

A CONCEPTUAL MATURITY MODEL FOR SOCIAL ENTREPRENEURSHIP WITHIN THE FRAMEWORK OF INTEGRATED REPORTING

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Abstract. Purpose – This article addresses socioeconomic sustainability in social entrepreneurship. It aimed to develop a conceptual maturity model for social entrepreneurship to help evaluate and enhance performance while aligning with stakeholder expectations.

Research methodology – The model was developed using text analysis methods by analysing integrated reporting and social entrepreneurship scientific literature, followed by expert surveys in Latvia and Georgia to assign indicator weights.

Findings – The designed model incorporates integrated reporting principles and social entrepreneurship values as performance indicator dimensions and concepts. Four performance levels were defined, with weights distributed according to expert input.

Research limitations – The model is conceptual and not yet empirically validated. Applicability may vary across cultural and sectoral contexts.

Practical implications – The model provides a tool for social entrepreneurship initiatives and enterprises to assess maturity, guide strategic development, and increase appeal to investors by demonstrating long-term value creation. It can be used in an Excel spreadsheet.

Originality/Value – This is the first maturity model for social entrepreneurship based on the integrated reporting framework, enabling socioeconomic sustainability through integration of the six capitals and other aspects of long-term value creation within a single business model. It also helps reduce the risk of moral disengagement among social entrepreneurship leadership and employees.

Keywords: social entrepreneurship, maturity model, integrated reporting framework.

JEL Classification: M10, M14.

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1. Introduction

European values include social justice (Misnevs et al., 2022). One area of economy promoting social justice is Social Entrepreneurship (henceforth – SE). SE aims to ensure social sustainability by addressing social issues (Aquino & Boluk, 2025; Sannikova et al., 2023) through value creation (Aquino & Boluk, 2025) for social dimensions of societal life, such as hunger alleviation (Xiaobao et al., 2023) and inclusivity (Sottini et al., 2025). The engagement of disadvantaged groups into socioeconomic activities is socially important to provide them with opportunities to improve the quality of their lives (Kaushik et al., 2023). However, when generating the social good, social entrepreneurs might find themselves in a

conflict with the economic rational (To et al., 2020), which is social sustainability should be seamlessly integrated with economic sustainability (Solaz et al., 2025), for otherwise, social sustainability is doomed. Thus, social enterprises cannot ignore financial success (Chebo & Dhiwayo, 2024). This leads to the need to establish a business model combining both sustainable social and economic value (Aquino & Boluk, 2025), which might be a great challenge given the SE context.

One approach that can help to design a business model encompassing both social and economic values in one balanced network of priorities is an integrating reporting framework (<IR>) due to its reliance on 4 pillars: long-term value-creation, integrating thinking, engagement with stakeholders, and a six-capital network. The six-capital network, inclusive of financial, human, social & relationship capitals (IFRS Foundation, n.d-a; n.d.-b), aligns with both performance management objectives and Sustainable Development Goal 8 “Economic Growth and Decent Workplace” (henceforth – SDG8) (Uzule et al., 2024) and with the principles of inclusive capitalism and stakeholder capitalism (Uzule, 2023).

While <IR> supports performance management, without progressing to a Maturity Model (henceforth – MM), enterprises may struggle to fully integrate its principles. MMs provide a structured framework for assessing and advancing organizational capabilities over time. <IR> fosters transparency and value creation, but an MM embeds these into strategy, preventing it from being just a compliance tool. MM enhances continuous improvement, innovation, and resilience by structuring performance levels and prioritizing key components.

Considering the challenges of SE and the strengths of both <IR> and MMs, the aim of this research was to develop a conceptual maturity model for social entrepreneurship to promote socioeconomic sustainability of social entrepreneurship initiatives and enterprises. To achieve this aim, the following research tasks were proposed:

- Identify components of the maturity model for SE considering the specifics of integrated reporting and social entrepreneurship.
- Identify weights for the components of the maturity model.
- Identify levels of the maturity model for social entrepreneurship in relation to socioeconomic impact on target groups of social enterprises.

The research methodology included a range of methods: distant reading method of text analysis for the identification of the components of the maturity model, expert interview-survey for the identification of weights for the components of the maturity model, distant reading method of text analysis and lexical adaptation of maturity model levels of Anschütz et al. (2024) for the needs of target groups of social enterprises.

To the best of the authors’ knowledge, this is the first scientific maturity model designed specifically for SE. Its practical value lies in its application as an assessment tool, enabling both social enterprises and evaluation agencies to systematically measure progress by tracking development within a single enterprise and benchmarking across multiple enterprises. By integrating insights from both professional and scientific literature, along with expert-driven weight assignments, the model supports data-driven decision-making, helping organizations refine their strategies, enhance their social impact, and strengthen their economic sustainability.

