disrupção. A literatura aponta que empresas estabelecidas tendem a enfrentar dificuldades para incorporar inovações disruptivas sem comprometer seus modelos de negócio consolidados, fenômeno descrito como o dilema do inovador. Estudos mostram que o comportamento empreendedor pode ser decisivo para superar esses impasses. Este artigo tem como objetivo propor um modelo teórico que integra elementos do comportamento empreendedor às principais características da disrupção tecnológica, oferecendo uma estrutura analítica e prática para orientar a superação do dilema do inovador. O estudo adota uma abordagem qualitativa e exploratória, com base em entrevistas semiestruturadas com empreendedores atuantes em setores impactados por inovações disruptivas. A análise de conteúdo foi guiada pelo Metamodelo de Filion (visão, modelo mental, energia, liderança e sistema de relações) e pelos fundamentos de Christensen *et al.* (2015), que incluem desempenho inicial inferior, margens reduzidas, resistência de clientes e surgimento de novos mercados. Os resultados indicam que a mobilização intencional e articulada dos cinco elementos comportamentais propostos por Filion (1993) favorece a reconfiguração de modelos de negócio, a superação de resistências e a exploração de oportunidades emergentes. O modelo teórico desenvolvido constitui a principal contribuição deste artigo, ao oferecer um referencial integrado e operacionalizável para aplicação em contextos de disrupção. Conclui-se que o comportamento empreendedor atua como catalisador da adaptação estratégica, da inovação contínua e da geração de valor em ambientes tecnológicos instáveis.



**Palavras-chave:** comportamento empreendedor; disrupção tecnológica; dilema do inovador; estratégia de inovação; liderança empreendedora.

## CONEXIONES ENTRE EL COMPORTAMIENTO EMPRENDEDOR, LA DISRUPCIÓN TECNOLÓGICA Y EL DILEMA DEL INNOVADOR

**Resumen**

Las transformaciones tecnológicas recurrentes desafían la capacidad de adaptación de emprendedores y organizaciones, especialmente en contextos marcados por la disrupción. La literatura señala que las empresas establecidas tienden a enfrentar dificultades para incorporar innovaciones disruptivas sin comprometer sus modelos de negocio consolidados, fenómeno descrito como el dilema del innovador. Los estudios muestran que el comportamiento emprendedor puede ser decisivo para superar estos impases. Este artículo tiene como objetivo proponer un modelo teórico que integre elementos del comportamiento emprendedor con las principales características de la disrupción tecnológica, ofreciendo una estructura analítica y práctica para orientar la superación del dilema del innovador. El estudio adopta un enfoque cualitativo y exploratorio, basado en entrevistas semiestructuradas con emprendedores que actúan en sectores impactados por innovaciones disruptivas. El análisis de contenido fue guiado por el Metamodelo de Filion (visión, modelo mental, energía, liderazgo y sistema de relaciones) y por los fundamentos de Christensen *et al.* (2015), que incluyen rendimiento inicial inferior, márgenes reducidos, resistencia de los clientes y surgimiento de nuevos mercados. Los resultados indican que la movilización intencional y articulada de los cinco elementos conductuales propuestos por Filion (1993) favorece la reconfiguración de modelos de negocio, la superación de resistencias y la exploración de oportunidades emergentes. El modelo teórico desarrollado constituye la principal contribución de este artículo al ofrecer un marco de referencia integrado y operable para su aplicación en contextos de disrupción. Se concluye que el comportamiento emprendedor actúa como catalizador de la adaptación estratégica, de la innovación continua y de la generación de valor en entornos tecnológicos inestables.

**Palabras clave:** comportamiento emprendedor; disrupción tecnológica; dilema del innovador; estrategia de innovación; liderazgo emprendedor.

## 1 INTRODUCTION

The contemporary business environment is characterized by rapid and continuous technological transformations. To remain competitive, companies and entrepreneurs must constantly adapt their strategies (Farida; Setiawan, 2022). Technological disruption, widely discussed in the literature, refers to innovations that not only improve existing technologies but also introduce new dimensions of value, often replacing established solutions (Christensen, 1997; Bower; Christensen, 1995; Morone, 1993; Christensen *et al.*, 2015, 2018; Si; Chen, 2020). This phenomenon presents significant challenges, especially for established companies, which face the so-called innovator's dilemma: the difficulty of adopting disruptive technologies due to the fear of compromising their dominant business models (Christensen, 1997).

Iconic cases illustrate the effects of this dilemma. Kodak failed to keep up with the transition to digital photography (Lucas Jr.; Goh, 2009); Blockbuster was overtaken by Netflix's streaming service (Keating, 2012); and Nokia lost market share due to the rapid innovation driven by Apple and Samsung (Vuori; Huy, 2016). These examples demonstrate how established organizations can fail to respond adequately to disruptive changes.



In this context, entrepreneurial behavior—understood as the set of actions, attitudes, and competencies mobilized by individuals to identify, explore, and transform opportunities into organizational realities, becomes a central factor for strategic adaptation. This concept goes beyond the creation of new businesses, encompassing the ability to innovate, respond to change, and drive transformation in uncertain environments. Studies such as those by Filion (1998), Renko *et al.* (2015), and Hensellek *et al.* (2023) indicate that characteristics such as vision, leadership, flexibility, and a willingness to take calculated risks are fundamental to operating in transforming environments (McClelland, 1971; Filion, 1998). These competencies enable the identification of emerging opportunities, agile action in the face of uncertainty, and the implementation of strategic change.

