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Tatiane Meurer, Franciele Beck

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Leadership, management control systems and innovation: Evidence in family businesses

Tatiane Meurer¹

<https://orcid.org/0000-0002-6780-7824>

Email: tatmeurer@furb.br

Franciele Beck¹

<https://orcid.org/0000-0001-7390-5933>

Email: fbeck@furb.br

¹ Universidade Regional de Blumenau, Centro de Ciências Sociais Aplicadas, Departamento de Contabilidade e Administração, Blumenau, SC, Brazil

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ABSTRACT

This study investigates how the interaction between leadership style and the management control system (MCS) manifests in product and process innovation practices in family business (FB), considering the variability in understandings and practices related to innovation. The gap addressed concerns the need for a more analytical understanding of how different leadership styles present in the family firm environment interact with the MCS, manifesting themselves in product and process innovation practices. The study provides insights into how leadership and the MCS may denote different product and process innovation practices, contributing both to the literature on innovation in FBs and, from a practical perspective, by highlighting how these elements can foster the continuity and sustainability of FBs. The impact of this research on the field lies in expanding the scope of investigation into the interaction between leadership styles and MCSs, highlighting how these elements, together, are articulated to promote innovation practices in the FB context. An exploratory-descriptive qualitative study was conducted, grounded in an interpretive approach, guided by semi-structured interviews with 15 managers of family-owned food businesses. The results reveal two distinct groups of FBs. The first, focused on the business essence (business orientation), is characterized by innovation practices driven by internal needs and opportunities, with a predominance of referent, expert, and participative leadership styles, associated with the use of belief, diagnostic, and interactive control systems. The second, focused on the market (market orientation), which presents innovation practices guided by external trends, with an autocratic leadership style and greater emphasis on limits and diagnostic control levers. The study contributes by demonstrating how distinct leadership styles, in interaction with the levers of management control, are manifested in innovation practices in FBs.

Keywords: leadership style, management control system, innovation, family businesses.

1. INTRODUCTION

The involvement of family members in ownership, management, and governance has been recognized as a component that interferes with the innovative behavior of the family business (FB) (Calabrò et al., 2019; Chrisman et al., 2015). In particular, given the involvement of family members in company management, there is an increase in the family's ability to influence business strategies (Chua et al., 1999; Frezatti et al., 2017; Oro & Lavarda, 2019) and, consequently, in innovation processes. In the last decade, the FB literature has focused on investigating the characteristics related to FBs that affect or drive innovation (e.g., Calabrò et al. [2019]) due to the research limitation that neglected the FB features that interfere with innovation (Dote Pardo, 2025; Leppäaho & Ritala, 2022). As a result, this study investigates innovation practices in FBs in light of the theoretical framework of Chua et al. (1999), seeking to capture the FBs' essence, understood through the family's presence and involvement in management and/or ownership, as well as the orientation toward business continuity across generations, factors that are reflected in organizational practices, including innovation (see Chua et al. [1999] and Ng et al. [2020]).

Although family involvement has been widely associated with innovation practices in FBs (Calabrò et al., 2019), the literature emphasizes that managers' leadership style plays a critical role in shaping innovation outcomes (see Baykal [2018], Figueiredo et al. [2022], and Villaluz and Hechanova [2019]). Studies indicate that leadership styles can differ in FBs because organizations have different managerial characteristics (Wang, 2005). In particular, within FB, the culture of these companies demonstrates a different approach to managerial behavior (Dyer, 1986; Sorenson, 2000), given the family's high involvement in the business

and the long tenures of family members' management (Fries et al., 2021). Occasionally, this implies certain leadership behaviors (Fries et al., 2021) and, consequently, the innovative practices that the organization adopts. For example, it is highlighted that the following leadership styles, participative, autocratic, *laissez-faire*, specialist, and referent, are leadership styles commonly found in the FBs' context, which drive different management behaviors (Dyer, 1986; Sorenson, 2000). Given that innovation practices vary across FBs and may entail distinct challenges (Casado-Belmonte et al., 2021), it becomes important to investigate how leadership styles interact with innovation practices in FBs.

It should also be noted that innovation practices are linked to the management control system (MCS), which formalizes innovation planning, monitoring, and control in the organizations (Barros & Ferreira, 2019; Strauß & Zecher, 2013). In one of the classic studies of the MCS, Simons (1995) reinforces that the control of the business strategy is composed of four control levers, which cover the belief system, limit, diagnosis, and interaction. Thus, while innovation practices are implemented as part of an organization's strategy, MCS can influence them (Lopes et al., 2019). Oro et al. (2026) recently found, through a survey, that family resources ("familiness") negatively affect innovation performance in Brazilian FBs and that this effect is mediated by the use of MCS. According to the authors, these findings are contrary to what has been predominantly reported in the literature and reinforce the importance of further investigating this relationship. In this regard, the present study reinforces the relevance of this discussion and advances it by incorporating leadership styles in explaining how FBs shape their innovation strategies and use MCS. Given the importance of family members in directing the company's innovation strategy and influencing the use of MCS (Efferin & Hartono, 2015; Oro et al., 2026), it is also relevant to understand and analyze how leadership styles contribute to these dynamics.

Although the literature shows advances in the discussion of innovation in FBs (Casado-Belmonte et al., 2021; Dote Pardo, 2025), there remains a gap both in understanding innovation in this context (see Calabrò et al. [2019] and De Massis et al. [2022]) and, above all, in analyzing how leadership style and MCS interact to promote innovation practices. In particular, existing studies – mostly grounded in quantitative approaches (see Alharbi et al. [2023], Cruz et al. [2015], and Fletcher et al. [2016]) – tend to examine these elements in isolation, which limits the understanding of organizational dynamics. This limitation is especially relevant in the FBs' context, where interactions between leadership and MCS may constitute a central mechanism through which innovation is promoted or even inhibited (see Cruz et al. [2015]). Moreover, from an interpretivist perspective, there is still a lack of studies exploring how these dimensions are articulated in practice, also considering the different ways in which innovation is understood and experienced within organizations (Eddleston et al., 2019).

In light of this, the gap guiding this study lies in the need to investigate, in an integrated manner, the interaction between leadership style and the MCS in innovation practices in FBs. To this end, by adopting a qualitative approach (Santos et al., 2018), the present study seeks to answer the following research question: how does the interaction between leadership styles and MCS manifest in product and process innovation practices in FBs?

The study results indicate that innovation in FBs manifests through distinct practices, driven by (i) internal needs, (ii) market trends, and (iii) strategic opportunities. These practices are shaped by the interaction between managers' leadership styles and MCS expressed through the control levers, such as behaviors, beliefs, guidelines, management indicators, and discussion processes, mobilized to foster innovation. Therefore, through thematic analysis, two distinct groups of FBs in our sample were identified: one oriented toward the essence of the business (business orientation) and another focused on market dynamics (market orientation). These groups reveal different configurations of this interaction between leadership and MCS, showing

how the combination of these elements influences innovation practices promoted in organizations.

The study contributes to FB's innovation literature by providing empirical evidence on how managers understand and practice innovation in this context, as suggested by previous studies (e.g., Leppäaho and Ritala [2022]). In this regard, the study advances Dote Pardo's (2025) research agenda by exploring the topic through a qualitative approach and by integrating two fields of inquiry: FBs and management accounting research. Additionally, unlike prior research that examines innovation in isolation, this study adopts a holistic perspective by integrating leadership styles and MCS to understand how they interact and shape innovation practices, thereby addressing gaps in the literature (see Kurtmollaiev and Helge [2023] and Oro et al. [2026]). From a qualitative perspective, the findings show that different combinations of leadership styles and MCS use are associated with specific ways of understanding and conducting innovation in FBs.

Thus, the study also offers practical contributions by demonstrating how certain configurations of leadership and MCS lead to distinct innovation practices. For example, the study shows that leaders oriented toward the internal aspects of the business tend to foster a culture that emphasizes creativity and autonomy, supported by the use of belief systems, interactive controls, and diagnostic controls, in which innovation manifests itself as a result of organizational needs and opportunities. Meanwhile, companies with managerial dynamics characterized by autocratic leadership and an emphasis on limits and diagnostic systems tend to be associated with innovation practices more oriented toward external demands, such as regulatory requirements and market trends, highlighting that, in these contexts, innovation is market-driven. By recognizing this context, FB companies and professionals can better understand and align their innovation strategies and practices.

