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by Sri Gunawan

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Article

Managing Knowledge, Dynamic Capabilities, Innovative Performance, and Creating Sustainable Competitive Advantage in Family Companies: A Case Study of a Family Company in Indonesia

Sugiarto Koentjoro ¹ and Sri Gunawan ^{2,*}

¹ PT, Prima Karya Kontrindo, Surabaya 60284, Indonesia; sugiartokoentjoro@hotmail.com

² Faculty of Economics & Business, Universitas Airlangga, Surabaya 60286, Indonesia

* Correspondence: sgunawan@feb.unair.ac.id

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Abstract: Family businesses often face significant challenges while trying to develop and increase their sustainability throughout generations. This is often due to their inability to properly manage the knowledge required to develop their resources to increase sustainability. Therefore, this study examines the relationship between processes of managing knowledge, dynamic capabilities, and innovative performance in an Indonesian family company in order to improve business performance. This is qualitative research with a single case study used to obtain data from nine participants in an Indonesian family company (“Ardiles”) that focuses on footwear. The findings showed that a family company that mobilizes knowledge can improve its members’ dynamic capabilities for proper business management and growth. Furthermore, the frequent process of mobilizing knowledge improves family members’ dynamic capabilities to create new ideas. This creative process helps to improve its innovative performance, thereby creating a sustainable competitive advantage among family companies.

Keywords: family company; managing knowledge; dynamic capability; entrepreneurial orientation; open innovation

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1. Introduction

Family companies play an essential role in the economic growth of a country; therefore, the need to boost their sustainability has caught the attention of key players in the business world. Globally, approximately 80% of functional businesses are family-owned, and 77% are new establishments [1–3]. Ironically, they are often faced with significant challenges in maintaining a sustainable competitive advantage [4]. However, relatively 10% to 30% of such companies are maintained to the second and third generation [1], while approximately 5% survive the fourth [5]. Conversely, several studies are centered on managing conflicts among family members to create a sustainable competitive advantage [6–8]. However, it is not enough for these companies to adapt to globalization, characterized by a competitive dynamic environment that relies solely on their capability to manage relational conflicts. They reluctantly indulge in new investments to avoid risks [9]. They undergo a gradual transformation [4,10] and tend not to involve other family members [11], causing their inability to improve innovative performance, which is a key factor in entrepreneurial orientation, as well as failure to create a sustainable competitive advantage [4,10,12]. This is due to family members’ incapability and unwillingness to seek, share, and transfer knowledge from generation to generation [9,12].

As a result, these companies are incompetent [13]. Sustainable competitive advantage is based on a firm’s ability to acquire new knowledge [14]. This acquisition is the basis for innovative performance

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in the company [15]. This is one of the tendencies of entrepreneurial orientation that aids in advancing such businesses and its occasional adaptation to a complex business environment. The acquisition of new knowledge that stimulates the creation of innovative performance seems to be a mysterious process.

However, family companies tend to possess significant financial resources and market control, although this does not lead to sustainable competitive advantage. In this era of globalization, there is a need to incite the dynamic capabilities of family members to improve corporate innovation performance [16] and adapt to environmental changes [17]. The complexity of managing knowledge to boost core competencies needs to be integrated with external expertise to encourage open innovation. It improves innovative performance and also causes family companies to face competitive and dynamic markets [18]. Therefore, this research was carried out to explore family members' managerial behavior in sustaining and implementing the knowledge required to stimulate innovative performance in these companies. Studies based on the statement above are still lacking.

Subsequently, the need to understand ways to improve a sustainable competitive advantage is an essential motivation for this research. This study aimed to identify research questions related to managing knowledge to incite innovative performance and create a sustainable competitive advantage in a company known as "Ardiles." This research offers a comprehensive explanation of the actions adopted by family members to improve their dynamic capabilities.

It also provides a broader understanding of literature in the context, as mentioned earlier. This is a significant contribution that aids family members in seeking, transforming, creating, and exploiting knowledge in a dynamic and uncertain environment. Furthermore, this study broadens the understanding of entrepreneurial orientation and creates innovative performance related to sustainable competitive advantage in family companies.

This research was carried out based on a single case study approach, which involves an Indonesian private company named "Ardiles." It was founded in the year 1942, and its primary focus is on footwear. The study shows the ability of family companies to generate sustainable competitive advantage. The literature review on family companies, managing knowledge, and entrepreneurial orientation was used as a basis for this research. The research results were further analyzed in accordance with the theoretical and managerial implications.

2. Theoretical Background

2.1. Family Company

In this study, the company is defined as a family-owned business, which has been passed down from generation to generation [5,19,20]. In the second generation, there were four shareholders (all males) with blood ties in accordance with the given authority and management of the company, including decision-making. Although these firms carry out closely interrelated business activities, they do not always converge [21–24].

The implication of a family firm's role is quintessential to understanding the intersection between professionalization and behavioral expectations related to the identity of family members and business owners [25]. Emotional ties and values are two interrelated factors that significantly influence decisions and outcomes [26,27].

The inability to harmonize these two factors (emotional ties and values) from the dimensions of family and business tend to negatively affect efforts to share knowledge in such companies [28]. Succession also causes a dramatic change in goals and cohesion, thereby negatively impacting innovative performance [29]. Several family businesses have the intention to involve the next generation. Furthermore, when the owner is absolutely involved in the business, it increases the viability of the company [30]. This involvement and corporate management support entrepreneurial behavior [12,31–33]. Some studies have been able to identify long-term family-oriented companies that involve roles across generations. This causes them to dedicate their resources to product innovation and risk-taking in order to encourage corporate entrepreneurship [34]. However, maximum innovative

performance is realized supposing there is sole ownership, while it decreases when the shareholders are dispersed across generations [35]. The ability to manage knowledge in business with intergenerational engagement boosts individual and corporate understanding. This enhances members' dynamic capabilities in the implementation of knowledge required to create new products and markets that are in accordance with consumer needs [4,35]. This enables these companies to improve innovative performance that adapts to dynamic environmental changes, thereby creating a sustainable competitive advantage [12,36].