2. Literature review

2.1. Integrated reporting as a business model framework for social entrepreneurship

Social Entrepreneurship (SE) has emerged as a dynamic field that blends social impact with entrepreneurial principles, yet the ability of social enterprises to sustain themselves while delivering long-term value remains a persistent challenge. Many social enterprises struggle to move beyond their initial stages due to limitations in financial sustainability, strategic adaptability, and stakeholder alignment. Traditional business models often fail to capture the unique complexities of SE, necessitating an alternative approach capable of integrating both financial and non-financial dimensions.

<IR> offers a way to structure social enterprise development by moving beyond conventional reporting. <IR> has traditionally been associated with corporate transparency and financial disclosure (Cortesi & Vena, 2019; IFRS Foundation, n.d.-a; n.d.-b; Tirado-Valencia et al., 2024; Uzule, 2023; Uzule et al., 2024), but its potential extends far beyond reporting. In the context of SE, it can be used as a strategic business model framework that aligns social impact, financial sustainability, and long-term value creation. Unlike conventional business models that prioritize financial outcomes as the primary indicator of success, <IR> incorporates a multi-capital approach, ensuring that economic, social, and environmental factors, embedded in financial, manufacturing, intellectual, human, social/relationship, and environmental capitals (IFRS Foundation, n.d.-b; Sun, 2024; Uzule, 2023), are equally incorporated in decision-making processes. By shifting the focus from short-term financial metrics to long-term value creation (Giorgino et al., 2023), this model might equip social enterprises with the capability to design business models balancing social impact-driven objectives with operational sustainability even in the context of uncertainty, which signals enhanced resilience to market fluctuations.

For social enterprises operating in volatile environments, integrated thinking fosters coherence between purpose, resource allocation, and impact measurement, ensuring strategic alignment with both mission and financial goals. By fostering multi-capital management, integrated thinking allows social enterprises to move beyond a trade-off mindset, when financial sustainability might conflict with social impact, thus, facilitating the transition towards a synergistic approach where financial growth and social value creation reinforce each other.

Another fundamental pillar of <IR> is stakeholder engagement (Sun, 2024) within a business model framework, which creates a shift from an enterprise-focused approach to an ecosystemic model embracing diverse groups of stakeholders. In <IR>, stakeholder engagement is not just about accountability and transparency; it represents a strategic mechanism for co-creating value (Parfitt, 2024; Sun, 2024). Social enterprises integrating stakeholder perspectives enhance legitimacy, foster collaborative innovation, and strengthen resilience. Engaged stakeholders contribute knowledge, networks, and resources, improving business model effectiveness and long-term sustainability. Stakeholder engagement also cultivates public trust in enterprise initiatives. At its core, public trust is not merely a byproduct of transparency but a strategic asset. When stakeholders see how an enterprise navigates financial pressures while staying mission-driven, they are more likely to support it through investment, policy advocacy, and consumer engagement.

2.2. Building a sustainable social enterprise: from early-stage growth to organizational maturity

Historically social enterprises have been established to solve social challenges (Alinaghian & Razmidoost, 2021; Indrawan et al., 2025), thus, contributing to local and regional development (Slitine et al., 2024). Social enterprises evolve through distinct stages, progressing from entrepreneurial initiatives to sustainable organizations. In the emerging stage, they often start as mission-driven projects with strong social objectives but limited financial stability, relying on grants, donations, or personal investments. This phase focuses on validating impact models and establishing an initial presence. As they develop, they formalize operations, refine revenue models, and secure structured funding sources such as impact investments or accelerators, ensuring scalability while staying aligned with their mission. Unlike profit-driven businesses, social enterprises must generate revenue without compromising their mission. Reliance on grants can create dependency, while revenue-driven activities may dilute core objectives. Without a financial model aligned with social impact, many struggle to remain stable.

A lack of integrated financial, social, and environmental strategies often keeps enterprises in survival mode rather than progressing toward strategic growth and implementation of sustainability. Achieving long-term sustainability and social value by social enterprises (Abeysekera, 2024) requires a holistic, multi-capital approach where these priorities are aligned rather than competing. This shift moves enterprises from short-term survival to sustained value creation, allowing them to grow without losing their core mission.

The scalability of social enterprise activities is crucial for expanding social impact but remains a challenge (Xiao, 2025). The capacity of enterprises to scale their operations directly affects their broader social impact (Savoia et al., 2023), which is important for expanding their social impact. However, operating in localized contexts complicates replication, requiring scalable yet context-sensitive models for effective expansion.