2. LITERATURE REVIEW

2.1 Leadership Style

FBs are recognized for their specific leadership styles, characterized by their idiosyncratic leadership configurations (Fries et al., 2021; Mussolino & Calabrò, 2014), and for having family leaders who control and manage the mechanisms and factors that encourage an innovative culture in the organization (Villaluz & Hechanova, 2019). Leaders can influence innovation in the organization when they engage their employees to innovate, emphasize innovation skills among employees, and especially when they value and reward innovation efforts (Villaluz & Hechanova, 2019). Thus, the broad role of a leader at all organizational levels is critical to leading an organization's innovative processes until the proposed innovation is achieved (Crossan & Apaydin, 2010).

Leadership is constantly superimposed on the personality of the founding owner, and for this reason, it affects organizational culture and management style, thus shaping organizational strategy (Baykal, 2018). Moreover, it is a complex exercise in which leaders inspire their followers and portray the importance of the organization's mission and goals, influencing them to think creatively to obtain a performance that exceeds their expectations (Alblooshi et al., 2021; Villaluz & Hechanova, 2019).

The leaders' values and principles are seen as a significant source of organizational culture to originate the internal integration of all organization members to achieve its corporate objectives (Efferin & Hartono, 2015). In parallel, Alblooshi et al. (2021) argue that leaders provide guidance, support, and advise their employees on organizational priorities.

The previous literature addresses specific leadership styles found in FBs (Fries et al., 2021), such as the participative, autocratic, *laissez-faire*, specialist, and reference leadership

styles (Dyer, 1986; Sorenson, 2000). Table 1 describes the leadership style behaviors investigated in this research.

Table 1

Description of leadership styles

Leadership style	Description
Participative	Leadership that preserves the reasoning of employees; they are leaders who seek to build teamwork and aim at employees' satisfaction.
Autocratic	Described by action-oriented leaders; that is, they are leaders who prioritize organizational activities more than the people involved in the processes and make decisions without consulting others, exalting the organizational hierarchy.
<i>Laissez-faire</i>	Described by freedom of choice in decision-making. They are leaders who offer a broad definition of the mission and organizational objectives to employees, granting them autonomy and not interfering in the processes to achieve the purposes exposed to them.
Specialist	Leadership that prioritizes specialized knowledge and technical skills and does not exalt hierarchy and organizational status.
Referent	Recognized by the loyalty and trust that employees build in their leaders, who perform referent behaviors towards employees.

Source: Adapted from Dyer (1986) and Fries et al. (2021).

This classification of leadership styles is particularly relevant in the FBs' context, as leadership in this type of organization differs from that observed in other organizational contexts (Fries et al., 2021). This is due to the specific characteristics of FBs, such as the emotional ties of family leaders, their high levels of influence in guiding the business, and the longer duration of their leadership tenures (Carney, 2005; Gomez-Mejia et al., 2011).

In this sense, as highlighted by Dyer (1986) and Fries et al. (2021), leadership in these organizations reflects both dynamics of authority and centralization of power as well as interpersonal relationships, making the referent, participative, expert, autocratic, and *laissez-faire* leadership styles particularly relevant for understanding managerial behaviors in this context.

Nevertheless, Alblooshi et al. (2021) reveal that leadership behavior permeates organizational processes, including innovation practices. In FBs, where leadership styles are deeply embedded in the family's goals, history, traditions, and concerns for control and influence (see Fries et al. [2021]), understanding how managers interpret and enact innovation offers particularly relevant insights.

2.2 MCS

MCS refers to a framework composed of various control mechanisms used to support organizations in achieving their objectives (Sa'adon et al., 2019). Simons (1995) structures and discusses the MCS through four control levers: belief systems, limit systems, diagnostic systems, and interactive systems. The Simons model (1995) has been widely used in management control research (Oro & Lavarda, 2019; Sa'adon et al., 2019; Widener, 2007), and for the present study, it helps understand the role of leadership style and family profile in enabling product or process innovation.

Belief systems are formal systems that are responsible for helping to guide the direction of the organization's strategy (Simons, 1994, 1995), whose management is responsible for constantly communicating the fundamental values and mission of the organization, aligned with

the strategies (Sa'adon et al., 2019; Simons, 1995). Constraint refers to the system of limits, in which it acts in opposition to the belief system (Widener, 2007). The diagnostic control system, characterized as a formal feedback system (Simons, 1994), concerns the communication of monitoring the performance of essential activities carried out by the company (Sa'adon et al., 2019; Simons, 1995). Finally, the interactive system is a formal system used by members of senior management to engage in the decision-making activities of their subordinates regularly (Simons, 1994) to encompass the encouragement of discussion and the learning process about strategic uncertainty of business (Sa'adon et al., 2019; Simons, 1995).

These four levers' systems collectively establish the framework that enables the company to control and to achieve its business strategy in an organization (Simons, 1994). When approaching the context of FBs, the centrality of founders and owners (family) is the driver for mobilizing the company's evolution and, consequently, the use of MCS (Moilanen, 2008). Studies indicate that family values embedded in management tend to be manifested especially in belief systems, influencing both the use of MCS and the strategic behavior adopted within the organization (Oro & Lavarda, 2019). Moreover, Basly and Cano-Rubio (2024) indicate that higher levels of family commitment are associated with a lower propensity for firms to invest in product innovation. On the other hand, the authors show that the use of diagnostic and interactive control systems exerts a positive influence on product innovation in FBs, thus highlighting the role of these control levers in fostering innovative practices.

According to Frezatti et al. (2022), as FBs change their size and structure, managerial control also changes to preserve the continuity of the organization for future generations. In this sense, the MCS literature points out that the key issue of this framework is to manage and balance innovation (Simons, 1995; Duréndez et al., 2011). In this study, we aim to explore the relationship and dynamics between the MCS and leadership style in FBs, focusing on investigating how these two elements are connected to the innovation processes adopted within the organization.

2.3 Product and Process Innovation

When looking at the context of FBs, some characteristics outline the environment of these organizations. Specifically, the particularities and vision of success transmitted from generation to generation reflect the organization's need for long-term survival, and thus, innovative processes become even more relevant (Cruz & Nordqvist, 2012; Hauck & Prögl, 2015). Innovation is widely recognized as a change that involves a relevant degree of novelty for the company (Organisation for Economic Co-operation and Development [OECD], 2018; Quinhões & Lapão, 2023). Thus, innovation can be characterized as products being considered goods and services and/or new and improved processes (OECD, 2018). Specifically, innovation is considered a new idea for the organization, a specific sector, or an organizational subunit, which aims to ensure adaptive behavior to changes due to pressure from the external environment (Damanpour et al., 2009).

In summary, product innovation concerns introducing a new or visibly different product or service from the organization's existing products or services, aiming to focus on the market (Gopalakrishnan et al., 1999). While process innovation refers to new tools or production methods that usually improve the creation or introduction of a product or service, these innovative processes can add value to the final consumer through quality and reliability improvements, focusing on the internal activity of the organization (Chang et al., 2015).

In line with the two types of innovation investigated in this study (product and process), the study by Galanakis et al. (2021) portrays various means of innovation listed in the food sector, such as innovation in smart packaging, food processing, and traceability systems with technology using blockchain, among others. Thus, to foster competitive advantages in this

sector, a strategic factor is innovation, which allows organizations to reduce production costs and meet the needs of consumers with service components and more technological processes, which innovation allows to provide (Capitanio et al., 2009).

3. METHODOLOGY

To meet the purpose of this research, a qualitative exploratory-descriptive study was conducted, based on an interpretive approach (Denzin & Lincoln, 2018; Patton, 2014). The methodological choice is based on the need to provide a broad and in-depth understanding of how the interaction between leadership styles and MCS manifests in innovation practices. In this context, qualitative research focuses on understanding the meanings attributed by individuals and the interpretation of phenomena in their natural contexts (Denzin, 2008; Denzin & Lincoln, 2006). Among the different qualitative approaches, the exploratory-descriptive study proves to be appropriate for examining the proposed interactions, especially when the phenomenon requires greater analytical depth.

The companies analyzed in this study comprise Brazilian FBs in the food sector, found in the Emerging Markets Information Service database (EMIS[®]). For the selection of the analyzed companies, privately held companies were chosen, considered medium (from 100 to 499 employees) and large (more than 500 employees).

