



# Dancing with Change: A Conceptual Analysis of How Family Businesses Embrace Product Development Management

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## Abstract

Understanding product development management is crucial, particularly within the context of family businesses, which are renowned for their resistance to change. Family firms demonstrate a paradox in innovation: while inclined toward calculated risk-taking, they often invest less in R&D compared with non-family businesses. This article explores the evolving landscape of product development management literature related to family businesses. It achieves this by meticulously examining pertinent scholarly works. Conducting a systematic review focused on family businesses' product development management practices. This article poses the following fundamental question: What prior research has delved into the intersection of family businesses and product development management? The authors adopted the updated Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA) reporting guidelines to ensure transparency and completeness in their systematic literature review. The research process hinges on accessing academic databases housing peer-reviewed journals, which initially yielded 955 articles. Through a series of discerning study selection phases, this number was pruned down to 68 articles eligible for further assessment. Ultimately, this study incorporates insights from 22 articles. Within the domain of product development management, the responsibility is typically divided among three key parties: marketing, design, and manufacturing. Notably, the findings underscore a predominant emphasis on the marketing perspective in the existing literature. Consequently, this article calls for future research endeavors to delve into the roles of design and manufacturing in the context of family business and product development management.

**Keywords:** *Family Business; Product Development Management; Literature Review; PRISMA Reporting*

## INTRODUCTION

The family business has consistently maintained its position as a prominent and influential economic enterprise. It is the leading force in over 98% of global organizations (Chua et al., 2004; Eddleston et al., 2008; Kets de Vries, 1993). Hence, the family business plays a pivotal role in fostering economic expansion, encompassing advanced and emerging nations (Fan et al., 2011; Koentjoro & Gunawan, 2020; Olubiyi et al., 2022) across a spectrum ranging from small-scale enterprises to giant corporations (Waldron, 2021). In addition, it has successfully addressed several challenges faced by multiple nations, including poverty and unemployment (Poza & Daugherty, 2018; Zahra & Sharma, 2004). Nevertheless, the family firm is also grappling with the challenge of being unable to endure for multiple generations. Maintaining business continuity can be challenging. Challenges arise from various factors, including succession planning, innovation, and opposition to change. Many family businesses encounter the challenge of maintaining business continuity (Kotter, 2012). However, research on innovation or product development management is still scarce, specifically within the context of family businesses.

The world of product development management holds a unique allure for family businesses. Its entrepreneurial spirit and long-term perspective often foster a culture of calculated risk-taking, propelling it to engage in cutting-edge activities that push the boundaries of its industries. However, a seemingly paradoxical element lies beneath this enthusiasm: despite its appetite for innovation, the family business tends to invest less in formal research and development (R&D) than its non-family counterparts. This intriguing discrepancy highlights an alternative approach to

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innovation within the family business, one that sheds light on its unique strengths and challenges in the ever-evolving landscape of business growth. This fascinating dynamic may unlock valuable insights into fostering innovation within the family business, empowering it to leverage its inherent advantages and contribute meaningfully to the global innovation ecosystem. Numerous academics have extensively examined the condition of family businesses (Poza & Daugherty, 2018; Tirdasari & Dhewanto, 2012, 2014, 2020a, 2020b). The lack of research in this area is especially noticeable when contrasted with the enormous amount of literature on innovation and product creation in enterprises that are not family-owned (Dyer Jr & Whetten, 2006). Family businesses have distinct attributes and internal workings that can impact their innovation ability. Family enterprises may prioritize the preservation of socioemotional riches over innovation, thereby affecting their reputation (Deephouse & Jaskiewicz, 2013).

Furthermore, the extent of research and development (R&D) spending in family-owned businesses can be influenced by family members' participation in decision-making and ownership (De Massis et al., 2013). Although there is an increasing amount of research on family enterprises and innovation, there is still a requirement for more extensive studies in this field. The current body of research has predominantly concentrated on sizable family-owned enterprises within the United States (Dyer Jr & Whetten, 2006), leaving a gap in knowledge regarding the innovation practices of family businesses in Indonesia and other emerging economies. The economic landscape of Indonesia is distinct because of the presence of a diverse range of small- and medium-sized family businesses. This condition provides an exciting setting for studying the dynamics of innovation within these family businesses. These enterprises play a crucial role in the Indonesian economy, substantially contributing to employment, economic expansion, and social progress. Gaining insight into their innovative techniques is crucial to cultivating a prosperous business environment within the nation. In Indonesia, family businesses frequently function within tightly knit communities, emphasizing robust family connections and principles. Their cultural elements can influence their attitude toward innovation, potentially resulting in a more prudent and consensus-oriented decision-making process.

Further investigation is required to comprehend the precise mechanisms by which family ownership and governance impact innovation in various contexts and industries. Moreover, there is a dearth of research regarding the influence of marital relationships within family businesses on their ability to innovate (Xu et al., 2021). The current research indicates that family businesses possess distinct qualities and dynamics that can impact their innovation ability. Further investigation is required to comprehensively comprehend the correlation between family ownership and innovation, especially in diverse cultural and institutional settings. The lack of research in this area emphasizes the need for additional exploration into innovation processes resulting in family businesses. Therefore, this study is crucial for gaining a broader understanding of the area. Gaining a comprehensive understanding of this field is crucial due to the family business's notable inclination toward resisting change. It has a preference for a steady state. This essay examines the trajectory of product development management literature in the context of family businesses. It establishes the most advanced development level by examining pertinent literature. The authors integrated the family business topic into a product development management theme to concisely enhance knowledge of family business literature. This study aims to address the following research question:

RQ: What existing research has been conducted on the intersection of family businesses and product development management?

This study delves into the specific area of product development management within family businesses, providing a comprehensive overview of this field's current state of knowledge. The article is structured into five distinct sections. The first section outlines the research background, followed by a detailed literature review. The third section elaborates on the methodology employed for the systematic literature review. Section 4 presents the results and discussion, encompassing the essential findings and their implications. The subsequent section provides a concise conclusion summarizing the main findings from the study. Finally, the article concludes with a comprehensive list of references.

## LITERATURE REVIEW

Family businesses possess the capacity to serve as both proponents and adversaries of innovation. It is crucial to identify and solve the elements that influence their approach to product creation to maximize their beneficial impact and enable them to succeed in a continuously changing marketplace. Although the idea that family businesses naturally foster creativity in product development may appear reasonable, the actual situation is more complex and necessitates a thorough examination of both the advantages and disadvantages. Other characteristics, such as aversion to risk, limited resources, and even solid familial ties, might operate as firebreaks despite the fact that their long-term view and entrepreneurial spirit ignite the development of ground-breaking products. The family business may be risk averse due to their familiarity with established products and the concern of endangering family assets, causing them to avoid radical developments (Thomsen & Pedersen, 2000). Constrained budgets and restricted access to external funding can limit the resources allocated for research and development endeavors (De Massis et al., 2013). Occasionally, when family interests are given priority over long-term corporate objectives, it might result in actions that hinder the progress of innovation (Gómez-Mejía et al., 2007). Meanwhile, family businesses frequently adopt a more extended outlook compared to publicly listed corporations, enabling them to allocate resources toward ventures that carry a higher level of risk but have the potential to yield significant breakthroughs (Cassia et al., 2012; T. Zellweger, 2007; T. M. Zellweger et al., 2012). Moreover, a robust entrepreneurial mindset and deep-seated enthusiasm for the industry might motivate family members to embark on pioneering endeavors and make significant advancements (Jin et al., 2021).