Social enterprises should consider stakeholder needs (Lee et al., 2021) because sustainability co-depends on bridging capability-building with stakeholder trust. Financial stability alone is insufficient without strong governance and accountability. Public trust is crucial for securing ongoing support from funders, investors, and policymakers. Enterprises demonstrating transparency, strategic clarity, and the ability to convert resources into lasting impact attract both financial investments and social legitimacy.

By embedding these principles into their operations, social enterprises move from aspiration to structural sustainability. This interconnected approach strengthens resilience, enabling them to navigate economic shifts, policy changes, and evolving public expectations while staying true to their mission.

2.3. Maturity models

MMs are designed to identify an organization's current level of development (Abdulghani & Winkler, 2025) and facilitate its transition to the next stage of business growth (Iannacci et al., 2025). These models provide a structured framework for assessing an organization's readiness to achieve future objectives (Kusma et al., 2024), tracking developmental stages (Moreira et al., 2024), and measuring goal attainment (Haraguchi et al., 2024; Sgambaro

et al., 2025). They also evaluate an organization's capabilities and preparedness for long-term sustainability while serving as tools for auditing strengths and weaknesses in performance (Elhusseiny & Crispim, 2024).

By offering a structured roadmap for growth, maturity models enable enterprises to improve financial stability, governance, stakeholder engagement, and operational efficiency. They help organizations assess current practices, establish clear pathways for progress, and benchmark operations against industry standards and best practices (Espadinha-Cruz et al., 2023). Thus, MMs drive continuous improvement through organizational capacity-building and maturity assessments aimed at achieving long-term strategic goals (Vásquez et al., 2021).

A typical MM consists of dimensions, sub-dimensions, and multiple progressive stages (Semeraro et al., 2023), often ranging from emerging to developing, established, and sustainable enterprises. For example, Vásquez et al. (2021) propose a four-level framework, where each stage is characterized by increasingly sophisticated business structures, financial strategies, and data-driven decision-making processes. At the most advanced stages, organizations achieve self-sufficiency, balancing financial resilience with long-term mission sustainability.

For social enterprises, MMs offer additional advantages by integrating a multi-capital approach to value creation, ensuring that maturity is not solely measured by financial performance or operational efficiency but also by an enterprise's ability to sustain long-term impact, foster public trust, and adapt to evolving socio-economic contexts. MMs serve as valuable tools for social enterprise managers in fostering long-term sustainability. Effective management plays a pivotal role in determining the success or failure of a social enterprise (Al-Tahitah et al., 2023) and significantly influences its overall growth.

3. Methodology

The design of a MM for SE initiatives within the framework of integrated reporting (<IR>) rested on two key elements – the levels and components. The levels were designed by lexically adapting the levels of the MM of Anschütz et al. (2024) to meet the needs of SE initiatives. The model of Anschütz et al. (2024) was chosen for its recency factor.

The model's components (indicators) were categorized into two dimensions based on the analysis of resources on <IR> and SE – the value creation dimension (consistent with <IR>) and the enabling dimension of SE, which included various aspects required for operational efficiency and observance of general values of SE. These two dimensions were further split into smaller components – dimension areas, which, in turn, covered various sub-dimensions. This structure of MM is consistent with the standard structure of MMs (Anschütz et al., 2024; Ferreira et al., 2024).

The process of identification of dimension areas and sub-dimensions was based on text analysis of relevant resources. To ensure transparency and replicability of the research, these resources were provided as references in the Appendix to this paper. Within this Appendix, the resources are indicated as "A. Integrated reporting corpus" and "B. Social entrepreneurship corpus". Specifically, to identify sub-dimensions of the value creation dimension consistent with <IR>, the corpus of professional and scientific literature on <IR> was constructed and subsequently analysed. In total, 72 resources were included in the created corpus with

some 33.33% being professional sources (Appendix A). The unequal ratio of between professional and academic sources was justified on two key grounds: (1) the broader availability of peer-reviewed academic research on <IR>; and (2) the necessity to use professional sources to capture industry practices, regulatory frameworks, and real-world practices. The paper selection criterion for both types of sources was based on the inclusion of the phrase “integrated report* (framework)” in the title of the document. Re-sources were obtained for the period spanning 2012–2024 to reflect on the longitudinal value creation practices. The papers were obtained from the scientific platform ScienceDirect.

To identify the social entrepreneurship dimension-areas and sub-dimensions, the social entrepreneurship corpus was created with 81 scientific papers (Appendix B). The papers were obtained from the ScienceDirect platform for the period of 2020–2025 with most papers having been published between 2022–2024. The paper selection criterion was based on the inclusion of “social entrepreneurship” or “social enterprise*” in the paper title.

