

Design Thinking as a Diagnostic Tool for Family-Owned MSMEs: A Qualitative Case Study of Pasundan Snack, Purwokerto, Indonesia

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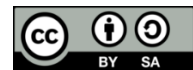
ABSTRAK

Usaha mikro, kecil, dan menengah (UMKM) di Indonesia cenderung tumbuh lebih cepat dibanding sistem manajemennya, terutama ketika kepemilikan, kepemimpinan, serta ketenagakerjaan di dalamnya berkaitan dengan relasi keluarga. Penelitian ini menelaah bagaimana pendekatan *human-centered design thinking* dapat mengidentifikasi sekaligus mengatasi kelemahan organisasi pada Pasundan Snack, sebuah ritel makanan ringan milik keluarga di Purwokerto, Jawa Tengah. Dengan desain kualitatif studi kasus tunggal, penelitian mengikuti lima tahapan proses *design thinking*: *empathize*, *define*, *ideate*, *prototype*, dan *test*. Data diperoleh melalui wawancara semi-terstruktur dengan lima narasumber yang mewakili empat kelompok pemangku kepentingan (pemilik, karyawan, pemasok, pelanggan). Hasil wawancara tersebut kemudian dianalisis menggunakan *empathy maps*, *customer journey map*, *affinity diagram* dengan *dot voting*, dan *5 Whys Analysis*. Meskipun *screening* awal menunjukkan perlunya peningkatan pada aspek pemasaran digital, tahapan *empathize* dan *define* justru mengungkap masalah yang lebih mendasar, yakni ketiadaan instrumen organisasi formal akibat keterbatasan pengalaman manajerial pemilik serta kecenderungan memilih anggota keluarga dibanding kompetensi. Bersama pemilik, tim memprioritaskan perangkat berupa struktur organisasi, prosedur operasional standar (SOP), bagan alur kerja, serta uraian jabatan. Pada tahap *testing*, pemilik menilai perangkat tersebut konstruktif, namun penerapan berlangsung secara bertahap karena keterbatasan anggota keluarga yang kompeten serta kebutuhan menyeimbangkan praktik lama dengan sistem baru. Temuan ini menunjukkan bahwa *design thinking* dapat menjadi salah satu metode untuk merumuskan ulang masalah UMKM, sekaligus menegaskan bahwa profesionalisasi perusahaan keluarga perlu dilakukan secara bertahap agar mampu mencapai perubahan yang berkelanjutan dan partisipatif.

ABSTRACT

Micro, small, and medium enterprises (MSMEs) in Indonesia often expand more rapidly than their management systems, especially when ownership, leadership, and employment are closely tied to family relationships. This study explores how a human-centered design thinking approach could uncover and address organizational weaknesses in a family-owned snack retailer, Pasundan Snack, located in Purwokerto, Central Java. Employing a qualitative single-case design, the research followed five stages in design thinking process: empathize, define, ideate, prototype, and test. Data were gathered through semi-structured hybrid interviews with five informants representing four stakeholder groups (owner, employees, supplier, and customer), then analyzed using empathy maps, customer journey mapping, affinity diagrams with dot voting, and 5 Whys analysis. While initial screening suggested weak digital marketing as the main issue, the empathize and define stages revealed a deeper challenge, that the absence of formal organizational instruments, rooted in the owner's limited managerial exposure and reliance on family-based rather than competency-based placement. Together with the owner, the team prioritized toolkits comprising an organizational structure, four standard operating procedures (SOPs), workflow charts, and job descriptions. In the testing stage, the owner viewed the toolkits as constructive, though implementation remained partial and gradual due to the scarcity of competent family members and the need to balance established practices with new systems. These findings indicate that design thinking could serve as a method for reframing problems faced by MSMEs, while also underscoring that the professionalization of family-owned enterprises must be undertaken gradually in order to achieve sustainable and participatory change.