2.2. Manage Knowledge

Cognitive knowledge is one of the implicit resources that are inherent in individuals. It is a transferred asset that is applicable under certain circumstances in the company [37]. In this era of globalization, the increase in the economic environment's dynamism has led to a high competitive advantage achieved through knowledge acquisition. Consequently, knowledge is developed through social interaction with human resources (HR). Additionally, the implicit and explicit types are converted into cognitive knowledge of family members, namely the SECI Model, which stands for socialization, externalization, combination, and internationalization [38,39].

Although knowledge needs to be accumulated in order to create value, this has remained a significant challenge for these companies' future generations [9,23]. This is influenced by factors associated with family relationships, commitment, psychological ownership (identity, ownership, responsibility), enrolling for practical academic courses, employing non-family members, or working outside the firm [40]. Therefore, it is a strategic resource for all family-owned businesses. Conclusively, knowledge needs to be transferred from the previous to the next generation (tacit knowledge) [9].

This is supported by the existence of a quality relationship between the predecessor and successor, academic background, experience, and delegation of business operations to future generations. The sharing of knowledge in family companies is either from the predecessor to successor or vice versa [41]. It is a two-way relationship that leads to new changes as well as improves their level of competitiveness. A company's ability is managed by increasing its absorptive information capacity from other firms [42,43]. It is also improved through an exploratory learning process to acquire new knowledge (which will serve as the potential knowledge).

This type of learning is carried out by ensuring that the implementation of potential knowledge is in accordance with the current conditions required to adapt to dynamic environmental changes [44–47]. Therefore, the company is expected to interpret the knowledge possessed based on the current environmental conditions. This encourages the flow of information to achieve HR capital gains, which boosts innovative performance [48]. The acquisition of knowledge leads to the development of rational thinking, which improves the dynamic capabilities involved in managing the company's abilities, including reconfiguring its resources to make essential decisions [49,50].

Dynamic capability is defined as the company's ability to adapt to rapid changes by creating, expanding, modifying, and exploiting its resources based on entrepreneurial behavior to encourage innovative performance and maintain its sustainability [51]. Alignment between increased dynamic capabilities and managing knowledge in family companies tends to create strategies to adapt to environmental changes, thereby boosting competitive advantages [17]. This supports the enhancement of the dynamic ability of managers, and to create superior value from their resources, they have to stay ahead of competitors [52]. The acquisition and allocation of new knowledge improve the dynamic capabilities of its human resources [53]. This aids the company in developing the flexibility and freedom required to make strategic decisions that adapt and revolve around the current environmental conditions [43]. Dynamic capabilities need to be designed to obtain, transform, and use the acquired knowledge to create new products according to market demands [4]. Managerial human and social capital, including managerial cognition, are the three major factors that underlie the generation of dynamic capabilities to improve sustainable competitive advantage [52,54].

Managerial human capital is carried out by investment in the company's management resources obtained through education, training, learning, and experience. Managerial social capital is carried out by boosting the knowledge of the company's internal and external social relations. Managerial cognition is a mental capital that gives corporate leaders the confidence to take strategic decisions resulting in integral relationships with managerial human and social capital. This aids the company in adapting to changes in the external environment to enhance its sustainable competitive advantage. Therefore, these companies need to take advantage of family members' potential dynamic capabilities in managing knowledge both at the managerial and operational levels [9]. Family companies that possess adequate social capital improve entrepreneurial orientation by enhancing innovative performance [55].

2.3. Entrepreneurship Orientation

Entrepreneurship orientation aids in the sustainability of family-owned businesses [19,33,56,57]. This is because their activities revitalize these companies [33].

It is either positively or negatively affected by age-long family companies with unique characteristics. A family company is a conducive environment for entrepreneurial activities [21,34]. On the contrary, some studies have reported that they exhibit lesser entrepreneurial activities because they do not embrace change, and such businesses tend to avoid decision making that exacerbates risk [10,26]. The allocation of ownership to several generations negatively influences the tendency to cause conflict and incompatibility of interests, thereby affecting innovative performance [35]. Family companies with an organizational structure that inhibits responsiveness, decentralization, and entrepreneurial orientation cannot adapt to new opportunities [58]. Therefore, there is a need for an alignment between the extent to which they are willing to take risks and the level of cohesion and uniformity of company goals. In conclusion, this aids them in identifying and exploit their strengths and weaknesses to unlock their innovative potentials [59].

It is also expected of them to mobilize complementary heterogeneous knowledge among family members to improve entrepreneurial orientation [60,61]. This dimension includes autonomy, innovation, risk-taking, being proactive, and competitive aggressiveness [62].

Autonomy describes individuals' actions to issue and implement ideas as well as their willingness to independently pursue opportunities that are free from corporate constraints. Innovation reflects the company's tendency to boost creativity, develop new ideas, and implement processes that either lead to modifying existing products or the generation of contemporary brands and services to suit the market demand [63,64]. An individual's risk-taking ability is related to the high cost of failure compared to the potential returns obtained from the company. Proactivity describes the efforts of both individuals and companies to take advantage of new opportunities. It involves searching for and analyzing potential perspectives, including anticipating the demands of consumers in the future.