To extract the key concepts from both corpora, the analyses included the lexical frequency and distant reading method for the identification of the importance of the selected concepts. Then, the link analysis for the concepts identified by the previous two methods was run. The analysis was conducted on the open access platform Voyant Tools.

Consistent with general requirements of MMs (e.g., Anschütz et al., 2024; Ferreira et al., 2024), each sub-dimension was expected to receive its weight, or the degree of importance expressed in a numerical value. The importance of sub-dimensions, or else, weights for the model’s sub-dimensions were identified via the expert interview-survey method. The questionnaire contained 30 questions grouped in 3 blocks, two of which contained open-ended questions and Likert scale questions on the 7 scale-system on the components of value creation in <IR> (11 questions) and value creation in SE (13 questions). The 7-scale system was chosen to better reflect on nuances of the importance of concepts. Then, having obtained information on the importance of these concepts, averages of Likert Scores were calculated for each entry within each dimension via (Eq. 1):

$$\text{Weight}_i = \frac{\text{Likert Score}_i}{\sum \text{Likert Scores}}, \quad (1)$$

where: “ i ” – a specific component of the equation; Likert Scores – expert interview results.

The weight distribution across sub-dimensions had to collectively reflect on the importance of their specified dimension area, which is why the weight of each dimension area equaled 1 to demonstrate that each one within the model had the equal weight of importance. This approach ensures a balanced and unbiased representation of all dimension areas, reinforcing the idea that no single area should dominate the assessment of maturity. Thus, the model promotes a holistic view, where progress in one area cannot compensate for significant shortcomings in another, which, in turn, promotes transparency in outcome interpretation. This makes the model more accessible and uniform to various groups of stakeholders.

Given that the model has two dimensions – one rooted in value creation within <IR> and another one representing SE within <IR>, the weights for the model’s SE dimension areas were derived not only from Likert scale responses but also from the value creation dimension

of <IR>, ensuring a structured and objective approach prioritizing long-term value creation. As the core foundation, Value Creation integrates governance, financial sustainability, stakeholder engagement, and operational efficiency, ensuring that all other dimension areas equally contribute to strategic success rather than existing in isolation, which is a reflection on integrating rather than silo thinking. Unlike Likert scale ratings, which reflect subjective perceptions, this method accounts for interdependencies between dimension areas, preventing any single dimension area from being overemphasized, which further boosts the model's balanced and unbiased approach to the weight distribution across dimension areas. This structured approach also aligns with an organization's long-term objectives rather than fluctuating opinions (Eq. 2).

$$\text{Weight}_{k,i} = \frac{\text{Original Weight}_{k,i}}{\sum \text{Original Weights}_k}, \quad (2)$$

where: " k " – a specific dimension area (business model / reporting, industry-enterprise, SE); " i " – a specific sub-dimension of dimension area " k "; Original Weight " k ", " i " – initial weight of component " i " within dimension area " k "; $\sum \text{Original Weights}_k$ – sum of all original weights within dimension area " k ", ensuring that the total weight remains normalized to 1.

To be able to use the model, it is essential that the performance level for each sub-dimension be determined. First, the level for each sub-dimension must be calculated based on its weight index (Eq. 3).

$$\text{Averaged Level}_i = \sum (\text{Score}_j \times P_{ij}), \quad (3)$$

where: " i " – a specific sub-dimension; " j " represents the level (0 to 4); "Score $_j$ " – the point value assigned to level " j " (0, 1, 2, 3, or 4); " P_{ij} " – the proportion of assessment responses assigned to level " j " for sub-dimension " i ". Then, the average of these sub-dimensions should be computed to obtain the final performance level (Eq. 4):

$$\text{Final Averaged Level} = \sum (\text{Averaged Level}_i \times \text{Weight}_i), \quad (4)$$

where: Weight " i " – the assigned weight for sub-dimension " i "; Averaged Level " i " – the calculated value obtained from Eq. 3.

The final stage of the research involved integrating the identified components into a comprehensive conceptual model for promoting and assessing SE activities. The Total Averaged Level Across All Dimensions is calculated by determining the individual averaged levels for each of the four-dimension areas. In this, the averaged level of each dimension area reflects its overall performance based on the assigned sub-dimensions and weighted indicators. Once the averaged levels for all dimension areas are obtained, they are aggregated and averaged to produce the Total Level of Maturity, which represents the overall performance across all dimensions.

Using the method of information synthesis, the model was drafted in Excel in the format of a table incorporating components, levels and weights. The designed model is to be used as an assessment questionnaire consistent with traditional MMs (Latino, 2025).