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1. INTRODUCTION

Micro, small, and medium enterprises (MSMEs) are a cornerstone of the Indonesian economy, yet many remain constrained by limited managerial capability and weak administrative systems (Armania et al., 2025; Bari & Widhaningrat, 2023). These limitations are particularly evident in family-owned MSMEs, where businesses often expand organically around trusted relatives and informal routines. The family business literature highlights that professionalization is frequently partial (Stewart & Hitt, 2012), with firms often prioritizing family members over equally or more qualified nonfamily candidates. In many cases, owners maintain subjective and informal practices to safeguard the privileges of family members, thereby protecting not only their economic objectives but also their socio-emotional wealth (Ferrari, 2025). By contrast, evidence shows that the adoption of formalized managerial routines enhances efficiency and is strongly correlated with improved firm outcomes (Espitia et al., 2025), underscoring the potential gains of gradual professionalization in family-owned enterprises. As family firms grow, coordination arrangements must accommodate a

wider range of products, sales channels, and activities. While work allocation based on habits and personal ties may provide flexibility in early stages, expansion requires clearer decision authority, operating standards, and accountability. Professionalization, therefore, is a multidimensional process extending beyond the recruitment of external managers (Dekker et al., 2013).

Design thinking offers a human-centered approach to such unstructured organizational challenges. It begins with stakeholder needs and proceeds iteratively through problem framing, idea generation, prototyping, and testing (Brown, 2008; Plattner, 2010). Widely applied across diverse fields including business, law, education, and medicine (Pande & Bharathi, 2020), it is particularly suitable for small enterprises because it emphasizes creativity and collaboration rather than financial resources (Bielawa, 2018). But then, applications to MSMEs have been reported more often in marketing and product innovation than in diagnosing internal organizational weaknesses (Carlgren et al., 2016; Micheli et al., 2019).

This study addresses that gap through a design thinking project with Pasundan Snack, a family-owned snack retailer in Purwokerto, Central Java. Established in the mid-1990s by a former textile worker, the business evolved from itinerant trading into wholesale and retail operations, now offering 400-500 product varieties and employing extended family members. Initial assessments identified limited digital marketing as the main concern, with proposals for social media and e-commerce mentoring. However, stakeholder exploration revealed broader organizational needs, including manual recordkeeping, overlapping responsibilities, and mismatches between competencies and job requirements. This raised a practical question: how should intervention priorities be identified before introducing additional marketing channels?

The study therefore examines Pasundan Snack's organizational needs, explains the design process across the five stages of design thinking, and assesses user acceptance and early implementation constraints. It addresses three questions: (1) how were organizational needs identified, (2) why were organizational arrangements prioritized over marketing interventions, and (3) what factors limited implementation? The contribution is a contextual account of problem reframing and the alignment of organizational design with family business capacity.

2. THEORETICAL FRAMEWORK

2.1 *Design Thinking: Conceptual Foundations and Application in Small Enterprises*

Design thinking is widely recognized as a solution-oriented approach for addressing complex or ill-defined problems that require a deep understanding of human needs (Brown, 2008). The Stanford model outlines five iterative stages: empathize, define, ideate, prototype, and test (Plattner, 2010). Rather than a linear sequence, these stages function as an analytical framework in which feedback can prompt reconsideration of both the problem and the proposed solution.

The empathize stage builds user understanding through convergent and divergent thinking involving multiple stakeholders (Gero & Milovanovic, 2023; Hashim et al., 2019). Tools such as empathy maps and customer journey maps help identify pain points, motivations, and opportunities for engagement (Mood, 2024). In the define stage, affinity diagrams organize large volumes of qualitative data into meaningful clusters (Lucero, 2015), while the 5 Whys technique traces issues to their root causes (Wirawan & Minto, 2021). Ideation generates candidate solutions, prototyping produces inexpensive artifacts to elicit feedback, and testing refines both the solution and the problem framing (Plattner, 2010).

For small and medium enterprises, design thinking is particularly relevant because it emphasizes creativity and teamwork rather than financial investment. (Bielawa, 2018) argues that it can stimulate innovation in products, processes, organization, and marketing, if leadership is committed. Survey evidence shows improvements in work culture and innovation efficiency, while failures are linked to weak managerial engagement, poor diffusion, as well as one-off use (Schmiedgen et al., 2015), as cited in (Bielawa, 2018).

Beyond its managerial utility, design thinking has been connected to constructivist learning, emphasizing experience and reflection as drivers of understanding (Pande & Bharathi, 2020). This perspective explains how interviews and work practice reviews can challenge initial diagnoses. (Carlgren et al., 2016) highlighted that design thinking must be examined through its enactment in practice. In this study, empathy maps, problem clusters, and document prototypes are analyzed as evidence of how design thinking was applied to organizational challenges in a family-owned MSME.