This article investigates the interrelationship between technological disruption, entrepreneurial behavior, and the overcoming of the innovator's dilemma. The main objective is to identify the most effective behaviors and strategies for dealing with disruptive transformations. The relevance of the study lies in the scarcity of research that integrates these three concepts and the need to provide practical guidance to entrepreneurs and managers operating in volatile markets.

To this end, a comprehensive theoretical review of technological disruption and entrepreneurial behavior was conducted, complemented by semi-structured interviews with

entrepreneurs active in sectors affected by disruptive changes. Data analysis resulted in the formulation of a theoretical model that links behavioral elements to key characteristics of disruption, such as resistance from established customers, reduced initial margins, and the emergence of new markets.

The main contribution of this study is the proposition of an integrated theoretical model that empirically expresses the articulation between entrepreneurial behavior and technological disruption. By structuring this relationship, the model provides a conceptual and practical foundation for guiding strategic actions in environments marked by uncertainty and transformation. In addition to its theoretical contribution, the study has high applicability, offering tools that can be used to foster innovation, resilience, and continuous adaptation in different organizational contexts.

## 2 THEORETICAL FRAMEWORK



This theoretical framework supports the analysis of how entrepreneurial behavior interacts with technological disruption and the innovator's dilemma. The chapter is structured into three complementary sections: the first presents the core characteristics of disruptive innovations and their implications for organizational strategy; the second examines the behavioral foundations of entrepreneurship, based on Filion's (1998) metamodel; and the third analyzes the innovator's dilemma, emphasizing the need for entrepreneurial responses to navigate its challenges.

### 2.1 CHARACTERISTICS OF TECHNOLOGICAL DISRUPTION AND ENTREPRENEURIAL RESPONSES

The theory of disruptive innovation, proposed by Christensen (1997), is a foundational reference in innovation studies and has significantly influenced business practices and organizational paradigms (Christensen *et al.*, 2018; Si; Chen, 2020). The literature distinguishes between sustaining technologies, which drive incremental improvements, and disruptive technologies, which introduce new value logics and destabilize established solutions (Christensen, 1997; Bower; Christensen, 1995; Morone, 1993).

According to Si and Chen (2020), disruption typically arises in market niches, where innovations gain traction due to advantages such as lower cost, simplicity, or accessibility. Although these technologies often exhibit inferior performance initially, they can establish new standards of value by capturing emerging markets (Danneels, 2004; Christensen, 1997).

Established companies struggle to respond to disruption because they prioritize the needs of their most profitable customers and avoid investing in innovations with low short-term returns. The uncertainty and limited scale of emerging markets further discourage early investment (Christensen, 1997; Corsi & Di Minin, 2014).

Table 1 summarizes the core characteristics of disruptive innovations: new dimensions of value, inferior initial performance, lower profit margins, focus on emerging markets, and resistance from traditional customers (Christensen, 1997).

**Table 1 -** Structural characteristics of technological disruption

| Characteristic | Description | Example |
|---|---|---|
| **New dimensions of value** | Offer unprecedented convenience, simplicity, or efficiency | Video streaming (Netflix) replacing video rentals |
| **Inferior performance** | Initially show lower technical performance | Early electric cars with limited range |
| **Lower profit margins** | Generate lower short-term revenue | Early VoIP services like Skype |
| **Emerging markets** | Create new niches and business models | Airbnb disrupting the hotel sector |
| **Resistance from profitable customers** | Preference for traditional solutions | Taxi companies versus Uber |

Source: Adapted from Christensen (1997).



Adopting disruptive technologies involves complex strategic decisions and irreversible investments, increasing the risk if outcomes fall short (Huff *et al.*, 1992; Osiyevskyy; Dewald, 2015). These shifts occur in dynamic innovation ecosystems marked by uncertainty and non-linear interactions, complicating prediction and control (Russell; Smorodinskaya, 2018). Innovation hubs, when supported by cooperation among governments, industries, and academia, can help strengthen these ecosystems (Maritan *et al.*, 2024).

Startups, unencumbered by high costs or rigid structures, tend to respond more rapidly. This agility allows them to enter new markets and challenge incumbents with leaner models (Bower; Christensen, 1995). Disruptive innovations often lead to the creation of entirely new industries — a process aligned with Schumpeter's notion of creative destruction (Wash; Kirchhoff, 2000).

Strategic adaptation to disruption is also shaped by individual behavior. Si and Chen (2020) identify five behavioral factors that influence this process: perception of disruption, inertia, mental models, prior experience, and entrepreneurial competencies. These factors guide how opportunities are interpreted and acted upon.

In this setting, the entrepreneur plays a central role. Schumpeter (1942) describes the entrepreneur as the agent who disrupts established orders through new products, services, or business models. The ability to detect weak signals, operate under uncertainty, and develop novel value propositions becomes decisive.

Uber and Airbnb exemplify this process. By identifying overlooked inefficiencies in transportation and lodging, they used digital tools to reshape their sectors, offering convenience, simplicity, and affordability. These cases highlight how entrepreneurial action, guided by vision and the willingness to challenge incumbents, drives disruption (Cusumano, 2015; Zervas *et al.*, 2017).