This has helped companies to become competitive. In addition, competitive aggressiveness describes a firm's tendency to intensely deal with competitors to improve their position [64]. This research focuses on improving innovative performance, which is one of the tendencies of entrepreneurial orientation [61,62]. This is because it has been reviewed in previous studies; therefore, it is considered an important basis for companies to improve their innovation performance to generate a competitive advantage [4,12,15,31,34,41,48].

Consequently, managing internal knowledge enhances entrepreneurial orientation, which in turn improves a company's innovative competence [65]. Although the complexity involved affects the company's performance and the external stakeholders that encourage family-owned businesses to carry out open innovation strategies to face competitive dynamic markets [18]. Firms that encourage open innovation by collaborating with other companies such as alliances, partnerships, and network mergers take advantage of external resources to obtain market information and technology [66,67]. Open innovation improves performance efficiency, which causes these businesses to adapt to consumers, new technology, products, and market networks.

3. Research Methods

3.1. Case Study

This research applied a qualitative methodological approach. The positivistic case study was used because of its advantages. It refers to theoretical assumptions to respond to specific research questions in family companies [68]. The quantitative approach was not applied because extremely little objective data was obtained [35]. This method involves information from a limited number of top management respondents in each of the surveyed family firms, which served as a basis for generalization and the possibility of obtaining subjective data [69]. A single case study approach is applied in this research by carrying out in-depth interviews to acquire detailed results [70]. This method was selected because it provides an explanation that is related to the complexity involved in the ability of family companies to create sustainable competitive advantage [70,71].

These types of firms are unique and complex because each of them operates differently. Subsequently, each family member has a certain level of cognitive knowledge and distinctive level of openness to sudden change [4,5,72].

Additionally, each of them varies in terms of the extent of the generational or engagement initiative and the willingness of family members to participate in decision making concerning the company's strategy [2,31,33,73]. Each family company has its uniqueness, making it difficult to decipher similar conditions or compare their compatibility or success. Therefore, the character of a single case study is weak in generalization. However, the research results are a source of valuable comparisons that needs to be thoroughly analyzed to understand the phenomenon being studied. Therefore, a single case study provides an in-depth knowledge of these instances [74]. This type of case study contributes to the development of theory applied in similar contexts and conditions, thereby creating opportunities for future quantitative research to be generalized [75].

This single case study approach focuses on the issues involved in the sustainability of the “Ardiles” family company (footwear industry) in Indonesia. This industry is being managed by the third generation and has nine business units, namely WA1, WA2, WA3, WA4, SSU1, SSU2, SSU3, SSU4, and ODE, as shown in Table 1.

Table 1. Anonymized data of the “Ardiles” family company, business units, years of establishment, and business fields.

Data Company	History Year in Business	Business Units	History Year in Business	Business Fields	Information
VIC home industry	1942–1986	-	-	Footwear home industry and marketing	- First company - 20 workers - Change to enterprise WA (1986)
WA enterprise	1986–now	- WA1 - WA2 - WA3 - WA4	1986–now 1995–now 1996–now 2007–now	Footwear industry and footwear raw material distributor Footwear industry Footwear development and marketing Footwear industry	- “Ardiles” brand family product
SSU enterprise	1988–now	- SSU1 - SSU2 - SSU3 - SSU4	1988–now 1985–now 2008–now 2013–now	Footwear industry and footwear raw material industry Footwear raw material industry Footwear industry Footwear industry	- Total ± 9000 workers
ODE enterprise	2009–now	ODE	2009–now	Footwear industry and footwear raw material industry	

Source: Authors.

Table 1 shows the anonymized data of the “Ardiles” family company, which consists of the business unit, field, and establishment year. Data on shareholders, unit managers, and the roles of family members are shown in Table 2. Table 3 provides information on the participants interviewed, including their ages and roles. The family tree of shareholders is shown in Table 4. An initial name was given to the company by a family member and professional participant. Also, the percentage of shares owned by each family member was not disclosed in this study.

Table 2. Data of shareholders, managers of business units, and roles of family members involved.

Business Units	Shareowner and Generations	Manager of Business Units and Generations	Other Family Members Involved and Generations	Roles of Family Members Involved
WA1	IIA (first son of the second generation) IIB * (second son of the second generation) IIC (third son of the second generation) IID (fourth son of the second generation)	II D (fourth son of the second generation)	-	-
WA 2	IIA, IIB *, IIC, IID	II A (first son of the second generation)	IIIB1 (first daughter of the third generation, first daughter of IIB *)	Operation manager
WA 3	IIA, IIB *, IIC, IID	IIIB2 (first son of the third generation, first son of IIB *)	-	-
WA 4	IIA, IIB *, IIC, IID	IIIB3 (family member of the third generation, second son of IIB *)	-	-
SSU 1	IIA, IIB *, IIC, IID	IIC (third son of the second generation)	-	-
SSU 2	IIA, IIB *, IIC, IID	IIC (third son of the second generation)	IIIC2 (Husband of the first daughter of IIC, the third generation)	Deputy manager
SSU 3	IIA, IIB *, IIC, IID	IIC (third son of the second generation)	IIIC3 (family member of the third generation, second son of IIC)	Deputy manager
SSU 4	IIA, IIB *, IIC, IID	IIC (third son of the second generation)	IIIC1 (family member of the third generation, first son of IIC) IIIC2 (Husband of the first daughter of IIC, the third generation)	Deputy manager Marketing manager
ODE	IIA, IIB *, IIC, IID	IIA (first son of the second generation)	IIIA1 (husband of the first daughter of IIA, family member of the third generation) IIIA2 (second daughter of IIA, a family member of the third generation)	Deputy manager Financial manager

* = passed away. Source: Authors.

Table 3. Participant data and roles.

