

# Critical success factors influencing organizational sustainability of social enterprises in the Philippines: An ISM-MICMAC approach

Maria Czarina A. Kinkito and Marc Immanuel G. Isip\*

Department of Industrial Engineering, College of Engineering and Agro-Industrial Technology, University of the Philippines Los Baños, Laguna, 4031 Philippines

## ABSTRACT

Motivation to contribute to public service is a defining quality of social entrepreneurs; it is also a significant predictor of social entrepreneurship intention. This explains why social entrepreneurship focuses on imparting social impact more than on generating profit. Despite numerous opportunities to respond to social problems especially among developing countries, the social enterprise (SE) sector in the Philippines struggles with a lack of public understanding, limited support, and inadequate policy frameworks. SEs operate holistically through the Triple Bottom Line (TBL) approach, which demands them to strengthen organizational sustainability, which is basically determined by their economic profit, social impact, and environmental stewardship. SE's organizational sustainability is therefore important but vulnerable due to the abovementioned struggles. This paper therefore attempts to explore critical success factors (CSFs) influencing organizational sustainability; this need stems from limited resources, whereby future possible interventions and reforms are to be decided based on priority, hierarchy, and strength of the interrelationships among success factors. This paper's significant contribution is in advancing knowledge in social entrepreneurship in developing countries like the Philippines to further facilitate sector growth. A conceptual model of the CSFs was created using the ISM-MICMAC technique, which revealed contextual relationships, driving power, dependence power, and an eight-level hierarchy among thirteen factors. The conceptual model emphasizes the significance of foundational factors such as regulatory compliance (RC), as well as sector support (SS) in creating an enabling environment for SEs; the the external and legal environment, mainly shaped by government, social, and financial institutions, influence business decisions and operations. Moreover, in the lower-middle level of the hierarchy are the internal capabilities that SEs need to continuously develop: factors such as individual entrepreneurial orientation (IEO), leadership

(LD), and management (MGT) play crucial roles in shaping the vision and capabilities of social entrepreneurs. The upper-middle level of the hierarchy emphasizes the need for internal and external innovations. And lastly, the upper levels of the hierarchy recognize the importance of having actors within social marketing and business supply networks, including suppliers, intermediaries, and other stakeholders participate in sustainability efforts. The MICMAC analysis revealed every factor plays a role in influencing or being influenced by other factors in the system; particularly, the fourth cluster in the MICMAC analysis revealed these CSFs are essential whereby governance and organizational strategic direction serve as the foundation and framework for the development of SEs. In conclusion, it is essential for policymakers to prioritize strengthening the foundational factors through the implementation of laws that ease the regulatory and business environment to encourage more participation and engagement from various sector proponents. Policies and programs towards enhancing the organization's innovative capabilities should be tailored to equip SEs with sufficient funds, skills, and knowledge; and finally, considering that all the CSFs in the model are influenced and require the support from other CSFs to function effectively, the entities in the entire value/supply chain should work together and provide solutions towards sustainable social development.

## INTRODUCTION

In recent years, social entrepreneurship has emerged as a growing phenomenon that combines entrepreneurial principles with a profound commitment to addressing pressing social and environmental challenges (Hietschold et al., 2023). This growing interest in social entrepreneurship is rooted in its potential to bring about positive change and contribute to the development of sustainable solutions (Kamaludin et al., 2024). Social entrepreneurship encompasses a wide range of organizations, commonly known as social enterprises (SEs), which are considered

\*Corresponding author

Email Address: [mgisip1@up.edu.ph](mailto:mgisip1@up.edu.ph)

Date received: 27 November 2025

Date revised: 11 May 2026

Date accepted: 10 June 2026

DOI: <https://doi.org/10.54645/2026191VOP-28>

## KEYWORDS

social entrepreneurship; public service; organizational resilience; critical success factors

as "hybrid entities" that integrate socially valuable activities, such as providing social services and engaging in social activism (Bojica et al., 2023). SEs are motivated by a deep desire to generate social impact and facilitate transformative benefits for society at large (Hietschold et al., 2023).

To evaluate the effectiveness of organizational systems among SEs, various concepts are employed including robustness, resilience, reliability, and sustainability. SEs have recognized the need to fulfill responsibilities beyond shareholder satisfaction and have adopted a more comprehensive approach to their business operations (Slitine et al., 2024). This holistic perspective is achieved through the Triple Bottom Line (TBL) approach, which evaluates business performance across interconnected dimensions: economic profit, social impact, and environmental stewardship (Elkington, 1998). By prioritizing organizational sustainability, SEs create long-term value and foster positive change, meeting present needs while safeguarding resources for the future. As a result, achieving sustainability empowers SEs to carry forward their mission, values, and practices to future generations, ensuring the perpetuation of their social impact and leaving a lasting legacy (Kamaludin, 2023).

Furthermore, to effectively prioritize the most influential aspects, organizations utilize the Critical Success Factor (CSF) framework, which is often linked to the Pareto principle. This principle suggests that 20% of the factors have the potential to impact over 80% of the organization's overall success. By identifying and focusing on these key factors, organizations can allocate their resources more effectively and increase their chances of achieving their business goals (Morales-Alonso et al., 2023; Singh & Awasthy, 2025). Social entrepreneurship, being a developing field, possesses distinctive elements that encompass its mission, goals, practices, and culture. Hence, caution is necessary when attempting to apply factors that have proven effective for traditional enterprises to the unique context of social entrepreneurship (Satar & John, 2016). By taking into account these unique characteristics, a more precise understanding of the CSFs driving sustainability in social entrepreneurship can be attained.

Although the SE sector in the Philippines has shown significant development, tripling in size over the past decade, it still faces barriers that hinder its growth (Pybus, 2017). Preliminary interviews with SE professionals reveal that the field is widely misunderstood, unappreciated, and lacks support from the general public. This misunderstanding is influenced by the nature of the field itself, the societal perception of businesses focusing solely on self-interest and profit, and a culture that doesn't prioritize the coexistence of profit and impact. Despite the vast potential of SE to improve various societal problems, social entrepreneurship remains underexplored, particularly in developing countries as existing literature primarily focuses on traditional for-profit enterprises and MSMEs, neglecting the unique challenges faced by SEs (Berrones-Flemmig & Mauroner, 2019). Moreover, among those that explore SEs are primarily from developed countries. As a result, SEs in the Philippines lack legal recognition, limiting sectoral understanding and accessibility in receiving specialized support.

The study's primary objective is to model the interrelationships among Critical Success Factors (CSFs) that influence organizational sustainability among social enterprises in the Philippines. Identifying and modelling the Critical Success Factors (CSFs) among SEs is thus crucial to aid in overcoming obstacles and ensure sustained success. This study's insights play a pivotal role in empowering social entrepreneurs to develop strategic plans, gain a competitive advantage, and achieve their goals. Moreover, advancing knowledge in social entrepreneurship, particularly in developing countries like the Philippines, fosters a formal and standardized concept, enabling further research and supportive strategies. Furthermore, tailored legal policies for social

entrepreneurs creates a supportive framework, facilitating sector growth in the Philippine business landscape.

## MATERIALS AND METHODS

### Research Design

A qualitative approach, particularly the Interpretive Structural Modeling (ISM) was utilized in this study to identify the CSFs and their relationships in the context of social enterprises in the Philippines. ISM follows the Multi-Criteria Decision Making (MCDM) method (Ansari et al., 2024). ISM is a qualitative approach to establish the interconnections among drivers, enabling a comprehensive knowledge of the relative connections among the critical success factors and identifying their dependence relationships, through the creation of a visual representation. It uses the qualitative data obtained from experts providing their knowledge and experience to dissect a complex system into many sub-systems and to construct a multi-level structural model (Ahmad et al., 2024).

### Sampling

Purposive sampling was deemed appropriate, as it enabled the researcher to collect insights from selected research participants considering the limited resources available, such as time and participant availability (Patton, 2015). Considering the objectives and availability of the participants in the study, seven social entrepreneurship professionals were selected to participate in the series of in-depth interviews conducted to obtain the necessary data. According to Hussain et al. (2024), a threshold of five respondents is recommended for those utilizing the purposive sampling method. However, according to Liu et al. (2016), there is no specific minimum number of expert requirements in literature was found for research involving ISM-MICMAC, whereby reported number of experts typically ranges from 4 to 10 enough to provide external validity. The final sample of seven experts falls within the range commonly reported in ISM-MICMAC studies.