In summary, technological disruption challenges dominant structures and introduces new logics of value. Its typical features — limited performance, customer resistance, and market uncertainty — demand flexibility and adaptability. Entrepreneurial behavior, in this context, becomes essential for strategic adaptation and opportunity exploration. Internalizing such behaviors is key to effectively navigating disruptive environments.



## 2.2 ENTREPRENEURIAL BEHAVIOR AND FILION'S METAMODEL

Entrepreneurship is widely recognized for its transformative potential, which drives continued interest in identifying the traits that shape entrepreneurial behavior. However, the subjective nature of these traits makes them difficult to define and measure (Brandstätter, 2011; Arru, 2020).

The behavioral approach focuses on the drivers of entrepreneurial action. While economists associate entrepreneurs with innovation, scholars of human behavior emphasize creativity, intuition, and proactivity (Filion, 1998). Schumpeter (1928) was among the first to link entrepreneurship to the introduction of new productive combinations. From this view, the entrepreneur is an agent of economic change (Gartner *et al.*, 1989).

Although the economic approach has contributed to the field, its difficulty in addressing non-quantifiable variables has led to broader behavioral interpretations (Filion, 1998). These perspectives, grounded in psychology, sociology, and related disciplines, offer a more comprehensive understanding of the entrepreneurial phenomenon.

Since McClelland (1987), several authors have identified recurring entrepreneurial traits, including innovation, leadership, risk-taking, persistence, creativity, initiative, flexibility, result orientation, self-confidence, learning capacity, and contextual awareness (Honm;

Teixeira, 2011; Dornelas, 2008; Man; Lau, 2000). The absence of these competencies can hinder performance and business sustainability (Zampier; Takahash, 2011).

Armond and Nassif (2009) emphasize that entrepreneurial behavior is not defined by fixed traits but by specific ways of acting. There is no universal entrepreneurial profile (Kerr *et al.*, 2018). Instead, behavior is shaped by the environment and by the interaction between personality and context (Filion, 1998). Different personality types can be effective depending on the context (Salmony; Kanbach, 2022).

Welter (2011) reinforces that entrepreneurial behavior is influenced by historical context, personal values, and culture. This broadens the analysis by incorporating social and situational variables into the development of entrepreneurial competencies. While no definitive profile exists, research offers insights into key attributes. Rank and Strenge (2018) identify innovation, opportunity-seeking, risk-taking, and creativity as the most frequently cited traits in the literature.

Based on the behavioral approach, Filion (1998) proposes a metamodel in which the entrepreneur is someone who conceives, develops, and implements visions. The model includes three types of vision: emergent (initial idea exploration), central (definition of product and market), and complementary (managerial support activities).



In addition to vision, the model includes four other elements: mental model (worldview), energy, leadership, and relationships. These components define how entrepreneurs perceive their environment, mobilize resources, and act strategically. Table 2 summarizes these elements.

**Table 2 -** Components of entrepreneurial behavior according to Filion's Metamodel (1998)

| Element | Characteristics | Example |
|---|---|---|
| **Worldview** | Individual worldview shaped by values, attitudes, and experiences. Foundation for constructing vision. | Fashion entrepreneur guided by ethics and sustainability in brand development. |
| **Energy** | Effort and intensity directed toward entrepreneurial activities. Related to leadership and relationships. | Developer who invests long hours in creating and improving digital solutions. |
| **Leadership** | Ability to influence and inspire based on vision and energy. Determines the reach of the vision. | Startup founder who mobilizes her team around innovative strategic goals. |
| **Relationships** | Network of connections that supports and influences the entrepreneurial vision. Includes family, partners, and allies. | Investor who leverages opportunities through a strong network in the financial sector. |

Source: Adapted from Filion (1998).

The Covid-19 pandemic intensified disruption across sectors, demanding fast and creative responses from entrepreneurs. Flexibility and adaptability became critical for business continuity and transformation (Seetharaman, 2020; Kraus *et al.*, 2020).

Entrepreneurial behavior thus results from the interaction between personal traits, social environment, and market dynamics. While profiles vary, attributes such as innovation, leadership, and adaptability are consistently central. Filion's (1998) metamodel provides a useful structure for analyzing these dimensions, emphasizing the role of vision as a unifying and integrating element. By combining individual and contextual factors, the behavioral approach enhances understanding and supports the development of entrepreneurial competencies.

According to Nascimento *et al.* (2024), higher education institutions are key to promoting these competencies by aligning training with market demands and digital transformation. The vision component, as defined by Filion (1993), contributes to the formulation and internalization of effective strategies in uncertain and rapidly changing environments.

