

THE RECEPTIVENESS PUZZLE: UNDERSTANDING WHY SMALL FAMILY BUSINESSES STRUGGLE WITH ACTIVITY-BASED COSTING ADOPTION

Rosaline Tandiono¹

*Accounting Department, School of Accounting
Master of Accounting, Bina Nusantara University, Jakarta, Indonesia 11480*

ABSTRACT

This study examines the challenges associated with the adoption of activity-based costing (ABC) in a small family business in a less developed country. Through a case study of PT XYZ, a logistic company, the study found that technical factors, including unpredictable customer requests, varying duration of activities, and uncertainty around distance and fuel consumption for each truck, make adopting the ABC method challenging. Organizational factors, such as a top-down hierarchy and the negative perception of the owner affecting the rest of the hierarchy, also contribute to the non-acceptance of ABC. Additionally, key agents within the company did not demonstrate enthusiasm toward changes. The cultural and contextual factors and unique characteristics of small family businesses further make them less receptive to adopting new ideas or changes, including the ABC method. This study offers practical implications for introducing changes, such as improving data collection processes, establishing better communication channels with family business owners, and seeking external expertise or advice from professionals with experience in family business management. The study expands the current discussion on ABC implementation and contributes to the family business literature by linking family business characteristics with the adoption of the ABC method.

Keywords: Activity-based costing (ABC), Small family business, Case Study, Less-developed country, Challenges.

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1. INTRODUCTION

Traditionally, businesses relied on traditional costing methods that focused on direct costs. This approach was suitable when productions heavily relied on raw materials and direct labor and when a technological change was limited and product variations were few (Akyol et al., 2007; Altawati et al., 2018). However, the business environment has rapidly evolved in recent years due to globalization, technological advancements, and changing customer needs, leading to a growing

¹Bina Nusantara University

Jl. Raya Kb. Jeruk No.27, RT.1/RW.9, Kemanggisan, Kec. Palmerah, Kota Jakarta Barat, Daerah Khusus Ibukota Jakarta, Indonesia - 11530

0804 169 6969

rtandiono@binus.edu

need for more appropriate costing methods (Pazarceviren & Celayir, 2013). For example, the rise of automation and digitization in manufacturing and services has led to a shift away from direct labor and a greater focus on indirect costs. Many businesses have adopted alternative costing methods, including activity-based costing (ABC), which allocates costs based on the activities that drive them rather than simply attributing costs to products or services (Quesado & Silva, 2021).

Compared to traditional costing methods, ABC provides a more accurate approach to strategic decision-making, such as pricing, product mix, and resource management (Altawati et al., 2018; Hammami et al., 2019). Additionally, ABC is valuable for operational decision-making, for example, reducing costs, improving quality, and minimizing resource waste (Alsayegh, 2020; Lueg & Storgaard, 2017). For these reasons, ABC has been widely adopted in larger organizations due to the availability of resources and positive management responses (Alsayegh, 2020; Lueg & Storgaard, 2017; Tam & Tuan, 2020). Studies in ABC, therefore, mainly focused on large manufacturing, service, and public institutions (Bjørnenak & Mitchell, 2002).

On the other hand, small businesses have been less receptive to the ABC method (Roztock, 2010). Prior studies have also shown that developed countries have higher rates of ABC adoption than less developed countries (Rankin, 2020; Tam & Tuan, 2020). Despite the issue, there is little understanding of why small businesses in a less developed country tend not to adopt ABC. This is an important area of research because understanding the factors that prevent small businesses from adopting more appropriate costing methods is crucial for their survival and growth in an increasingly competitive business environment.

Based on the background above, the primary objective of this study is to investigate the factors hindering the adoption of ABC in small businesses operating in less developed countries. The research will focus on a single case study of a small family business in Indonesia. The characteristics of small family businesses, such as their unique way of running the organization, decision-making style, management, and openness to new ideas and outsiders, have been discussed in previous studies (Dias & Davila Junior, 2018; Tien et al., 2019). These characteristics may inhibit the adoption of ABC in such businesses. However, empirical studies that analyze the intertwining of small family businesses and ABC adoption are scant. Therefore, the research question of this study is: *"What are the reasons that prevent a small family business from adopting ABC?"*

To answer the above research question, this study investigates the adoption receptivity of ABC in PT XYZ, a small family-owned logistics company based in Indonesia. PT XYZ, operated by the owner and her two sons, exemplified the characteristics of a small, privately owned, and locally operated business, as identified by Scott and Bruce (1987). The logistics industry, known for intense competition, lacks substantial empirical evidence on ABC implementation (Bokor & Markovits-Somogyi, 2015; Sarihan & Marsap, 2019). Given these characteristics, PT XYZ serves as a pertinent case study for examining ABC adoption, highlighting the industry-specific significance of this research.