Previous studies employing the ISM-MICMAC approach have used varying numbers of participants. Nirmal et al. (2025) initially employed 4 experts, but snowballed to 11. Zhang et al. (2025) utilize eight experts: 3 department heads of manufacturing companies, two from the academe, two industrial engineers, and one policy maker to discuss factors involved in sustainable rural tourism development in China. Feng et al. (2024) used 9 experts to engage in the discussion of the influencing factors of employees' green behavior in manufacturing organizations; these experts came from research institutions, corporate executives and mid-levels, government departments, universities. As for Hussain et al. (2024), seven experts: three were professors, and three professors and four construction industry practitioners were used to validate the relevance of the factors and to develop the self-structural interaction matrix (SSIM). Lastly, Hasan et al. (2024) used eight experts composed of university professors in different regions, managers of logistics companies, and research centers to validate the relationships of capability factors in the logistics industry.

To ensure construct validity, the CSFs examined in this study were derived from a thorough literature review in the area of social entrepreneurship. To achieve internal validity, the participant experts were briefed about the study's objective and the definition of each CSF. The detailed process was explained to ensure that the experts concentrate on the direct relationships between each pair of CSFs. Moreover, the experts were provided with the main objective of the process, which is to gain a deeper understanding of the phenomenon – specifically to further understand which CSF leads to achieving another CSF and whether the CSFs are related.

### Inclusion/ Exclusion Criteria of Participants

Listed below are the identified criteria used for selecting the participants in the study:

1. The participant must have extensive knowledge, experience, and expertise practicing in the Philippine social entrepreneurship field for at least five (5) years. Furthermore, they must have taken an active role in their affiliated social enterprise's strategic development and organizational sustainability initiatives.
2. The participant must have played a significant role in organizational growth and sustainability initiatives during their time with the affiliated social enterprise.
3. The participant has worked with a "social enterprise" as defined in the literature:
  - a. Social enterprises refer to organizations that focus primarily on their mission statement, which refers to pursuing innovative solutions to create social value or wealth.
  - b. Social enterprises refer to organizations prioritizing generating social impact over financial impact.
  - c. Social enterprises refer to organizations that are impact-centered or focus on achieving value in terms of large-scale transformational benefit to society at large.

**Table 1:** Participant inclusion and exclusion criteria.

	INCLUSION CRITERIA	EXCLUSION CRITERIA
Experience	SE Professionals with at least 5 years of experience working in the Philippine SE sector	SE Professionals with less than 5 years of experience working in the Philippine SE sector
Role	Key decision makers: SE Founders, CEOs, Executive Directors	SE Employees
SE Type	New generational SEs (New Gen SEs)*	Other types of SEs: Social cooperatives, Fair Trade Organizations (FTOs), Microfinance institutions, Trading and Development Companies (TRADOs)
SE Characteristics	Organizations that embody SE characteristics such as being: Mission-Driven, Financially Sustainable, and Impact-Centered	Organizations that claim to be SEs without this being reflected in its mission statement, business model, and impact.

\*fastest-growing segments of social enterprises in the Philippines, which are established by young professionals or entrepreneurs that are excluded from the traditional non-governmental development organizations; they often have a business background, leading them to prioritize commercialization faster

### Ethical Considerations

Upon initial contact and receiving a response of interest from each study participant via LinkedIn chat, the purpose of the study and the data collection process were explained thoroughly with an emphasis on the following research protocols:

1. Participation in the study remained completely voluntary, without any repercussions if they refused to participate.
2. Participants who agreed to participate were free to withdraw their participation and retract collected data at any stage of the study.
3. Participants were given appropriate time to ask questions and address their concerns about the study before proceeding.
4. Upon receiving final confirmation of participation in the research, a formal written letter containing all pertinent information was sent through the participants' email.
5. The participants were informed of the essential details of the study: purpose, objectives, outputs and dissemination process, and consent guidelines.
6. All participant information, data, and files (video, audio recording, and transcripts) were kept confidential and only utilized for the conducted research.
7. The online interviews were recorded upon receiving the consent from the participants.

### Research Method

The research methodology was conducted in four main stages, using a process similar to that of Kumar et al. (2024), and Panda et al. (2023):

1. Identifying relevant Critical Success Factors (CSFs) to be considered in the study through Systematic Literature Review (SLR) and in-depth interviews with SE professionals
2. Analyzing the contextual relationships of the identified CSFs, which will be modeled through ISM Technique
3. Categorizing the CSFs based on their driving and dependence power through applying Matrix of Cross-

Impact Multiplication Applied to Classification (MICMAC) Analysis

4. Devising management, policy and theoretical implications of the study based on the generated ISM-MICMAC analysis

### Identification of Critical Success Factors

The systematic literature review yielded 24 journal articles deemed relevant for consideration; these journal articles were then reviewed intensively for extraction of 23 initial CSFs relevant to MSMEs, SMEs, and SEs (see Appendix Table 1). After the preliminary CSF list was generated, a series of in-depth interviews with seven (7) social entrepreneurship experts (participants) was then conducted to finalize the list of CSFs that will be used for the ISM-MICMAC analysis. A semi-structured interview process was conducted following a three-level flow process: 1) preliminary interview, 2) secondary interview, and 3) validation interview. The *preliminary* interview aimed to screen the initial list of CSFs generated from literature review; the participants collectively decided whether to add more or delete some CSFs; the outcome of the preliminary interview was a finalized list of CSFs. The *secondary* interview aimed to establish the contextual relationships between CSFs; the participants were able to provide the direction of the relationships as represented by arrows pointing from one factor to another. Some factors were also identified not to have any relationship with other factors. The *validation* interview aimed to provide a validation of the ISM-MICMAC model by soliciting comments from the participants; more importantly the validation focused on how the model could be applied in social entrepreneurship practice.

### ISM Process

Interpretive Structural Modeling (ISM) methodology was utilized by analyzing the results generated in the *secondary* interviews. These were then reiterated accordingly through a series of *validation* interviews with the participants. Specifically, it was conducted through the following steps:

- Step 1. Identification of Factors to be Linked
- Step 2. Identification of Relationships Between the Factors
- Step 3. Interpretation of Relationship
- Step 4. Developing Structural Self-Interaction Matrix (SSIM)

- Step 5. Developing Initial Reachability Matrix
- Step 6. Incorporating Transitivity and Developing Final Reachability Matrix
- Step 7. Defining Reachability and Antecedent Sets
- Step 8. Developing Level Partitions
- Step 9. Developing Conical Matrix
- Step 10. Building the Digraph
- Step 11. Building Interpretive Structural Model
- Step 12. Classification of Power of Variables

**MICMAC Analysis Process**

To identify the CSFs that strongly influence other variables based on their driving and dependence power, MICMAC analysis was applied. The steps to conducting MICMAC analysis are as follows:

- Step 1. Identify the Driving Power and Dependence Power of Each Variable
- Step 2. Classification of the Variables into Four Clusters
- Step 3. Plotting Variables on a Graph that Shows Driving and Dependence Power

**Data Analysis Process**

Smart Interpretive Structural Modeling (SmartISM) software developed by researchers Ahmad & Qahmash (2021) was utilized to generate the ISM and MICMAC analysis. The use of this

**Table 2:** Participant’s profile.

Experts	Education	Industry	Position	Experience
A	Master’s degree	Agribusiness	Founder and President	5
B	Bachelor’s degree	Commerce	Founder and CEO	5
C	Bachelor’s degree	Tourism	Founder and CEO	7
D	Master’s degree	Health and Wellness	Founder and CEO	5
E	Master’s degree	Research consultancy	Executive Director	9
F	Master’s degree	Health and Beauty	Founder and CEO	5
G	Master’s degree	Agribusiness	Co-founder and CEO	6

**Organizational Profile of the Participants**

The participants’ affiliation was required to exhibit the characteristics of a social enterprise that are: mission-driven,

software ensures the correct application of ISM, especially during the transitivity calculation; manual computation is prone to errors due to higher-order computational complexity.

**Validation Process**

During these *validation* interviews, feedback from the participants was taken into account to improve the ISM-MICMAC results until a final model was agreed upon. These *validation* interviews also provided an opportunity to discuss the implications of the results. The knowledge obtained from this stage contributes to the development of practical, policy-oriented, and theoretical implications that aim to provide valuable insights and support for social entrepreneurs and the broader SE sector.

**RESULTS AND DISCUSSION**

**Selected SE Professionals Profile**

A diverse set of SE professionals across different industries in the social entrepreneurship field were consulted throughout the study. Detailed background of the SE professionals’ profiles is presented in Table 2.

financially sustainable, and impact-centered. Detailed background on the participants’ SE organizations is provided in Table 3.