There is a unique way in which the family business creates new products that change over time. The reason for this is that they are deeply rooted in tradition and often have a long-term view. When they are first starting, they often focus on fixing and making better goods that have been passed down from generation to generation (De Massis et al., 2016). Formal R&D methods are not usually used to make decisions about products. Instead, family experience and gut feelings are used (Craig & Moores, 2006). Minor changes and improvements to existing goods are more likely to occur when people are cautious and do not have many resources. Radical innovation is less critical than incremental improvements (Chrisman et al., 2005a).

During the growth stage of the family business, they start to focus on the market when they are making new products. Researching the market and getting feedback from customers are becoming increasingly critical for making decisions about products and making sure they meet the changing needs of the market (Zahra et al., 2004). Expertise in design, engineering, and marketing may also be brought in at this stage by specialized teams or outside consultants (Kammerlander et al., 2015). These changes make innovation more balanced. Family businesses can still use their core skills and history while also looking for new and different product ideas (Duran et al., 2016).

As the family business grows and matures, they frequently prioritize product development as a central strategic function, closely integrating it with the entire corporate vision and goals (De Massis et al., 2015). Structured procedures are put into place to guarantee uniform excellence and

originality, with clearly outlined phases for investigation, advancement, experimentation, and introduction (Chrisman et al., 2005b). Open innovation is increasingly prevalent as family businesses engage in partnerships with external collaborators and universities to gain access to novel technology and ideas that might drive additional efforts in product development (De Groot et al., 2023).

Beyond the point of maturity, some family businesses push the limits of product development by making their plans more sustainable and using resources more efficiently (Curado & Mota, 2021). Emphasizing social and environmental responsibility can help create goods that solve significant problems and make money at the same time. Additionally, some family businesses do impact investing, which means they use the time and money they spend on product creation to directly help make the world a better place for people and the environment (Zellweger et al., 2013). Lastly, some more established family businesses start a process called "legacy re-invention." They bring their history back to life through new goods that appeal to younger generations and ensure that the business stays relevant in a market that is constantly changing (Kammerlander & Ganter, 2015). It should be emphasized that certain firms may display traits from numerous stages simultaneously, illustrating the dynamic and complex nature of product development in family-owned organizations.

Research on innovation and product development management within family businesses remains limited compared with the extensive literature on non-family firms (Chrisman & Patel, 2012). Family businesses tend to invest less in research and development (R&D) than their non-family counterparts, and their investment patterns are often characterized by higher unpredictability due to the varying alignment between long- and short-term family aspirations and the firm's financial objectives. However, Chrisman and Patel (2012) hypothesize that family and economic goals tend to converge when a family business's performance falls below its ambition levels. Under such circumstances, family businesses are predicted to increase their R&D investments and exhibit less variability in their investment patterns than non-family businesses. This suggests that family businesses may become more proactive in pursuing innovation when faced with performance challenges.

Furthermore, risk-taking, a vital aspect of the entrepreneurial mindset, is positively correlated with initiative and innovation in family businesses. Family firms that embrace a calculated risk-taking approach are more likely to engage in innovative activities, potentially leading to the development of new products, services, or processes that can enhance their competitive advantage. The existing literature highlights the complex relationship between family businesses and innovation. While family firms may exhibit lower R&D investments and more unpredictable investment patterns, their propensity for innovation can be influenced by factors such as performance pressures and a willingness to take calculated risks. Further research is needed to explore the specific mechanisms that drive innovation in family businesses and to identify strategies to foster a more innovation-centric culture within these organizations.

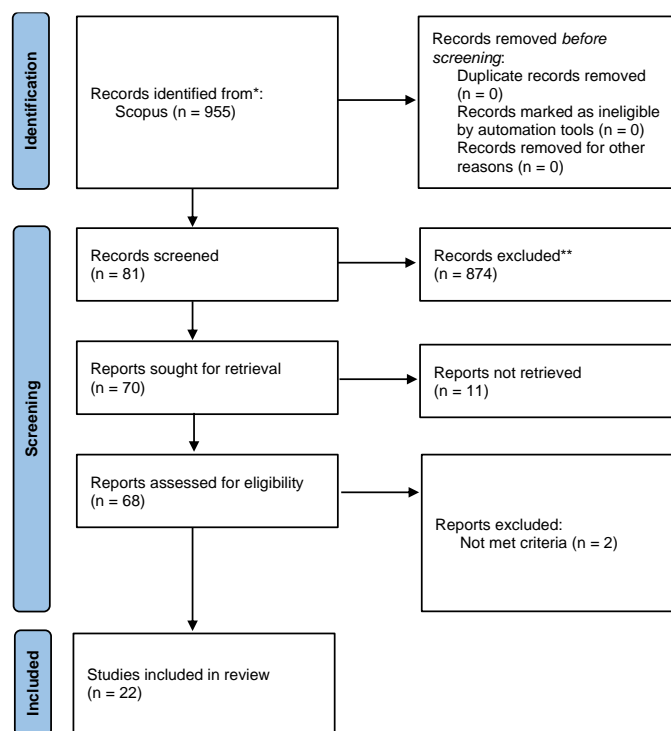
The risk-taking behaviour of family businesses has been a subject of ongoing research, with studies revealing a complex relationship between risk propensity and entrepreneurial orientation. Naldi et al. (2007) found that family businesses exhibit lower risk-taking levels than non-family businesses, even when engaging in entrepreneurial activities. This risk aversion was found to be negatively correlated with performance, highlighting a crucial aspect of understanding entrepreneurial orientation in family businesses. Despite their recognized role as drivers of economic development and technological innovation, some family businesses may develop a conservative stance over time, becoming less inclined to embrace the risks inherent in entrepreneurial pursuits (Zahra, 2005). The article employed agency theory to identify critical factors influencing risk-taking behaviour among 209 American manufacturing family businesses,

utilizing a broad definition of entrepreneurial risk-taking. The findings indicated that family involvement and ownership positively impacted entrepreneurship, whereas long-term CEO-founder tenures had an opposing effect. These insights encourage managers to leverage family members' skills and talents by fostering entrepreneurship and carefully expanding into new markets.

This study adheres to the updated PRISMA reporting guidelines outlined by [Page et al. \(2021\)](#) to systematically review the existing literature on product development management within the context of family businesses. The comprehensiveness and transparency of PRISMA reporting make it an ideal framework for conducting a rigorous and transparent literature review.

## RESEARCH METHOD

This study utilized a systematic literature review to compile and integrate the literature on product development management in the context of family businesses. The data-gathering approach involved the use of Scopus, the most widely used academic database for finding publications in the field of social sciences. This comprehensive literature review was conducted in June 2022. The execution adhered to the PRISMA criteria. The PRISMA methodology comprises three primary stages: identification, screening, and inclusion ([Page et al., 2021](#)). Initially, the identification process involves searching for articles using a database source. This study conducted a comprehensive search on the Scopus database, which is known for its high-quality and reliable information.



**Figure 1.** PRISMA flow diagram ([Page et al., 2021](#))

Furthermore, in this phase, any duplicate records are eliminated before proceeding to the subsequent screening phase. Furthermore, the screening phase involves using eligibility criteria to selectively filter the records. The criterion encompass article type, year, subject area, and other relevant factors. Furthermore, this stage selectively screens documents for complete textual access. During this stage, a scholar must thoroughly examine the entire text to determine the number of reports that are included and those that are not. The final phase involves integrating the entire

number of articles into the research. The record selection process was undertaken without any time constraints but was limited to include published papers written in English. During the search process, two exhaustive search queries were created and merged using the conjunction “AND”. One document identifies suitable keywords for managing product development, while another identifies the proper keywords for a family business. Figure 1 illustrates the procedural stages of a systematic literature review.