This study draws on prior research to identify factors that may affect the successful implementation of ABC, including technical, organizational, behavioral, cultural, and contextual aspects. By contextualizing these factors within the framework of a small family business, this study intends

to reveal why PT XYZ has yet to adopt ABC. The synthesized literature review serves as a reference point to interpret and analyze the data collected during the study (Merriam, 1988). This research makes a notable contribution to the existing body of knowledge in two primary aspects. First, this study extends the discussion of the worldwide adoption and implementation of ABC by focusing on a specific setting of a small family-owned business. Second, this study contributes to the existing study on family businesses by providing an in-depth qualitative examination of the interplay between family business characteristics and management accounting practices.

2. LITERATURE REVIEW

2.1 Activity-based Costing and its Application

Activity-based costing (ABC) is a method of calculating costs introduced in the 1980s to address the limitations of traditional costing methods (Berliner & Brimson, 1988). Traditional costing methods allocate overhead costs to products based on a single cost driver, such as labor or machine hours, which can result in inaccurate cost estimates. In contrast, ABC uses multiple cost drivers more closely related to the output, increasing the cost data's precision (Sarihan & Marsap, 2019). By improving the relationship between prices, overhead activities, and products, ABC can increase the possibility of business sustainability and enable companies to have more competitive pricing (Askarany et al., 2010). In addition, ABC can identify redundant resources and promote efficient resource allocation (Raucci & Lepore, 2020).

Furthermore, ABC is recognized as a valuable tool for businesses to reduce and manage costs while providing insights into the activities that drive product or service costs. This information can help managers make informed decisions that lead to greater efficiency and profitability (Tam & Tuan, 2020). The accurate cost information provided by ABC can aid managers in identifying which products or services to prioritize and which to discontinue (Tam & Tuan, 2020). ABC has been found to be a cost-control mechanism that enhances a company's competitiveness and contributes to sustainable business practices (Kennedy & Affleck-Graves, 2001).

ABC implementation has been found to lead to favorable results in several studies. Qian and Ben-Arieh (2008) found that ABC helps managers recognize non-value-adding operations and generate demands on indirect and ongoing capital. Singer and Donoso (2006) demonstrated that ABC provides valid cost estimation, making it an accurate costing method, particularly in organizations where products are diverse. In contrast, traditional costing systems assign indirect costs based on easily identifiable factors, such as direct labor hours, leading to less accurate costing. Kumar and Mahto (2013) argue that ABC assigns indirect costs to activities related to the actual relationship, resulting in more precise costs.

While some studies have reported positive outcomes from implementing ABC, its success is not guaranteed. Several factors have been identified that can influence the adoption and effectiveness of ABC. The following section reviews and synthesizes the literature on the factors affecting ABC implementation.

2.2 *Critical Factors for Successful ABC Adoption*

Brewer (1998) identified six common factors crucial for implementing ABC successfully. These include the participation and support of top-level managers, adequate training, fostering teamwork among employees from different departments to become versatile generalists who can use ABC, incentivizing employee performance related to ABC adoption, empowering workers to make decisions related to ABC, and adopting a long-term, sustainable approach to ABC implementation rather than expecting immediate results. However, subsequent studies have further categorized the factors that influence the success of ABC implementation into technical, organizational, behavioral, cultural, and contextual factors.

Technical factors are all necessary detailed information and methods in calculating ABC. They include identifying main activities, selecting cost drivers, and problem accumulating cost. Prior studies have shown that technical factors play a key role in assessing the success of ABC adoption (Fei & Isa, 2010). However, while technical factors are the main aspects of achievement, they can also hinder ABC implementation by making it too complex, difficult, and costly (Askarany et al., 2010; Pietrzak et al., 2020). On the other hand, Shields (1995) found that the relationship between technical factors and ABC's successful implementation was insignificant. Therefore, focusing solely on technical factors does not provide a holistic picture of the factors contributing to ABC adoption's success or failure.