The subsequent step focused on determining if the key <IR> concepts form a network. Consistent with <IR>, six capitals of <IR> encode ESG principles, which were further explored through ESG concepts – “social”, “governance”, and “environment”. Other key concepts of <IR> included the concepts of “value”, “sustainability”, “integrated”, “capital”, “stakeholder”, “corporate” and “business governance” (Figure 3). Overall, the results indicate that indeed these concepts form a network, while relating to value-creation within <IR> contexts. Therefore, they should be included in both the MM dimensions and sub-dimensions.

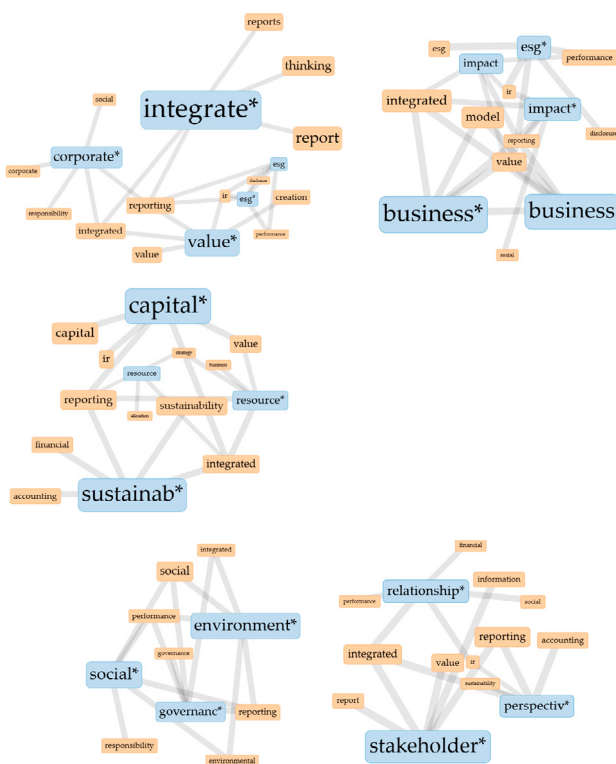


Figure 3. Links among the key <IR> concepts (source: created by the authors)

The next analysis aimed to determine the importance of the concepts related to the concepts of industry and organization (Figure 4). The results prove the interconnectedness, which is why this aspect should also be included in the MM.

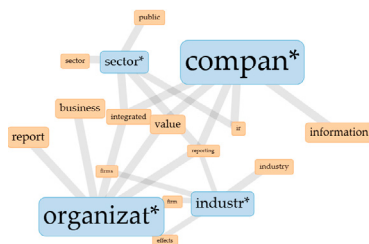


Figure 4. Interconnection of the concepts of industry-sector-organization (source: created by the authors)

government); (3) innovation (technology, significant impact); and (4) operations (organizational needs, operational constraints, strategy, production efficiency, value, mission, methodology, capitals, resources, people, ethics, risks, relationship, sustainable, environment, energy, opportunities, information, change, knowledge, thinking, decision-making). Because some of these concepts already emerged in the integrated reporting corpus, they were not repeatedly included in the model. Only the concepts specific to SE were left for use here: (1) social problems; (2) innovation (significant impact for specified individuals, or groups, or communities); (3) operational conditions (constraints; ethics; opportunities).

The next step in analysis focused on the identification of connections between the concepts, which were derived from the link analysis (Figure 7). These connections highlight the direct relationship between SE, sustainability, and business development. Additionally, they reveal a strong link between innovation, social sustainability, and entrepreneurship, emphasizing the integral role of innovation in fostering sustainable social enterprises. The link analysis shows that value creation is among sustainability aspects, which aligns with one of the key pillars of <IR> – long-term value creation.

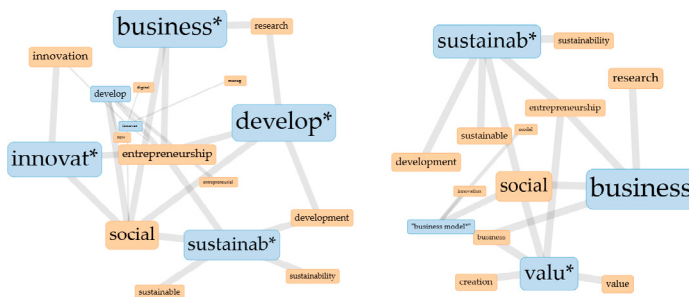


Figure 7. Links among the key concepts of SE (source: created by the authors)

The outcomes of the above analyses led to the postulation of four-dimension areas for SE: (1) value creation for sustainability (consistent with <IR>); (2) business model/reporting (<IR>, SE); (3) industry-enterprise relationship (<IR>, SE); and (4) social entrepreneurship (SE). Sub-dimensions were also derived from these analyses. The identified dimensions were structured around two key pillars: value creation, as the core objective of the model, and the enabling dimension, which ensures the integration of SE values and the operational viability of SE activities.