### Eligibility Criteria

To direct this study and collect the relevant pieces of literature necessary for the research, the authors incorporated four inclusion criteria. At the beginning of the search procedure, any journal article (IC1) with a research methodology that fell into quantitative, qualitative, or mixed methodology categories was considered. Second, we only examined English (IC2) publications because it is the language most commonly used by researchers and other professionals in the academic world. Third, only research on business and management (IC3) has been included in this article. In conclusion, IC4 was incorporated to provide answers to the study questions.

In addition, this study integrated two exclusion criteria to enhance the data searching step throughout the process of deciding the degree to which each acquired paper is connected to the others. At the beginning of this study, all articles that discussed product development management in industries other than family businesses were disregarded (EC1). Second, this investigation did not consider any topic included in the Scopus database, except EC2: Business, Management, and Accounting. Before being chosen, the articles were subjected to a stringent screening process that considered the inclusion criteria. Ultimately, the discovered articles were categorized according to several distinct criteria. The criteria for the analytical recommendations are outlined in Table 1, which is shown below.

**Table 1.** Inclusion and Exclusion Criteria

| Inclusion criteria   | Exclusion criteria  |
|--|---|
| IC1: Journal articles  | EC1: Non-family business areas                                      |
| IC2: Written in English  | EC2: All subject areas, except Business, Management, and Accounting |
| IC3: Research area in business and management  |   |
| IC4: Research aimed at investigating topics related to product development management within family businesses |   |

### Information Source

To guarantee that the papers were of high quality, the initial search was conducted through an internet database such as Scopus, which has extensive scientific research libraries. It was done using the search strategy that had been set. Due to the authors’ access limitations, specific papers were excluded from this study. In addition, it took a cursory look over the “papers” bibliography lists to find works of literature that were pertinent to the topic.

### Study Selection

The following stages involved the execution of this step:

1. The search keyword was chosen based on the study’s interest in examining relevant subjects of product development management in the context of family businesses. During the search process, two exhaustive search queries were formulated and merged using the operator “AND”.

The search queries contain the keywords listed in Table 2.

**Table 2.** Keywords Included in The Search Queries

| Topic                          | Keywords   |
|--------------------------------|--|
| Product development management | product development, new product, product innovation, innovation, research and development |
| Family business                | family business, family firm, family enterprise, family entrepreneur, and family company   |

In addition, searches using these keywords were conducted on each internet database utilized for this investigation. Table 3 provides a rundown of the search terms used in each online database.

**Table 3.** Search Strings in This Systematic Literature Review

| Databases | Search string  | Initial results |
|-----------|--|-----------------|
| Scopus    | ( TITLE-ABS-KEY ("family business" OR "family firm" OR "family enterprise" OR "family entrepreneur" OR "family company") AND TITLE-ABS-KEY ("product development" OR "new product" OR "product innovation" OR "innovation" OR "r&d" OR "research and development") ) | 955             |

- In this study, appropriate titles, abstracts, and keyword combinations were investigated, evaluated, and selected to improve the quality of the search results. Its purpose was to sort papers according to the eligibility requirements. This process is repeated twice. Initially, the database on the website is searched using the title and abstract. The second step involves reviewing the keywords, title, and abstract once the relevant facts on the reference management software, Mendeley, have been updated.
- Articles were searched for and retrieved according to the eligibility requirements, or their full texts were downloaded and made available. Subsequently, an article-by-article complete reading was undertaken on the selected papers counted in the previous systematic literature review.
- The reference lists of the publications were reviewed to find more relevant research, and then the process began again from Step 2.

### Data Collection Process

The original search activity yielded results that were gathered and organized in an Excel table. The primary search details were also stored in reference management software (Mendeley) to evaluate relevance while eliminating duplicate entries. Afterwards, the discovered records were filtered based on specific criteria, such as title, keywords, and content, to extract information from the abstract. Consequently, the complete text of all literary works that met the eligibility criteria was preserved. The information contained in the publications was further examined to determine the degree to which it aligns with the purpose of this systematic literature review. The spreadsheet contains specific details, including the title, authors, year, keywords, objective, region, theory, methodology, outcome, future study, and NPD triangle. The data collection procedure involves the extraction of figures and tables. This investigation evaluated each possibly pertinent paper by thoroughly examining the complete text and extracting data.



### Data collection

The following categories of information were extracted from the papers:

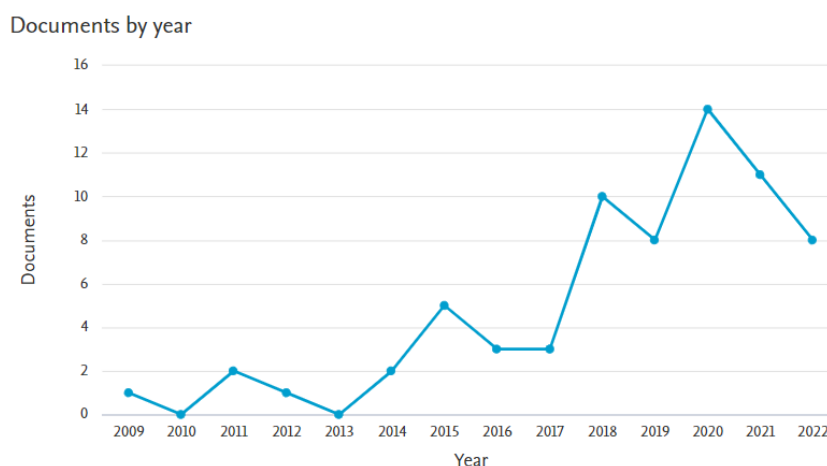
1. Demographic breakdown of the selected manuscripts, followed by their contents:
  - a. Dissemination of the findings of the research
  - b. Those regions that were considered in the study
  - c. Existence of research foundations
2. The primary emphasis of this study

The information was meant to be provided to academics and family business actors; therefore, item 1 of the dataset was elaborated. The second data item was used to explain relevant issues in order to have a better understanding of the work that has been done previously on product development management inside the family business. Using the method known as thematic synthesis, each finding was investigated. The data outlines and relationships were more easily uncovered using this strategy.

In addition to using a rigorous and transparent data collection process based on the widely recognized PRISMA framework, this study leveraged the sophisticated capabilities of Vos Viewer software. This powerful tool facilitated a deeper and more nuanced analysis of the gathered data, enabling the identification of hidden patterns, connections, and trends that might have remained obscured through traditional methods alone. By visually representing the network of relationships within the data, Vos Viewer enhanced our understanding of the key themes and concepts emerging from the literature, ultimately enriching the findings and contributing significantly to the overall strength and validity of this research.

### FINDINGS AND DISCUSSION

The preliminary findings indicated 955 articles. Following multiple stages of research selection, the number of publications reviewed for eligibility was reduced to 68. Figure 2 illustrates the pattern of publications from 2009 to the present. The publication started in 2009 and focused on a family firm's successful implementation of product innovation in Australia. The trend experienced a marginal uptick in 2011 and subsequently declined in 2013. Subsequently, it began its growth and reached its zenith in 2020, boasting 14 items. The text covers various topics, such as product innovation strategy, successor innovation motives, technological innovation, radical innovation, and so on. This list includes renowned authors in the field of family business research.