Participant	Generation/Outside Professional	Age Range	Roles
IIB2 **	The first son of the third generation, first son of IIB *	±44	- Managers of WA1 business units - Shareholders - Managers of WA3 business units
IIB3	Second son of IIB *, a family member of the third generation	±35	- Managers of WA4 business units - Deputy managers of SSU4 unit business
IIC1	The first son of IIC, a family member of the third generation	±38	- Deputy managers of SSU3 unit business
IIC3	Second son of IIC, a family member of the third generation	±35	- Deputy managers of SSU3 unit business
D	Professionals outside family members	±50	- SSU1 and SSU2 business unit production managers
R	Professionals outside family members	±50	- SSU3 business unit production managers

* = passed away. ** = participants of core family members.

Table 4. Family tree and shareholders.

Generation I	IA φ * + IB σ **			
Generation II	IIA σ (1943) Shareholder	IIB σ * (1945–2013) Shareholder	IIC σ (1949) Shareholder	IID (1958) Shareholder
Generation III	IIIA1 φ (1972)	IIIB1 φ (1972)	IIIC1 σ (1980)	IIID1 φ **
	IIIA2 φ (1982)	IIIB2 σ (1974)	IIIC2 φ (1982)	IIID2 σ **
		IIIB3 σ (1983)	IIIC3 σ (1983)	

* = passed away. ** = not yet involved and still in postgraduate study. Source: Authors.

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 3.2. Data Collection

Data was collected through interviews and direct observations, which is a method commonly used in case studies to gather information [71]. The research questions in this study are related to the strategies used by “Ardiles” to improve family members’ dynamic capabilities in managing knowledge to increase their innovative performance and create a sustainable competitive advantage.

In this study, data were obtained through “in-depth interviews,” which are often the primary and effective means of collecting data [76]. The number of participants was chosen to reduce the occurrence of bias data in the interview results.

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 A total of nine participants took part in semi-structured face-to-face interviews. They were asked questions associated with the strategy used by each family member to manage the company in order to increase the production of various models of footwear. The next question was related to the response previously obtained and needed in accordance with the research objectives. The participants included four core family members, with three from the second generation (IIA, IIC, IID) and one from the third generation (IIB2), which represented the late family members from the second generation (IIB *). Interviews were also conducted with three other family members from the third generation (IIB3, IIC1, IIC3) and two professional participants involved in the family business (D, R).

All participants' data are shown in Table 3. This study conducted one-on-one in-depth interviews to find participants willing to talk and share their ideas. Interviews with the core participants (the four family members) were repeated in several sessions.

Each interview's duration was adjusted to the time provided by the participants, with the shortest at an average of 1 h, while the longest was 1 h and 58 min. Interviews with other participants were conducted in 1–2 sessions with a minimum and maximum duration of 47 min 15 s and 2 h 36 min. Audio recording devices were used to document the details of the information obtained from participants to ensure the validity of the data collected in the study [77,78].

3.3. Data Analysis

A case study approach was used to analyze the data used in this research [71,79]. This is similar to the patterns matching data analysis procedures, which started with the open coding process, using the organization of the transcript obtained from the interviews [71,75,79].

Transcript data were given additional footnotes for citations by making a memo to form the initial code to track different categories. Furthermore, the existing data were identified using relevant concepts classified into various categories using categorical aggregation. The next step is the axial coding process, which combines several relevant categories to identify the emerging themes, manually identified, without using special coding software due to the semi-structured interviews. The themes identified were compared to the relationships likely to arise along the dimensions: managing knowledge, by theoretical aggregation [80].

This study also showed the importance of linking the dimensions such as managing knowledge, dynamic capabilities, and innovative performance. The integration of these concepts can enhance the understanding of the strategies used by "Ardiles" to create a sustainable competitive advantage. Therefore, identifying the processes needed to manage knowledge in the "Ardiles" family company adequately. It can provide insight into ways to improve family members' dynamic capabilities. Furthermore, interview manuscripts and study results were examined by involving two experts in the family business field that also work as lecturers at Universitas Airlangga, Surabaya, Indonesia.

4. Result

4.1. Bundling Knowledge

Through the representative quotations from the interview results, three emerging categories were identified: namely, internal, external, and managerial cognition. These categories are related to the theme "knowledge bundling," which can be created based on family members' professional knowledge.

The findings generated in this study shows that knowledge and experiences were transferred to the family members of "Ardiles" from previous generations. IID as the fourth son of the second generation shared the knowledge and experience possessed by family members of the third generation to increase their experiences.

As the second generation, we endeavor to provide adequate knowledge to the third generation to boost their level of experience. (IID: fourth son of the second generation)

IIIB2, the eldest son of the third generation and the first to get involved in the family business, encouraged others to learn from operational managers and other professionals.

I encourage them to learn from external professionals to increase their level of knowledge. (IIIB2: the eldest son of the third generation)

Similarly, other third-generation family members (IIIB3) feel that cognitive knowledge can be developed through the learning process and experience acquired since each generation started running the business.

... at that time, my elder brother "Koko" arguably released me after mentoring me on the strategies used to negotiate with suppliers and assessing raw materials. Sometimes, I also learnt from Mr. IIC, IID, and IIA. (IIIB3: third-generation family members)

Professional R, the production manager at the SSU1 and SSU2 business units indicated that the father (IIC: third son of second-generation) as the manager transfers knowledge related to production and provision of solutions to possible problems to the son (third generation). This was also carried out by the SSU3 business unit's production managers to the third-generation family members involved.