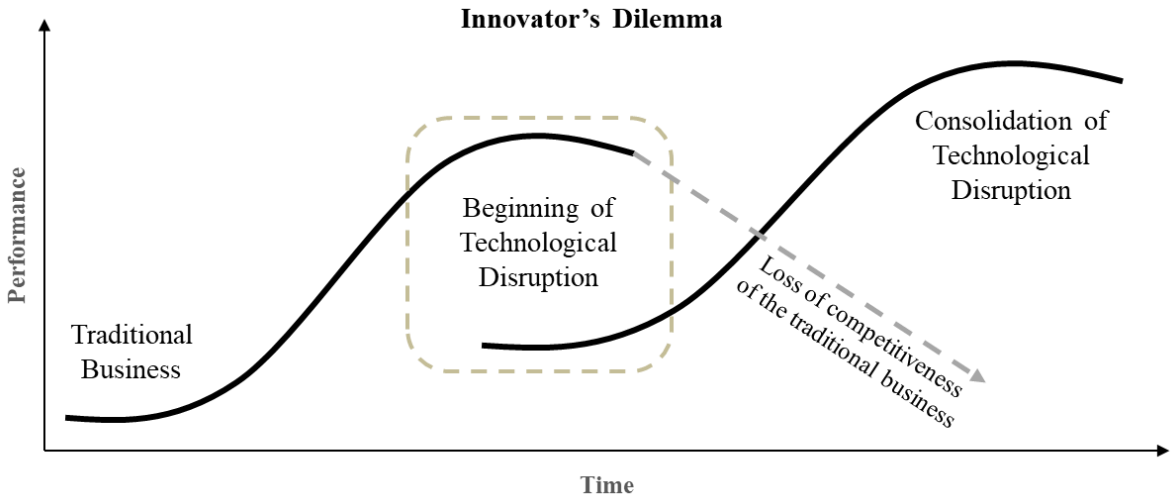


## 2.3 THE INNOVATOR'S DILEMMA AND THE NEED FOR ENTREPRENEURIAL RESPONSES

The innovator's dilemma, introduced by Christensen (1997), refers to the challenge faced by established companies when disruptive technologies threaten their existing business models. By focusing on profitability and satisfying their most profitable customers, these companies often neglect emerging innovations — even when such innovations offer long-term potential.

Figure 1 illustrates this dilemma: a tension between customer-driven demand for incremental improvements and the emergence of disruptive technologies with initially lower performance but transformative potential.

**Figure 1 -** Representation of the Innovator's Dilemma




Source: Authors (2025).



When confronted with disruption, companies face two options: continue investing in sustaining technologies with predictable returns, or explore emerging markets with uncertain prospects and lower margins (Bower; Christensen, 1995; Christensen *et al.*, 2015, 2018; Christensen; Raynor, 2003). The latter, while potentially strategic, is often avoided due to its limited short-term profitability.

This resistance stems from a strong focus on current customer demands. Well-managed firms prioritize resource allocation to initiatives with clear demand and measurable outcomes, which discourages experimentation in uncertain markets (Christensen, 1997). This efficiency-driven logic can inhibit innovation and strategic agility (Bower; Christensen, 1995).

Emerging markets also pose additional challenges: scarce data on demand, size, and acceptance makes risk evaluation difficult, reducing incentives for early investment (Christensen; Raynor, 2003). As Utterback and Acee (2005) note, disruptive entrants often originate from peripheral sectors or alternative technological paradigms, such as massive parallelism in computing. These newcomers introduce overlooked value propositions and can ultimately reshape entire markets, highlighting the need for strategic vigilance and reconfiguration capacity.

Wash and Kirchhoff (2000) argue that companies dominant in existing technologies often struggle to adopt new paradigms. Their dependence on legacy capabilities becomes a liability in disruption scenarios, increasing vulnerability to emerging competitors. Even with resources, market insight, and structured teams, many organizations fail to adapt. A persistent

attachment to current models and resistance to change frequently block the adoption of disruptive innovations (Christensen, 1997). Overcoming the dilemma demands strategic rethinking and a willingness to cannibalize parts of the existing business.

Christensen (1997) proposes that companies should actively replace their own products with superior alternatives, even at the cost of short-term profit. Survival depends on anticipating shifts and abandoning outdated models before competitors do. Iterative, low-cost experimentation, both in product and market development, is essential. Such experimentation produces actionable insights, especially in underdeveloped markets where projections are unreliable.

The innovator's dilemma encapsulates the strategic tensions organizations face during technological disruption. Addressing it requires not only structural adjustments but also a behavioral shift. The next section outlines the methodology used to investigate how entrepreneurial behavior contributes to overcoming this challenge.

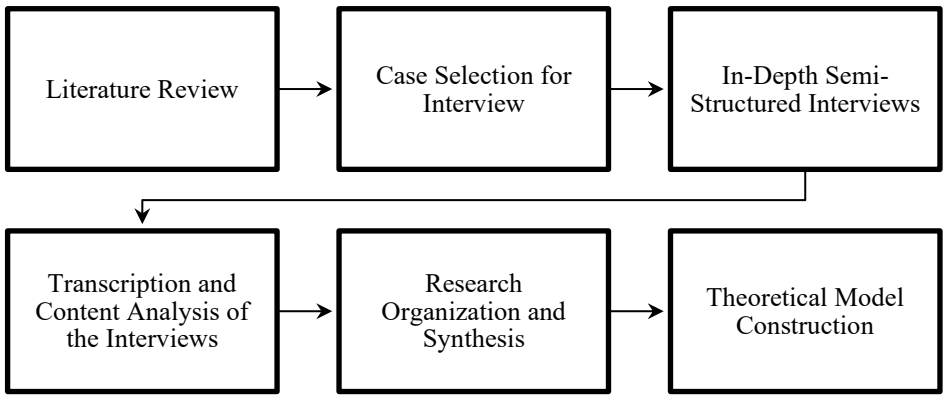


## 3 METHODOLOGY

This study adopts a qualitative and exploratory approach, suitable for investigating the interaction between technological disruption, entrepreneurial behavior, and the innovator's dilemma. This approach allows for the in-depth analysis of complex phenomena in fields with limited theoretical consolidation, such as innovation and entrepreneurship (Severino, 2017; Gil, 2019).