Scholars have shifted their focus to organizational factors in analyzing the success of ABC adoption rather than emphasizing the technical aspects. *Organizational factors* encompass a range of internal business issues and can significantly affect the success of ABC implementation. For example, Maelah and Ibrahim (2006) found that supportive management, rewards and benefits, cost assessment, and performance appraisal measures significantly influenced the success of ABC implementation. Sartorius et al. (2007) demonstrated that sufficient resources and understanding management were the two key elements for achieving ABC adoption. Liu and Pan (2007) asserted that, among all organizational factors, support from top management is the most significant driving factor for successful ABC adoption.

In some studies, *behavioral factors*, particularly attitudes and support from employees, have also been identified as contributing to the success of ABC implementation. Brown et al. (2004) found that managerial support, internal champion support, and organizational size initially impacted the interest in ABC. However, the acceptance or rejection of ABC ultimately depended on the support of key internal agents. Additionally, the behavior of the non-accounting staff is critical in determining the success of ABC implementation. To gain the support and ownership of non-accounting employees, organizations can link the success of ABC to personal employee welfare or emphasize a tone from the top that prioritizes ABC implementation (Krumwiede, 1998; Shields, 1995).

Another factor is culture. *Cultural factors* are a crucial component that contributes to the success of ABC implementation. These factors comprise national and organizational culture, and their influence has been studied by scholars. Brewer (1998) argued that cultural factors could be

observed when examining the effective implementation of ABC. ABC's implementation was essentially a change management process that required the incorporation of cultural factors. Failure to do so could lead to employees' defensiveness and a lack of usefulness of ABC. He found that national culture with a high-power distance was more likely to succeed in ABC adoption. Conversely, Zhang et al. (2015) identified that organizational culture, which was outcome-oriented and emphasized attention to detail, significantly related to the achievement of ABC adoption. The interaction between centralization, outcome orientation, formalization, and innovation supported success.

Lastly, *contextual factors* are crucial in the success or failure of ABC adoption. Rankin (2020) identified key contextual factors, including competition intensity, cost structure, product diversity, company size, cost information importance, and company strategy. However, Rankin's study found that only three factors were positively associated with ABC adoption: large organization size, reliance on accurate cost information, and strategic decision-making. Chongruksut and Brooks (2005) demonstrated that increased competition is a major reason businesses adopt ABC. Charaf and Bescos (2013) also found that contextual factors such as the importance of cost in decision-making, business complexity or diversity, and proportion of indirect costs can affect ABC implementation success, with the need for accurate costing as the most significant indicator.

The existing literature on the factors of successful ABC implementation offers valuable insights. However, how these factors affect the acceptance of ABC in small family businesses is yet to be explored. The absence of research examining the impact of these factors on small family businesses might be attributed to the challenges of data availability and persuading small business owners of the relevance of the topic. Nevertheless, this research gap presents an opportunity for the current study to address this important area.

3. RESEARCH METHODOLOGY

3.1 *The case study – PT XYZ*

The purpose of this study was met by selecting a case study approach, which allows for in-depth understanding and sensible coverage of the chosen topic (Yin, 2009). This method was feasible since the researcher was able to gain access to PT XYZ and examine the actual environment. Access is crucial for primary data collection in qualitative research and ensuring accurate and reliable results.

PT XYZ is a trucking and freight services provider that was established in 1999. Its primary business activity involves transporting goods from Jakarta's port to any location in West Kalimantan, as specified by its customers. PT XYZ incurs several costs in its operations, which include freight shipping costs, trucking expenses, direct labor, and taxes. PT XYZ owns several trailer trucks to facilitate its operations but does not hire drivers directly. Instead, it outsources drivers from a third-party provider, paying a fixed, lump-sum fee per route. The company's direct costs include direct labor, drivers' fees, freight charges, loading and unloading expenses, and fuel costs. Meanwhile, PT XYZ's indirect costs include administration, operational support, and

marketing activities. Furthermore, PT XYZ is dedicated to providing top-notch services to its customers to remain competitive in the market. This entails accommodating the specific delivery requirements of its clients, including delivery time and location, to meet their demands.