2.2 Professionalization, Standard Operating Procedures, and Family MSMEs

Research on family enterprises consistently shows that professionalization is often partial or uneven. (Stewart & Hitt, 2012) distinguish several modes of professionalization, including hybrid forms that combine formal structures with informal family practices. Evidence from family SMEs in Bogotá indicates that structured management approaches are positively related to business success, while the personal priorities of the family head can reduce performance. Importantly, professionalization and socioemotional wealth are not inherently opposed when management practices respect family identity (Espitia et al., 2025). Studies of Italian family SMEs further reveal that preferential placement of relatives regardless of qualification fosters perceptions of discrimination among nonfamily employees, undermining organizational justice and commitment while increasing turnover intentions. Ferrari (2025) therefore advocates more formal governance mechanisms, while acknowledging the tension between informal trust and structured human resource processes.

Standard operating procedures (SOPs) and job descriptions represent practical instruments of such formalization. In an Indonesian consulting MSME, the absence of formal organizational instruments was identified as a core problem, and their subsequent introduction, through SOPs, workflow charts, and job descriptions, improved efficiency by standardizing processes and clarified employee responsibilities by explicitly defining roles and accountability (Bari & Widhaningrat, 2023). Similarly, a participatory SOP development program in a village MSME center enhanced operational consistency, product quality, and transparency (Armania et al., 2025). Together, these findings suggest that organizational instruments can serve as effective solutions, provided their implementation is participatory and aligned with existing practices.

In this study, the organizational arrangements consist of organizational structures, SOPs, workflow charts, and job descriptions. The structures define role groupings and reporting relationships, SOPs specify how processes are executed, workflow charts visualize activity sequences along with decision points, and job descriptions delineate individual responsibilities. These components must function as an integrated system, because altering reporting lines without adjusting processes or responsibilities risks creating uncertainty at the point of execution.

Dekker et al. (2013) emphasize that family businesses exhibit diverse configurations of professionalization, extending beyond the mere presence of nonfamily managers. In the present case, attention is directed toward clearer placement criteria and documented work arrangements. Family ties remain integral to the business context, but the analytical issue concerns how personal trust can be complemented by explicit job requirements and reviewable accountability mechanisms.

3. RESEARCH METHOD

3.1 Research Design and Case Selection

This study employed a qualitative single-case design in which design thinking functioned both as the process of inquiry and the intervention framework. Data were collected through semi-structured interviews with the owner, employees, a supplier, and a

customer, conducted in a hybrid format (on site and via Zoom). Pasundan Snack, a family-owned snack retailer in Purwokerto, Central Java, was purposively selected for four reasons. First, it combines traditional snack varieties with local culinary preferences, giving cultural relevance. Second, its history demonstrates a clear growth trajectory from roaming vendor to minimarket, making it a representative case of entrepreneurial expansion. Third, it provides a useful setting for examining the resilience and sustainability of local entrepreneurship. Lastly, it generates employment for family members and the surrounding communities, linking organizational arrangements to broader social outcomes. The firm operates under two schemes: business-to-consumer (B2C) retail and business-to-business (B2B) distribution, allowing organizational roles to be analyzed across different market contexts. The case is bound by three stages: identification of organizational needs, development of organizational arrangements, and initial evaluation of implementation. The unit of analysis is the organizational design process, which situates the study within the intersection of managerial routines and family-based practices.

3.2 Informants and Data Collection

Informants were selected purposively based on their direct involvement in management, daily operations, supply, and purchasing. Five individuals participated: the owner, two long-serving administrative employees (responsible for warehouse and financial administration, each with approximately ten years of experience), one artisan supplier, and a loyal customer. This composition captures perspectives from internal management, operational staff, and external stakeholders, although not all relevant viewpoints could be represented. Data was collected through semi-structured interviews in a hybrid format between 4 and 6 May 2025, with one team member attending on site at the business premises while the others joined via Zoom.

The interview guide encompassed five management domains: strategy, marketing, finance, operations, and human resource management, and combined prepared questions with follow-up probes to elicit informants' experiences. Interviews were video recorded using a smartphone, tripod, and clip-on microphone, while one team member summarized key points during each session. Prior to data collection, the team defined end goals, constraints, and success indicators for each domain as a working frame for the project.

3.3 Data Analysis

Data analysis followed the five stages of design thinking, which served simultaneously as a process framework and an interpretive lens. In the empathize stage, interview findings were synthesized into empathy maps for each stakeholder group (owner, employees, supplier, and customer), capturing what they hear, see, say and do, think and feel, as well as their pains. A customer journey map was also constructed to identify pain points, motivations, and opportunities for engagement.