The investigation followed a general inductive method. Semi-structured interviews were used to explore entrepreneurs' perceptions and experiences in contexts of technological transformation (Minayo, 2010). Data were analyzed using the Content Analysis technique proposed by Bardin (2015), with coding and categorization based on Filion's (1998) entrepreneurial behavior elements and Christensen's (1997) characteristics of technological disruption. This enabled the identification of interpretive patterns and relationships between constructs. Figure 2 presents the methodological path adopted.

**Figure 2 -** Methodological path




Source: Authors (2025).

The research process was structured into two main components: (i) construction of the theoretical framework and case selection, and (ii) empirical data collection and content analysis.

## 3.1 THEORETICAL FRAMEWORK CONSTRUCTION AND CASE SELECTION



The initial step involved a literature review to articulate the core concepts of the study. Databases such as Web of Science, Scopus, and Google Scholar were consulted using the terms “technological disruption,” “entrepreneurial behavior,” and “innovator’s dilemma.” Only peer-reviewed works that addressed at least two of these concepts were considered. This review provided the conceptual foundation for designing the interview guide and informed the criteria for data analysis.

Three entrepreneurs were then selected based on accessibility and relevance. The chosen sectors — promotional products, digital marketing, and out-of-home (OOH) advertising — have experienced significant technological disruption. The selection followed three criteria: direct involvement in strategic decisions, operation in disrupted sectors over the past 20 years, and evidence of successfully overcoming the innovator’s dilemma.

Given the exploratory nature of the study, analytical depth was prioritized over statistical generalization (Stake, 1995; Yin, 2015). The sample size allowed for intensive analysis of behavioral patterns in real disruption contexts, offering useful insights for future research.

## 3.2 DATA COLLECTION AND ANALYSIS

The interviews focused on entrepreneurs' strategic responses to technological disruption. The interview script was based on Filion’s (1998) behavioral model and

Christensen's (1997) disruption theory. Questions addressed perceptions of disruption, adaptation strategies, behavioral competencies mobilized, key barriers and enablers, and lessons learned.

All interviews were transcribed and analyzed in three stages following Bardin's (2015) methodology: pre-analysis, coding and categorization, and interpretation. Statements were categorized using Filion's five behavioral elements — vision, mental model, energy, leadership, and relationship system — and Christensen's disruption characteristics, such as reduced performance, customer resistance, and emerging markets.

This analytical process led to the construction of a correspondence matrix, illustrating how each behavioral element related to specific disruptive characteristics. For instance, vision was consistently linked to trend anticipation and business model adjustment, while leadership facilitated team alignment and customer transition to new technologies.

The identified patterns provided the basis for developing a theoretical model that articulates how entrepreneurial behavior contributes to overcoming the innovator's dilemma. The model integrates empirical evidence with the conceptual framework and constitutes the study's main analytical contribution.



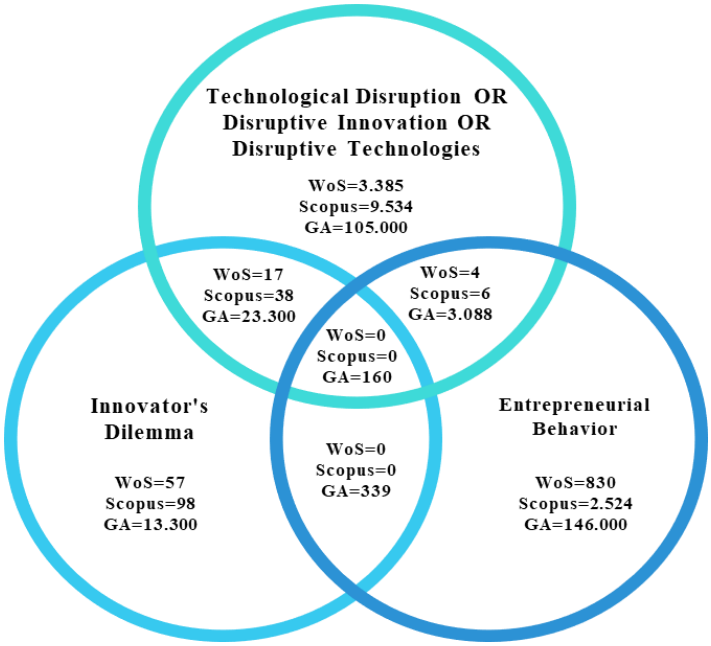
## 4 RESULTS

The results are organized into three analytical axes: the analysis of interviews, the assessment of entrepreneurial behavior in the context of technological disruption, and the proposition of a theoretical model. Findings are based on semi-structured interviews analyzed using Content Analysis, integrating theoretical and empirical elements to explore the relationship between disruption, entrepreneurial behavior, and the innovator's dilemma.

The literature review supported the development of the research instruments and guided data interpretation. Key references include Filion's (1993) metamodel and Christensen's (1997) framework on disruptive innovation. To examine how these constructs are represented in the literature, a bibliographic analysis was conducted in Web of Science (WoS), Scopus, and Google Scholar (GA).

Figure 3 presents the publication volume for the topics "Technological Disruption," "Innovator's Dilemma," and "Entrepreneurial Behavior."

**Figure 3 -** Distribution of publications on core research topics




Source: Authors (2025).



The topic “Technological Disruption” shows the highest volume: 3,385 results in WoS, 9,534 in Scopus, and 105,000 in GA. “Entrepreneurial Behavior” also appears frequently: 830 in WoS, 2,524 in Scopus, and 146,000 in GA. “Innovator’s Dilemma,” in contrast, has more limited coverage: 57 in WoS, 98 in Scopus, and 13,300 in GA.