**Table 3:** Participant’s organizational profile.

SE	Mission Statement	Target Community
A	Provide resources, training and support for farmers	Farmers
B	Make sustainable zero waste products accessible in the Philippine market	Local community
C	Promote sustainable tourism practices and provide opportunities for local capacity development	Local community, local government units
D	Break the stigma of mental health in the Philippines and provide access to mental health services	Local community, companies, and businesses
E	Empower social entrepreneurship research and education in the Philippines	Social entrepreneurs, researchers, policymakers, local community
F	Produce locally made sustainable health and beauty products for the Filipino people	Local community
G	Empower local farmers to market their products and provide customers a seamless farm to table experience	Farmers, local community

**Finalized List of CSFs**

During the *preliminary* interview, starting from an initial list of 23 CSFs gathered from literature review (see Appendix Table 1), the list was narrowed down to 13 CSFs (see Table 4).

**Table 4:** Final CSFs after the preliminary interview.

No.	Critical Success Factor (CSF)	Acronym
1	Regulatory compliance	RC
2	Business model	BM
3	Sustainable supply chain	SSC
4	Individual entrepreneurial orientation	IEO
5	Innovative financing	IF
6	Leadership	LD
7	Management	MGT
8	Marketing	MKT
9	Networking	NWG
10	People and culture	PC

11	Sector support	SS
12	Stakeholder participation	SP
13	Sustainability metrics evaluation	SMEv

CSF 1 - Regulatory Compliance (RC). Ensuring regulatory compliance is a fundamental requirement for social entrepreneurs as it guarantees ethical operations and adherence to legal frameworks (Leisering, 2024). Compliance, rather than a burden, offers strategic advantages by establishing credibility, accessing financial support, and achieving the dual objectives of social and economic impact (Spanuth & Urbano, 2024). The participants highlighted three main subfactors to achieve CSF 1 (RC): systematic change and easing policies, questioning policies and systems, and working with the existing system.

CSF 2 - Business Model (BM). When developing a strategy for any enterprise, the creation of a business model is crucial for understanding business performance, competitive advantage, and value creation (Pareja-Cano et al., 2023). The participants emphasized three key characteristics that distinguish SE business models from traditional models: clarity and familiarity (surrounding their purpose, revenue generation, and scalability), self-sustainability, and integrated social mission.

CSF 3 - Sustainable Supply Chain (SSC). Establishing a sustainable supply chain (SSC) is vital for the long-term viability of social entrepreneurship. It involves adopting a holistic approach to design, manage, and control the supply chain, with the goal of enhancing customer service and reducing costs (Taylor & Rosca, 2023). The participants identified three main subfactors relevant for CSF 3 (SSC): supply chain mindset, raw material sourcing and procurement, and making sustainability mainstream.

CSF 4 - Individual Entrepreneurial Orientation (IEO). Individual Social Entrepreneurial Orientation (IEO) is vital in enhancing an individual's entrepreneurial knowledge, behavior, and thinking (Nikitina et al., 2023). Based on Miller (2011), the concept of entrepreneurship orientation (EO) is actually an organizational level construct that has three key dimensions: organization's propensity to take risks, active engagement in innovation, and a proactive approach to pursuing new business opportunities. Rigtering et al. (2024) suggest that analyzing an individual's entrepreneurial orientation involves considering the surrounding environment (availability of opportunities), personal traits (influenced by genetics and the environment), and attitudes (shaped by experiences, peers, education, etc.).

During the interviews, it became evident that pursuing social entrepreneurship is not for everyone due to the numerous challenges involved in entering the field. Various factors contribute to shaping an individual's entrepreneurial orientation in the context of social entrepreneurship, including their background, experience, personality traits, and attitudes.

CSF 5 - Innovative Financing (IF). By embracing innovative financing, social enterprises can discover new funding sources and collaborate with diverse donors from the government and private sector to achieve greater impact. Innovative financing strategies are needed to ensure wise utilization of financial resources in their social enterprises. Therefore, effective management of financial support from various sources, developing investor relationships, and practicing resourcefulness are key for social entrepreneurs. (Schätzlein et al., 2023; Talukder & Lakner, 2023).

CSF 6 - Leadership (LD). SE leaders should possess distinctive qualities and undertake specific actions. They should have a strong belief in their ability to make a meaningful impact and be fully committed to addressing social issues. Their motivation is primarily rooted in creating social value rather than personal financial gain. With this, SE leaders excel in inspiring and unifying their organizations, fostering trust, enthusiasm, and a sense of

belonging among employees (Dixit et al., 2023; Sipahi Dongul & Artantaş, 2023).

CSF 7 - Management (MGT). Having a proficient manager in the organization not only ensures that company objectives are met but also guarantees employee satisfaction, proper resource utilization, and smooth operations. Effective managers must have the necessary experience, knowledge, and skills. They can work in several capacities (wear multiple hats), and can communicate and manage limited resources effectively (Sessions and Pychlau, 2024; Trigili, 2025)

CSF 8 - Marketing (MKT). Effective marketing is essential for social enterprises (SEs) as it allows them to create value for stakeholders and society while maintaining financial self-sufficiency. Implementing effective marketing strategies contributes to the overall performance and financial outcomes of SEs. These strategies involve identifying opportunities, diffusing innovative solutions, and effectively communicating the benefits offered (Lückenbach et al., 2023).

CSF 9 - Networking (NWG). The success of entrepreneurial endeavors relies on the interactions within social networks among different actors. This is particularly crucial for social enterprises operating in resource-constrained environments, as networks provide a means to access and mobilize resources beyond their organization.

Through networking, social entrepreneurs gain access to a range of opportunities, resources, knowledge, and experiences that foster growth. They can establish connections with potential investors, partners, and collaborators, which not only helps in securing support but also enhances their legitimacy and provides valuable information and knowledge (Daskalopoulou et al., 2023; Hidalgo et al., 2024).

CSF 10 - People and Culture (PC). The concept of people and culture in human resources (HR) emphasizes the need to align HR practices with business objectives to effectively manage individuals within organizations. Social ventures recognize the importance of prioritizing individuals and fostering a positive organizational culture to drive enduring progress. This entails cultivating an organizational culture that aligns employees' skills and values with the company's mission, a crucial aspect for social enterprises (Abbas et al., 2024; Nguyen et al., 2024; Pedraza-Rodríguez, 2023).

CSF 11 - Sector Support (SS). To overcome limited resources, SEs actively seek support from a range of actors, including fellow entrepreneurs, civil society organizations, academic institutions, government entities, funders, and incubators. Collaboration with the private sector and government is particularly crucial for SEs as it bridges sectoral gaps and effectively tackles social and environmental challenges. These partnerships and cross-sector collaborations facilitate resource pooling, promote sustainable development, and lead to more efficient solutions. By engaging with businesses, SEs gain opportunities for knowledge exchange, enhanced reputation, and access to broader markets (Cinar et al., 2024; Haug et al., 2024; Hedley et al., 2023).

CSF 12 - Stakeholder Participation (SP). Stakeholder participation plays a crucial role in the success of SEs. Social entrepreneurs prioritize involving beneficiaries in their work to ensure the effective delivery of community services. By engaging stakeholders and fostering collaboration to build trust, social entrepreneurs are able to demonstrate their business expertise,

explore new markets, and achieve long-term success and sustainability (Bailey & Lumpkin, 2023; Bunduchi et al., 2023).

successful and sustainable SE (Bonfanti et al., 2024; Kamaludin et al., 2024).

CSF 13 – Sustainability Metrics Evaluation (SMEv). Evaluating the impact of SEs is important because it enables SEs to understand the effectiveness of their work and to make evidence-based decisions on improving their ventures. It also aids social entrepreneurs in effectively demonstrating their impact to investors, donors, and other stakeholders, which is essential for securing funding and support. Lastly, it helps build credibility and trust among stakeholders, which is invaluable for building a

**Interpretive Structural Modeling**

The final Structural Self-Interaction Matrix (SSIM) reflects the collective understanding of the relationships between CSFs, based on the consensus and insights gained from the interviews. Because 13 CSFs were selected and analyzed in the study, this resulted in the identification of 78 pairwise comparisons (see Table 5).