It is worth mentioning that the companies were selected for several reasons. In the first place, privately held companies of medium and large size were chosen to better achieve FBs with a high level of family involvement due to our interest in capturing the leadership style. Thus, priority was given to organizations in which the family was effectively present and involved in management and/or ownership, as well as those that demonstrated an orientation toward the continuity of the business across family generations (see Chua et al. [1999]).

Another reason concerns Simons' (1995) framework, which makes it essential to analyze medium and large companies, since it is necessary for these companies to present management structure and complexity in terms of MCS. Finally, priority was given to companies in the food sector not only because of the economic and social relevance of this segment, but also due to its structural specificities. This context is characterized by a growing demand for innovation primarily oriented towards health and sustainability, combined with an environment strongly regulated by food safety standards (De Bernardi & Azucar, 2020). These factors require organizations to continuously reconcile regulatory compliance with flexibility to innovate. In this scenario, managerial leadership and the use of MCS become particularly critical, as they need to balance processes with the encouragement of innovation.

The unit of analysis of this study is FBs, which are investigated based on the perceptions of their managers. Based on this, the profile of the interviewees was defined so as to include family or non-family members who participate in the company's top management, such as chief executive officers (CEOs), chief financial officers (CFOs), and directors. These criteria were adopted because such managers are responsible for leading the companies, as well as for formulating and conducting the organization's strategic and innovative processes. In this way, they are considered key informants, whose perceptions make it possible to support inferences at the organizational level. It is also noteworthy that non-family members were also considered valid informants, since, given the difficulty accessing a family member, these managers tend to occupy positions close to the family and to share similar perceptions about the organizational dynamics.

Thus, potential interviewees were initially identified from the EMIS database, focusing on privately traded FBs in the food industry. Invitations to connect were then sent via LinkedIn[®] by one of the researchers. Subsequently, individuals who accepted the connection request received a brief description of the study along with an invitation to participate. For those who

agreed, the ethical protocol was shared, outlining the study's purpose and the ethical principles governing research in the applied social sciences. These aspects were reiterated at the beginning of each interview, including a request for informed consent and authorization for audio recording. The interviews were then conducted online using platforms such as Google Meet, Microsoft Teams, and Skype, recorded, and transcribed. The transcripts were subsequently shared with participants to allow for review and validation, and, once confirmed, were incorporated into the corpus of analysis.

In sum, 13 companies participated in the research, as depicted in Table 2.

Table 2*Characterization of the companies analyzed based on the survey data (January and July 2021)*

Case	Foundation	Generation	Employees	Interviews	Profession	Family member	Minutes
A	1956	2nd	900	1	Director operational	No	44
				2	CFO	No	59
B	1996	1st	300	3	CEO	Yes	49
C	1915	5th	700	4	Commercial director	Yes	28
D	1951	3rd	140	5	President	Yes	76
E	1891	1st	800	6	Commercial director and marketing	No	74
F	1952	3rd	6,000	7	Industry director	No	39
G	1948	3rd	3,300	8	Commercial director	Yes	40
H	1974	3rd	1,820	9	Commercial director and marketing	No	35
I	1915	4th	600	10	Commercial director and marketing	No	47
J	1979	1st	1,900	11	CFO	No	59
				12	Founding partner	Yes	49
K	1938	4th	3,200	13	Commercial director	No	44
L	1925	3rd	1,500	14	Director of operations	No	50
M	1954	3rd	360	15	Vice president	Yes	25

Notes: *Company E was acquired by another family company that is in its 1st generation in command. The term “case” refers to the empirical units investigated, corresponding to each interviewee.*

CEO = chief executive officer; CFO = chief financial officer.

Source: *Prepared by the authors.*

As shown in Table 2, interviews were conducted with 15 owners/managers, including six family members and nine non-family members. The interviews took place from January to July 2021, totaling 11 hours and 58 minutes, with an average duration of approximately 48 minutes per interview, and resulted in 165 pages of transcription. To ensure the accuracy of the interviews, each interviewee received the transcriptions for review and validation.

3.1 Procedures for Data Collection

For the operationalization of the research, the interview method was adopted, specifically choosing the semi-structured interview format. Thus, the questions were designed to capture the maximum variation in the interviewees' understandings about aspects of their reality (Conz et al., 2020).

The interview script adopted in the research process was designed in five blocks. The first block of questions aims to verify the interviewee's profile and professional features. The second block consists of identifying the involvement of family members in the company (based on Chua et al. [1999]). In sequence, the third block aims to identify the leadership style present in the analyzed companies (according to Dyer [1986] and Fries et al. [2021]). In the fourth block, we sought to understand the company's management model in relation to the use of the MCS, focusing on how the organization uses the four control levers (according to Simons [1995]). Concerning the fifth and final block of questions, two main and open questions were designed to capture variations in understandings and practices of innovation.

To enhance the quality of the data collected, follow-up questions were used during the interviews to clarify and exemplify the situations described, as well as to elicit more detailed responses from the participants. This is a common technique in qualitative research to improve internal consistency and ensure alignment between participants' accounts and the researcher's interpretation (see Conz et al. [2020]). Additionally, the interview script was reviewed by a group of experts in the field, and two pilot interviews were conducted to refine the instrument.

3.2 Data Analysis Procedures

For data analysis, the thematic analysis technique was adopted, following the guidelines of Bepari et al. (2024). This approach is characterized by its flexibility and its ability to identify thematic patterns from the analysis of textual data (Cassell & Bishop, 2019; King & Brooks, 2018).

Initially, the interviews were fully transcribed and imported into NVivo[®] Plus software for coding. The analytical process was structured in three stages. In the first phase, a deductive approach was adopted, in which topics associated with the existing literature were identified and coded – namely leadership styles present in organizations (Dyer, 1986; Fries et al., 2021) and the use of MCS (Simons, 1995), including belief systems, boundary systems, diagnostic systems, and interactive systems. These categories guided the initial data organization.

In the second phase, an inductive approach was employed to capture how innovation is understood and practiced by managers, without relying on predefined categories; instead, topics related to innovation emerged directly from the data, in alignment with the interview guide.

The coding process was conducted by the first author through an iterative and interpretative approach, allowing continuous refinement based on the empirical material. Subsequently, the second author reviewed the coding and its alignment with the data. In cases of divergence, both authors engaged in discussions and returned to the data to refine interpretations until consensus was reached.

After coding, the initial codes were grouped into topics based on similarities and recurrences. This process enabled the identification of four leadership styles, the use of the four

levers of management control, and three distinct ways of understanding and practicing innovation.

In the third stage, the analysis focused on the articulation between leadership style, MCS, and innovation. All coding categories were reread in an integrated manner, cross-analyzing the topics to identify common patterns among the companies studied. Finally, the topics were grouped into two groups: one entitled “business orientation” and the other “market orientation”.

4. RESULTS

4.1 Leadership Style and MCS in FBs

Among the leadership styles mentioned in the previous literature on FBs, we identified four leadership styles in the organizations investigated: (i) referent; (ii) participative; (iii) specialist; and (iv) autocratic. Although these leadership styles have been widely discussed in the FB literature, similar configurations and behaviors may also emerge in non-family organizations. Likewise, their associations with different uses of MCS and innovation practices may not be limited to the FB context. Nevertheless, the evidence shows that, in the FBs analyzed, family involvement in management, together with the preservation of family goals and values, influences the way these leadership styles are enacted. Accordingly, the following sections describe each of the identified styles, highlighting the behaviors and practices reported by the interviewees.

Referent leadership is expressed through the example that managers provide to their subordinates. This leadership style is characterized by leaders who seek to inspire a sense of belonging and an “ownership” attitude, encouraging employees to act responsibly and align their behaviors with the continuity of the organization. As one manager states:

It is the inspirational question [...]. As a leader, you can inspire your subordinates [...] they are together in your team, they incorporate that, and then comes the question that I also own this here, this here also belongs to me, it's belonging, so I also contribute to the company's strategy. (Case L)

In addition to referent leadership, participative leadership was also identified in the companies analyzed. In these organizations, this leadership style is represented by the team's joint development, characterized especially by collective engagement and shared responsibility for organizational results. Thus, in the cases characterized by a participative leadership style, the profit-sharing program is configured as a mechanism to encourage collective team performance by linking financial gains to the company's performance and productivity. As the manager of Case G describes, “What counts is the overall result of the team; individual results are important, but individual results cannot prevail over team results [...]”