However, intersections between these topics reveal a clear gap. The combination of “Technological Disruption” and “Entrepreneurial Behavior” returned only 4 results in WoS, 6 in Scopus, and 3,088 in GA. The overlap with “Innovator’s Dilemma” yielded 17 in WoS, 38 in Scopus, and 23,300 in GA. All three topics combined returned no results in WoS or Scopus, and only 160 in GA.

This scarcity highlights the originality and relevance of this research, which seeks to understand how entrepreneurial behavior contributes to overcoming the innovator’s dilemma in disruptive environments. The disparity across databases reflects different indexing criteria: while WoS and Scopus apply strict scientific curation, Google Scholar includes a broader range of materials such as theses and institutional reports, which explains its higher volume.

## 4.1 EMPIRICAL ANALYSIS: ENTREPRENEURIAL RESPONSES TO DISRUPTION

The interviews with three entrepreneurs revealed how strategic behaviors were mobilized to address challenges posed by technological disruption. All interviewees led

adaptation processes in companies that experienced significant sectoral transformations in the past 20 years.

The responses showed consistent behavioral patterns, particularly in relation to key disruptive characteristics: lower initial performance, reduced profit margins, customer resistance, and the emergence of new value dimensions. These challenges triggered strategic responses grounded in vision, flexibility, and leadership.

Initial performance limitations were commonly cited. Entrepreneurs acknowledged that disruptive solutions underperformed early on, yet long-term vision helped them recognize future advantages. For instance, in the OOH sector, digital panels faced early resistance but later became strategic assets.

Reduced margins required operating with lower short-term revenue. In this context, cognitive flexibility and efficient resource use were critical. One participant noted that initial digital marketing returns were modest, but personalization later enhanced profitability.

Customer resistance was another obstacle. Entrepreneurs addressed this through engagement and proactive communication. A hybrid strategy combining traditional practices with digital tools eased adoption for hesitant clients.



In parallel, disruptive technologies opened new value dimensions and markets. Programmatic media and digitalization were seen as opportunities to increase competitiveness. These insights suggest that overcoming the innovator's dilemma relies less on resources and more on behavioral capacity.

The interview data were analyzed through Content Analysis (Bardin, 2015), using the five elements of Filion's (1998) metamodel — vision, mental model, energy, leadership, and relationship system — and Christensen's (1997) disruption characteristics. Responses were categorized to explore how behavioral traits aligned with challenges such as reduced margins, inferior performance, emerging markets, and customer resistance. Table 4 presents the correspondence matrix between entrepreneurial behavior and disruption characteristics.

**Table 4 -** Correspondence Matrix – Entrepreneurial Behavior (EB) and Technological Disruption (TD)

| EB / TD | New Value Dimensions | Inferior Performance | Lower Profit Margins | Emerging Markets | Resistance from Profitable Customers |
|---|---|---|---|---|---|
| **Vision** | Identify opportunities and adjust strategies | Focus on future improvements | Temporarily accept lower margins | Explore new markets | Educate customers on benefits |
| **Mental Model** | Adapt to new ways of creating value | Accept initial limitations | Operate with reduced margins | Respond quickly to new demands | Address resistance through persuasion |
| **Energy** | Sustain innovation implementation | Overcome initial limits through effort | Maintain operations under financial stress | Direct resources to new areas | Support actions to overcome resistance |
| **Leadership** | Engage teams and stakeholders | Maintain focus on development | Lead operational adjustments | Lead team through change | Involve customers in the adoption process |
| **Relationship System** | Maximize value through partnerships | Reduce initial technical barriers | Support lower margins with external help | Facilitate entry into new markets | Strengthen trust to promote acceptance |

Source: Authors (2025).



Each behavioral element was essential to adaptation. Vision helped anticipate trends, guide entry into new markets, and mitigate performance and margin limitations. As one entrepreneur noted: “Investing in digital was a necessary decision for the future of the company.”

The mental model, shaped by experience and openness to change, enabled entrepreneurs to act despite uncertain returns and to reinterpret evolving markets. One participant stated: “I realized marketing automation took time to generate results, but I knew it was only a matter of time.”

Energy, reflected in persistent effort, was crucial to navigating transitions, such as the deployment of geolocated digital panels or maintaining operations with reduced profitability: “We maintained our strong digital presence, even with lower margins.”

Leadership ensured team alignment and client engagement. It supported internal stability during transformation and drove implementation: “I began training our team to prepare for campaign automation.”

The relationship system played a supporting role by enabling collaborations, accessing resources, and legitimizing new initiatives: “We worked with tech startups to integrate innovative solutions.” Another interviewee emphasized the importance of balancing innovation with tradition: “My wife, who is also my business partner, helped us maintain the connection with traditional customers.”

Overall, the data show that these behavioral elements function both individually and collectively. Their interaction reinforces adaptability and strategic response in volatile environments. Entrepreneurs who mobilize them in an integrated manner demonstrate higher resilience, agility, and innovation capacity. This reinforces the central argument of the study: entrepreneurial behavior is a critical factor in overcoming the innovator's dilemma under technological disruption.