**Table 5:** Structural self-interaction matrix results.

No.	CSF	1 RC	2 BM	3 SSC	4 IEO	5 IF	6 LD	7 MGT	8 MKT	9 NWG	10 PC	11 SS	12 SP	13 SMEv
1	RC		V	V	O	O	V	V	O	O	O	V	O	O
2	BM			V	O	X	A	A	V	V	V	A	V	V
3	SSC				A	O	A	A	O	A	O	A	O	V
4	IEO					O	X	V	O	V	O	O	O	O
5	IF						A	A	O	O	O	O	O	O
6	LD							V	V	V	V	A	V	V
7	MGT								V	V	V	A	V	V
8	MKT									X	O	O	V	V
9	NWG										O	O	V	V
10	PC											O	V	V
11	SS												V	V
12	SP													V
13	SMEv													V

**Initial Reachability Matrix**

The developed SSIM in Table 5 was then converted into an Initial Reachability Matrix in Table 6 showing the pairwise relationship of the factors in the binary format of 1 and 0.

**Table 6:** Initial reachability matrix results.

No.	CSF	1 RC	2 BM	3 SSC	4 IEO	5 IF	6 LD	7 MGT	8 MKT	9 NWG	10 PC	11 SS	12 SP	13 SMEv	DRIVING POWER
1	RC	1	1	1	0	0	1	1	0	0	0	1	0	0	6
2	BM	0	1	1	0	1	0	0	1	1	1	0	1	1	8
3	SSC	0	0	1	0	0	0	0	0	0	0	0	0	1	2
4	IEO	0	0	1	1	0	1	1	0	1	0	0	0	0	5
5	IF	0	1	0	0	1	0	0	0	0	0	0	0	0	2
6	LD	0	1	1	1	1	1	1	1	1	1	1	1	1	11
7	MGT	0	1	1	0	1	0	1	1	1	1	0	1	1	9
8	MKT	0	0	0	0	0	0	0	1	1	0	0	1	1	4
9	NWG	0	0	1	0	0	0	0	1	1	0	0	1	1	5
10	PC	0	0	0	0	0	0	0	0	0	1	0	1	1	3
11	SS	0	1	1	0	0	1	1	0	0	0	1	1	1	7
12	SP	0	0	0	0	0	0	0	0	0	0	0	1	1	2
13	SMEv	0	0	0	0	0	0	0	0	0	0	0	0	1	1
DEPENDENCE POWER		1	6	8	2	4	4	5	5	6	4	2	8	10	

**Final Reachability Matrix**

The initial reachability matrix was then reviewed for the presence of transitive relations, which were denoted with 1\*. Consequently,

each CSF’s driving power and dependence power were computed (see Table 7).

**Table 7:** Final reachability matrix results.

No.	CSF	1 RC	2 BM	3 SSC	4 IEO	5 IF	6 LD	7 MGT	8 MKT	9 NWG	10 PC	11 SS	12 SP	13 SMEv	DRIVING POWER
1	RC	1	1	1	1*	1*	1	1	1*	1*	1*	1	1*	1*	13
2	BM	0	1	1	0	1	0	0	1	1	1	0	1	1	8
3	SSC	0	0	1	0	0	0	0	0	0	0	0	0	1	2
4	IEO	0	1*	1	1	1*	1	1	1*	1	1*	0	1*	1*	11
5	IF	0	1	1*	0	1	0	0	1*	1*	1*	0	1*	1*	8
6	LD	0	1	1	1	1	1	1	1	1	1	1	1	1	11
7	MGT	0	1	1	0	1	0	1	1	1	1	0	1	1	9
8	MKT	0	0	1*	0	0	0	0	1	1	0	0	1	1	4
9	NWG	0	0	1	0	0	0	0	1	1	0	0	1	1	5
10	PC	0	0	0	0	0	0	0	0	0	1	0	1	1	3
11	SS	0	1	1	1*	1*	1	1	1*	1*	1*	1	1	1	7

12	SP	0	0	0	0	0	0	0	0	0	0	0	1	1	2
13	SMEv	0	0	0	0	0	0	0	0	0	0	0	0	1	1
DEPENDENCE POWER		1	7	10	4	7	4	5	9	9	8	2	11	13	

**Level Partitioning**

Level partitioning in ISM refers to the process of grouping the CSFs into different levels based on their degree of dependence or influence within the system being modeled. This helps in creating a hierarchical structure that aids in visualizing the relationships

among the factors. Analysis of the relationships of the 13 CSFs resulted in the identification of eight levels for the ISM model, with the final level partitioning table presented in Table 8.

**Table 8:** Final level partitioning results.

Elements (MI)	Reachability Set R(MI)	Antecedent Set A(NI)	Intersection Set R(MI)∩A(NI)	Level
1	1	1	1	8
2	2,5	1,2,4,5,6,7,11	2,5	4
3	3	1,2,3,4,5,6,7,8,9,11	3	2
4	4,6	1,4,6,11	4,6	6
5	2,5	1,2,4,5,6,7,11	2,5	4
6	4,6	1,4,6,11	4,6	6
7	7	1,4,6,7,11	7	5
8	8,9	1,2,4,5,6,7,8,9,11	8,9	3
9	8,9	1,2,4,5,6,7,8,9,11	8,9	3
10	10	1,2,4,5,6,7,10,11	10	3
11	11	1,11	11	7
12	12	1,2,4,5,6,7,8,9,10,11,12	12	2
13	13	1,2,3,4,5,6,7,8,9,10,11,12,13	13	1

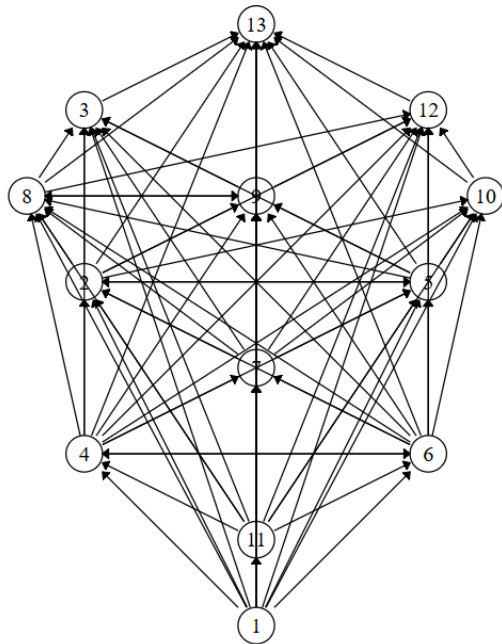
**Conical Matrix and Initial Digraph**

The conical matrix is presented in Table 9. It considers the levels identified during the level partitioning process, enabling a clear understanding of the flow of influence and hierarchical structure. The initial digraph as shown in Figure 1, visualizes the CSFs that directly influence other CSFs, as well as the CSFs that are

influenced by other CSFs. This aids in identifying key CSFs or drivers in the system and assists in assessing the complexity of the system. As a result, the presence of multiple interconnected factors and the directionality of the relationships indicate the level of complexity and interdependence within the system.

**Table 9:** Conical matrix.

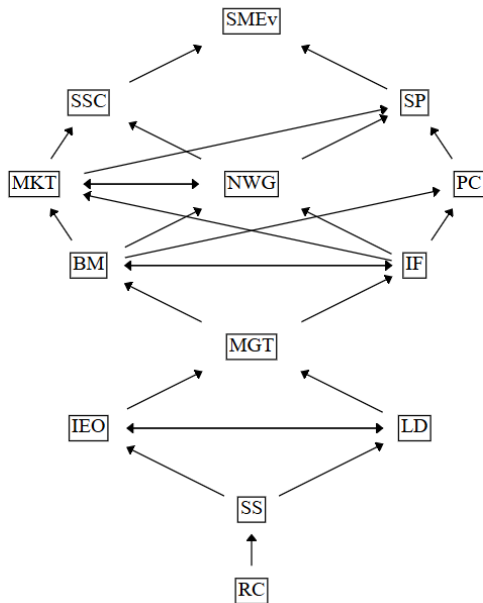
No.	CSF	13 SMEv	3 SSC	12 SP	8 MKT	9 NWG	10 PC	2 BM	5 IF	7 MGT	4 IEO	6 LD	11 SS	1 RC	Driving Power	Level
13	SMEv	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
3	SSC	1	1	0	0	0	0	0	0	0	0	0	0	0	2	2
12	SP	1	0	1	0	0	0	0	0	0	0	0	0	0	2	2
8	MKT	1	1*	1	1	1	0	0	0	0	0	0	0	0	5	3
9	NWG	1	1	1	1	1	0	0	0	0	0	0	0	0	5	3
10	PC	1	0	1	0	0	1	0	0	0	0	0	0	0	3	3
2	BM	1	1	1	1	1	1	1	1	0	0	0	0	0	8	4
5	IF	1*	1*	1*	1*	1*	1*	1	1	0	0	0	0	0	8	4
7	MGT	1	1	1	1	1	1	1	1	1	0	0	0	0	9	5
4	IEO	1*	1	1*	1*	1	1*	1*	1*	1	1	1	0	0	11	6
6	LD	1	1	1	1	1	1	1	1	1	1	1	0	0	11	6
11	SS	1	1	1	1*	1*	1*	1	1*	1	1*	1	1	0	12	7
1	RC	1*	1	1*	1*	1*	1*	1	1*	1	1*	1	1	1	13	8
Dependence																
Power		13	10	11	9	9	8	7	7	5	4	4	2	1		
Level		1	2	2	3	3	3	4	4	5	6	6	7	8		