In the define stage, five team members externalized problems on a digital whiteboard, grouped them into five management domains through affinity mapping, and prioritized them using dot voting. The five highest-ranked problems were then analyzed through the 5 Whys technique to trace root causes.

The ideate stage generated candidate solutions through brainstorming on the same whiteboard. These were filtered again through dot voting, and the eight solutions that received the maximum five votes were rated by team members on two criteria: priority (ranked 1-8, with lower values indicating higher priority) and urgency (4-point Likert scale from 1 = strongly disagree to 4 = strongly agree to implement in the near term). Mean scores across five raters were computed to support decision-making, though these figures were treated as descriptive aids rather than inferential statistics.

The prototype stage produced organizational instruments, including an organizational structure, SOPs, workflow charts, and job descriptions, while the test stage

involved handover and feedback on early implementation. Evidence strength varied across stages and was interpreted accordingly.

Table 1. Design Thinking Stages, Methods, and Outputs

Stage	Methods and tools	Output
Empathize	Semi-structured hybrid interviews, empathy maps, customer journey map	Needs, pains, and journey of four stakeholder groups
Define	Affinity diagram, dot voting, 5 Whys analysis	Five priority problems and their root causes
Ideate	Whiteboard brainstorming, dot voting, priority rating, urgency Likert scale	Eight shortlisted solutions, one selected and confirmed by the owner
Prototype	Organizational redesign; drafting of SOPs, workflows, and job descriptions	Organizational toolkit
Test	Handover and explanation to the owner's representative, owner evaluation	Feedback and implementation status

Source: Authors' fieldwork (2025).

3.4 Trustworthiness and Ethical Considerations

The credibility of the findings was supported by triangulating perspectives across four stakeholder groups and by documenting interviews through video recordings that served as an audit trail. In addition, the owner's confirmation of the selected solution and subsequent evaluation of the prototype provided evidence of design relevance. However, because the project team acted simultaneously as researchers and facilitators, the results should be interpreted as an account shaped by that dual role rather than as independent verification.

4. RESULTS

4.1 Empathize: Stakeholder Needs and Pain Points

The empathize stage synthesized interview findings into empathy maps for each stakeholder group (owner, employees, supplier, and customer), alongside a customer journey map (Table 2). Across all groups, informants expressed trust in and affection for Pasundan Snack, attributing its growth to product quality, variety, and long-standing relationships. These positive perceptions highlight the firm's embeddedness in local networks and its reputation for reliability.

At the same time, each group identified frictions rooted in informal, manual, or undefined ways of working. Employees described overlapping responsibilities and reliance on manual recordkeeping, which created inefficiencies as well as uncertainty. The supplier emphasized the absence of clear scheduling and documentation, leading to delays and inconsistent coordination. Customers noted limited brand visibility and lack of systematic communication, reflecting weaknesses in marketing and service routines. The owner acknowledged that organizational arrangements were largely based on family trust and long-standing habits rather than formalized procedures, which constrained scalability.

The customer journey map traced four stages. In awareness, new customers learned about the store through word of mouth and felt intrigued, but the absence of online purchase facilities required a physical visit. In consideration, they weighed product quality, price, and variety, yet felt indecisive due to uncertain stock availability and limited promotion of new products. In decision, purchases were made for personal use or as souvenirs, accompanied by optimism, though non-cash payment options were lacking and price perceptions varied, with some customers considering them high and others viewing them as fair. In retention, product variety, perceived fairness of prices, friendly service, and quality encouraged repeat visits, although competitors had already introduced online ordering and digital payment.

Customer-proposed solutions included delivery or online ordering, a product catalog, and non-cash payment facilities.

Three cross-cutting patterns emerged. First, key processes (stock management, transactions, and cash flow) were recorded manually and depended on individual memory or routines. Second, digital touchpoints with customers were almost absent, with marketing relying heavily on word of mouth. Third, relationships were trust-based and informal, sustaining loyalty but also producing unresolved issues such as payment delays and return disputes with suppliers, which lacked formal procedures.

The project team also noted three constraints: limited understanding of digital transformation, resistance to altering a business model perceived as already effective, and restricted access to market trend and customer behavior information. Taken together, these findings reveal a dual reality in which strong relational capital and product reputation coexist with operational frictions, underscoring the need for structured organizational instruments to support sustainable growth.