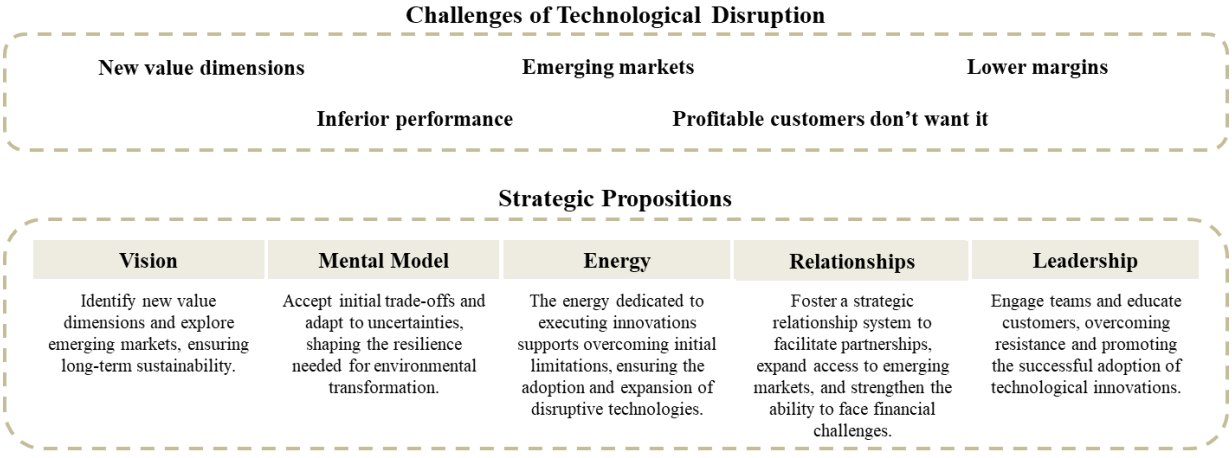
## 4.3 PROPOSITION AND APPLICATION OF THE THEORETICAL MODEL

Based on the articulation between empirical findings and the theoretical framework, we propose a theoretical model that integrates the five elements of entrepreneurial behavior (Filion, 1998) with the structural characteristics of technological disruption — inferior performance, reduced margins, customer resistance, emerging markets, and new value dimensions (Christensen, 1997).



The model offers an analytical and practical structure to guide entrepreneurs in overcoming the innovator's dilemma by promoting strategic adaptation in disruptive environments. Figure 4 synthesizes the model, showing how each behavioral element acts as a strategic response to one or more disruption challenges. These elements operate interdependently, enhancing organizational adaptability and resilience.

**Figure 4 -** Theoretical model for overcoming the Innovator's Dilemma from the perspective of Entrepreneurial Behavior




Source: Authors (2025).

Vision is the model's strategic axis. It enables entrepreneurs to anticipate changes, explore emerging markets, and recognize new value dimensions — even before they are

acknowledged by the dominant market. Vision also plays a key role in managing customer resistance by supporting communication and education strategies.

Mental model refers to the entrepreneur's cognitive framework for interpreting uncertain environments. It underpins strategic flexibility, enabling the acceptance of short-term losses, reinterpretation of value, and adaptation to unstable markets.

Energy reflects sustained effort and commitment in navigating early-stage challenges. It drives experimentation, supports persistence despite reduced margins or limited performance, and ensures the continuity of operations under uncertainty.

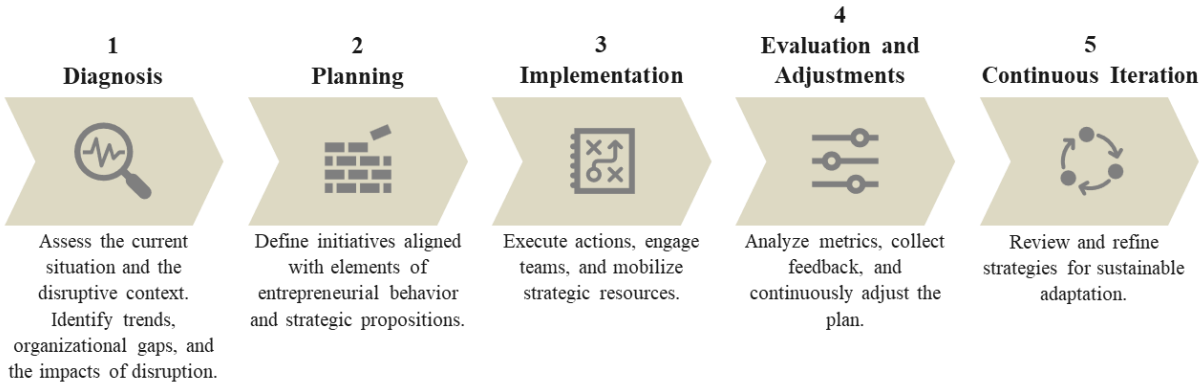
Leadership coordinates internal and external efforts. It facilitates team engagement, resource alignment, and stakeholder communication, linking strategic direction to collective execution.

Relationship system encompasses the entrepreneur's support network. It mitigates risks, facilitates access to new markets, and legitimizes disruptive solutions in the eyes of stakeholders still aligned with traditional models.



Together, these elements form a robust behavioral base to guide entrepreneurs in responding proactively to disruption. To operationalize the model, we propose five implementation steps, based on established change management frameworks (Kotter, 1996). Figure 5 outlines these phases: Diagnosis, Strategic Planning, Implementation, Evaluation and Adjustments, and Continuous Iteration.