**Figure 1:** Digraph of the CSFs driving organizational sustainability of SEs in the Philippines.

**Final ISM Model**

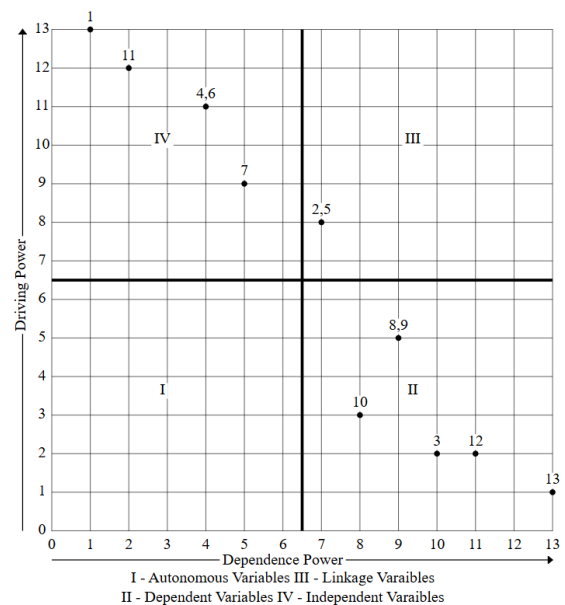
The final ISM Model is presented in Figure 2. Compared to the initial digraph shown in Figure 1, the final model removes the transitive or indirect relationships between the factors across levels.



**Figure 2:** Final ISM model.

**MICMAC Analysis**

A limitation of the ISM model is its inability to categorize the CSFs based on their nature. To overcome this limitation, the Matrice d'Impacts Croisés Multiplication Appliquée à un Classement (MICMAC) was performed to cluster the CSFs in a two-dimensional grid divided into four quadrants: autonomous, dependent, linkage, and independent. The generated MICMAC diagram for the CSFs Driving the Organizational Sustainability of SEs in the Philippines is shown in Figure 3.



**Figure 3:** MICMAC diagram.

Upon review of the generated MICMAC Diagram, no CSF fell under the first cluster as autonomous factors. This absence of autonomous factors thus suggests that all CSFs are interconnected and have varying levels of driving and dependence power. As a result, every factor plays a role in influencing or being influenced by other factors in the system. In the second cluster, 6 out of 13 CSFs or 46.15% of the CSFs were classified as dependent factors. As observed, these include the CSFs that are those positioned in higher levels in the ISM Model as follows:

- Level 1 Factor: CSF 13 (SMEv)
- Level 2 Factors: CSF 3 (SSC), CSF 8 (MKT)
- Level 3 Factors: CSF 9 (NWG), CSF 10 (PC), CSF 12 (SP)

The classification of these factors as dependent factors emphasizes that these CSFs are influenced and require the support from other CSFs to be successful and effective. As a result, these CSFs need to be addressed strategically considering their interconnectedness. Moreover, 15.38% or 2 out of 13 CSFs were classified as Linkage Factors as they fell in the third cluster. These CSFs correspond to be the two factors in Level 4 of the ISM: CSF 2 (BM), and CSF 5 (IF). These linkage factors play a crucial role for SEs to achieve organizational sustainability as they have a direct and positive influence on dependent factors. For instance, CSF 2 (BM) defines the strategic framework and operational processes of the SE, while CSF 5 (IF) ensures that financial resources are available. Effectively addressing these CSFs leads to contributing towards responding to the dependent CSFs such as: CSF 9 (NWG), CSF 10 (PC), CSF 12 (SP), (SSC), CSF 8 (MKT), and ultimately CSF 13 (SME). Hence, Hence, these linkage factors should be strategically leveraged.

Lastly, the remaining 38.46% or 5 out of 13 CSFs were classified as Independent Factors as they fell in the fourth cluster. These include the CSFs belonging to the lower levels of the ISM: Level 5: CSF 7 (MGT), Level 6- CSF 4 (IEO), CSF 6 (LD); Level 7- CSF 11 (SS); and Level 8- CSF 1 (RC). Collectively, these CSFs are essential as governance and organizational strategic direction serve as the foundation and framework for the development of SEs. As a result, prioritizing these CSFs have the strongest influence within the system. These factors can assist the development of the other CSFs positioned at higher levels in the ISM. Overall, ISM has enabled the understanding of the hierarchy of the CSFs that drive organizational sustainability among SEs in the Philippines. However, through the MICMAC diagram, a clearer strategic direction for addressing the CSFs was presented.

## CONCLUSION and IMPLICATIONS

The findings of this study serve as a reference point for the general society to understand the SE field better, for management to effectively strategize operations, and for policymakers to be guided on policy creation. All of these aim to promote a vibrant SE sector. The outlook for SE in general and in the Philippines looks bright; however, more people must understand what the sector offers to sustain this momentum. SE growth is not just the government's responsibility but is a whole-of-nation approach. With this, presented below are the following management and policy implications that strengthen public understanding. This, in turn, leads to strengthened SE awareness and appreciation, a key step toward development.

### Implications to Policy

Strengthening CSF 1 (RC) has the most impact on the system of CSFs influencing organizational sustainability among SEs in the Philippines. According to the panel of experts, there are three main implications for policymakers to consider: SE Recognition, Leniency of Regulatory Requirements, and Enabling Enforcement Mechanisms. In order to promote SE development, the primary goal should start with ensuring the sector is recognized by the broader community and policy environment. This recognition is essential to prevent any misconceptions and to build a better support environment for SEs. This includes access to more resources and funding opportunities, along with enhanced credibility and trustworthiness. Along with this comes the need to establish a general and inclusive definition of social entrepreneurship. To ensure the development of the definition of SE is not too broad or too limiting, the following is recommended: 1) the SE must have a social mission statement that targets to impart social value to the general community; 2) the SE must have a sustainable business model that is easily understandable by investors; and 3) the SE must have a social impact evaluation strategy and action plan to track its progress in imparting social impact.

The current regulatory requirements imposed on social enterprises are the same as those for traditional for-profit businesses. This lack of differentiation means there are no incentives or specific support available to assist social enterprises, despite the unique challenges they face. Consequently, this situation makes it more difficult for new and important players to enter the social enterprise sector. Ideally, the best way to support SE development is to prioritize the passing of the Poverty Reduction Through Social Entrepreneurship (PRESENT) program, known as the PRESENT Senate Bill No. 789 of the 20<sup>th</sup> Congress. This Act covers access to loans, insurance programs, access to R&D support, government procurement, market development, recognition and support, tax exemptions, cash incentives, as well as the establishment of the "National Enterprise Development Council" for MSMEs and SEs to carry out the policy throughout the country.

SEs operate within a complex business environment due to their dual or triple-bottom-line nature, emphasizing the importance of enforcing mechanisms to support their compliance with various obligations. These obligations encompass registration, taxation, reporting, and labor regulations. There is a need to establish regulatory agencies and support systems. These are essential to assist SEs in monitoring their impact and reputation, promoting transparency and accountability of their mission, and in preventing unfair practices. As a result, this assists SEs in building trust and confidence among stakeholders, attracting more support and resources for development.

Increasing CSF 11 (SS) activity starts with establishing SE support units, creating SE funding programs, and strengthening funding mechanisms. It is recommended that government agencies provide specialized assistance, support, and services to SEs. Specifically, these units play a crucial role in facilitating the growth and

development of SEs by offering a range of resources tailored to their needs. This includes but is not limited to information, training, capacity-building programs, funding and financial support, and networking opportunities. In addition, SE support units also engage the target communities of SEs, creating a platform for knowledge sharing, learning, and networking among SEs. Policymakers can look into designing funding programs targeted at addressing the financial needs of SEs, offering them access to capital and resources that may otherwise be challenging to obtain through traditional funding channels. Careful consideration must be taken into account when establishing objectives, eligibility criteria, and performance metrics SEs have to abide by when being considered for assistance.