Another leadership style identified is specialist leadership. This style shows similarities with referent leadership by emphasizing subordinates' performance based on responsibility and a sense of belonging to the organization. Additionally, it is close to participative leadership in that it encourages the employees' joint engagement in achieving organizational objectives. They are leaders who seek to value the expertise (knowledge and professional skills) that each subordinate has to offer the organization and tend not to emphasize formal hierarchy, as stated by Case K's manager:

Being a leader also has to bring an awareness that the practice of leadership is not necessarily linked to a charge, to a position of power. You are a leader many times

without having a position of power; when you know how to be a leader without a position of power. Having a position of power becomes just a nomenclature [...].

Finally, the last leadership style identified concerns autocratic leadership. Unlike other leadership styles captured in the FBs investigated in this study, autocratic leadership is characterized by adherence to rules and procedures, formal hierarchies, and decision-making power centered on the leader. For these managers, decision-making is centralized in the figure of the leader, while subordinates' performance is guided by rules and procedures established both by the organization and by regulatory bodies. In this context, leaders act directly and continuously on subordinates' activities, intervening whenever necessary to ensure the achievement of organizational objectives, as described by the commercial director of Case C:

We understand that a supervisor supervises, a manager manages, and a director directs. The director interferes in achieving goals and always looks at the business, you know, guiding people so that they don't leave the focus that the company wants to follow. Because you have to direct it to what you think is right, even because if it doesn't work out, it's us who respond, you know; we respond when the president asks for it.

Considering the identified leadership styles, similarities can be observed in the behavioral traits of referent, participative, and specialist leadership. These leadership styles portray leaders as figures who value inspiration and collective growth within the team. On the other hand, autocratic leadership prioritizes management models based on rules and guidelines, where centralized decision-making and hierarchies are emphasized. Such differences illustrate how leadership interacts with MCS, which, in FBs, is further shaped by family influence, particularly through the active involvement of family members in management processes. Based on this, the findings reveal two predominant configurations that associate leadership styles and MCS use, supported by specific mechanisms and practices.

The first group identified is associated with referent, participative, and specialist leadership, which is characterized by the predominance of the use of belief systems and interactive control, reflecting a "business-oriented" approach. As these are family-owned businesses, leaders actively use belief systems to communicate the organizational values and purposes preserved across generations, reinforcing not only team alignment and engagement, but also the family identity and legacy within the organizational context, as stated in Case K: "[...] he [the CEO] cares deeply about this, the essence of the company, the values, the values they built, the family values, so there is a very human side in the relationships among all people." Thus, formal mechanisms such as mission, vision, and values are not only documented, but continuously reinforced and incorporated into the organization's daily practices, including innovation practices, as reported in Case L: "innovation is always linked to the mission, and even now that we are testing some alternative products, it is running into precisely these pillars, and we are in a dilemma about how to do this, right." This evidence shows that innovation decisions are influenced both by strategic concerns and by tensions between preserving family values and pursuing new opportunities.

Regarding the interactive system and these three leadership styles, interaction occurs through both formal and informal mechanisms grounded in family authority and the closeness among the parties, where there are frequent communication, meetings, and open dialogue across different hierarchical levels. It is observed that this organizational dynamic fosters a faster flow of information and more agile responses: "We hold these meetings at the board level, at the managerial level, and at the factory level as well. We extend this information to the entire managerial staff and to the entire factory's operational workforce." (Case G).

We have some meetings that are held monthly, usually around the end of the month, regarding results and other matters that are discussed. [...] There are meetings that are daily, [...] some weekly and others monthly. [...] So, as we [the business family] do things the right way, [...] there is all this monitoring, and normally every 2 months there is this meeting with the entire possible team, where performance recommendations, deliveries, fuel consumption, accident prevention, and all these aspects are presented. (Case D)

It is observed that these practices encourage continuous dialogue and organizational learning, which are further reinforced by family proximity and influence.

In contrast, the second group identified, associated with autocratic leadership, is characterized by the predominance of the use of limit systems, reflecting a “market-oriented” approach. In these organizations, leadership is expressed through formal rules, procedures, and internal and external regulations to guide organizational behavior. It is noted that these constraints reflect families’ prudence regarding the preservation of the company’s reputation, especially in sectors such as those analyzed, where operational failures may compromise not only organizational continuity but also the family’s reputation and legacy.

It is a food industry, so there are a series of restrictions; it must have very high quality and very strong food safety. So, it is full of protocols, including those required by international certifications, by ISO, in short, everything that the market demands nowadays. (Case C)

Therefore, limit systems are operationalized through strict compliance with standards and certifications, such as the International Organization for Standardization (ISO) and Food Safety System Certification (FSSC), which define acceptable behaviors and constrain organizational actions, as the manager of Case E denotes:

We have the global certification, which is the FSSC, which is for the food sector [...] everything is regulated, and we have a discipline, which, because we are a food company, this certification is very strict, okay, that for to obtain it, you need to practice what is registered; it is not enough to just be on paper.

As for the diagnostic system, as they are medium and large organizations, all companies have this formalized and structured system.

We have specific indicators for those products that we launched; that is, after the launch of a new product, we did a whole follow-up of this product, seeing the costs, expenses, seeing the acceptance of this product by consumers (Case H).

The interviewees highlight that diagnostic control systems are used to monitor organizational performance through key indicators, especially in the context of innovation processes, as evidenced in Case H. The managers monitor product performance using specific metrics related to costs, market acceptance, and financial results. The findings indicate that the formalization of diagnostic controls coexists with informal mechanisms based on trust relationships established between the business family and external managers, while decision-making authority remains strongly influenced by the family. Even when operational management is delegated to external professionals, the family maintains active participation in defining and monitoring performance indicators: “there are many control tools, many process items throughout the month, and the information is highly tabulated, [...] and these indicators come from us [the business family].” (Case D)

At the same time, the interviewees emphasize that these controls are exercised within an organizational environment characterized by trust and respect. As highlighted in Case E:

Trust [...]. It is an environment where lightness and respect for people are preserved. This does not mean that people do not work hard or that there is no pursuit of achieving performance indicators. [...] things are accomplished in a lighter way, and that is how we live our daily routine, always following the guidance of our shareholders [the business family].

These findings suggest that, within the context of family firms, diagnostic controls are not exclusively technical mechanisms, but rather controls shaped by family values, trust, and the influence exerted by the business family over organizational practices.

Thus, the interaction between leadership styles and the MCS occurs through identifiable mechanisms, such as the preservation and dissemination of organizational values and purposes, communication practices, the degree of formalization, as well as the use of performance indicators defined and maintained by family leaders and members. These elements are reflected in how innovation is practiced, potentially leading to both more flexible and participative processes as well as more control-oriented approaches.

4.2 Understandings and Practices of Innovation in FBs

When respondents were asked about “What does innovation mean in the company?”, two types of innovation were identified: product innovation and process innovation, corresponding to existing classifications in the innovation literature (OECD, 2018). However, when discussing the practice of innovation in the company, it was possible to identify, through the experiences of the interviewees regarding innovation, how innovation is practiced in the investigated companies, as shown in Table 3.

Table 3

Example of understanding and practicing innovation based on the survey data (January and July 2021)

Understanding	Practice	Quote
Product innovation	Necessity	[...] understanding what the market is asking for in terms of product, it's thinking about the product, it's whether the product we develop will be accepted by the consumer, by the market, and it will be good, in terms of profitability. Either innovate a new product, or innovate an existing one, or adapt an existing one to the conditions that the market asks for. (Case A)
Process innovation	Necessity	Every time you innovate a product, you automatically need to innovate your process, so product and process innovation go together [...]; you can't make a new product with the same process; you have to improve your process or change the process. (Case F)
Product innovation	Trend	We are always attentive to market movements, consumers' perception of our product, and our client. (Case E)
Process innovation	Trend	So, you always have to bring more modern equipment, new technologies; today there is a lot of Industry 4.0. In short, they are robots that we are installing at the end of the line,

		so there are a lot of little things that you will have to do. (Case C)
Product innovation	Opportunity	We actually end up innovating for an opportunity, which we are able to manufacture; we have factory expertise, and for packaging, a lot of things that make it easier and more comfortable for consumers. (Case I)
Process innovation	Opportunity	As it is a company that has opportunities for growth and investment, it is a company that has invested in technology, constantly adapting its lines, buying new lines, adapting, bringing new processes. (Case A)

Source: *Prepared by the authors.*

These findings reveal that the understandings and practices of product and process innovation are perceptible to all respondents. However, it was found that most of the interviewees mentioned more frequently the understandings and practices related to the innovation of products, when comparing the interviewees' reports regarding the innovation of processes.