The third sons of the second generation are placed in the factory by IIC to learn of the problems that exist in the company and determine the best way to resolve these problems, other than staying at home talking and playing. (Professional R: production manager in the SSU3 business unit)

These findings indicate the existence of an internal learning process from family members in the "Ardiles," which is carried out through social interactions between them and professionals in the company's business unit. The transfer of knowledge in the company's internal environment increases cognitive knowledge among family members.

The result of this study showed that family members of "Ardiles" can also increase their knowledge through external social interactions outside the scope of the company. IIC, as the third son of the second generation, encouraged others, especially the third generation, and professional staff involved in different business units to attend international exhibitions abroad. This is because it encourages them to learn more and increase their knowledge of the footwear industry for advancement.

... my children, every year I have to go to Germany to participate in foreign exhibitions. (IIC: third son of the second generation)

This was also supported by the fourth son of the second generation (IID), whomanages the WA1 business unit with a branch in China involved in the procurement of raw materials for shoes/sandals. This branch supports the need for raw materials in various business units and strengthens the knowledge on the latest trending raw materials in China.

... we are mandated to master fashion ... therefore, we adopt the strategies used by other cultures ... furthermore, our overseas offices of raw material resources in China inspires us ... (IID: the fourth son of the second generation)

Family members' participation in local and international exhibitions can provide input related to the development of new technologies for footwear products. Also, the routine conduction of market surveys has the ability to increase their knowledge on domestic and global markets for footwear products. This was also carried out by IIIB2, the eldest son from the third generation.

... The advancement in technology has positively improved our capabilities enabling us to read from the internet, newspapers, and join exhibitions (IIIB2: third-generation eldest son)

To improve cognitive knowledge, other third-generation family members (IIIB3) also carried out market surveys to obtain precise information through customer responses in order to determine their specifications for footwear products.

I also have external mentors, experienced in determining customers' need ... that tends to open my horizons, conduct market surveys and exhibitions. (IIIB3: third-generation family members)

Other third-generation family members (IIIC3) increased their knowledge through external focus group discussions (FGDs) related to "launching" a new product from the family business. They stated that FGD can increase knowledge on the trend of footwear products in the market and provide suitable ways to market new products in new business environments.

... I studied outside through IIIB2 ... holding a Focus Group Discussion before "launching" a product. We also conducted an FGD where we determined the average number of cities, using hundreds of respondents. ... Whenever we enter a new market, we study the terrain ... External professionals carry out the FGD ... and once the results are good, we launch the product with more confidence (IIIC3: third-generation family members)

Professional D stated that, as a production manager of the SSU1 and SSU2 business units, efforts need to be made to increase their knowledge. The third-generation family members in the SSU business unit took the initiative to conduct market surveys on product models and prices in order to obtain information on the trends in the market and consumer purchasing power. They also attended international exhibitions regularly to increase their knowledge of the export market and new product models in the global market.

The third generation sons of IIC survey the market create a relationship with the marketing community, and attend exhibitions on exported footwear ... there are family members responsible for exhibitions, therefore, they are assigned to determine the prices and model of the products. (Professional D: production manager in SSU1 & SSU2 business units)

This study illustrates the existence of an external learning process from "Ardiles" family members that can be obtained through social interactions in external companies, such as through participation in exhibitions, and conducting consumer/market surveys related to products and prices to improve their cognitive knowledge.

The research result shows that the next generation needs to be trained on risks management and strategic decision processes on existing business opportunities before being authorized to manage business units in the "Ardiles" family company. IIIC3, as a member of the third-generation family, felt more willing to make decisions after witnessing the strategies used by IIIB2 (third-generation eldest son) to make prompt decisions.

... I make decisions based on IIIB2 strategies, which encourages me. (IIIC3: third-generation family members)

According to IIIB2 (third-generation eldest son), in the "Ardiles" family company, conditions were created that required the next generation to increase their mental capital to take risks and make strategic decisions based on their cognitive knowledge.

... therefore, the third generation is also faced with a situation that enables them to make a decision, with their experience and knowledge used to determine its success ... they are also trained to be courageous in making decisions. (IIIB2: third-generation eldest son)

Professional D indicated that IIC (third son of the second generation) as a manager in the SSU business unit needs to be given to the next generation (son) to enable them to make decisions according to their duties. This learning process improves their mental capital in making strategic decisions.

... they (sons of IIC) make their own decisions and are accountable to the IIC. (Professional D: production manager in SSU1 and SSU2 business units)

These findings revealed that the managerial cognition learning process among "Ardiles" family members was the mental capital used to make decisions based on the knowledge and opportunities provided by senior generation family members. Decisions were made in accordance with the limits of their authority.

Therefore, it can be concluded that the cognitive knowledge of family members in the company was improved through the accumulation of knowledge gained through internal, external, and managerial cognition learning processes that prepare professional HR family members for the dynamic business environment.

4.2. Knowledge Mobilization

An emerging category—namely, preparing and positioning human resources professional family members related to the theme of knowledge mobilization—was identified through representative quotations from the interviews.

This research showed that the “Ardiles” family company provided opportunities for trusted professionals and family members to manage their business units. This enabled managers to “leverage” their knowledge to advance the business units to make a profit. According to the third-generation family member IIIB3, family members need to have the competence and responsibility required to advance the business unit.

... Honesty, competency, and responsibly are the significant conditions of picking a person to lead a family business unit (IIIB3: third-generation family members)

Also, this study’s results showed that the responsibility to manage business units in “Ardiles” is only prioritized by family members (i.e., professionals) with the ability to utilize their knowledge for adequate advancement. According to the eldest son of the third generation (IIIB2), the business unit managers need to have the ability to create new ideas and courage as well as the responsibility to implement them. This is because each business unit competes openly with others in the internal company to increase professionalism.