On the other hand, strengthened financial mechanisms include the following: 1) the establishment of dedicated funds or financial institutions that provide accessible and affordable capital to SEs; 2) provision of tax incentives in the form of tax credits, exemptions, or deductions towards monetary investments made by investors to support SE activity; 3) developing financial education and capacity-building programs targeted at assisting social entrepreneurs with effectively managing their resources; 4) encouraging SEs to implement innovative financing models such as impact investing and social impact bonds; and 5) implementing collaborations with financial institutions to bridge SEs and banks, venture capitalists, or impact investors that are interested in supporting social impact ventures.

The middle level CSFs emphasize the need for improving entrepreneurship education in the Philippines and making it more accessible to the general public. This starts with education reform, which should be done by introducing SE in the formative years of learners' education, along with incorporating SE in the basic educational curriculum. As a result, this leads to the development of a strong foundation and understanding of social entrepreneurship principles, fostering an entrepreneurial mindset and encouraging innovative and socially responsible thinking. Overall, this assists the cultivation of a new generation of socially conscious individuals equipped with the necessary skills, knowledge, and mindset to drive social change and contribute to the growth and sustainability of social enterprises. Recently, significant progress has been made in terms of the attempts to promote entrepreneurial education in the Philippines, with Senate Bill No. 1697 of the 20<sup>th</sup> Congress, "An Act Requiring the Inclusion of Entrepreneurship as a separate subject in the Junior and Senior High School Curricula of the K-12 Program" currently being filed for approval by the Senate. This law thus opens doors for incorporating SE into the curriculum so that more students develop knowledge of the field. Moreover, other areas of improvement for entrepreneurial education include incorporating activities that would boost Individual Entrepreneurial Orientation (IEO) values such as creativity and a mindset leaning towards innovation.

### Implications to Management

SEs must clearly embody their mission and core values. This can be explained with CSF 1 (RC) being a foundational CSF. Like any enterprise, SEs should comply with business regulations and go beyond minimum compliance when necessary. In order to enhance organizational sustainability, SE managers must prioritize the establishment of a robust support system within their ventures. By actively engaging with and leveraging the services provided through CSF 11 (SS), social entrepreneurs can enhance their efficiency and effectiveness in addressing the unique challenges they face, ultimately leading to greater organizational sustainability.

It is equally important for SE leaders to establish an internal program that directly aligns with the organization's goals. This is where CSF 4 (IEO) plays a crucial role, as it complements CSF 6 (LD) in fostering employee engagement. SE managers should

focus on building employee interest and commitment by ensuring they embrace and embody the values of the SE. By nurturing a strong culture fit and encouraging employee development, SE managers can create a cohesive team that is dedicated to fulfilling the organization's mission and driving sustainable impact.

CSF 7 (MGT) plays a crucial role in ensuring the organizational sustainability of social enterprises, considering the complexities associated with the SE environment. SE managers can focus on developing internal policies and frameworks that provide guidance for the organization. Regularly reviewing and refining the strategies outlined in CSF 2 (BM) and CSF 5 (IF) becomes imperative, as these linkage factors serve as key drivers for other CSFs at different levels of the ISM hierarchy.

Several management strategies emphasized by the SE professionals that managers should incorporate when developing CSF 2 (BM) are as follows: 1) strengthen community networks by initiating community projects and meet-ups, creating networking sessions, and building community initiatives; 2) conduct education and advocacy campaigns to communicate their mission to their target audience, increase brand awareness, and build customer relationships; 3) establish grassroots connections with local community leaders who hold positions of influence and responsibility within local communities; and 4) increase visibility through community engagement and outreach activities, community partnerships with organizations and non-profits to leverage their resources and knowledge, and social media and other digital platforms.

SE managers must navigate numerous considerations to align the SE with its social mission. To address these challenges, they must focus on developing internal policies and frameworks that provide guidance for the organization. By laying a strong foundation through effective management practices, SE managers can create a conducive environment for the implementation and integration of these interconnected CSFs, ultimately contributing to the organizational sustainability of the social enterprise.

#### Areas for Future Research

This study has some limitations that can be addressed in future studies. First, the CSFs and their interrelationships used in the ISM-MICMAC analysis were based on expert feedback, therefore, the generated model, along with the results of the study are highly dependent on the practical knowledge of the participants. It is recommended that a different set of experts coming from different social enterprise backgrounds, experiences, and areas of expertise can be considered in future research. Considering the qualitative nature of the study, the small sample size of experts renders the results obtained in this study more indicative rather than representative. Therefore, larger number of experts involved are highly needed in future studies, which would strongly increase the reliability and validity of the findings. A different set of experts can also yield a different set of (additional) CSFs to be considered, which can then provide a different set of interrelationships among the factors. Second, although ISM-MICMAC is valuable for understanding interrelationships, it does not provide a precise quantitative analysis that may be utilized for rigorous decision making. Therefore, it is recommended to explore and combine ISM with quantitative MCDM techniques, such as AHP (Analytical Hierarchy Process) or TOPSIS (Technique for Order of Preference by Similarity to Ideal Solution), to incorporate numerical data, weighting, and calculation methods into the decision-making process. This integration would enhance the accuracy and reliability of the analysis, allowing for more robust decision-making in the social entrepreneurship context. And lastly, the study focused on analyzing the general organizational factors driving social entrepreneurship across several different industries. As different industries have different needs, further studies should be conducted to consider analyzing the CSFs per distinct industry, such as the agribusiness, recycling, health industries, among others

in order to generate a more accurate model of the CSFs relationships applicable to the specific industry.

#### CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

#### CONTRIBUTIONS OF INDIVIDUAL AUTHORS

MCAK: Conceptualization, Methodology, Resources, Investigation, Formal Analysis, Validation  
MIGI: Supervision, Visualization, Writing - Initial and Final Article Draft, Writing - Review & Editing  
Both authors (MCAK and MIGI) expressed final approval for the work and agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

#### FUNDING

No external funding was received for this study.

#### REFERENCES

- Abbas A, Ekowati D, Suhariadi F, Anwar A. Human capital creation: a collective psychological, social, organizational and religious perspective. *Journal of Religion and Health*. 2024 Jun;63(3):2168-200. <https://doi.org/10.1007/s10943-022-01665-8>
- Abera F. Critical Success Factors of Small and Medium Sized Enterprises in Addis Ababa, Ethiopia: Structural Model. *Global Scientific Journal*. 2021 Sep;9(9).
- Ahmad K, Islam MS, Jahin MA, Mridha MF. Analysis of Internet of things implementation barriers in the cold supply chain: An integrated ISM-MICMAC and DEMATEL approach. *Plos One*. 2024 Jul 12;19(7):e0304118. <https://doi.org/10.1371/journal.pone.0304118>
- Ahmad N, Qahmash A. SmartISM: Implementation and assessment of interpretive structural modeling. *Sustainability*. 2021 Aug 6;13(16):8801. <https://doi.org/10.3390/su13168801>
- Alegre I, Berbegal-Mirabent J. Social innovation success factors: hospitality and tourism social enterprises. *International Journal of Contemporary Hospitality Management*. 2016 Jun 13;28(6):1155-76. <https://doi.org/10.1108/IJCHM-05-2014-0231>
- Alfoqahaa S. Critical success factors of small and medium-sized enterprises in Palestine. *Journal of Research in Marketing and Entrepreneurship*. 2018 Oct 30;20(2):170-88. <https://doi.org/10.1108/JRME-05-2016-0014>
- Anderson AR. The economic reification of entrepreneurship: re-engaging with the social. In *Rethinking entrepreneurship 2015* Sep 16 (pp. 44-56). Routledge.
- Ansari FA, Haque SN, Khan S, Khan W. Modeling the enablers of implementing green HRM practices: An ISM-MICMAC approach. *Corporate Social Responsibility and Environmental Management*. 2024 July 9;31(6):6260-6274. <https://doi.org/10.1002/csr.2913>
- Bailey RC, Lumpkin GT. Enacting positive social change: A civic wealth creation stakeholder engagement framework.