Given that certain dimension area, such as *value creation*, *business model/reporting*, and *industry-enterprise relationship*, appeared in both corpora, the *value creation as a dimension and dimension area were merged with the dimension area receiving further specification as value creation for sustainability*. The *value creation* dimension was not subdivided into multiple areas, to keep the model succinct and user-friendly. The two other areas – *business model/reporting* and *industry-enterprise relationship* – were incorporated into the *enabling* dimension of Social Enterprise (SE), as they are conceptually more aligned with the operational realities of individual social enterprises than with the overarching framework <IR>.

The subsequent stage of analysis focused on verifying the results of the text analysis outcomes, while setting the weights to the identified dimension areas and subdimensions. It was achieved via the expert interview-survey. In total, 40 experts from Georgia and 15 experts from Latvia participated in the study. The demographic data is provided in Tables 1–2.

Table 1. Demographic information about experts (source: created by the authors)

Education	Female	Male	Georgia	Latvia
Bachelor	5	3	6	2
Master	27	7	21	13
Ph.D.	11	2	11	2
Total	43	12	38	17

Table 2. Duration of experts' engagement in SE (source: created by the authors)

Education	Participants	Total years of engagement in SE	Average years of engagement in SE
Bachelor	8	82	10
Master	34	225	7
Ph.D.	13	90	7
Total	55	397	7

Among the respondents, some 43.5% were social entrepreneurs, either founders, managers, or employees of social enterprises, providing first-hand expertise in running, scaling, and sustaining socially driven businesses. A noticeable proportion of participants, 20%, were consultants in social entrepreneurship initiatives, working closely with enterprises to assess feasibility, provide strategic guidance, and deliver tailored training programs. About 18% were academic professionals teaching social entrepreneurship, involved in research, curriculum development, and educational programs aimed at fostering social enterprise knowledge and skills. Further 18% were members of organizations and associations supporting social entrepreneurship, engaging in advocacy, capacity-building, and networking efforts to promote the sector. About 9% were government and municipal institution employees, actively involved in shaping policies, funding programs, and supporting social enterprise ecosystems. Additionally, 5.5% specialize in evaluating social entrepreneurship initiatives, contributing to impact assessment, policy recommendations, and research efforts. About 2% represented the group of social enterprise investors. The study also features 1.8% of participants working as researchers, focusing on generating analytical insights into social entrepreneurship trends, challenges, and best practices. Such a diverse expert background ensures a comprehensive perspective on social entrepreneurship, integrating insights from practitioners, policymakers, investors, consultants, researchers, and educators across two different socio-economic and regulatory environments.

Regarding the verification of the postulated dimension areas, in open-ended responses, experts confirmed the earlier obtained outcomes that core values of SE relate to social values, balancing social and economic goals, fostering innovation, inclusivity and sustainability, promoting collaboration, transparency, and community empowerment. In their views, to enhance long-term sustainability, it is important to develop reliable and measurable framework for SE activities.

Regarding the outcomes of weight distribution analysis (see Methodology), the results for the dimension-area of value-creation for sustainability are available in Table 3.

Table 3. Sub-dimensions of value-creation (source: created by the authors)

Value creation sub-dimensions	Likert score	Weight
Social value/impact/innovation	6.16	0.09
Stakeholder engagement portfolio	6.05	0.09
Sustainability of financial model / investment portfolio	6.04	0.09
Industry standards/expectations	5.85	0.09
Deployment of capitals	5.82	0.09
Impact on the organization	5.67	0.08
Staff well-being as a driver of organizational development	5.62	0.08
Strategic decision-making driven by integrated insights	5.55	0.08
Ethics of governance for SDGs	5.55	0.08
Value creation clarity	5.51	0.08
Reporting connectivity and transparency	5.49	0.08
Transformation potential	5.09	0.07
TOTAL SUM OF WEIGHTS		1

The resulted weights for the enabling dimension are provided in Table 4.

Table 4. Weights for the enabling dimension (source: created by the authors)

SE enabling dimension areas	Sub-dimensions	Weight
Business model / reporting	Social / relationship capital	0.085
	Financial capital	0.085
	Human capital	0.07
	Intellectual capital	0.06
	Environmental capital	0.05
	Manufacturing capital	0.06
	Risk management	0.07
	Governance efficiency	0.07
	Part of business strategy	0.07
	Resource–relationship	0.07
	Stakeholder engagement	0.085
	Integrated thinking	0.07
	Clarity in reporting	0.07
	Investment portfolio	0.085
	WEIGHT SUM	1
Industry – enterprise	Market needs	0.25
	Industry standards	0.25
	Organizational needs	0.25
	Organizational knowledge	0.15
	Organizational change	0.1
	WEIGHT SUM	1
SE	Social problems	0.3
	Innovation impact on specified groups	0.3
	Operational ethics	0.25
	Future development	0.15
	WEIGHT SUM	1

The overall weight assignment by sub-dimensions is provided in Figure 8.