We cannot make any family member without the adequate abilities and knowledge a unit manager (IIIB2: third-generation eldest son, WA3 business unit manager)

According to professional R, the second generation third son (IIC), the family member in each business unit needs to be a professional with the right competence required to manage a business unit.

Before IIIC3 controlled the product, the IIC failed to realize the need to lead the SSU3 business unit (Professional R: production manager in SSU3 business unit)

Therefore, it can be concluded that, in an effort to leverage the knowledge of family members in business units, HR professionals need to be trusted to manage the process of knowledge mobilization in the “Ardiles” company.

This study, identified as knowledge bundling and mobilization with theoretical aggregation, concluded that the relationship between emerging themes and dimensions is based on adequate knowledge management. Therefore, by providing opportunities for family members to manage their knowledge-based business unit, it can increase their ability to continuously accumulate, create, and implement the right business strategies. Furthermore, the continuous implementation of the right business strategies increases the dynamic capabilities of knowledge-based family members.

4.3. Innovative Performance

Through representative quotations from the interviews in this study, it can be concluded that managing knowledge through the bundling and mobilizing process increases the dynamic capabilities of family members to create innovation performance in the “Ardiles” family company. This enabled their business to grow to three companies with nine business units. Furthermore, through implementing a horizontal integration strategy, the family company forms business units that make footwear products with varied models that differ from one business unit to another. The family company also implemented a vertical integration strategy by forming business units that produce footwear products from raw material using the right development and distribution network. This research identified innovative performance in each business unit of the “Ardiles” family company such as product variations, line extension, vertical integration, expansion to new markets, and adaptation of new technology, which have continued to increase over time. IIIB2, the WA3 business unit manager that engaged in the marketing and development of the “Ardiles” brand, improved the business units’ innovation

performance by creating varied models, developing new and broader markets, and improving the quality of HR professionals.

Since 2018, our varied models have increased with thousands of colors ... the last category is in JawaPos, Mr. Jokowi, our president, is currently in possession of our basketball shoes ... our category is quite complete, and each shoe increases in accordance with HR expertise ... there is a yearly expansion of our marketing unit through online distributors, e-commerce ... global market. (IIIB2: third-generation eldest son, WA3 business unit manager)

Entrepreneurial orientation with innovative performance tendencies was also shown by other third-generation family members (IIIC1) that maintained an existing SSU4 business unit via the continuous development of more models of footwear products.

Every year we always develop more models ... this is in a bid to ensure the company's continuous existence (IIIC1: third-generation family members)

Similarly, third-generation family members (IIIB3), that are managers of the WA4 business unit, introduced different footwear models by investing in the fashion product category that requires many models.

We aim to produce more varied models next year because the current market consists of numerous fashion models. (IIIB3: third-generation family members)

Also, the third-generation family members (IIIC3, IIIB3) increased their cognitive knowledge by participating in exhibitions with global products such as "Nike" and "Reebok" used as a reference for innovation.

... examine the exhibitions in China and determine the extent the technology can be applied in our factory. (IIIC3: third-generation family members)

... (I) furthermore, Nike's machine in its product is different and can act as a reference in Ardiles ... (IIIB3: third-generation family members)

According to the third son of the second generation (IIC), participating in exhibitions abroad can increase family members' knowledge and stimulate the innovation required to create export products in the future.

... It is essential to participate in exhibitions overseas to acquire more knowledge on exportation, to raise the shoe business to exportation standard (IIC: third son of the second generation)

The third generation's learning process was initially carried out by the fourth son of the second generation, IID, by sharing experiences to create new product designs.

... the second generation provides the right knowledge to the third ... in terms of model competition, design, and development strategies. (IID: fourth son of the second generation, WA1 business unit manager)

According to professional D, production manager at the SSU1 and SSU2 business units, the business unit of "Ardiles" follows the market trend by developing a varied footwear product model according to consumer needs. In an effort to support the creation of a wide variety of models, the company followed the development of technology carried out by global products such as "Nike" and "Reebok" as a point of reference.

We have a target, and experience producing numerous footwear; however, it cannot be of various models to avoid saturation. Furthermore, the market has to create a better one every year, and the modeling process is very fast ... globally, this family company has a significantly growing business unit of sandals, similar to the development of technology and in the direction of products such as "Nike" and "Reebok." (Professional D: production manager in business unit SSU1, SSU2)

Furthermore, through representative quotes from interview results, cooperation with external parties was also identified. This was used to combine their family companies' internal innovation competencies with external knowledge to encourage open innovation and improve performance to adapt to dynamic environmental conditions.

This can be seen from the results of interviews conducted with IIA (the first son, second generation) and with IIIB2 (the first son, third generation).

Therefore, innovative performance improvements in the family company "Ardiles" were carried out by increasing HR family members' dynamic capability in managing business units based on knowledge. By collaborating with external companies, "Ardiles" encourages open innovation to support their business units in creating new products and markets as well as in utilizing new technology to increase production quality and quantity.

We did not collaborate with private companies in Taiwan to expand our knowledge on footwear because they are experts and due to the raw materials, technology, and marketing networks ... (IIA: the first son of the second generation)

We worked with an online shoe distribution network, external marketing consultants, and government agencies to market our products. (IIIB2: third-generation eldest son)

5. Discussion

The axial coding process from the research result illustrates that there are linkages between two themes—namely, knowledge bundling and mobilization—with dimensions used to manage the knowledge related to increasing the dynamic capabilities of family members and innovative performance as a theoretical aggregation.