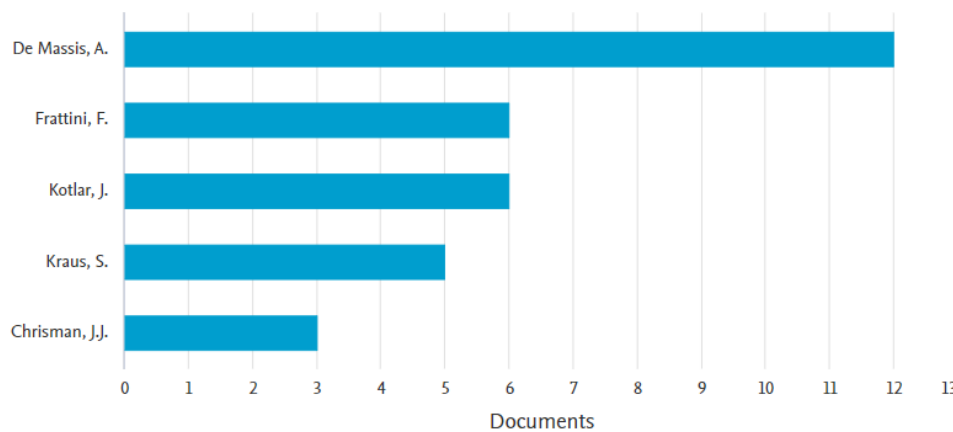
**Figure 2.** Publications trend

. Figure 3 illustrates the top five authors who have produced the most articles. Alfredo De Massis from Italy holds the record for having the most articles among scholars. He authored 12



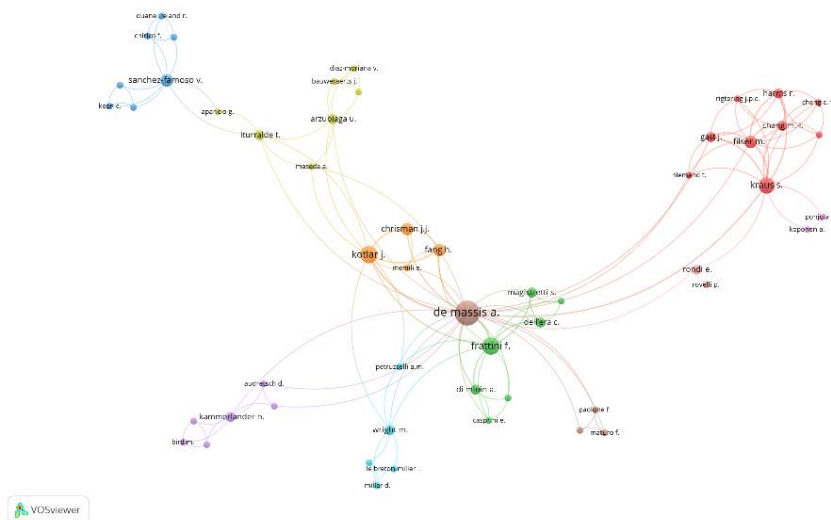
articles. He is renowned for his expertise in publications related to the family business. Massis initiated his publication on product development management subjects in 2014 on the basis of his findings. The primary contention of this paper is that family managers should set specific benchmarks for evaluating supplier negotiation power and gauging the extent of external interference with their management control. His recent article, published in 2021, uses a relational perspective to analyze open-service innovation in family manufacturing enterprises.

Furthermore, Massis’s most highly cited paper was published in 2016. This article showcases the innovative nature of organizations’ adherence to their traditions. This analysis will assess and deliberate on the exemplary circumstances of six prosperous family enterprises. The essays were collaboratively authored with other academics rather than written individually.



**Figure 3.** Five top authors in the family business study

Figure 4 illustrates the network of De Massis in collaboration with other experts. The chart depicts the ties between academics who have published articles on product development management in family firms.

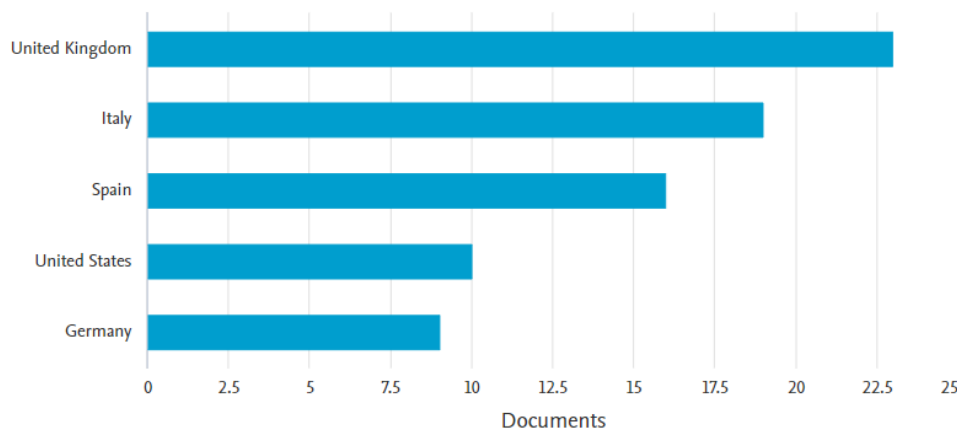


**Figure 4.** Network visualization of the authors

These academics have contributed to the field of study known as family businesses. Most publications are indexed in Scopus. The network is broken into 10 groups, each represented by a particular hue. It describes the author’s degree of collaboration with other individuals. According to the illustration, De Massis works closely with five researchers: Frattini, F; Kotlar, J; Fang, H. Filser,

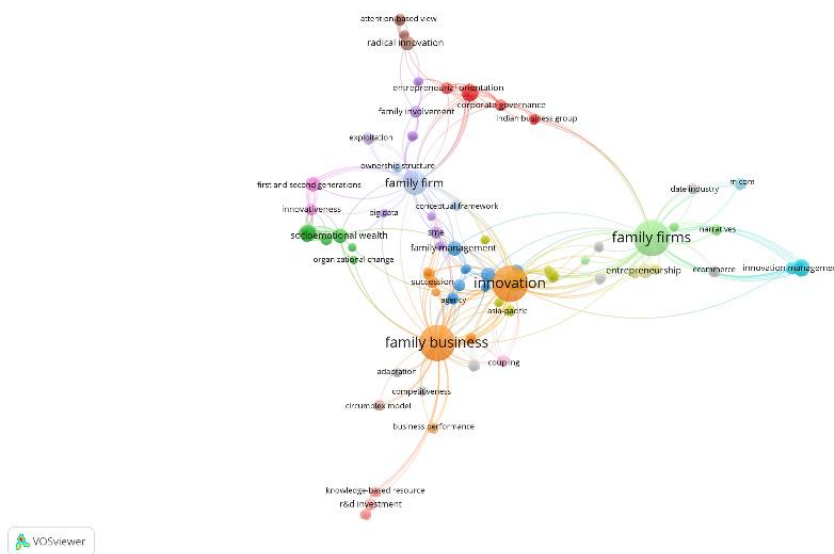
M; and Kraus, S.