Table 2. Informants and Key Empathy-Map Insights

Stakeholder	Needs and positive perceptions	Pain points
Owner	Pride in the business's growth, customers return because of product quality, want the store to become a main destination for snacks and souvenirs, optimistic that gradual improvements can widen reach.	Maintaining quality amid rising competition, manual stock recording, limited access to and understanding digital innovation, expect to modernize without losing the family identity of the business.
Employees: warehouse and finance administrators	Complete product range, store seen as friendly and comfortable, expect work to become faster and less error-prone with digital recording and payment, want delivery/online ordering, product catalog.	Difficulty recording daily transactions, cash flow, and stock manually, arranging products of varied sizes, payment still conventional (no QRIS), customers learn of new products only by visiting.
Supplier: snack artisan	Pleased that demand has grown, ten-year partnership and high trust in the business, hopes for faster payment and direct communication with the owner.	Payment delays of up to three invoices disrupt cash flow and raw-material purchasing, return policy for goods perceived as unfair and costly, communication only through the warehouse administrator.
Customer: loyal reseller	Attracted by variety, confident in the business's progress, ten-year relationship, buys heavily before religious holidays.	No return policy for defective goods (damaged packaging, rodent-bitten items), short operating hours, cash-only payment, uncertainty about stock before visiting.

Source: Authors' interviews (2025).

4.2 Define: Priority Problems and Root Causes

The define stage consolidated 24 problems across five management domains into an affinity diagram. Dot voting was then used to prioritize issues, producing the five problems shown in Table 3. These were subsequently analyzed through the 5 Whys technique to trace their root causes. Two observations stand out from this process.

First, four of the five priority problems concerned internal management rather than market access. This indicates that organizational arrangements, rather than external demand, represented the most pressing constraint on business development. Second, the root causes converged on the owner's managerial capability, awareness, and decision logic. Specifically, the analysis highlighted comfort with established methods, the absence of

formal planning during early phases of success, lack of managerial training, and a preference for trusted relatives without competency assessment.

Taken together, these findings suggest that the firm's operational frictions were not primarily the result of external competition or customer demand, but of internal reliance on informal practices. The define stage thus reframed the problem from weak marketing to organizational capacity, providing a foundation for subsequent ideation and prototyping.

Table 3. Priority Problems and Root Causes from 5 Whys Analysis

Rank	Domain	Problem	Root cause
1	Strategic	Business focus remains traditional, technology is not used.	Owner is comfortable with long-established methods and has limited understanding of the benefits of digital strategy.
2	Financial	Budgets lack a sound basis, causing gaps between plans and realization.	Early growth occurred without formal financial planning, creating a perception that planning is not urgent.
3	Marketing	Marketing is conventional and limited to words of mouth.	Limited access to, and understanding of, innovation in digital markets.
4	Operations	No SOPs, job descriptions, or workflow charts, overlapping responsibilities.	Owner lacks managerial training and awareness of the value of a documented management system.
5	Human resources	Incumbents' competencies do not match task requirements.	Limited managerial capacity and a culture that favors personal closeness over objectivity, no formal competency-based recruitment policy.

Source: Authors' affinity diagram and 5 Whys analysis (2025).

4.3 Ideate: Solution Generation and Prioritization

The ideate stage generated a broad pool of candidate solutions to address the five priority problems identified in the define stage. Through brainstorming and dot voting, eight solutions received unanimous support: (1) an organizational toolkit comprising SOPs, organizational structure, job descriptions, and workflow charts; (2) regular monthly meetings for budget preparation and review; (3) encouragement for the owner to participate basic managerial training; (4) the introduction of key performance indicators (KPIs); (5) digital marketing through social media; (6) promotions and product catalogs distributed via WhatsApp; (7) digital payment options (e.g., QRIS, e-wallets, transfers, EDC machines, etc.); and (8) budget tracking using Microsoft Excel.

To prioritize these solutions, each team member rated them on two criteria: priority (ranked 1-8, with lower values indicating higher urgency) and urgency (a 4-point Likert scale from 1 = strongly disagree to 4 = strongly agree to implement in the near term). Mean scores were computed across the five raters, serving as descriptive support for decision-making rather than inferential statistics or measures of problem prevalence.

The results, summarized in Table 4, highlight that organizational instruments and managerial routines were consistently rated as the most urgent interventions, whereas marketing and digital payment solutions were regarded as secondary priorities. This prioritization reflects a reframing of the firm's challenges, whereby strengthening internal organizational capacity was considered a prerequisite for sustaining external growth initiatives.