This study provides insight into the conceptualization of the process of managing knowledge to enhance the dynamic capabilities of family members. Furthermore, it creates innovative performance related to product and market innovation and adaptation of the company to dynamic environments. This case study shows that the knowledge obtained from internal, external, and managerial cognition learning, such as a mental capital for family members to dare to create and implement strategic decisions, needs to be accumulated as a form of bundling knowledge to create professional HR members.

Through these findings, it can be concluded that family members' knowledge can be leveraged by trusting professional HR to manage business units. Family companies managing knowledge through bundling and mobilization can improve the dynamic capabilities of family members to manage business units. Furthermore, the increase in the dynamic capabilities of knowledge-based family members, encourage open innovation to collaborate with external companies capable of supporting innovative performance in business units. These include the creation of new products and markets, as well as the utilization of new technologies to improve the quality and quantity of production, thereby, creating a sustainable competitive advantage.

Internal and external learning, as well as improving managerial cognition, are important ways to increase the potential knowledge resource portfolio of individual companies' knowledge and professional HR family members. These findings suggest that internal learning is carried out through internal social interaction between family members and other professionals involved in the business. It involves the transfer of implicit knowledge information and the sharing of experiences and strategies that have been implemented in each business unit.

The transfer of knowledge between internal family members is important to improve their cognitive knowledge and maintain future generations' continuation. Individual knowledge is a collective part of

company knowledge transferred from one person to another periodically [38]. In general, the older generation's knowledge and experience are stored in the form of implicit knowledge [39] and as valuable knowledge in their family business [12]. Therefore, the experienced older generation's role is needed to educate, mentor, and supervise the next generation through close social interaction. This can enable the family business to adapt to the competitive environment [9].

External learning from family members can be conducted through social interactions, participating in local/international exhibitions and conducting market surveys related to knowledgeable information extracted from consumers, market prices, or competitors/global products that are on the market. Furthermore, family companies can develop assuming members increase the new knowledge obtained externally [9,23]. The company's ability to recognize the value of new external information and assimilate and transform business interests can enhance innovative capabilities to support performance [42].

The findings in this study also indicate the existence of managerial cognition learning processes based on the knowledge gained from family members' internal and external learning. Determining strategic decisions is another important step that improves the cognitive knowledge of family members. Furthermore, it is essential to exchange information to improve the strategy-making process. The ability to promote the business environment and delegate future generations can increase their flexibility to make decisions and tolerate mistakes as a basis for the development of managerial cognition [23,73]. This can also encourage family members to participate in the strategy-making process to improve their managerial cognition in making decisions [9].

The accumulation of knowledge over time through internal, external, and managerial cognition learning processes can increase the potential knowledge of family members to prepare and improve the HR of professionals in the company. A successful transfer of knowledge between family members can create a company's internal knowledge resource [81]. This also has the ability to provide a greater opportunity for them to leverage knowledge to develop the business units they manage. Based on the findings, we proposed the following proposition.

Proposition 1. *Internal and external learning and managerial cognition are applicative solutions capable of supporting the process of knowledge bundling in family companies. It also prepares and increases the knowledge of professional HR family members in order to mobilize the knowledge possessed in the business units they manage.*

The findings in this study also revealed that professional HR family members need to be allowed to manage business units by older family members. Furthermore, utilizing professional family members is an important step in leveraging and mobilizing knowledge in the business units. This can support family companies to improve HR members' dynamic capabilities in managing knowledge by creating, transforming, and implementing new knowledge to support innovative performance improvements.

The collective capacity of corporate executives in absorbing new knowledge, which is combined with existing knowledge, can produce a portfolio of competencies for professional corporate executives [54]. Dynamic leadership capabilities act as a driving force for the company's survival and growth [82]. In addition, companies capable of mobilizing new knowledge can support the improvement of managers' dynamic capabilities to create superior value from their resources to stay ahead of competitors [52]. This also enables them to reconfigure knowledge resources and adapt to market changes to achieve a competitive advantage [43].

Dynamic capability generated from the process of knowledge mobilization improves the innovative performance of family companies in terms of product innovation, which is in accordance with customer demand, and strategic adaptation to the market [4]. Generational involvement in family companies can support the deployment of knowledge and experience to each family member, and this enables them to support the increase in internal innovation performance [33,60]. The new knowledge created from the bundling process and knowledge mobilization is the foundation of the company's ability to innovate [15]. Based on the findings, the following propositions are offered.

Proposition 2. *Placing knowledgeable, professional HR family members to manage business units in family companies is an applicable solution that can support knowledge mobilization.*

Proposition 3. *Carrying out the process of managing knowledge through bundling and mobilizing can support family companies in creating, transforming, and implementing new knowledge to improve the dynamic capabilities of knowledge-based family members.*

Through this case, it can be concluded that improving innovative performance in business units, supported by the dynamic capabilities of knowledge-based family members, is a foundation for family companies to become more creative. Family companies that can increase creativity are able to develop new ideas for their companies to create dynamic capability building that can pave the way to improve innovative performance and face uncertainty [17]. In the uncertainty of the business environment, the product life cycle becomes shorter; therefore, it is necessary to combine innovation competencies from internal and external company ideas to adapt to the market [83] by optimizing new technologies [84]. The dynamic innovation capabilities of family members allow the company to integrate internal and external competencies to adapt to the dynamic environment [16]. The project team's competence has the role of collaborative knowledge creation needed in open innovation as the basis for project success and sustainable competitiveness [85]. Companies need to encourage open innovation, which shows good permeability when coupling coordination between two different industries. They also need to complement each other's resources to improve innovative performance [86]. Family companies that can implement creative processes tend to produce new goods and technologies, adapt to the dynamic market, and increase the quantity and quality of production.