The conclusion indicated that more than 15 different territories participated in the investigation, which was supported by geography. The top five territories are shown in Figure 5, which can be found below. The United Kingdom contributes the most, followed by Italy, Spain, the United States, and Germany. The study in the United Kingdom commenced an upward trajectory in 2011 and has continued to expand to this day. The initial piece elucidates the concept of entrepreneurial learning as socially situated and seamlessly incorporated into the everyday existence of family enterprises. This article was published in the Journal of Small Business and Enterprise Development. The authorship of this text can be attributed to a scholar affiliated with Lancaster University. The latest article also explores the impact of family ownership and management participation on the technical innovation of family enterprises. The Journal of Business Research has issued this publication.



**Figure 5.** Five top territories

The manuscript addressed many aspects of product development management in family businesses. Figure 6 illustrates the researcher keywords employed in the studies. The picture employs diverse colors to depict different clusters and convey distinct ideas.



**Figure 6.** Term map of past studies

The primary keywords encompass innovation, family business, family firms, and family firm. There are 177 terms categorized into 25 clusters. The suggested research area encompasses both creativity and family companies. Ultimately, this evaluation encompasses 22 papers. These articles pertain to the management of product development in a family business. Table 4 summarizes the subjects covered by each article, which aims to address the current research deficit in the field.

According to the table, the scholarly exploration of product development management in family businesses has been limited. Out of the 22 publications, the majority of them are research papers. Studies on this topic have been conducted in various countries, such as Germany (Beck et al., 2020; de Groote et al., 2021; De Massis et al., 2018; Kallmuenzer & Scholl-Grissemann, 2017; Stadler et al., 2018), the United Kingdom (Belitski & Rejeb, 2022), the Netherlands (Brinkerink & Bammens, 2018), and other countries. Most research conducted in Germany focuses on the Mittelstands, which are characterized by their high level of innovation (De Massis et al., 2018). Nevertheless, there has been no research conducted in Indonesia thus far. The purpose differs among the 22 literary works. To investigate the potential impact of family ownership on R&D investment, Kong and Choi (2015) examined how this influence may differ based on company group membership and growth potential. Their goal was to understand the connection between family influences and innovation outcomes. Furthermore, the purpose of this study is to assess the probability of family businesses adopting the open customer innovation model and to evaluate the advantages of customer collaboration between family and non-family enterprises (Belitski & Rejeb, 2022). The predominant method adopted was quantitative, with 13 papers utilizing this strategy. Eight studies utilized the qualitative approach, while one applied a mixed-method research design.

The effective creation and sale of new products rely on the collaborative synergy of three essential functions: marketing, design, and production. The NPD triangle, sometimes known as the trifacta, symbolizes the fundamental basis of efficient product development management. It offers a rich environment for examining the relationship between innovation and tradition. The NPD triangle works for everyone, but the family business is different. It blends old moves with fresh creativity to create something extraordinary (Chrisman et al., 2005a). Familial strengths in communication, shared values, and entrepreneurial spirit complement the structured approach of the NPD triangle, empowering the family business to navigate the complexities of NPD with greater efficiency and emotional investment. The family business likes to talk and share its values with its members. It makes everyone work together on new products like a family, always on the same page. It can decide things quickly and agree on what the product should be, which helps the business make it faster and better (Chrisman et al., 2005a).

The family business can think more about the long run. It can choose things that are good for the environment and society and invest in excellent new products that might take longer to pay off. It means it can try out bolder, smarter ideas for the future, just like the NPD triangle for making new things (Cesaroni et al., 2021). The family business loves challenges. It is not scared to try out crazy designs and marketing tricks, even if it has never been done before. It allows the company to make creative products that people really love, and sometimes, it even shakes up the whole market (Cesaroni et al., 2021). However, the complexities of family life can present daunting challenges. Commitment to understanding, empathy, and collaborative solutions paves the way for deeper connection and enduring love. Several familial-specific obstacles may emerge while adopting the NPD triangle within the context of family business. These can encompass decision-making complexity, resistance to change, and resource limitations. Sometimes, the family takes too long to decide on new products because everyone wants to agree. It does not fit with the triangle of creating things quickly, cheaply, and with everything needed (Chrisman et al., 2005a).

**Table 4.** Articles Included in The Review

| No | Authors                | Year | Title  | Country        | NPD Triangle |        |               | Theory  | Methodology |              |
|----|------------------------|------|--|----------------|--------------|--------|---------------|---|-------------|--------------|
|    |                        |      |  |                | Marketing    | Design | Manufacturing |   | Qualitative | Quantitative |
| 1  | Beck et al.            | 2020 | Communicating family firm brand antecedents and performance effects  | Germany        | ✓            |        |               | -   | ✓           | ✓            |
| 2  | Belitski et al.        | 2022 | Does the open customer innovation model hold for family firms?   | United Kingdom |              | ✓      |               | open customer innovation models and family firms, geographical perspective, family firm size                                    |             | ✓            |
| 3  | Bendig et al.          | 2020 | Effect of family involvement on innovation outcomes: moderating role of board social capital                               | -              | ✓            |        |               | Family involvement and outcomes of innovation, number of inventions, market relevance of innovations, board social capital, and |             | ✓            |
| 4  | Brinkerink and Bammens | 2018 | Family influence and R&D spending in Dutch manufacturing SMEs: role of identity and socioemotional decision considerations | Netherlands    |              |        | ✓             | socioemotional  |             | ✓            |
| 5  | Byrom et al.           | 2009 | Coopers brewery: heritage and innovation within a family firm  | Australia      |              | ✓      |               | -   | ✓           |              |
| 6  | Casprini et al.        | 2017 | How family firms execute open innovation strategies: the loccioni case   | Italy          | ✓            | ✓      | ✓             | open innovation   | ✓           |              |
| 7  | Choi et al.            | 2015 | Family ownership and R&D investment: role of growth opportunities and business group membership                            | Korea          |              |        | ✓             | family owners and R&D investment  |             | ✓            |
| 8  | Fredyna et al.         | 2019 | Entrepreneurial orientation and product innovation: the moderating role of family involvement in management                | Spain          |              |        | ✓             | entrepreneurial orientation, product innovation, family management  |             | ✓            |
| 9  | Fuetsch                | 2022 | Innovation in family farms: roles of the   | Austria        | ✓            |        |               | resource-based view   |             | ✓            |

| No | Authors            | Year | Title  | Country                           | NPD Triangle |        |               | Theory  | Methodology |              |
|----|--------------------|------|--|-----------------------------------|--------------|--------|---------------|---|-------------|--------------|
|    |                    |      |  |                                   | Marketing    | Design | Manufacturing |   | Qualitative | Quantitative |
|    |                    |      | market, family, and farm performance   |                                   |              |        |               |   |             |              |
| 10 | Groote et al.      | 2021 | How can family businesses survive disruptive industry changes? insights from the traditional mail order industry   | Germany                           | ✓            |        |               | family firm resource view, ability, and willingness paradox, SEW perspective  | ✓           |              |
| 11 | Islam et al.       | 2022 | Family enterprise and technological innovation   | China                             | ✓            |        |               | agency theory, behavioural agency theory, socioemotional wealth, resource-based view, internationalization strategy |             | ✓            |
| 12 | Kallmuenzer et al. | 2017 | Disentangling antecedents and performance effects of family SME innovation: a knowledge-based perspective  | Germany, Austria, and Switzerland | ✓            |        |               | knowledge-based view  |             | ✓            |
| 13 | Kotlar et al.      | 2014 | Profitability goals, control goals, and R&D investment decisions of family and non-family firms  | Spain                             |              |        | ✓             | behavioural   |             | ✓            |
| 14 | Li et al.          | 2015 | Research on Chinese family businesses: perspectives  | China                             | ✓            |        |               | -   | ✓           |              |
| 15 | Magistretti et al. | 2019 | Exploring the relationship between types of family involvement and collaborative innovation in design-intensive firms: insights from two leading players in the furniture industry | Italy                             |              | ✓      |               | innovation in design-intensive firms, innovation in family firms, and type of family involvement                    | ✓           |              |
| 16 | Massis et al.      | 2016 | Innovation through tradition: lessons from innovative family businesses and directions for future research   | -                                 | ✓            | ✓      | ✓             | knowledge-based, search breadth, dynamic capabilities   | ✓           |              |
| 17 | Massis et al.      | 2018 | Perspective innovation with limited  | Germany                           | ✓            | ✓      | ✓             | knowledge on innovation,  | ✓           |              |