**Figure 5 -** Steps for model application




Source: Authors (2025).

The application of the model unfolds in five complementary phases. The first is Diagnosis, which involves mapping the competitive environment, identifying internal capabilities, and detecting early signs of disruption to assess organizational readiness. Next

comes Strategic Planning, where objectives are defined and behavioral elements are aligned with strategic priorities tailored to the specific disruption context. The Implementation phase focuses on executing planned actions through engaged teams, coordinated resources, and continuous monitoring. This is followed by Evaluation and Adjustments, which consists of analyzing outcomes, gathering feedback, and refining strategies based on observed results. Finally, Continuous Iteration establishes a learning cycle with periodic reviews, development of future capabilities, and reinforcement of an adaptive organizational culture.

The model demonstrates that overcoming the innovator's dilemma requires not only resources or structural adjustments but also the integrated mobilization of specific entrepreneurial behaviors. Anchored in robust theoretical foundations (Filion, 1993; Christensen, 1997) and empirically validated through interviews, it offers both explanatory and prescriptive value.

Entrepreneurs who intentionally cultivate these behavioral elements build organizations that are more resilient, adaptive, and capable of turning disruption into opportunity. In this sense, entrepreneurial behavior becomes not just a reactive mechanism but a proactive force in leading transformation. The structured steps offer a replicable path for translating theory into action across diverse organizational settings.



## 5 DISCUSSION

The analysis revealed that technological disruption directly influences entrepreneurial behavior, particularly within the framework of the innovator's dilemma. Challenges such as initially inferior performance, reduced profit margins, and customer resistance demand specific behavioral responses. These conditions shape the entrepreneur's ability to identify opportunities, allocate resources, and adapt business models with resilience.

The central role of entrepreneurial behavior in navigating disruption was evident in the reported experiences. Elements such as strategic vision, leadership, cognitive flexibility, and persistence emerged as decisive factors. The frameworks of Filion (1993) and Christensen (1997) offered a consistent analytical basis, and the integration of these models with empirical data broadens current understanding by highlighting the need for a multidimensional and adaptive entrepreneurial posture.

Strategic vision proved essential for anticipating trends, exploring new value dimensions, and entering emerging markets. Entrepreneurs who aligned long- and short-term goals managed to reconfigure traditional models, even in contexts of limited initial returns —

consistent with Christensen's (1997) proposition that long-term advantages lie in underexplored markets.

Flexibility in mental models enabled entrepreneurs to reinterpret scenarios and adapt decisions under uncertainty. This cognitive adaptability was critical for managing low profitability, fluctuating performance, and shifting consumption patterns.

Energy, understood as sustained effort, supported the implementation of innovations despite initial resistance or lack of financial return. This persistence allowed continuity and learning in evolving environments.

Leadership played a key role in engaging teams and external stakeholders. As an integrating force, it enabled the coordination of efforts, reduced internal resistance, and facilitated communication of innovation benefits to clients and partners.

The relationship system acted as a strategic support network. Collaborations helped mitigate risks, improve resource access, and legitimize disruptive solutions, especially in the face of skepticism from traditional actors.



These findings confirm and expand the literature, offering a new perspective by structurally articulating behavioral responses to technological disruption. The proposed model contributes by connecting individual action to strategic outcomes and by offering a practical framework for entrepreneurial decision-making in uncertain environments.

While the model is theoretically and empirically grounded, its generalizability is limited by the small sample. Future studies — including comparative, longitudinal, or cross-sectoral analyses — could refine the model and assess its applicability across different contexts and stages of disruption.

Despite these limitations, the study provides a solid basis for advancing theory and informing practice. Entrepreneurial behavior is not only a response to disruption but also a proactive force that enables opportunity recognition and sustainable value creation in dynamic environments.

## 6 CONCLUSION

This study investigated the relationship between entrepreneurial behavior, technological disruption, and overcoming the innovator's dilemma, resulting in a theoretical model that integrates these concepts in an applied and cohesive manner. The findings demonstrate that entrepreneurial behavior plays a decisive role in enabling strategic adaptation to disruption, offering pathways to transform threats into opportunities for sustainable growth.

The data confirm that the five behavioral elements — strategic vision, cognitive flexibility, directed energy, engaging leadership, and relationship systems — act interdependently in response to the main challenges of disruption. Vision anticipates trends and reconfigures models; a flexible mental model supports decision-making under uncertainty; energy sustains innovation efforts; leadership mobilizes people and resources; and relationship systems legitimize innovations and expand access to markets and resources.

By connecting these behavioral elements with the structural features of disruption, the proposed model contributes to the literature with a framework that is both conceptually robust and operationalizable. It not only reinforces established theoretical foundations but also offers practical guidelines for navigating highly dynamic and competitive contexts.

The study's qualitative scope and small sample size represent limitations, suggesting the need for further empirical validation. Future research could apply quantitative methods, test the model across sectors, and explore longitudinal dynamics to assess its generalizability and refine its components. These developments may deepen the understanding of how entrepreneurial behavior supports adaptation over time in disruption-driven scenarios.



In conclusion, entrepreneurial behavior emerges not merely as a reaction to technological change but as a strategic force for value creation. The model contributes to theory by offering an integrated behavioral lens on disruption, and to practice by providing actionable insights for entrepreneurs and organizations seeking to lead in volatile environments. Continued investigation of this agenda can strengthen the theoretical and practical foundations of innovation management and strategic entrepreneurship.

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