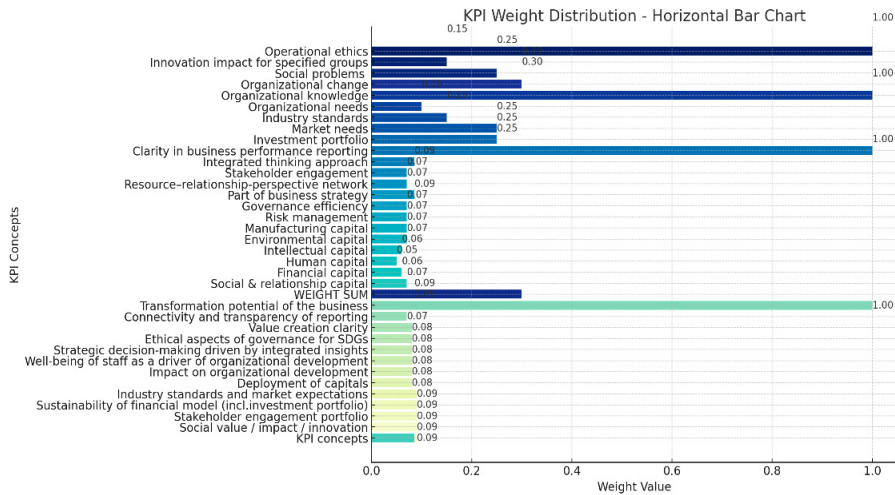


Figure 8. Total weight distribution across sub-dimensions of the model
(source: created by the authors)

The next stage of research focused on identifying performance areas for assessment. Given SE's primary goal of generating social good, the proposed performance areas were defined based on their socioeconomic impact on specific target groups: (1) the social enterprise/organization itself, (2) the specified target group(s) receiving SE services/products, and (3) the general public.

The inclusion of target group impact in performance evaluation aligns with the principles of Industry 4.0 maturity models, which emphasize the shift from a product-focused to a customer-focused approach (Simetinger & Basl, 2022). Additionally, the model incorporates Level 0 to ensure that organizational needs are assessed before launching specific initiatives, following the approach outlined by Mittal et al. (2018).

The last stage in the design of the model was to determine the number of levels and their descriptions. In general, MMs can be designed with varying levels. This research adopts a five-level approach to provide a more detailed and structured framework. The general descriptions and scores were drawn from Anschütz et al. (2024) and adapted to the context of SE, considering the top 200-word frequency analysis of the SE corpus.

Since the MM was designed around two key pillars – value creation and enabling dimensions – the resulting level descriptions vary (Table 5 for value creation and Tables 6–8 for enabling dimension).

Overall, the proposed model is structured around two dimension-pillars – (1) Value Creation of <IR> (VC) and (2) Enabling Dimension of SE (ED-SE) – organized into four dimension-areas: Value Creation for sustainability (VC), business model/reporting (ED-SE), industry-enterprise (ED-SE), key concepts of Social Entrepreneurship (ED-SE). The analysis of the <IR> and SE corpora yielded multiple sub-dimensions, each assigned a specific weight index. To assess performance, the model introduces five progressive levels, each with a distinct

Table 5. Level description for value creation (source: created by the authors)

Level	Points	Description
0	0	No social entrepreneurship initiatives are in place. No structured awareness or investment in social impact. No structured approach to value creation for sustainability exists. The enterprise lacks a defined mission, strategy, or framework for social or environmental impact. No alignment with SDGs.
1	1	Initial social entrepreneurship ideas have been conceptualized, and some early efforts have been in place. Initial awareness of sustainable value creation is emerging. Early conceptualization of social and environmental impact initiatives at place, but no structured processes exist. Some recognition of SDGs but no integration into business operations.
2	2	Initial social entrepreneurship initiatives have been implemented, with some operational activities taking place on a limited scale, including funding / formal measurement. The organization has started implementing sustainable value creation initiatives with internal processes to support them. However, these processes are fragmented, and sustainability impact is not fully measured. Engagement with stakeholders and investors is minimal. Some alignment with specified SDGs exists.
3	3	Strategic planning and implementation of social entrepreneurship projects are in place, including impact measurement. Social entrepreneurship is now part of the business model. Strategic planning for sustainable value creation is in place. The enterprise has structured initiatives, performance tracking, and clear governance for attaining specified SDGs. Disclosure and reporting mechanisms are established. Compliance with industry sustainability standards begins.
4	4	Continuous development and scaling of social entrepreneurship initiatives, with a strong focus on impact assessment, innovation, sustainability, integration into the broader business ecosystem. Sustainable value creation is fully integrated into the enterprise's core strategy. There is continuous improvement in social and environmental impact, with a holistic approach to measuring SDGs. The organization might innovate. It measures impact, ensures transparency in reporting, engages stakeholders and investors, and optimizes sustainability processes for scalability.