| No | Authors        | Year | Title   | Country | NPD Triangle |        |               | Theory                                    | Methodology |              |
|----|----------------|------|---|---------|--------------|--------|---------------|---|-------------|--------------|
|    |                |      |   |         | Marketing    | Design | Manufacturing |   | Qualitative | Quantitative |
|    |                |      | resources: management lessons from the German Mittelstand   |         |              |        |               | resource-based view, family firm research |             |              |
| 18 | Migniori       | 2020 | How does family management affect innovation investment propensity? the key role of innovation impulses | Italy   | ✓            | ✓      | ✓             | technology-push/demand-pull               |             | ✓            |
| 19 | Miller et al.  | 2015 | Resources and innovation in family businesses: The janus face of family socio-emotional preferences     | -       | ✓            |        |               | socioemotional wealth                     | ✓           |              |
| 20 | Rondi et al.   | 2022 | Exchanging knowledge in the TMT to realize more innovation opportunities: what can family firms do?     | Italy   | ✓            |        | ✓             | family firm, and TMT knowledge exchange   |             | ✓            |
| 21 | Stadler et al. | 2018 | International and product diversification strategies that suit family managers?                         | Germany |              |        | ✓             | Human capital, social capital,            |             | ✓            |
| 22 | Wu et al.      | 2018 | Managerial incentives and investment policy in family firms: evidence from a structural analysis        | US      |              |        | ✓             | corporate investment policy               |             | ✓            |

The family business must build trust through defined decision-making roles. This streamlines product development, letting everyone feel involved and valued while keeping the wheels spinning. Old habits can make it hard for the family business to try out new things for its products. Nevertheless, if the management encourages everyone to share ideas and always looks for ways to improve, the company can come up with even better and more creative products (Cesaroni et al., 2021). In addition, sometimes, the family business is not big enough to have separate teams for everything it needs for new products. This might make it harder to use the triangle ideally. However, it can be fixed by getting help from other companies or using technology, so the family business can still create great products even if resources are limited (Mu et al., 2007).

Every function within the NPD triangle plays a unique but interconnected role in taking a product from its initial idea to becoming available in the market. Marketing acts as an intermediary between the company and its clients, with the responsibility of comprehending market demands, recognizing potential product prospects, and formulating persuasive methods for product introduction and advertising. Product development management can gain a lot from using feedback and insights from influencers (Hermawan, 2021). Because they know a lot about what their audience wants and needs, influencers can provide helpful feedback during the ideation, creation, and testing stages of a product. Their involvement can help ensure that goods appeal to the right people and increase the chances of success in the market. When enterprises use influencer marketing as part of their product development strategy, they can make better product choices, get customers more involved, and ensure that the product fits the market better. Today's market is constantly changing, but businesses can get ahead by using the power of influencers. The role of design involves converting customer requirements into concrete product specifications and incorporating engineering and industrial design elements to guarantee that the product's physical appearance and functionality meet consumer expectations. For example, product development management plays a critical role in the success of Imanee's digital marketing strategy (Prisca & Wulandari, 2022). Imanee can develop products that align with its target audience's needs and desires by understanding customer preferences and market trends. This customer-centric approach to product development will enhance the effectiveness of their digital marketing efforts, as they can promote products that resonate with their audience and generate genuine interest. Research shows that most consumers are more likely to trust a brand recommended by a trusted friend or family member. Leveraging endorsement partnerships within targeted digital marketing campaigns can replicate this powerful effect, transforming endorsers into potent catalysts for building loyal, enduring customer trust (Pretita & Toha, 2022).

Manufacturing assumes responsibility for the production system's design, operation, and coordination, which includes monitoring procurement, distribution, and installation. An extensive examination of the available literature indicates a significant disparity in the attention given to various components of the NPD triangle. Most studies focus on the marketing factor, with nine publications covering this issue. Manufacturing is the subject of six articles that go into its exploration, while design is the focus of only two articles that entirely examine its role. Four articles demonstrate a comprehensive approach by covering all three legs of the NPD triangle, while one explicitly explores the connection between marketing and manufacturing. There is a need to further investigate the design and manufacturing aspects of product development management because of the imbalanced allocation of research focus. Gaining a more equitable comprehension of the three roles and their interconnections is crucial for maximizing the efficiency of the product development process and achieving long-lasting success in the current competitive market. The findings of this research support the notion that, regardless of the specific stage-related challenges encountered, a comprehensive understanding and effective implementation of technology proficiency, effective



marketing strategies, robust commercialization efforts, and skilled managerial leadership are crucial for maximizing success in the product development process (Mu et al., 2007).

## **CONCLUSIONS**

This study aims to ascertain the prevailing direction of family business literature in product development management. Specifically, the purpose of this paper is to provide an answer to the following research question: What previous studies have been conducted on the topic of product development management and family businesses? It creates the most advanced version by examining pertinent pieces of literature. This study has integrated the concept of family business into the theme of product development management to enhance the comprehension of family business literature concisely. This study investigates existing research on family businesses and product development management. This study adheres to the updated recommended reporting items for systematic review and meta-analyses (PRISMA) reporting guidance, as Page et al. (2021) outlined, to evaluate the existing literature comprehensively. The reason is that PRISMA reporting is comprehensive and the process is transparent. This study presented the preliminary findings of 955 publications. Following multiple stages of study selection, the number of articles reviewed for eligibility was reduced to 68. Ultimately, the review considered 22 publications as the final number of studies. The responsibility for product development management lies with three parties: marketing, design, and production. This is referred to as the NPD triangle. This discovery indicates that most articles solely focus on the marketing aspect. This article proposes that future research should investigate additional entities that may be accountable, such as those involved in design and manufacturing. The research results support the idea that, no matter what stage-related problems are faced, the most important factors for success in the product development process are a deep understanding of and skill with technology, strong commercialization efforts, effective marketing strategies, and skilled managerial leadership (Mu et al., 2007).

This essay raises important issues regarding the underlying innovation techniques and challenges. Potential future research may investigate how family dynamics and decision-making influence innovation strategies and the possible trade-offs between immediate profitability and long-term innovation in family-owned enterprises. This research highlights a deficiency in the existing literature concerning the specific contributions of design and manufacturing in the context of product creation within family businesses. It highlights the necessity for conducting research that examines the incorporation of design and manufacturing into the new product development (NPD) procedures of family businesses. It is crucial to comprehend the distinct challenges and opportunities encountered by design and manufacturing in family firms and to explore the potential synergies between design, manufacturing, and marketing in fostering innovation within family businesses. This study provides family business managers with valuable insights into the primary obstacles and opportunities related to product creation in the family business. It also emphasizes the significance of collaboration among marketing, design, and manufacturing departments. This study aims to address the theoretical gaps in the field of family business and product development management, thus contributing to the expansion of knowledge in this area for researchers and academics.