Among the eight solutions, the organizational toolkit was the only option ranked at the top on both criteria (tied with WhatsApp promotion on the urgency scale) and was

therefore selected as the primary intervention. The owner confirmed and agreed to this choice, signaling alignment between the design team's analysis and managerial acceptance. Notably, digital marketing and WhatsApp promotion obtained lower priority ranks (4.8 and 5.0) but relatively high urgency scores (3.6 and 3.8). This pattern indicates that the team did not dismiss digital initiatives but deliberately sequenced them after organizational foundations, recognizing that sustainable marketing and payment innovations depend on clear internal structures and processes.

Table 4. Prioritization of Shortlisted Solutions (Mean of Five Raters)

Solution	Priority rating (1 = most urgent)	Urgency (1-4)
Organizational toolkit (structure, SOPs, job descriptions, workflow charts)	2.8	3.8
Monthly budget preparation and review meetings	2.8	3.2
Encouragement to join basic managerial training	3.4	3.2
Key performance indicators (KPIs)	4.0	3.6
Digital marketing through social media	4.8	3.6
Promotions and catalogs through WhatsApp	5.0	3.8
Digital payment options (QRIS, e-wallets, transfers, EDC)	6.2	3.0
Budget tracking in Microsoft Excel	6.8	2.4

Note: Lower priority scores indicate higher urgency; higher Likert scores indicate stronger agreement on near-term implementation. *Source:* Authors' calculations (2025).

4.4 *Prototype: Organizational Toolkit and Instruments*

Before drafting the toolkit, the team first mapped existing positions in both business schemes. In the B2C retail scheme, roles comprise the owner, supervisor, store administrator, finance staff, cashier, helper, shop assistant, and cook, with a mix of family and external staff. In the B2B distribution scheme, positions included the owner, warehouse administrator, salesperson, finance staff, driver, and helper, with family members dominant in several roles. Internal discussion on effectiveness relative to business scale led to the proposal of a new organizational structure (Table 5). In this structure, the owner remains the ultimate decision maker and may consult an external business adviser. Two managers report directly to the owner: the Business Support Manager, responsible for finance (cash-flow management) and human resources (recruitment and employee administration), and the Business Manager, responsible for marketing (online and offline), sales, and operations (procurement, logistics, warehouse, distribution, customer service, and staff consumption).

To operationalize this structure, four SOP documents were drafted: daily operations management, employee management, financial management, and strategic management. Each SOP carries a document number, effective date (28 May 2025), purpose, scope, parties involved, and procedural steps. Examples include stock checking and receipt of goods from suppliers in the operations SOP, and recruitment, training, and performance evaluation in the employee SOP.

Workflow charts translated the SOPs into visual sequences, covering strategic workflows for family business management, B2B management, and B2C management. In addition, a job description was prepared for each position, specifying identification, purpose, duties and responsibilities, and expected outputs. Together, these instruments formed the organizational toolkit, designed to provide clarity of roles, accountability mechanisms, and process standardization, thereby complementing the trust-based practices that had previously sustained the business.

Table 5. Proposed Organizational Structure of Pasundan Snack

Manager	Supervisor	Staff positions
Business Support Manager	Finance	Finance staff, cashier
	Human resources	Recruitment staff, administration staff
Business Manager	Marketing	Online marketing staff, offline marketing staff
	Sales	Salesperson
	Operations	Logistics and warehouse staff, helper, driver, shop assistant, cook

Note: The owner heads the structure and may be supported by an external business adviser.

Source: Authors' design (2025).

4.5 Test: Handover and Owner Evaluation

The team handed over and explained the organizational structure, SOPs, workflow charts, and job descriptions to the owner's representative one day after submission. These documents were designated as living documents, to be reviewed and updated every two to three years. The owner regarded the toolkit as a constructive step toward strengthening the management system and adopted it as a basis for business development, particularly in relation to the opening of a new store in the Purwokerto area. The toolkit was also expected to reduce the potential for fraud by clarifying responsibilities and accountability.

Testing nevertheless revealed two implementation challenges. First, the new structure could not be applied optimally because few family members possessed the competencies required for mid-level positions. This created a dilemma between prioritizing internal candidates and opening positions to external talent. The owner chose to begin by defining competency requirements and building a talent pool, with immediate recruitment for roles such as Human Resources Supervisor. Second, successful implementation depends on organizational maturity, readiness, and long-term commitment. Recruitment, training, and socialization of the new system require systematic planning to avoid resistance.