In terms of business performance, the researcher relied on the interview results. Previous studies indicate that most family businesses are less transparent in disclosing information, including finance-related information (Chen et al., 2014; Lien & Li, 2014). Therefore, obtaining the financial statements from PT XYZ becomes a challenge. Nevertheless, despite the constraints of not having access to the financial reports, this study aims to provide a comprehensive understanding of PT XYZ's business performance within the available scope of data. It was revealed through interviews that PT XYZ is historically witnessing profit. However, in recent years, coupled with the challenges posed by the global pandemic, PT XYZ has needed help to maintain its financial performance. According to the respondents, the decrease in profit is due to increased competition.

3.2 *Data collection*

Using multiple data sources in research offers advantages such as verification and discovery opportunities, and reduction of error and bias (Yin, 2009). This study employed observation and semi-structured interviews to enhance the reliability and validity of the research. The observation was conducted before semi-structured interviews as it was necessary to understand the business process for implementing ABC. According to Bokor and Markovits-Somogyi (2015), an in-depth understanding of the operation flow, cost drivers, and business activities is crucial for implementing ABC. Observation also enabled the researcher to formulate relevant questions for the interviews and comprehend the conversational context.

The observation period took place from April to May 2021 after receiving consent from the business owner. Videos and photos were taken with the permission of the people involved in the business process. The researcher also identified cost objects, drivers, and activities during the observation to assess the feasibility and challenges of implementing ABC. After each observation day, the researcher recorded the results and reflections in a field note to facilitate the analysis of the data.

Semi-structured face-to-face interviews followed the observation. The semi-structured interview was selected for its ability to include open-ended questions and to facilitate clarification of responses when required. The interviews were conducted between May and June 2021 with a total of five respondents which is considered an adequate sample size in a case study approach (Creswell, 2007). Additionally, as a small family business, PT XYZ has a limited number of employees, with most of them being family members. The participants included the director, branch manager, assistant manager, finance staff, and marketing staff, all of whom were involved in the company's operations. Given their roles and responsibilities, these respondents were considered appropriate and sufficient to provide rich information about the research questions.

The interviews were guided by the following themes - the current company's challenges, the current costing methods, the knowledge and perceptions of alternative costing methods, such as ABC, and

the attitudes and responses to the introduction of ABC. The average interview session lasted between 50-75 minutes. The interviews were recorded with consent from the respondents.

3.3 Data analysis

The researcher attempted to interpret the situations, events, and interactions observed during the field observation, as noted in the field notes (Mays & Pope, 1995). Though the analysis was carried out during the observation, a more comprehensive analysis was conducted post-observation. As Mays and Pope (1995) posit, the analysis of observational data is similar to qualitative data analysis, and it can be done through an inductive or comparative approach. This research used the comparative approach to analyze the observational data. The researcher compared the field notes with the videos and photos captured during the observation. The comparison aimed to ensure a comprehensive understanding of the business process. The comparison process was repeated several times to reduce any analysis errors and confirm the accuracy of the business process. This rigorous analysis approach enhanced the trustworthiness of the study.

The next phase in the data analysis is to perform a detailed analysis of the interview data. This phase involves several steps. Firstly, the interviews were transcribed verbatim and then read line by line to ensure the researcher was immersed in the data (Braun & Clarke, 2006). This stage also involved taking notes as a way to actively engage with the data, fostering a deeper exploration and analysis of the collected information. Next, the researcher applied an inductive approach to derive codes from the data. The codes were generated based on the literature, the researcher's interests, and the information that the respondents highlighted as essential. After the data were coded, the researcher collated and organized them into broader themes, and a thematic map was developed (Braun & Clarke, 2006).

After summarizing the primary outcomes, the author conducted member checking to verify the trustworthiness of the study. Member checks, also known as respondent validation, involve seeking input on the findings from some of the interview participants (Merriam, 2009). The author emailed her preliminary findings to all respondents to confirm their accuracy. The feedback received from the interviewees played a crucial role in making several critical inferences based on their input. The whole process involved multiple rounds of analysis, with each round refining and adding to the themes derived from the data. Throughout the data analysis process, the researcher iteratively moved between the various stages of the analysis and used literature to support and complement the data.