## **LIMITATION AND FURTHER RESEARCH**

Although this study offers essential insights into the present state of research on family businesses and product development management, it is crucial to recognize its limitations. The literature review was limited to a specific range of databases and search phrases, which may have omitted relevant studies from alternative sources or used different terminology. Furthermore, the study predominantly focused on research conducted in industrialized nations, potentially

disregarding valuable perspectives from family companies in emerging economies. To overcome these limitations and enhance the comprehension of this subject, future research should broaden the extent of the literature review by encompassing a more comprehensive array of sources and languages, conduct comparative studies across various regions, examine the influence of design and manufacturing in family enterprises, explore the effect of family dynamics on product development, and conduct longitudinal studies to monitor changes over time.

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## REFERENCES

- Beck, S., Prüggl, R., & Walter, K. (2020). Communicating the family firm brand: Antecedents and performance effects. *European Management Journal*, 38(1), 95–107. <https://doi.org/10.1016/j.emj.2019.04.008>
- Belitski, M., & Rejeb, N. (2022). Does open customer innovation model hold for family firms? *Journal of Business Research*, 145(May 2021), 334–346. <https://doi.org/10.1016/j.jbusres.2022.03.012>
- Brinkerink, J., & Bammens, Y. (2018). Family Influence and R&D Spending in Dutch Manufacturing SMEs: The Role of Identity and Socioemotional Decision Considerations. *Journal of Product Innovation Management*, 35(4), 588–608. <https://doi.org/10.1111/jpim.12428>
- Cassia, L., De Massis, A., & Pizzurno, E. (2012). Strategic innovation and new product development in family firms: An empirically grounded theoretical framework. *International Journal of Entrepreneurial Behavior & Research*, 18(2), 198–232. <https://doi.org/10.1108/13552551211204229>
- Cesaroni, F. M., Chamocho Diaz, G. D., & Sentuti, A. (2021). Family firms and innovation from founder to successor. *Administrative Sciences*, 11(2), 54. <https://doi.org/10.3390/admsci11020054>
- Chrisman, J.J., & Patel, P. C. (2012). Variations in R&D investments of family and nonfamily firms: Behavioral agency and myopic loss aversion perspectives. *Academy of Management Journal*, 55(4), 976–997. <https://doi.org/10.5465/amj.2011.0211>
- Chrisman, James J, Chua, J. H., & Sharma, P. (2005a). Trends and directions in the development of a strategic management theory of the family firm. *Entrepreneurship Theory and Practice*, 29(5), 555–575. <https://doi.org/10.1111/j.1540-6520.2005.00098.x>
- Chrisman, James J, Chua, J. H., & Steier, L. (2005b). Sources and consequences of distinctive familiness: An introduction. *Entrepreneurship Theory and Practice*, 29(3), 237–247. <https://doi.org/10.1111/j.1540-6520.2005.00080.x>
- Chua, J. H., Chrisman, J. J., & Chang, E. P. C. (2004). Are Family Firms Born or Made? An Exploratory Investigation. *Family Business Review*, 17(1), 37–54. <https://doi.org/10.1111/j.1741-6248.2004.00002.x>
- Craig, J. B. L., & Moores, K. (2006). A 10-year longitudinal investigation of strategy, systems, and environment on innovation in family firms. *Family Business Review*, 19(1), 1–10. <https://doi.org/10.1111/j.1741-6248.2006.00056.x>
- Curado, C., & Mota, A. (2021). A systematic literature review on sustainability in family firms. *Sustainability (Switzerland)*, 13(7), 3824. <https://doi.org/10.3390/su13073824>
- De Groote, J. K., Conrad, W., & Hack, A. (2021). How can family businesses survive disruptive industry changes? Insights from the traditional mail order industry. *Review of Managerial*

- Science*, 15(8), 2239–2273. <https://doi.org/10.1007/s11846-020-00424-x>
- De Groote, J. K., Schell, S., Kammerlander, N., & Hack, A. (2023). The role of similarity and complementarity in the selection of potential partners for open innovation projects in family firms. *Small Business Economics*, 60(4), 1347–1367. <https://doi.org/10.1007/s11187-022-00666-x>
- De Massis, A., Audretsch, D., Uhlaner, L., & Kammerlander, N. (2018). Innovation with Limited Resources: Management Lessons from the German Mittelstand. *Journal of Product Innovation Management*, 35(1), 125–146. <https://doi.org/10.1111/jpim.12373>
- De Massis, A., Di Minin, A., & Frattini, F. (2015). Family-driven innovation: Resolving the paradox in family firms. In *California Management Review* (Vol. 58, Issue 1, pp. 5–19). University of California Press. <https://doi.org/10.1525/cmr.2015.58.1.5>
- De Massis, A., Frattini, F., Kotlar, J., Petruzzelli, A. M., & Wright, M. (2016). Innovation through tradition: Lessons from innovative family businesses and directions for future research. *Academy of Management Perspectives*, 30(1), 93–116. <https://doi.org/10.5465/amp.2015.0017>
- De Massis, A., Frattini, F., & Lichtenthaler, U. (2013). Research on technological innovation in family firms: Present debates and future directions. *Family Business Review*, 26(1), 10–31. <https://doi.org/10.1177/0894486512466258>
- Deephouse, D. L., & Jaskiewicz, P. (2013). Do family firms have better reputations than non-family firms? An integration of socioemotional wealth and social identity theories. *Journal of Management Studies*, 50(3), 337–360. <https://doi.org/10.1111/joms.12015>
- Duran, P., Kammerlander, N., Van Essen, M., & Zellweger, T. (2016). Doing more with less: Innovation input and output in family firms. *Academy of Management Journal*, 59(4), 1224–1264. <https://doi.org/10.5465/amj.2014.0424>
- Dyer Jr, W. G., & Whetten, D. A. (2006). Family firms and social responsibility: Preliminary evidence from the S&P 500. *Entrepreneurship Theory and Practice*, 30(6), 785–802. <https://doi.org/10.1111/j.1540-6520.2006.00151.x>
- Eddleston, K. A., Kellermanns, F. W., & Sarathy, R. (2008). Resource configuration in family firms: Linking resources, strategic planning and technological opportunities to performance. *Journal of Management Studies*, 45(1), 26–50. <https://doi.org/10.1111/J.1467-6486.2007.00717.X>
- Fan, C. W., Tan, J., Guller, E., Garcia, B., & Quek, A. (2011). *Asian Family Businesses Report 2011*.
- Gómez-Mejía, L. R., Haynes, K. T., Núñez-Nickel, M., Jacobson, K. J. L., & Moyano-Fuentes, J. (2007). Socioemotional wealth and business risks in family-controlled firms: Evidence from Spanish olive oil mills. *Administrative Science Quarterly*, 52(1), 106–137. <https://doi.org/10.2189/asqu.52.1.106>
- Hermawan, D. (2021). Influencer Marketing in Digital Era: Does It Really Works? *International Journal of Management, Entrepreneurship, Social Science and Humanities*, 3(2), 50–67. <https://doi.org/10.31098/ijmesh.v3i2.260>
- Jin, C., Wu, B., & Hu, Y. (2021). Family business internationalization in paradox: effects of socioemotional wealth and entrepreneurial spirit. *Frontiers in Psychology*, 12, 667615. <https://doi.org/10.3389/fpsyg.2021.667615>
- Kallmuenzer, A., & Scholl-Grissemann, U. (2017). Disentangling antecedents and performance effects of family SME innovation: A knowledge-based perspective. *International Entrepreneurship and Management Journal*, 13(4), 1117–1138. <https://doi.org/10.1007/s11365-017-0443-x>
- Kammerlander, N., & Ganter, M. (2015). An attention-based view of family firm adaptation to discontinuous technological change: Exploring the role of family ceos' noneconomic goals. *Journal of Product Innovation Management*, 32(3), 361–383.