Through our data, it was possible to identify three different reasons to practice innovation, which means the interviewees give different meanings and practices to innovation according to their companies' reality. The three understandings and practices refer to (i) innovation by necessity, (ii) innovation by trend, and (iii) innovation by opportunity.

Interviewees perceive that product innovation in the food industry is intrinsically linked to the development and creation of new products or the improvement of existing ones, with this process being strongly influenced by the context of FBs. As highlighted by one respondent, "The family enhances innovation through a very strong involvement of the owners; they closely identify with the company's origins and [...] continue this tradition, being highly involved in the company's product development." (Case G).

In this sense, the practice of product innovation driven by necessity is propelled not only by the demands of consumers and distribution centers, but also by the values and orientation of the owning family. These needs may be related to both the launch of new products and the enhancement of existing ones. Additionally, the practice of process innovation out of necessity arises from the company's requirements to adopt new and specific processes for the development of a new product or to meet the demands of various areas, such as manufacturing, logistics, and management, among other departments. Thus, the data indicate that, in FBs, need-driven innovation is grounded both in internal dynamics influenced by the family and in the demands of consumers and the organization itself, reflecting a business-oriented approach.

By practicing trend-driven innovation, the company introduces new products or enhances existing ones by observing the trends among its competitors and in the external market. In other words, if the market launches a specific product in the niche where the company operates, the organization assesses whether it has the necessary expertise to launch that product and innovates by introducing it. Additionally, interviewees report that trend-driven innovation is also associated with improving the design of existing products and enhancing their physical form. Similarly, process innovation driven by trends involves analyzing new manufacturing methods used by competitors and incorporating these methods into the company's production lines. Thus, it is evident that the practice of trend-driven innovation signifies a market-oriented approach.

Finally, product or process innovation driven by opportunity is associated with the availability of investment capital and the organization's production structure. In addition, due to the presence of the family in business management, the findings indicate that this dynamic is also influenced by the strategic involvement of family members, who participate in decisions

related to resource allocation and the definition of priorities for company growth. As evidenced by Case M, opportunity-driven innovation involves the pursuit of a balance between investments in products and processes:

[...] we now also need to innovate in processes [...] how to reach the market, how to serve the customer [...] seeking to create a process that allows us to grow and give speed to this growth [...] aligned with products, which need to be innovating because it is a characteristic of the company. (Case M)

Thus, companies that engage in opportunity-driven innovation are characterized by a business orientation, in which internal capabilities, resource availability, and family involvement are factors that jointly influence innovation practices.

5. DISCUSSION OF RESULTS

The data analysis revealed different patterns related to leadership styles, control levers, and innovation practices among the analyzed companies. Table 4 summarizes the classifications identified in the study.

Table 4

Predominance of leadership styles, control levers, and innovation practices

Categories	Predominance	Cases
Leadership style	Referent	A, L, and M
	Autocratic	B, C, E, and H
	Specialist	D, I, and K
	Participative	F, G, and J
Management control systems	Diagnostic system	Present in all companies
	Belief system	A, D, F, G, I, J, K, L, and M
	Interactive system	A, D, F, G, I, J, K, L, and M
	Limits system	B, C, E, and H
Innovation practices	Necessity	A, D, F, G, I, J, K, L, and M
	Opportunity	A, D, G, I, J, K, and M
	Trend	B, C, E, and H

Note: *The categories mentioned are predominant in the indicated cases but not absent in the other cases analyzed.*

Source: *Prepared by the authors.*

Based on this classification, we were able to classify the cases into two groups of FBs (business orientation group and market orientation group), as illustrated in Figure 1.

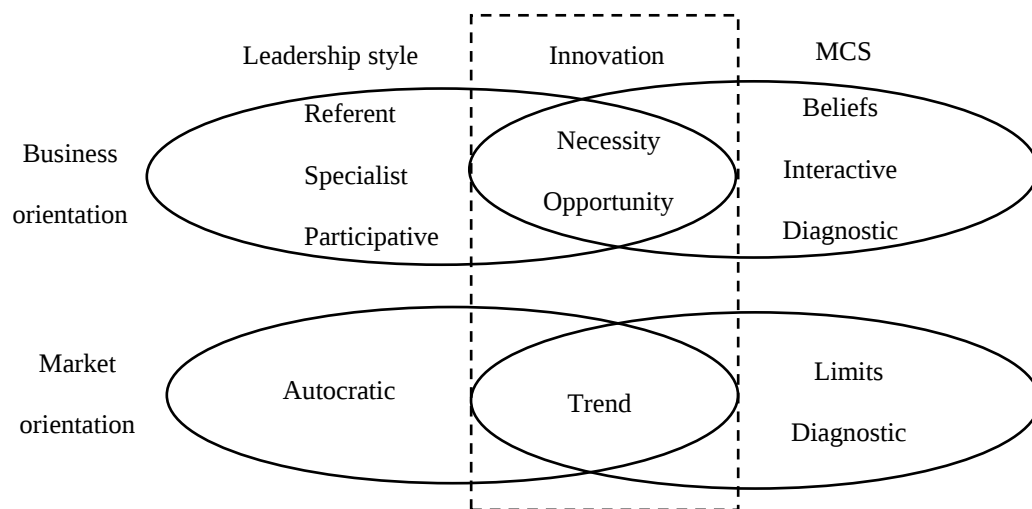


Figure 1 Leadership style and management control system in innovation practices based on the survey data (January and July 2021).

Source: Prepared by the authors.

The results suggest that different configurations of leadership styles and MCS are associated with distinct ways of understanding and implementing innovation, contributing to the literature on innovation in FBs (e.g., Calabrò et al. [2019], De Massis et al. [2022], and Dote Pardo [2025]). The way innovation is understood denotes the behaviors adopted in each of the identified groups, being influenced by the context in which they are embedded (Hajar, 2021). This can be understood by the findings encountered, in which, in the first group, called business orientation, nine companies understand and practice innovation out of necessity and opportunity. The context of these companies is shaped by different leadership profiles, including referential, specialist, and participative, where the use of belief, interactive, and diagnostic systems is more prevalent in these organizations. In line with Baykal (2018) and Sorenson (2000), these leadership profiles share a focus on promoting employee commitment and engagement. In this group, leadership is predominantly oriented toward the business internal aspects. The data indicate that innovation occurs based on internal organizational dynamics, with the belief system reinforcing values and purposes, guiding which innovative practices are considered acceptable in light of these principles, while interactive controls promote ongoing discussions about uncertainties and opportunities, influencing how these practices are developed, and diagnostic controls enable the monitoring of innovation practices.

These findings are in line with the literature, as studies indicate that the belief system is used to defend organizational values and purposes related to strategies, motivating the exploration of new ideas and opportunities aligned with the company's principles (Chenhall & Moers, 2015; Simons, 1995; Tuomela, 2005). Whereas the interactive system aims to guide the organization through strategic uncertainties, facilitating discussions and the formulation of new strategies (Chenhall & Moers, 2015). As for the diagnostic control lever, in both groups, companies have this mechanism structured to monitor the innovative goals and processes stipulated by the organization, as per Sa'adon et al. (2019). Considering the context of FBs, MCS contribute to the construction of a shared vision of organizational goals, values, and strategies, fostering not only alignment among family and business members but also the development and preparation of the next generation to assume leadership roles (Hillen & Lavarda, 2020). Thus, the results of this study reinforce the conclusions of Basly and Cano-

Rubio (2024) by showing that the combined use of belief, interactive, and diagnostic systems contributes to the development of innovation practices in FBs.

As evidenced by the data, these mechanisms are manifested in innovation practices by guiding both what to innovate and how to innovate, making innovative practices primarily driven by needs and opportunities identified within the organizational context, which, in the case of the FBs analyzed, are also influenced by the family's direct involvement in business management. According to the study by von Hippel and Kaulartz (2021), the authors identify that in some companies, innovation processes start with researching customer needs, aiming to identify newly defined needs by end consumers that can be combined with new product solutions. This is consistent with Baykal (2018), as it shows that FBs exhibit distinctive characteristics in innovation processes compared to other types of organizations, differing in the way they seek and implement innovation due to the influence of family members.