Innovative performance refers to companies' tendency to support the creation of new ideas, novelty, and creative processes that can produce new products, services, or the process of using new technologies to adapt to market changes [62]. Furthermore, companies that utilize innovation to exploit opportunities and create new products and markets can increase their value. Therefore, such companies can compete better in the business environment [87]. The findings in this research lead to the following proposition.

Proposition 4. *Increasing creativity to create new ideas based on family members' dynamic capabilities in managing knowledge can enable family companies to produce new products and adapt to new markets and technologies. This tends to improve the quality and quantity of production, thereby enhancing innovative performance and creating sustainable competitive advantage in family companies.*

6. Conclusions and Implication

6.1. Conclusions

This research examined the importance of improving family members' dynamic capabilities in managing knowledge to support innovative performance in family companies. The study showed that knowledge mobilization improves the dynamic capability of effective knowledge-based family members from the bundling process as follows:

1. Family members can obtain internal learning through social interactions within the company, which involves the transfer of implicit knowledge, information, and experience of each family member and professionals involved.
2. External learning can be obtained by family members through social interaction with other companies, which involves obtaining information from consumers, competitors/global products, market prices, market surveys, and through participation in local/international exhibitions.
3. Increase in managerial cognition of family members in making decisions based on the knowledge possessed and through past experiences implemented in family companies.

The process of knowledge mobilization involves placing professional family members to manage business units as a condition and opportunity to leverage the knowledge possessed, activating the process of mobilizing knowledge periodically to improve the dynamic capabilities of knowledge-based family members to create new ideas. Family companies capable of increasing the dynamic of members can explore and exploit internal and external knowledge [88], thereby encouraging open corporate innovation to improve their innovative performance to adapt in a dynamic environment.

This creative process helps family companies to improve their innovative performance by producing new products. It also enables them to adapt to the market with the ability to use new technologies to improve the quality and quantity of production, thereby creating a sustainable competitive advantage.

6.2. Theoretical Implication

This study extends the understanding of managing knowledge in the family business by focusing on members' actions in the bundling and mobilization process to improve their dynamic capabilities. Furthermore, the research provides a more comprehensive explanation by identifying that placing professional family members to manage business units in family companies is an applicable solution for the knowledge mobilization process initially from bundling. It also provides a broader understanding of the organizational learning literature related to the concept of increasing absorptive capacity as a transformation and exploitation ability to realize the capacity of the knowledge possessed [43,44,46,47].

This research also provides a more comprehensive explanation by identifying the use of internal, external, and managerial cognition learning as an applicative solution in the knowledge bundling process. It also has the ability to provide a broader understanding of the organizational learning literature related to the concept of increasing the absorptive capacity as an acquisition and assimilation ability to create insight on potential knowledge [43,44,46,47].

The study also extends the literature of dynamic managerial capability by identifying the strategies used by family companies to improve knowledge-based family members' dynamic capabilities through the mobilization and bundling. It also provides a more comprehensive understanding of the concept of dynamic managerial capability in the context of managing knowledge in family business based on managerial human capital, managerial social capital, and managerial cognition [52,54].

This study also contributes to the literature on entrepreneurial orientation while focusing on the antecedents of the creation of accumulated knowledge obtainable from social interaction within and outside the company. Subsequently, knowledge accumulation followed by its implementation can help family companies to improve the dynamic capabilities of knowledge-based family members to create innovation. Therefore, the model proposed in this study shows that managing knowledge is important in order to improve innovative performance. This is in line with previous research, which stated that knowledge is the basis for innovation [15,33,60].

6.3. Managerial Implication

The process of effectively managing knowledge is essential to create sustainable competitive advantage across generations in family companies. Practitioners of family companies need to understand that in dynamic external environments, product models and markets often change. Therefore, family company practitioners need to continuously improve family members' cognitive knowledge through social interaction with professionals involved in the family business and among themselves. It can also be obtained through family members' participation in local/international exhibitions, markets, and consumer surveys. In addition, managerial cognition learning is also needed by family members as a mental capital for making innovative decisions based on the knowledge they possess.

Providing opportunities for family members that are professionals to manage business units in family companies can help them implement and expand their knowledge, advance in their business units, and improve business unit managers' dynamic capabilities.

Older and future generations need to recognize signals from the external environment that can change at any time. Furthermore, they need to seize opportunities by developing creative ideas based on the knowledge-based dynamic capabilities, possessing and encouraging open innovation by partnering with joint ventures, and expanding networks and technology with external companies to get the needed resources.

Effective knowledge management can support family companies to improve innovative performance by creating new products, adapting to new markets, and increasing the ability to recognize new technologies to improve the quality and quantity of products. It also aids in achieving efficiency in production and management processes, thereby creating a sustainable competitive advantage.

6.4. Future Limitation and Research

This study is associated with the following limitations. First, it was conducted using a single case study in a family company with a focus on the footwear industry. Therefore, the study results cannot be generalized for all family businesses, irrespective of its valuable comparison for future empirical studies on family companies. Second, this study did not consider the occurrence of relational conflict between family members, which tends to affect the knowledge and increase in family companies' innovative performance. Third, this research failed to discuss future or previous generations' reluctance to accept and create new knowledge. Fourth, it failed to consider the strength of the company's financial capital and geographical and cultural differences capable of influencing family companies in managing knowledge to improve innovative performance.

This research was conducted using a single case study in a well-established family company, a third-generation business comprising three companies and nine business units. Therefore, there is a need to conduct future research to examine the extent to which the ability to absorb cognitive knowledge differs between family members, which can affect the company's ability to implement knowledge and improve innovative performance.

Furthermore, future research needs to observe the extent to which the implementation of open innovation can be explored in relation to the obstacles and successes of the family companies in maintaining sustainability and competitive advantages.

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