4. FINDINGS AND DISCUSSION

4.1 Technical factors

PT XYZ encountered several unforeseen situations during the observation period. One such situation was the unexpected requests made by customers. For example, a customer might unexpectedly request immediate delivery to multiple locations, even if it conflicts with PT XYZ's pre-existing delivery schedule for the day. Despite this challenge, PT XYZ prioritized its

commitment to providing excellent customer service and accommodated the customer's request by adjusting its delivery schedule. The staff mentioned that such occurrences were a regular part of PT XYZ's operations, with customers frequently changing their requests near-daily. The described situation is not unique among small family businesses. According to Vizcaino et al. (2021), small family businesses tend to offer personalized services to customers to demonstrate their competence and establish positive relationships. Vizcaino et al. (2021) further assert that small family business owners view customized services as an essential job requirement and crucial to maintaining strong customer connections.

Besides the condition above, PT XYZ faced another unexpected situation: the varying duration of activities. For example, the loading and unloading of goods require different amounts of time based on the size of the goods. Moreover, one of the forklifts was under maintenance during one of the observational days, resulting in a longer duration for the loading and unloading process. These circumstances can impact the identification of cost drivers for the company.

The other unanticipated circumstance encountered by PT XYZ pertained to the distance and fuel consumption of each truck. The outsourced drivers were provided only with the pickup and delivery addresses, without any specific instructions on the route to take or the estimated duration of each trip. Furthermore, the trucks were not equipped with a global positioning system (GPS), making monitoring their movements and fuel consumption challenging. These factors hindered the accurate determination of the cost drivers.

The above situations, which are the unpredictable requests made by customers, varying duration of activities, and uncertainty around distance and fuel consumption for each truck, made it challenging to obtain accurate cost data for each activity, which is a key requirement for ABC (Bokor & Markovits-Somogyi, 2015). These challenges could also hinder understanding the interrelationships between activities, units of measurement, cost drivers, and outputs in the ABC system. This, in turn, could make it difficult to accurately identify the most significant cost drivers and allocate costs to the appropriate activities and products. It is possible, therefore, to conclude that the issues faced by PT XYZ that implementing ABC may not be straightforward, particularly when faced with unpredictable situations that can make it difficult to obtain accurate cost data and calculate the cost.

4.2 Organizational factor

At PT XYZ, the pricing method is top-down, made at the top, by the director who is also the owner and founder of the company. She is the final decision-maker for all matters, including the cost and price of her business. Although she did not use a specific method, she is knowledgeable about all the costs involved. When asked what costs were included in charging customers, she said something like,

"Well, I always make sure to include the freight shipping, trucking, wages, and tax as the costs in determining the price for each customer" (Director).

Nevertheless, not all costs have their scientific calculation. Costs determinations are based on the director's judgment.

"Most of the costs I mentioned are fixed based on the customers. For example, whether the customers are existing or new, and so on. For trucking, I use estimation. I do not have any particular way to calculate that amount for each customer" (Director).

The director's statement that most of the costs mentioned are "fixed based on the customers" implies that the cost determination is not based on a standardized method but varies depending on the customers' characteristics. Moreover, the use of estimation for trucking and the absence of a particular way to calculate the amount for each customer indicates that there may be some degree of subjectivity in the cost-determination process.

She also insisted that her experience and knowledge of each customer were sufficient in determining costing and pricing.

"I have been in this industry for more than 20 years. I have experience in calculating costs. I know how much I want to charge for each customer" (Director).

This statement suggests that the director of PT XYZ relies heavily on her intuition in determining costs and pricing. The finding is consistent with prior studies that found family business entrepreneurs tend to use intuition in decision-making (Kakkonen, 2011; Manesh et al., 2022). While experience can certainly be valuable, it is important to also consider objective data and analysis in the costing and pricing process. Relying solely on a subjective judgment can lead to inconsistencies and errors in pricing, which can ultimately impact the company's profitability and customer satisfaction.

When introduced to the ABC method, she was pessimistic and sounded reluctant. She perceived the ABC method as complicated and required extensive changes for her employees.

"The costing method that you explained sounds complicated. The current method that I use is much simpler. Besides, many of my employees have been working for five years or more. It will be challenging for them to change to the new costing system." (Director)

She also said some costs were difficult to determine due to their uncertainty, thus, justifying her current method of cost calculation.