- Entrepreneurship Theory and Practice. 2023 Jan;47(1):66-90. <https://doi.org/10.1177/10422587211049745>
- Berrones-Flemmig CN, Mauroner O. Understanding social entrepreneurship in developing countries-a multiple case study from Mexico. *International Journal of Business and Globalisation*. 2019;22(3):389-418. <https://doi.org/10.1504/IJBG.2019.099301>
- Bojica AM, Martínez-Del-Río J. Framing conflicting demands and strategies for managing hybridity in social enterprises. *Entrepreneurship & Regional Development*. 2023 Oct 20;35(9-10):715-45. <https://doi.org/10.1080/08985626.2023.2223610>
- Bonfanti A, De Crescenzo V, Simeoni F, Adai CR. Convergences and divergences in sustainable entrepreneurship and social entrepreneurship research: A systematic review and research agenda. *Journal of Business Research*. 2024 Jan 1;170:114336. <https://doi.org/10.1016/j.jbusres.2023.114336>
- Boyer D, Creech H, Paas L. Report for SEED Initiative Research Programme: Critical success factors and performance measures for start-up social and environmental enterprises. *International Institute for Sustainable Development= Institut international du développement durable*; 2008 Jun.
- Bunduchi R, Smart AU, Crisan-Mitra C, Cooper S. Legitimacy and innovation in social enterprises. *International Small Business Journal*. 2023 Jun;41(4):371-400. <https://doi.org/10.1177/02662426221102860>
- Chaivirutnukul K, Chandrachai A. The effects of critical success factors on social enterprises sustainability. *Asian Journal of Applied Sciences*. 2019 Jun 17;7(3).
- Cinar E, Simms C, Trott P, Demircioglu MA. Public sector innovation in context: A comparative study of innovation types. *Public Management Review*. 2024 Jan 2;26(1):265-92. <https://doi.org/10.1080/14719037.2022.2080860>
- Daskalopoulou I, Karakitsiou A, Thomakis Z. Social entrepreneurship and social capital: A review of impact research. *Sustainability*. 2023 Mar 8;15(6):4787. <https://doi.org/10.3390/su15064787>
- Dixit AR, Malik N, Seth M, Sethi D. The role of social entrepreneurial leadership and benchmarking in women empowerment. *Benchmarking: An International Journal*. 2023 Jan 11;30(1):180-95. <https://doi.org/10.1108/BIJ-08-2021-0493>
- Douglas J, Douglas A, Muturi D, Ochieng J. An exploratory study of critical success factors for SMEs in Kenya. In *Toulon-Verona Conference" Excellence in Services 2017 Sep* (pp. 223-234).
- Elkington J. Partnerships from cannibals with forks: The triple bottom line of 21st-century business. *Environmental Quality Management*. 1998 Sep;8(1):37-51.
- Feng X, Li E, Li J, Wei C. Critical influencing factors of employees' green behavior: Three-stage hybrid fuzzy DEMATEL-ISM-MICMAC approach. *Environment, Development and Sustainability*. 2024 July; 26(7): 17783-17811. <https://doi.org/10.1007/s10668-023-03364-0>
- Gupta N, Mirchandani A. Investigating entrepreneurial success factors of women-owned SMEs in UAE. *Management Decision*. 2018 Jan 8;56(1):219-32. <https://doi.org/10.1108/MD-04-2017-0411>
- Haug N, Dan S, Mergel I. Digitally-induced change in the public sector: a systematic review and research agenda. *Public Management Review*. 2024 Jul 2;26(7):1963-87. <https://doi.org/10.1080/14719037.2023.2234917>
- Hasan MK, Lei X, Hlali A, Bian Z. Modelling capability factors of logistics industry based on ISM-MICMAC. *Heliyon*. 2024 Nov 30;10(22): e40539. <https://doi.org/10.1016/j.heliyon.2024.e40539>
- Hedley D, Hedley DF, Walkowiak E, Bury SM, Spoor JR, Shiell A. Cost-benefit analysis of a non-government organization and Australian government collaborative supported employment program for autistic people. *Autism*. 2023 Jul;27(5):1377-90. <https://doi.org/10.1177/13623613221138643>
- Hidalgo G, Monticelli JM, Vargas Bortolaso I. Social capital as a driver of social entrepreneurship. *Journal of Social Entrepreneurship*. 2024 Jan 2;15(1):182-205. <https://doi.org/10.1080/19420676.2021.1951819>
- Hietschold N, Voegtlin C, Scherer AG, Gehman J. Pathways to social value and social change: An integrative review of the social entrepreneurship literature. *International Journal of Management Reviews*. 2023 Jul;25(3):564-86. <https://doi.org/10.1111/ijmr.12321>
- Hussain K, Sun H, Ahmad N, Iqbal M. Assessment of risk factors to Green, Lean, Six Sigma adoption in construction sector: Integrated ISM-MICMAC approach. *Heliyon*. 2024 June 30;10(12): e32749. <https://doi.org/10.1016/j.heliyon.2024.e32749>
- Kamaludin MF. Social sustainability within social entrepreneurship. *Technological Forecasting and Social Change*. 2023 Jul 1;192:122541. <https://doi.org/10.1016/j.techfore.2023.122541>
- Kamaludin MF, Xavier JA, Amin M. Social entrepreneurship and sustainability: A conceptual framework. *Journal of Social Entrepreneurship*. 2024 Jan 2;15(1):26-49. <https://doi.org/10.1080/19420676.2021.1900339>
- Kaswuri AH, Jani R, Othman A. Examining the critical success factors of knowledge-based social enterprises in Malaysia. In *Proceeding: International Business Management Conference (IBMC 2017) 2017 Dec 3 (Vol. 3, p. 4)*.
- Klangpangrut N, Taeporamaysamai P, Hintao J. Success factors of small and medium enterprises in Sakon Nakhon province, Thailand. In *International academic multidisciplinary research conference in Vienna 2019 2019 Mar 6*.
- Kumar P, Bhamu J, Goel S, Singh D. Interpretive structural modeling of lean six sigma critical success factors in perspective of industry 4.0 for Indian manufacturing industries. *International Journal of System Assurance Engineering and Management*. 2024 Aug;15(8):3776-93. <https://doi.org/10.1007/s13198-024-02375-y>
- Leisering K. What is compliance? Definition, basics & tips to get started. *EQS group*. April 25, 2024. <https://www.eqs.com/en-us/compliance-knowledge/blog/what-is-compliance/>
- Liu H, Skibniewski MJ, Wang M. Identification and hierarchical structure of critical success factors for innovation in construction projects: Chinese perspective. *Journal of Civil Engineering and Management*. 2016; 22(3): 401-416. <https://doi.org/10.3846/13923730.2014.975739>
- Lo MC, Wang YC, Wah CR, Ramayah T. The critical success factors for organizational performance of SMEs in Malaysia: a partial least squares approach. *Revista Brasileira de Gestão de*