Meanwhile, in the second group, composed of four companies, innovation is predominantly understood as being trend-oriented. In this context, a market orientation is observed, evidenced both by the autocratic leadership style adopted by managers and by the greater emphasis on the use of limit systems driven mainly by external forces.

Unlike the business-oriented approach, the organizations in this group present a more disciplined and structured management model, in which guidelines and rules guide employees' behavior, a pattern which, in the context of the FBs classified in this group, is associated with centralized decision-making and the influence of family owners in the conduct of organizational activities. These aspects are consistent with findings in the literature, as autocratic leaders often prioritize task execution over employee participation, centralize decision-making, and reinforce organizational rules (Dyer, 1986). According to Tuomela (2005), the limits system highlights the behavior and actions that people should follow according to rules and plans established by managers. Within the FBs' context, the emphasis on rules and procedures may reflect an effort to protect the firm's reputation and continuity across generations. Family owners often seek to preserve the family's identity and legacy, avoiding strategic decisions that may threaten these non-economic factors (Gomez-Mejia et al., 2011). This is consistent with the findings of Oro et al. (2026), which indicate that FBs may perceive innovative behavior as a potential threat to the preservation of socioemotional wealth (SEW) as well as to family control and management. In this sense, boundary systems may act not only as mechanisms of organizational control but also as instruments that guide and delimit the behaviors considered appropriate by family members (see Almeida and Gasparetto [2022]), including innovation-related behaviors. Although the literature traditionally treats these control systems as an internal control system, labeled by managers, in our research, we argue that the market (e.g., regulatory bodies) also drives certain regulations that food companies need to adopt, which consequently impact their innovation processes.

In this regard, the context of the food companies analyzed in this study provides an important lens through which to interpret these findings. Unlike technology industries, where innovation is often associated with radical product development (e.g., Agriculture 4.0) (Klerkx & Rose, 2020), food companies operate under stringent food safety regulations and quality standards, as evidenced by several of the cases analyzed. These specific characteristics require businesses to balance innovation initiatives with regulatory compliance, resulting in more structured and controlled innovation processes, where innovations emerge primarily from identified needs, opportunities, and industry trends, as reported by the data. This context helps explain the consistent presence of diagnostic control systems across all companies. Diagnostic controls enable managers to monitor organizational performance against predefined objectives (Simons, 1995); in turn, within food companies, formal monitoring mechanisms are also essential to ensure compliance with food safety and quality requirements (Peres et al., 2025).

6. CONCLUSIONS

To answer the research question, the results of this study make it possible to understand not only how innovation is perceived and practiced in the FBs searched, but also the mechanism through which these elements interact jointly. The findings reveal the existence of two distinct groups – one with a business orientation and the other with a market orientation – which present different leadership styles and distinct patterns of use of the MCS, especially with regard to the predominant use of certain control systems.

In the business-oriented group, there is a predominance of specialist, referent, and participative leadership, associated with a more intensive use of belief, diagnostic, and interactive control systems. This configuration favors innovation practices driven by both necessity and opportunity. On the other hand, in the market-oriented group, a more autocratic leadership style prevails, in which limits and diagnostic control systems stand out, favoring trend-driven innovation.

Thus, it is observed that leadership does not act in isolation but rather guides and shapes the use of different systems within MCS, impacting innovation practices according to the combination of preserved organizational values, levels of interaction, monitoring, and control mechanisms and indicators, and the definition of boundaries. This results in different ways of practicing innovation within organizations (see Alharbi et al. [2023], Basly and Cano-Rubio [2024], Cruz et al. [2015], and Dote Pardo [2025]). These findings also reinforce the importance of considering the industrial context in which innovation takes place. In the food manufacturing sector, where firms must continuously balance innovation practices with industry demands related to product quality, process standardization, and compliance with regulatory requirements, leadership and MCS play important roles that extend beyond simply fostering innovation.

Thus, the study provides theoretical, practical, and social contributions. Initially, the study advances the literature on innovation, particularly in the FBs' context, by elucidating the conceptual aspect of how innovation is understood and practiced from the perspective of FB managers, and also by discussing the interaction between two crucial elements – leadership style and MCS usage – in stimulating innovative practices in FBs. This contribution addresses the gap identified by previous studies, which highlight the need to understand the organizational dynamics underlying innovation through qualitative research approaches that provide more detailed evidence (see Barros and Ferreira [2019]). Furthermore, the study contributes to the debate on how leadership and MCS interact in promoting innovation, as research such as that of Alharbi et al. (2023) indicates that leadership constitutes an organizational resource that influences the planning and implementation of MCS, which can act as mechanisms capable of fostering innovation practices within organizations.

From a practical perspective, the conclusions of this study offer pathways for family owners, highlighting how the management profile shaped by the family in the organization's leadership influences the use of MCS and the way innovation is planned and pursued within the organization. Along the same lines, it allows managers of FBs to promote innovation through the alignment between leadership styles and the use of MCS. Specifically, the results suggest that managers can implement different control levers – such as beliefs, boundaries, diagnostic, and interactive systems – according to their leadership approach to stimulate different innovation practices.

From a social perspective, the study aligns with the Sustainable Development Goals (SDGs), particularly SDG 9 – Industry, Innovation, and Infrastructure. By highlighting how innovation can be fostered within FBs, the findings contribute to discussions on strengthening innovative capacity and supporting sustainable development, while also offering practical insights to promote innovation and infrastructure development in these organizations.

The study acknowledges some limitations that should be considered when interpreting the results. First, the analysis is based exclusively on data collected from top managers, which may restrict the understanding of the phenomenon to a strategic perspective. Given that innovation practices are experienced across multiple organizational levels, this focus may overlook how these practices are perceived, interpreted, and implemented by other stakeholders within the organization. Additionally, different departments and professional functions may have distinct views on innovation, leadership, and the use of MCS, which were not addressed in this study. Another limitation refers to the fact that specific characteristics of the FB context were not explored, such as the emotional ties and bonds among family members, the preservation of the family legacy, family identity, and family-specific resources (see Berrone et al. [2012] and Habbershon et al. [2003]). These elements may provide additional insights to explain further patterns across the identified groups. Moreover, the qualitative nature of this research, focused on a specific set of FBs within a particular sector, limits the generalizability of the results to other organizational contexts. Based on these limitations, future research may expand the findings by incorporating multiple organizational levels, including middle managers and employees directly involved in innovation practices, enabling comparisons between strategic and operational perspectives. Furthermore, future studies could investigate how FB-specific dimensions, such as SEW and familiness, are associated with leadership styles, the use of MCS, and innovation practice.

REFERENCES

- Alblooshi, M., Shamsuzzaman, M., & Haridy, S. (2021). The relationship between leadership styles and organisational innovation: A systematic literature review and narrative synthesis. *European Journal of Innovation Management*, 24(2), 338-370. <https://doi.org/10.1108/EJIM-11-2019-0339>
- Alharbi, I. B., Jamil, R., Mahmood, N. H. N., & Shaharoun, A. M. (2023). Transformational leadership's impact on organizational innovation: The mediating role of management control system. *Global Business Review*, 24(6), 1418-1433. <https://doi.org/10.1177/0972150920934640>
- Almeida, D. M., & Gasparetto, V. (2022). Tensões dinâmicas no sistema orçamentário de empresa familiar e a dualidade da estrutura. *Revista Contabilidade & Finanças*, 33, 232-247. <https://doi.org/10.1590/1808-057x202114110>
- Barros, R. S., & Ferreira, A. M. D. S. D. C. (2019). Bridging management control systems and innovation: The evolution of the research and possible research directions. *Qualitative Research in Accounting & Management*, 16(3), 342-372. <https://doi.org/10.1108/QRAM-05-2017-0043>
- Basly, S., & Cano-Rubio, M. (2024). Family commitment and product innovation in family SMEs. Do management control systems have an influence? *The Journal of Entrepreneurship*, 33(3), 517-547. <https://doi.org/10.1177/09713557241281796>
- Baykal, E. (2018). Innovativeness in family firms: Effects of positive leadership styles. *Strategic Design and Innovative Thinking in Business Operations*, 213-232. https://doi.org/10.1007/978-3-319-77622-4_11
- Bepari, M. K., Nahar, S., & Mollik, A. T. (2024). Perceived effects of key audit matters reporting on audit efforts, audit fees, audit quality, and audit report transparency: stakeholders' perspectives. *Qualitative Research in Accounting & Management*, 21(2), 192-218. <https://doi.org/10.1108/QRAM-06-2022-0098>
- Berrone, P., Cruz, C., & Gomez-Mejia, L. R. (2012). Socioemotional wealth in family firms: Theoretical dimensions, assessment approaches, and agenda for future research. *Family Business Review*, 25(3), 258-279. <https://doi.org/10.1177/0894486511435355>