"In my opinion, my costing method is effective. I don't have to use any assumption. For example, the maintenance cost or the trucking fees, they are not fixed." (Director)

It is understandable that the director may have concerns about the uncertainty of some costs, as this can be a challenge for any costing method. However, it is important to note that the ABC method is designed to address the issue of cost accuracy by identifying and allocating costs based on the activities that drive them (Liu & Pan, 2007; Tam & Tuan, 2020).

The director's unresponsive behavior may have been due to the researcher's introduction and explanation of the ABC method to her. Since the researcher was perceived as an outsider, her judgment and suggestions were likely to be met with more resistance. Studies on family businesses have criticized the management style in such businesses, which tends to be more autocratic and less receptive to new ideas, especially from those who are perceived to be outsiders (Dias & Davila Junior, 2018; Tien et al., 2019). PT XYZ, being a small family business, may be particularly prone to such tendencies. Consequently, suggestions from outsiders, like the researcher, may be unwelcome. However, if someone she trusted, such as her eldest sons, had introduced the ABC method, the director's reception level might have been different.

The director's overall attitude towards the adoption of the ABC method seems to be unsupportive. This is concerning as prior research has demonstrated that the support of upper management is critical for the successful implementation of ABC (Liu & Pan, 2007; Maelah & Ibrahim, 2006; Sartorius et al., 2007). In the case of PT XYZ, the director appeared to doubt the validity of the ABC method. The support of top management is important as it sets the tone for the organization and guides employees on what is deemed significant (Shields, 1995). When top management is hesitant to adopt ABC, it signals to employees that the current costing method is satisfactory and that any changes are discretionary. Under these circumstances, it is challenging to correct the weaknesses of the current costing method.

It is also important to note that, in examining organizational factors related to the adoption of ABC within PT XYZ, this study finds that there is a limited representation of various organizational factors. While existing studies highlight other influences of organizational factors, such as reward and benefits, cost assessment, and sufficient resources (Maelah & Ibrahim, 2006; Liu & Pan, 2007; Sartorius et al., 2007), as a small family business, PT XYZ's organizational factor is characterized by centralized decision-making process, with leadership and ownership playing a pivotal role. The limited exploration of other organizational factors is reflective of the unique dynamics of small family businesses, where the owner's leadership style, preferences, and decisions often hold substantial weight.

4.3 Behavioral factor

The day-to-day operations of PT XYZ were managed by its manager and assistant manager, with additional support from the finance and marketing staff who assisted in administrative tasks such as recording transactions in accounting books and invoicing customers. When the manager was introduced to the ABC method, he initially showed interest and inquired about its benefits and drawbacks. However, his enthusiasm faded when he learned that adopting the ABC method would require a specific accounting system and employee training. He stated that he needed to think about it and recognized the method's potential for altering costs but acknowledged that the company did not currently possess the necessary resources to implement it.

"Oo.. I see. I need to think about it. It is interesting how this [ABC] method can alter the costs. But it also requires a lot of other things that we do not have at the moment." (Manager)

One potential limitation of the ABC method is its high implementation cost. Adopting ABC costing can be more expensive than traditional costing, as it requires the definition of cost objects and critical analysis and definition of activities. Additionally, specific accounting software is needed for more accurate ABC data collection (Prasad et al., 2021). In line with this limitation, the manager of PT XYZ did not express support for the adoption of the ABC method.

Conversely, the assistant manager of PT XYZ showed enthusiasm toward the ABC method. He stated that he had been advocating for a change in the costing method to the director and manager for some time but has yet to be successful.

"Yes, I am familiar with the ABC method. I have studied it and have discussed this alternative method with my mother [the director] and my brother [the manager]. However, they do not seem interested in changing the current system," (Assistant manager).

Despite the assistant manager's enthusiasm for the ABC method, he holds a lower position in the company hierarchy than the manager and director. In family businesses, it is common to have a centralized power structure and submissive behavior from family members (Tien et al., 2019). Therefore, the assistant manager's eagerness to adopt the ABC method may not be enough if the upper-level management does not support it.