Consequently, the owner implemented the toolkit partially and gradually, balancing continuity with change. At the initial stage, two additional employees were recruited to fill newly created positions, marking the first step toward embedding the new organizational arrangements. This phased approach reflects both the opportunities and constraints of professionalizing a family-owned MSME, where trust-based practices must be complemented by formal structures without undermining established relationships.

5. RESULTS AND DISCUSSION

The central finding is that design thinking reframed the project's focus. Initial screening treated weak digital marketing as the primary problem, yet the empathize and define stages revealed that digital gaps were symptoms of deeper deficiencies in organizational foundations. Evidence from employees and customers (manual recordkeeping, absent online channels, and cash-only payment) remained valid, but the team's prioritization showed that formal roles, procedures, and decision rights were prerequisites for executing digital initiatives reliably. This aligns with the principle that design thinking directs attention to user needs before solutions are fixed (Brown, 2008; Plattner, 2010) also demonstrates how practical tools such as empathy maps, affinity diagrams, and 5 Whys can be applied by small teams in resource-constrained enterprises (Bielawa, 2018).

Root cause analysis pointed to owner capability and family-based placement rather than market conditions. This resonates with evidence that family firms often professionalize only partially (Stewart & Hitt, 2012) and that preferential placement of relatives can undermine fairness and retention among nonfamily employees (Ferrari, 2025). The supplier's request for direct communication and the owner's dilemma between internal and external candidates illustrate the tension between informal trust and formalization. The owner's decision to begin with mid-level

positions, competency requirements, and a talent pool reflects a hybrid, sequenced route to professionalization, consistent with findings that professionalization can coexist with family identity when practices honor it (Espitia et al., 2025).

The organizational toolkit, comprising structure, SOPs, workflow charts, and job descriptions, fits evidence from Indonesian MSMEs, where such instruments clarified responsibilities, improved efficiency, and supported transparency (Armania et al., 2025; Bari & Widhaningrat, 2023). The proposed structure also embedded the digital agenda by creating marketing roles, suggesting that organizational design can serve as the vehicle for sustaining later initiatives in e-commerce and digital payments. Testing revealed implementation challenges, notably limited competencies among family members and the need for gradual adoption to avoid conflict with established routines. The owner responded by recruiting two new employees and designating toolkit as a living document, scheduled for review every two to three years. This phased approach reflects risks noted in SME design thinking projects, where weak managerial engagement or one-off use can undermine sustainability (Schmiedgen et al., 2015), as cited in (Bielawa, 2018).

Practical implications follow. For MSME mentors and policy programs, short empathize-and-define diagnostics can prevent premature investment in digital tools that organizations are not yet structured to manage. For family owners, competency requirements, and talent pools provide an objective basis for placement that can coexist with trust in relatives.

6. CONCLUSION

This case study of Pasundan Snack demonstrates that stakeholder-centered inquiry through design thinking can redirect an MSME's improvement agenda from assumed marketing problems toward the underlying need for formal organizational foundations. Evidence from the owner, employees, supplier, and customer, structured through empathy maps, journey mapping, affinity diagramming, and 5 Whys analysis, led to a prioritized and owner-endorsed solution: organizational structures, four SOPs, workflow charts, and job descriptions.

The owner's evaluation was positive but pragmatic, with implementation limited by competency constraints and the need to phase changes gradually. Initial adoption included recruitment of two new employees, while broader implementation was sequenced to avoid conflict between old and new systems. The study concludes that design thinking is a practical approach for diagnosing and sequencing improvements in family-owned MSMEs. Its output is most likely to take hold when owners are engaged, adoption is gradual, and documents are maintained as living instruments.

Theoretically, the case illustrates how design thinking can redirect interventions by exploring stakeholder needs, while also exposing the limits of artifact completion when competencies are insufficient. Managerially, implementation should begin with processes associated with recurring uncertainty (transaction recording, inventory management, and supplier payments), before expanding to broader structures.

Limitations include reliance on a single case, five informants, and one design iteration, with evaluation based primarily on owner perceptions. Future research should observe routine use longitudinally, measure outcomes such as role clarity, error rates, and employee commitment, and compare across industries and generations of family ownership.

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