- Calabrò, A., Vecchiarini, M., Gast, J., Campopiano, G., De Massis, A., & Kraus, S. (2019). Innovation in family firms: A systematic literature review and guidance for future research. *International Journal of Management Reviews*, 21(3), 317-355. <https://doi.org/10.1111/ijmr.12192>
- Capitanio, F., Coppola, A., & Pascucci, S. (2009). Indications for drivers of innovation in the food sector. *British Food Journal*, 111(8): 820-838. <https://doi.org/10.1108/00070700910980946>
- Carney, M. (2005). Corporate governance and competitive advantage in family-controlled firms. *Entrepreneurship Theory and Practice*, 29(3), 249-265. <https://doi.org/10.1111/j.1540-6520.2005.00081.x>
- Casado-Belmonte, M. D. P., Capobianco-Uriarte, M. D. L. M., Martínez-Alonso, R., & Martínez-Romero, M. J. (2021). Delineating the path of family firm innovation: Mapping the scientific structure. *Review of Managerial Science*, 15(8), 2455-2499. <https://doi.org/10.1007/s11846-021-00442-3>
- Cassell, C., & Bishop, V. (2019). Qualitative data analysis: Exploring themes, metaphors and stories. *European Management Review*, 16(1), 195-207. <https://doi.org/10.1111/emre.12176>
- Chang, J., Bai, X., & Li, J. J. (2015). The influence of leadership on product and process innovations in China: The contingent role of knowledge acquisition capability. *Industrial Marketing Management*, 50, 18-29. <https://doi.org/10.1016/j.indmarman.2015.04.014>
- Chenhall, R. H., & Moers, F. (2015). The role of innovation in the evolution of management accounting and its integration into management control. *Accounting, Organizations and Society*, 47, 1-13. <https://doi.org/10.1016/j.aos.2015.10.002>
- Chrisman, J. J., Chua, J. H., De Massis, A., Frattini, F., & Wright, M. (2015). The ability and willingness paradox in family firm innovation. *Journal of Product Innovation Management*, 32(3), 310-318. <https://doi.org/10.1111/jpim.12207>
- Chua, J. H., Chrisman, J. J., & Sharma, P. (1999). Defining the family business by behavior. *Entrepreneurship Theory and Practice*, 23(4), 19-39. <https://doi.org/10.1177/104225879902300402>
- Conz, E., Lamb, P. W., & De Massis, A. (2020). Practicing resilience in family firms: An investigation through phenomenography. *Journal of Family Business Strategy*, 11(2), 100355. <https://doi.org/10.1016/j.jfbs.2020.100355>
- Crossan, M. M., & Apaydin, M. (2010). A multi-dimensional framework of organizational innovation: A systematic review of the literature. *Journal of Management Studies*, 47(6), 1154-1191. <https://doi.org/10.1111/j.1467-6486.2009.00880.x>
- Cruz, C., & Nordqvist, M. (2012). Entrepreneurial orientation in family firms: A generational perspective. *Small Business Economics*, 38(1), 33-49. <https://doi.org/10.1007/s11187-010-9265-8>
- Cruz, A. P. C. D., Frezatti, F., & Bido, D. D. S. (2015). Estilo de liderança, controle gerencial e inovação: Papel das alavancas de controle. *Revista de Administração Contemporânea*, 19(6), 772-794. <https://doi.org/10.1590/1982-7849rac2015150099>
- Damanpour, F., Walker, R. M., & Avellaneda, C. N. (2009). Combinative effects of innovation types and organizational performance: A longitudinal study of service organizations. *Journal of Management Studies*, 46(4), 650-675. <https://doi.org/10.1111/j.1467-6486.2008.00814.x>
- De Bernardi, P., & Azucar, D. (2020). *Innovation in food ecosystems*. Springer Nature. <https://doi.org/10.1007/978-3-030-33502-1>
- De Massis, A., Rondi, E., & Appleton, S. W. (2022). Innovation in family business. *Oxford Research Encyclopedia of Business and Management*. Oxford University Press. <https://doi.org/10.1093/acrefore/9780190224851.013.332>

- Denzin, N. K. (2008). *Collecting and interpreting qualitative materials* (Vol. 3). Sage.
- Denzin, N. K., Lincoln, Y. S. (2006). *The planning of qualitative research: Theories and approaches* (2nd ed.). Artmed/Bookman.
- Dote Pardo, J. S. (2025). Innovation in family business: A bibliometric and systematic review of research trends and future directions. *International Journal of Innovation Science*, 1-25. <https://doi.org/10.1108/IJIS-03-2025-0112>
- Duréndez, A., Madrid-Guijarro, A., & García-Pérez-de-Lema, D. (2011). Innovative culture, management control systems and performance in small and medium-sized Spanish family firms. *Innovar*, 21(40), 137-154.
- Dyer, W. Gibb (1986). *Cultural change in family firms: Anticipating and managing business and family transitions*. Jossey-Bass. <https://doi.org/10.2307/2392903>
- Eddleston, K. A., Kellermanns, F. W., & Collier, G. (2019). Research on family firm innovation: What do family firms actually think and do? *Journal of Family Business Strategy*, 10(4), 100308. <https://doi.org/10.1016/j.jfbs.2019.100308>
- Efferin, S., & Hartono, M. S. (2015). Management control and leadership styles in family business: An Indonesian case study. *Journal of Accounting & Organizational Change*, 11(1): 130-159. <https://doi.org/10.1108/JAOC-08-2012-0074>
- Figueiredo, J. A. L., Chimenti, P., Cavazotte, F., & Abelha, D. (2022). Uma década de pesquisas sobre liderança e seus efeitos na criatividade-inovação: uma revisão sistemática e narrativa da literatura. *Revista Brasileira de Gestão de Negócios*, 24(1), 66-91. <https://doi.org/10.7819/rbgn.v24i1.4151>
- Fletcher, D., De Massis, A., & Nordqvist, M. (2016). Qualitative research practices and family business scholarship: A review and future research agenda. *Journal of Family Business Strategy*, 7(1), 8-25. <https://doi.org/10.1016/j.jfbs.2015.08.001>
- Frezatti, F., Bido, D. D. S., Mucci, D., & Beck, F. (2017). Estágios do ciclo de vida e perfil de empresas familiares brasileiras. *Revista de Administração de Empresas*, 57, 601-619. <https://doi.org/10.1590/s0034-759020170607>
- Frezatti, F., de Souza Bido, D., Mucci, D. M., Beck, F., & da Cruz, A. P. C. (2022). The impact of the management control system on the family business' intention to maintain the organization for future generations. *Journal of the Knowledge Economy*, 1-32. <https://doi.org/10.1007/s13132-022-00918-x>
- Fries, A., Kammerlander, N., & Leitterstorf, M. (2021). Leadership styles and leadership behaviors in family firms: A systematic literature review. *Journal of Family Business Strategy*, 100374. <https://doi.org/10.1016/j.jfbs.2020.100374>
- Galanakis, C. M., Rizou, M., Aldawoud, T. M., Ucak, I., & Rowan, N. J. (2021). Innovations and technology disruptions in the food sector within the COVID-19 pandemic and post-lockdown era. *Trends in Food Science & Technology*, 110, 193-200. <https://doi.org/10.1016/j.tifs.2021.02.002>
- Gomez-Mejia, L. R., Cruz, C., Berrone, P., & De Castro, J. (2011). The bind that ties: Socioemotional wealth preservation in family firms. *Academy of Management Annals*, 5(1), 653-707. <https://doi.org/10.5465/19416520.2011.593320>
- Gopalakrishnan, S., Bierly, P., & Kessler, E. H. (1999). A reexamination of product and process innovations using a knowledge-based view. *Journal of High Technology Management Research*, 1(10), 147-166.
- Habbershon, T. G., Williams, M., & MacMillan, I. C. (2003). A unified systems perspective of family firm performance. *Journal of Business Venturing*, 18(4), 451-465. [https://doi.org/10.1016/S0883-9026\(03\)00053-3](https://doi.org/10.1016/S0883-9026(03)00053-3)
- Hajar, A. (2021). Theoretical foundations of phenomenography: A critical review. *Higher Education Research & Development*, 40(7), 1421-1436. <https://doi.org/10.1080/07294360.2020.1833844>