The finance staff at PT XYZ appeared to be unfamiliar with the ABC method. When asked about it, she responded,

"No, I have not heard about the ABC method." (Finance Staff)

Although the finance staff had not heard about the ABC method, she had noticed a decline in profit over the last few years and acknowledged a need for a better costing and pricing method. She stated,

"Recently, there has been a drastic change in the business. One of them is the lesser profit that the company earned. [...] yes, I agree, there should be a better costing and pricing method to deal with the current situation." (Finance staff)

During the interview, the finance staff showed an interest in the discussion of the ABC method, asking several questions about the technical aspects, benefits, and limitations of the method. However, when asked if she would support the adoption of the ABC method, she quickly evaded the question, stating that she was not a decision-maker and only followed instructions.

"I cannot say anything about the costing decision. I only do what I was told to do." (Finance staff).

The finance staff also commented that the ABC method would require a significant number of changes and monitoring to ensure its accuracy. Although her remark may have been intended to express the challenges that come with the adoption of the ABC method, it could also indicate a less supportive attitude toward the method.

The marketing staff expressed that her responsibilities primarily involved acquiring and maintaining customers' satisfaction, whereas the pricing calculations and decisions were made by the top. She acknowledged that she lacked knowledge about pricing methods and did not participate in the pricing calculation process.

"I am not involved in the details of pricing calculation. Those people at the top decide the price. My job is to sell our service to customers and make sure they are satisfied." (Marketing staff)

The marketing staff appeared to be more focused on her sales targets rather than the discussion of the ABC method. She expressed concerns about achieving high sales targets while ensuring customer loyalty, which she acknowledged was not easy.

"If the sales target is high, it will be difficult to achieve. Meanwhile, as part of our customer service, we need to keep customers' loyalty; doing so is not easy. Besides, no one is loyal in business, isn't it?" (Marketing staff)

Previous research has shown that the successful implementation of the ABC method requires supportive behavior from internal agents (Brown et al., 2004; Krumwiede, 1998). In the case of PT XYZ, there were four internal agents - the manager, the assistant manager, and the finance and marketing staff. Unfortunately, the manager expressed doubts about the ABC method, citing concerns about its complexity and the need for specialized technology. While these concerns may be valid, the manager should carefully weigh the costs and benefits of adopting ABC. If the benefits outweigh the costs, then it may be worthwhile to invest resources in supporting the implementation of ABC.

Similarly, while the finance staff did not directly express opposition to the ABC method, her comments suggested that she was worried about the changes that might occur if ABC were implemented. This could indicate a lack of support for the ABC method. On the other hand, the marketing staff appeared to be disengaged from the costing and pricing strategy of the business, while only the assistant manager showed enthusiasm and support for the ABC method.

Overall, the findings suggest that the internal agents at PT XYZ did not exhibit strong supportive behavior toward the ABC method. Given the importance of internal agents in the successful implementation of ABC, this lack of support could pose a significant obstacle to the adoption of the ABC method at PT XYZ.

4.4 Cultural factor

The assistant manager at PT XYZ supported the ABC method but needed more authority to make decisions for the company. Prior research has shown that implementing ABC is more successful in cultures with high levels of collectivism, where decisions made by those in positions of authority are generally well-received by those lower in the organizational hierarchy (Brewer, 1998). In the case of PT XYZ, more than the assistant manager's support for ABC was needed to sustain its implementation, as it required the director and manager to be enthusiastic about the method. Therefore, the company's hierarchical culture plays an important role in creating a supportive cultural environment for implementing ABC. Ultimately, the "tone at the top" is what counts in promoting the adoption of ABC.

Furthermore, as previously discussed, PT XYZ is a small family business with typical family business characteristics such as centralized control and command, limited openness to new ideas, and emphasis on personal maturity and seniority. The founder plays a significant role in the business and has devoted a substantial portion of their life to it (Tien et al., 2019). These characteristics shape the company's organizational culture, which can have both benefits and drawbacks. However, in this case, the organizational culture that has been described acted as a barrier to adopting the ABC method.

4.5 Contextual factor

Based on the literature, various contextual factors can affect the acceptance and implementation of new methods, but the participants in this study only mentioned increased competition in the logistics industry as a contextual factor. The assistant manager expressed concern about the negative impact of intense competition on the business and emphasized the need to change how the business operates, especially in cost calculation. Nevertheless, despite his suggestion, the company did not make any changes and continued to operate in the same way for years.