- Negócios. 2016 Jul;18:370-91. <https://doi.org/10.7819/rbgn.v18i61.3058>
- Lückenbach F, Schmidt HJ, Henseler J. Building brand meaning in social entrepreneurship organizations: the social impact brand model. *Journal of Brand Management*. 2022;30(3):207-26. <https://doi.org/10.1057/s41262-022-00299-1>
- Miller D. Miller (1983) revisited: A reflection on EO research and some suggestions for the future. *Entrepreneurship Theory and Practice*. 2011 Sep;35(5):873-94. <https://doi.org/10.1111/j.1540-6520.2011.00457.x>
- Morales-Alonso G, Pablo-Lerchundi I, Ramírez-Portilla A, Ordieres-Meré J. Entrepreneurial intention through the lens of the Pareto rule: A cross-country study. *Cogent Business & Management*. 2023 Dec 11;10(3):2279344. <https://doi.org/10.1080/23311975.2023.2279344>
- Muriithi SM. African small and medium enterprises (smes) contributions, challenges and solutions. *European Journal of Research and Reflection in Management Sciences*. 2017;5(1):36-48.
- Musinguzi P, Baker D, Villano RA. Interrelationships amongst critical success factors and rural social enterprises' performance in a developing country context. *Journal of Rural Studies*. 2023 May 1;100:102995. <https://doi.org/10.1016/j.jrurstud.2023.03.003>
- Nikitina T, Licznarska M, Ozoliņa-Ozola I, Lapina I. Individual entrepreneurial orientation: comparison of business and STEM students. *Education+ Training*. 2023 Aug 9;65(4):565-86. <https://doi.org/10.1108/ET-07-2021-0256>
- Nirmal DD, Nageswara Reddy K, Sohal AS, Kumari M. Development of a framework for adopting Industry 4.0 integrated sustainable supply chain practices: ISM-MICMAC approach. *Annals of Operations Research*. 2025 Aug 15; 348(3): 1387-1455. <https://doi.org/10.1007/s10479-023-05427-x>
- Nguyen N, Dang-Van T, Vo-Thanh T, Do HN, Pervan S. Digitalization strategy adoption: The roles of key stakeholders, big data organizational culture, and leader commitment. *International Journal of Hospitality Management*. 2024 Feb 1;117:103643. <https://doi.org/10.1016/j.ijhm.2023.103643>
- Panda DK, Bhattacharjee K, Chatterjee D, Basu S. Survival and sustenance strategy of primary agricultural cooperative credit societies in India: a fuzzy interpretive structural modelling approach. *International Journal of Social Economics*. 2023 May 17;50(6):821-38. <https://doi.org/10.1108/IJSE-05-2022-0331>
- Pareja-Cano B, Valor C, Benito A. How social enterprises nurture empowerment: a grounded theoretical model of social change. *Journal of Social Entrepreneurship*. 2023 Jan 2;14(1):29-49. <https://doi.org/10.1080/19420676.2020.1821753>
- Patton MQ. *Qualitative research & evaluation methods: Integrating theory and practice*. 4th ed. Sage Publications; 2015.
- Pedraza-Rodríguez JA, Ruiz-Vélez A, Sánchez-Rodríguez MI, Fernández-Esquinas M. Management skills and organizational culture as sources of innovation for firms in peripheral regions. *Technological Forecasting and Social Change*. 2023 Jun 1;191:122518. <https://doi.org/10.1016/j.techfore.2023.122518>
- Pybus J. It's time to give Filipino social enterprises wings [Internet]. [www.pioneerspost.com](http://www.pioneerspost.com). 2017. Available from: <https://www.pioneerspost.com/news-views/20171026/it-s-time-give-filipino-social-enterprises-wings>
- Rigtering C, Niemand T, Phan V, Gawke J. Intrapreneurs, high performers, or hybrid stars? How individual entrepreneurial orientation affects employee performance. *Journal of Business Research*. 2024 Apr 1;176:114596. <https://doi.org/10.1016/j.jbusres.2024.114596>
- Samadzad S, Hashemi M. Analyzing success factors of small and medium enterprises (SMEs): a study in Iranian context. *International Journal of Innovation in Management, Economics and Social Sciences*. 2022 Feb 15;2(1):43-51.
- Satar MS, John S. A conceptual model of critical success factors for Indian social enterprises. *World Journal of Entrepreneurship, Management and Sustainable Development*. 2016 May 9;12(2). <https://doi.org/10.1108/WJEMSD-09-2015-0042>
- Schätzlein L, Schlütter D, Hahn R. Managing the external financing constraints of social enterprises: A systematic review of a diversified research landscape. *International Journal of Management Reviews*. 2023 Jan;25(1):176-99. <https://doi.org/10.1111/ijmr.12310>
- Sessions H, Pychlau S. Self-inconsistency or self-expansion from wearing multiple hats? The daily effects of enacting multiple professional identities on work meaningfulness. *Journal of Applied Psychology*. 2024 Jun;109(6):897. <https://doi.org/10.1037/apl0001176>
- Singh D, Awasthy R. Expanding the horizons of social entrepreneurship through indigenous research: A review and research agenda. *Journal of Social Entrepreneurship*. 2025 May 4;16(2):366-91. <https://doi.org/10.1080/19420676.2023.2178484>
- Sipahi Dongul E, Artantaş E. Exploring the link between social work, entrepreneurial leadership, social embeddedness, social entrepreneurship and firm performance: a case of SMES owned by Chinese ethnic community in Turkey. *Journal of Enterprising Communities: People and Places in the Global Economy*. 2023 Apr 28;17(3):684-707. <https://doi.org/10.1108/JEC-11-2021-0162>
- Slitine R, Chabaud D, Richez-Battesti N. Beyond social enterprise: Bringing the territory at the core. *Journal of Business Research*. 2024 Apr 1;176:114577. <https://doi.org/10.1016/j.jbusres.2024.114577>
- Spanuth A, Urbano D. Exploring social enterprise legitimacy within ecosystems from an institutional approach: A systematic literature review and research agenda. *International Journal of Management Reviews*. 2024 Apr;26(2):211-31. <https://doi.org/10.1111/ijmr.12349>
- Talukder SC, Lakner Z. Exploring the landscape of social entrepreneurship and crowdfunding: A bibliometric analysis. *Sustainability*. 2023 Jun 12;15(12):9411. <https://doi.org/10.3390/su15129411>
- Taylor KM, Rosca E. Sink, swim, or drift: How social enterprises use supply chain social capital to balance tensions between impact and viability. *Journal of Supply Chain Management*. 2023 Apr;59(2):62-86. <https://doi.org/10.1111/jscm.12295>
- Trigili SD. The challenges of wearing multiple hats: A compliance officer's guide to successfully leading a small firm. *Journal of Financial Compliance*. 2025 Jan 1;8(4):365-74. <https://doi.org/10.69554/AURF4504>
- Wronka M. Analyzing the success of social enterprises-critical success factors perspective. In *Active Citizenship by Knowledge Management & Innovation: Proceedings of the Management,*

Zhang DD, Liao B, Wu D, Usmani MS. Systematically prioritizing key barriers for the implementation of sustainable rural tourism

## APPENDIX

**Appendix Table 1:** Preliminary List of CSFs

CSF	Cited Papers
1 Marketing	Satar and John (2016), Alegre and Berbegal-Mirabent (2016), Boyer et al. (2008)
2 Business Environment	Anderson (2015), Gupta and Mirchandani (2018), Samadzad and Hashemi (2022), Abrera (2021)
3 Business Infrastructure	Muriithi (2017), Anderson (2015), Samadzad and Hashemi (2022)
4 Business Model	Kaswuri et al. (2018), Alegre and Berbegal-Mirabent (2016), Klangpangrut et al. (2019), Abrera (2021)
5 Community Participation and Engagement	Wronka (2013), Chaivirutnukul and Chandrachai (2019), Satar and John (2016), Kaswuri et al. (2018), Boyer et al. (2008)
6 Customer Service and Relations	Alfoqahaa (2018), Lo et al. (2016), Douglas et al. (2017)
7 Delivery	Wronka (2013), Alfoqahaa (2018)
8 Entrepreneurial Orientation	Satar and John (2016), Kaswuri et al. (2018), Lo et al. (2016)
9 Innovative Financing	Wronka (2013), Chaivirutnukul and Chandrachai (2019), Satar and John (2016), Kaswuri et al. (2018), Muriithi (2017), Anderson (2017), Samadzad and Hashemi (2022), Abrera (2021)
10 Government Support	Wronka (2013), Satar and John (2016), Gupta and Mirchandani (2018), Samadzad and Hashemi (2022)
11 Human Capital	Wronka (2013), Satar and John (2016), Kaswuri et al. (2018), Alegre and Berbegal-Mirabent (2016), Samadzad and Hashemi (2022)
12 Innovation and Competitiveness	Wronka (2013), Chaivirutnukul and Chandrachai (2019), Boyer et al. (2008), Abrera (2021)
13 Leadership	Boyer et al. (2008), Wronka (2013), Chaivirutnukul and Chandrachai (2019), Kaswuri et al. (2018), Samadzad and Hashemi (2022), Klangpangrut et al. (2019)
14 Legal Framework	Wronka (2013), Kaswuri et al. (2018), Muriithi (2017)
15 Management	Wronka (2013), Satar and John (2016), Alegre and Berbegal-Mirabent (2016), Boyer et al. (2008), Lo et al. (2016), Anderson (2015), Samadzad and Hashemi (2022), Abrera (2021)
16 Networks, Partnerships, and Collaboration	Satar and John (2016), Kaswuri et al. (2018), Alegre and Berbegal-Mirabent (2016), Boyer et al. (2008), Samadzad and Hashemi (2022)
17 Organizational Culture	Satar and John (2016), Geormas and Glaveli (2019)
18 Organizational Performance	Lo et al. (2016)
19 Risk Management	Boyer et al. (2008)
20 Social Impact Evaluation	Satar and John (2016), Musinguzi et al. (2023)
21 Personal or Individual Factors	Wronka (2013), Gupta and Mirchandani (2018), Samadzad and Hashemi (2022)
22 Technology Knowledge and Orientation	Lo et al. (2016)
23 Triple Bottom Line Planning	Satar and John (2016), Musinguzi et al. (2023), Boyer et al. (2008)