- Hauck, J., & Prügl, R. (2015). Innovation activities during intra-family leadership succession in family firms: An empirical study from a socioemotional wealth perspective. *Journal of Family Business Strategy*, 6(2), 104-118. <https://doi.org/10.1016/j.jfbs.2014.11.002>
- Hillen, C., & Lavarda, C. E. F. (2020). Orçamento e ciclo de vida em empresas familiares em processo de sucessão. *Revista Contabilidade & Finanças*, 31(83), 212-227. <https://doi.org/10.1590/1808-057x201909600>
- King, N., & Brooks, J. (2018). Thematic analysis in organisational research. In C. Cassell, A. L. Cunliffe, & G. Grandy (Eds.), *The SAGE handbook of qualitative business and management research methods: Methods and challenges* (pp. 219-236). SAGE Publications. <https://doi.org/10.4135/9781526430236.n14>
- Klerkx, L., & Rose, D. (2020). Dealing with the game-changing technologies of Agriculture 4.0: How do we manage diversity and responsibility in food system transition pathways? *Global Food Security*, 24, 100347. <https://doi.org/10.1016/j.gfs.2019.100347>
- Kurtmollaiev, S., & Helge, T. (2023). Repurposed: Management control in innovation leadership. In K. R. Jensen, S. Kaudela-Baum, & R. Sheffield (Eds.), *Innovation leadership in practice: How leaders turn ideas into value in a changing world* (pp. 243-257). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-83753-396-120231013>
- Leppäaho, T., & Ritala, P. (2022). Surviving the coronavirus pandemic and beyond: Unlocking family firms' innovation potential across crises. *Journal of Family Business Strategy*, 13(1), 100440. <https://doi.org/10.1016/j.jfbs.2021.100440>
- Lopes, I. F., Beuren, I. M., & Gomes, T. (2019). Influência do uso do sistema de controle gerencial e da estratégia organizacional no desempenho da inovação. *Revista Universo Contábil*, 15(1), 85-105. <https://doi.org/10.4270/ruc.2019105>
- Moilanen, S. (2008). The role of accounting in the management control system: A case study of a family-led firm. *Qualitative Research in Accounting & Management*, 5(3), 165-183. <https://doi.org/10.1108/11766090810910209>
- Mussolino, D., & Calabrò, A. (2014). Paternalistic leadership in family firms: Types and implications for intergenerational succession. *Journal of Family Business Strategy*, 5(2), 197-210. <https://doi.org/10.1016/j.jfbs.2013.09.003>
- Ng, D., James, H. S., Jr., & Klein, P. G. (2020). Keeping it in the family: a socio-cognitive approach to the prioritization of family goals. *Journal of Small Business and Enterprise Development*, 27(3), 471-487. <https://doi.org/10.1108/JSBED-07-2019-0257>
- Organisation for Economic Co-operation and Development (2018). *Oslo manual 2018: Guidelines for collecting, reporting and using data on innovation*.
- Oro, I. M., & Lavarda, C. E. F. (2019). Interface dos sistemas de controle gerencial com a estratégia e medidas de desempenho em empresa familiar. *Revista Contabilidade & Finanças*, 30(79), 14-27. <https://doi.org/10.1590/1808-057x201806490>
- Oro, I. M., Vargas, L. A., Schmidt, J. L., & Begnini, S. (2026). Familiness, management control systems, and innovation performance in Brazilian family firms. *International Journal of Entrepreneurship and Governance in Cognitive Cities (IJECC)*, 4(1), 1-15. <https://doi.org/10.4018/IJECC.410776>
- Patton, M. Q. (2014). *Qualitative research & evaluation methods: Integrating theory and practice*. Sage Publications.
- Peres, F. A. P., Bondarczuk, B. A., Gomes, L. D. C., Jardim, L. D. C., Corrêa, R. G. D. F., & Baierle, I. C. (2025). Advances in food quality management driven by Industry 4.0: A systematic review-based framework. *Foods*, 14(14), 2429. <https://doi.org/10.3390/foods14142429>
- Quinhões, T. A. T., & Lapão, L. V. (2023). Innovation management: Still a long way to go. *RAE – Revista de Administração de Empresas*, 64(1), e2023-0160. <https://doi.org/10.1590/S0034-759020240107>

- Sa'adon, S. K., Amir, A. M., & Amiruddin, R. (2019). Management control system and innovation: Implication for Malaysian manufacturing innovation performance. *Asian Journal of Accounting & Governance*, 12. <https://doi.org/10.17576/AJAG-2019-12-13>
- Santos, L. S., Leal, F. G., Alperstedt, G. D., & Feuerschütte, S. G. (2018). O método fenomenográfico na pesquisa científica em administração no Brasil: análise e discussão sobre seu uso. *Revista de Ciências da Administração*, 129-146. <https://doi.org/10.5007/2175-8077.2018v20n50p129>
- Simons, R. (1994). How new top managers use control systems as levers of strategic renewal. *Strategic Management Journal*, 15(3), 169-189. <https://doi.org/10.1002/smj.4250150301>
- Simons, R. (1995). *Levers of control: How managers use innovative control systems to drive strategic renewal*. Harvard Business School Press. <https://doi.org/10.1002/smj.4250150301>
- Sorenson, R. L. (2000). The contribution of leadership style and practices to family and business success. *Family Business Review*, 13(3), 183-200. <https://doi.org/10.1016/j.jfbs.2020.100374>
- Strauß, E., & Zeher, C. (2013). Management control systems: a review. *Journal of Management Control*, 23(4), 233-268. <https://doi.org/10.1007/s00187-012-0158-7>
- Tuomela, T. S. (2005). The interplay of different levers of control: A case study of introducing a new performance measurement system. *Management Accounting Research*, 16(3), 293-320. <https://doi.org/10.1016/j.mar.2005.06.003>
- Villaluz, V. C., & Hechanova, M. R. M. (2019). Ownership and leadership in building an innovation culture. *Leadership & Organization Development Journal*, 40(2), 138-150. <https://doi.org/10.1108/LODJ-05-2018-0184>
- von Hippel, E., & Kaulartz, S. (2021). Next-generation consumer innovation search: Identifying early-stage need-solution pairs on the web. *Research Policy*, 50(8), 104056. <https://doi.org/10.1016/j.respol.2020.104056>
- Wang, Y. (2005). Impacts of leadership style on the development of small business: lessons from a Chinese family-controlled firm. *International Journal of Management Practice*, 1(2), 215-232. <https://doi.org/10.1504/IJMP.2005.007136>
- Widener, S. K. (2007). An empirical analysis of the levers of control framework. *Accounting, Organizations and Society*, 32(7-8), 757-788. <https://doi.org/10.1016/j.aos.2007.01.001>

AUTHOR CONTRIBUTIONS

Tatiane Meurer

Conceptualization: equal;
 Data curation: equal;
 Formal analysis: equal;
 Funding acquisition: equal;
 Investigation: equal;
 Methodology: equal;
 Project administration: equal;
 Writing – original draft: equal.

Franciele Beck

Conceptualization: equal;
 Investigation: equal;
 Supervision: equal;
 Validation: equal;
 Visualization: equal;
 Writing – review and editing: equal.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

The entire dataset supporting the results of this study was published in the article itself.

DECLARAÇÃO DE USO DE INTELIGÊNCIA ARTIFICIAL

The authors declare that generative artificial intelligence was used in the following stages of the production of this manuscript:

- Text refinement: ChatGPT.
- Translation: ChatGPT.

The authors declare that, regardless of the use of the tools mentioned above, all generated content was supervised, verified, and critically validated by humans. The authors assume full and exclusive responsibility for the accuracy of the data, integrity of mathematical/statistical formulas, originality of the text, and the conclusions presented in the published article.

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