- <https://doi.org/10.1111/jpim.12205>
- Kammerlander, N., Sieger, P., Voordeckers, W., & Zellweger, T. (2015). Value creation in family firms: A model of fit. *Journal of Family Business Strategy*, 6(2), 63–72. <https://doi.org/10.1016/j.jfbs.2015.04.001>
- Kets de Vries, M. F. R. (1993). The dynamics of family controlled firms: The good and the bad news. *Organizational Dynamics*, 21(3), 59–71. [https://doi.org/10.1016/0090-2616\(93\)90071-8](https://doi.org/10.1016/0090-2616(93)90071-8)
- Koentjoro, S., & Gunawan, S. (2020). Managing knowledge, dynamic capabilities, innovative performance, and creating sustainable competitive advantage in family companies: A case study of a family company in Indonesia. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(3). <https://doi.org/10.3390/JOITMC6030090>
- Kong, L., & Choi, Y. R. (2015). *Institutional Knowledge at Singapore Management University Family ownership and R & D investment: The role of growth opportunities and business group membership National University of Singapore and business group membership*. 1053–1061. <https://doi.org/10.1016/j.jbusres.2014.10.007>
- Kotter, J. P. (2012). *Leading change*. Harvard business press.
- Mu, J., Peng, G., & Tan, Y. (2007). New product development in Chinese SMEs: Key success factors from a managerial perspective. *International Journal of Emerging Markets*, 2(2), 123–143. <https://doi.org/10.1108/17468800710739216>
- Naldi, L., Nordqvist, M., Sjöberg, K., & Wiklund, J. (2007). Entrepreneurial orientation, risk taking, and performance in family firms. *Family Business Review*, 20(1), 33–47. <https://doi.org/10.1111/j.1741-6248.2007.00082.x>
- Olubiyi, O., Lawal, A. T., & Adeoye, O. O. (2022). Succession planning and family business continuity: Perspectives from Lagos State, Nigeria. *Organization and Human Capital Development*, 1(1), 40–52. <https://doi.org/10.31098/orcadev.v1i1.865>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *The BMJ*, 372. <https://doi.org/10.1136/bmj.n71>
- Poza, E. J., & Daugherty, M. S. (2018). *Family business* (5th ed.). Cengage.
- Pretita, S., & Toha, M. (2022). Marketing Mix Strategy Formulation of Ready Meal Business using Hierarchical Clustering (Case Study of Kokikit). *International Journal of Management, Entrepreneurship, Social Science and Humanities*, 5(1), 161–181. <https://doi.org/10.31098/ijmesh.v5i1.914>
- Prissca, M., & Wulandari, N. (2022). Digital Marketing Strategy for Local Business Imanee Clothing Line. *International Journal of Management, Entrepreneurship, Social Science and Humanities*, 5(1), 182–193. <https://doi.org/10.31098/ijmesh.v5i1.917>
- Stadler, C., Mayer, M. C. J., Hautz, J., & Matzler, K. (2018). International and product diversification: Which strategy suits family managers? *Global Strategy Journal*, 8(1), 184–207. <https://doi.org/10.1002/gsj.1190>
- Thomsen, S., & Pedersen, T. (2000). Ownership structure and economic performance in the largest European companies. *Strategic Management Journal*, 21(6), 689–705. [https://doi.org/10.1002/\(SICI\)1097-0266\(200006\)21:6<689::AID-SMJ115>3.0.CO;2-Y](https://doi.org/10.1002/(SICI)1097-0266(200006)21:6<689::AID-SMJ115>3.0.CO;2-Y)
- Tirdasari, N. L., & Dhewanto, W. (2012). Family Business Succession in Indonesia: A Study of Hospitality Industry. *Procedia - Social and Behavioral Sciences*, 57, 69–74. <https://doi.org/10.1016/j.sbspro.2012.09.1159>
- Tirdasari, N. L., & Dhewanto, W. (2014). Family Business Succession of Hospitality Industry in Indonesia. *Journal of Asia Pacific Business Innovation & Technology Management*, 004, 021–

029.

- Tirdasari, N. L., & Dhewanto, W. (2020a). When is the right time for succession? Multiple cases of family businesses in Indonesia. *Journal of Family Business Management*, 10(4), 349–359. <https://doi.org/10.1108/JFBM-10-2019-0064>
- Tirdasari, N. L., & Dhewanto, W. (2020b). Critical Success Factors in Business Succession: The Indonesian Family Business. In I. Fahmi (Ed.), *Advances in Economics, Business and Management Research* (Issue 141, pp. 74–78). Atlantis Press. <https://doi.org/10.2991/aebmr.k.200514.017>
- Waldron, J. (2021). *The Digital Transformation of Traditional Family Businesses*. Metasfresh. <https://metasfresh.com/en/2021/09/15/the-digital-transformation-of-traditional-family-businesses/>
- Xu, Y., Cheng, B., & Pan, F. (2021). Will conjugal relationship affect the corporate innovation? Empirical evidence from a-share listed family business in China. *Nankai Business Review International*, 13(1), 100–123. <https://doi.org/10.1108/NBRI-05-2021-0038>
- Zahra, S.A. (2005). Entrepreneurial risk taking in family firms. *Family Business Review*, 18(1), 23–40. <https://doi.org/10.1111/j.1741-6248.2005.00028.x>
- Zahra, Shaker A, Hayton, J. C., & Salvato, C. (2004a). Entrepreneurship in family vs. non-family firms: A resource-based analysis of the effect of organizational culture. *Entrepreneurship Theory and Practice*, 28(4), 363–381. <https://doi.org/10.1111/j.1540-6520.2004.00051.x>
- Zahra, Shaker A, & Sharma, P. (2004b). Family business research: A strategic reflection. *Family Business Review*, 17(4), 331–346. <https://doi.org/10.1111/j.1741-6248.2004.00022.x>
- Zellweger, T. (2007). Time horizon, costs of equity capital, and generic investment strategies of firms. *Family Business Review*, 20(1), 1–15. <https://doi.org/10.1111/j.1741-6248.2007.00080.x>
- Zellweger, Thomas M, Nason, R. S., Nordqvist, M., & Brush, C. G. (2013). Why do family firms strive for nonfinancial goals? An organizational identity perspective. *Entrepreneurship Theory and Practice*, 37(2), 229–248. <https://doi.org/10.1111/j.1540-6520.2011.00466.x>
- Zellweger, Thomas Markus, Nason, R. S., & Nordqvist, M. (2012). From longevity of firms to transgenerational entrepreneurship of families: Introducing family entrepreneurial orientation. *Family Business Review*, 25(2), 136–155. <https://doi.org/10.1177/0894486511423531>