"The business is suffering because of more competitors in the industry. I have told my Mom [the director] that we have to change how we do business, particularly how we calculate costs. However, as I said before, no changes have been made. We still do things the way we have been for years." (Assistant manager)

The director of the company also acknowledged the impact of increased competition on their business, as she stated:

"Yes, there is more competition in this industry. In Pontianak, for example, there are getting more companies that provide logistic services. Unlike in the old days, nearly all companies in Pontianak were our customers. But now some of them no longer use our services." (Director)

The marketing staff indicated that smaller logistics companies had contributed to the increase in competition. She stated,

"Competition, yes, it has been getting fiercer the last few years. Many small logistic companies enter the market. They are smaller than us, they only have 1 or 2 trucks, but they can get customers." (Marketing staff)

The assistant manager and director attributed the negative impact of competition to competitors offering better pricing to customers. The director stated,

"Well, I do not know exactly, but it seems that other [logistic] companies give them [customers] lower prices." (Director)

The assistant manager added,

"O yes, price, of course. If we can offer customers a lower price than our competitors, I bet we can get more customers." (Assistant manager)

The participants, particularly the director, acknowledged the intensity of competition. However, she expressed reluctance to change the current costing and pricing strategy, citing the difficulty of reducing costs and the risk of incurring losses if prices were lowered:

"It is hard to reduce costs. Everything goes up, the salary, fuel, and others. How can I lower my price to customers? I will end up suffering losses." (Director)

Based on the cited quotes, it can be concluded that the intensification of competition required PT XYZ to have better cost information. Nonetheless, the participants do not seem to comprehend this requirement fully. This finding contrasts with Charaf and Bescos's (2013) and Chongruksut and Brooks's (2005) conclusions. It is possible that PT XYZ gets used to doing things in the traditional way. The family business established customs, and the legacy of the family's involvement in the business can create resistance to change, making it difficult to introduce and implement new ways of operating the business. This can be a challenge for family businesses that need to adapt and innovate to stay competitive in the market (Vizcaino et al., 2021).

5. CONCLUSION

The ABC method has been widely adopted by large companies. However, studies have also shown that small family businesses have yet to adopt this costing method. This study presents empirical evidence on why a small family business is hesitant to adopt ABC. Through a case study, this study found that small family businesses may be less receptive due to technical factors, including the unpredictable requests made by customers, varying duration of activities, and uncertainty around distance and fuel consumption for each truck. Additionally, organizational factors, such as a top-down hierarchy where the owner's negative perception, affect the rest of the hierarchy. Key agents within the company also did not demonstrate positive behavior toward changes to the ABC method. Furthermore, the hierarchical culture and the unawareness of the importance of accurate costing

and pricing in an increasingly competitive environment make a small family business less interested in adopting the ABC method.

Although this study's findings are based on a single case study, they may apply to similar contexts, allowing readers to draw relevant insights. Therefore, several actionable recommendations are possible. First, organizations could improve their data collection processes to address the challenges of obtaining accurate cost data in dynamic and unpredictable environments. For example, in this specific case, implementing technologies such as GPS tracking, automated data collection, and real-time reporting to capture more accurate data on distance and fuel consumption.

Second, it is imperative to have the right tone at the top. Particularly in a small family business, the role of a trusted individual is crucial to persuade the top decision-maker to support any new ideas or changes. Small family businesses tend to be more reserved and less receptive to outsiders; therefore, information, suggestions, and advice from a trusted and close person are more likely to be accepted by the owner. Moreover, establishing the right tone at the top can encourage those lower in the hierarchy to adopt similar behaviors and attitudes.

Lastly, if a family business decides to adopt a new idea, such as the ABC method, seeking external expertise or advice from professionals experienced in family business management can be beneficial. This can help the company navigate the challenges that may arise and develop a strategy for implementing the new idea in a way that aligns with the company's values and culture.

As with all research, this study is not without limitations. Since the current study was conducted during COVID-19, there may be changes in the business environment that could impact the adoption of ABC in small family businesses. Future research could complement this study by investigating the post-pandemic challenges and opportunities associated with implementing ABC in small family businesses.

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