Table 6. Level descriptions of performance impact on the social enterprise / social entrepreneurship initiative (source: created by the authors)

Level	Points	Description of performance impact on the organization
0	0	No social entrepreneurship initiatives implemented, and the organization lacks a defined mission or operational model in this area.
1	1	Initial social entrepreneurship ideas have been conceptualized, and some early steps toward organizational structure and processes have been taken. However, operations remain unstructured.
2	2	Initial social entrepreneurship initiatives have been implemented, with some operational activities taking place. However, these processes are still in the early stages and not fully optimized.
3	3	Strategic planning and structured implementation of social entrepreneurship activities are in place. The organization has clear processes, performance tracking, and documentation to ensure sustainable operations.
4	4	The organization has fully integrated social entrepreneurship into its core strategy, continuously improving operations, innovating, and optimizing sustainability. Processes are refined, impact is measurable, and scalability is actively pursued.

description outlining the pathway to the next stage. The model is structured in a way that allows for direct implementation in an Excel spreadsheet, as it provides a clear column structure (dimension → dimension-area → sub-dimension → weight index → levels) and rows corresponding to specific entries and sub-dimensions. Furthermore, the required formulas for calculating performance levels are included, ensuring a systematic and automated approach to assessment (Figure 9).

Value creation dimension	Sub-dimensions	Weight index	0	1	2	3	4	LEVEL	TOTAL AVERAGED LEVEL ACROSS ALL DIMENSIONS		COMMENTS						
			Points					Formula									
			0	1	2	3	4										
Value creation for sustainability	Social value/impact/innovation	0.09	Table 5					Formula 3 for each entry	Dimensions	Level							
	Stakeholder engagement portfolio	0.09							Value creation								
	Sustainability of financial model / investment portfolio	0.09							Business model /reporting								
	Industry standards/expectations	0.09							Industry - enterprise network								
	Deployment of capitals	0.09							Social entrepreneurship (SE)								
	Impact on the organization	0.08															
	Staff well-being as a driver of organizational development	0.08															
	Strategic decision-making driven by integrated insights	0.08															
	Ethics of governance for SDGs	0.08															
	Value creation clarity	0.08															
	Reporting connectivity and transparency	0.08															
	Transformation potential	0.07															
	WEIGHT SUM	1	TOTAL AVERAGED LEVEL					Formula 4									
Enabling dimension of SE	Sub-dimensions		Performance impact on social enterprise /social					LEVEL	Performance impact on specified group	LEVEL	Performance impact on general public	LEVEL					
			Levels						Levels		Levels						
		Weight index	0	1	2	3	4	Formula	0	1	2	3	4	Formula			
			Points						Points								
			0	1	2	3	4		0	1	2	3	4				
Business model / reporting	Social / relationship capital	0.085	Table6					Formula 3 for each entry	Table 7					Formula 3 for each entry	Table 8	Formula 3 for each entry	
	Financial capital	0.085															
	Human capital	0.07															
	Intellectual capital	0.06															
	Environmental capital	0.05															
	Manufacturing capital	0.06															
	Risk management	0.07															
	Governance efficiency	0.07															
	Part of business strategy	0.07															
	Resource-relationship	0.07															
	Stakeholder engagement	0.085															
	Integrated thinking	0.07															
	Clarity in reporting	0.07															
	Investment portfolio	0.085															
	WEIGHT SUM	1															
Industry-enterprise cconnection	Market needs	0.25															
	Industry standards	0.25															
	Organizational needs	0.25															
	Organizational knowledge	0.15															
	Organizational change	0.1															
	WEIGHT SUM	1															
SE values	Social problems	0.3															
	Innovation impact on specified groups	0.3															
	Operational ethics	0.25															
	Future development	0.15															
	WEIGHT SUM	1															
	WEIGHT SUM	1	TOTAL AVERAGED LEVEL					Formula 4	TOTAL AVERAGED LEVEL	Formula 4	TOTAL AVERAGE LEVEL	Formula 4					

Figure 9. Overview of the created MM for SE in an Excel spreadsheet (source: created by the authors)

Table 7. Level descriptions of performance impact on the target group (source: created by the authors)

Level	Points	Description of performance impact on the target group
0	0	No clear target group is identified, and no impact is made.
1	1	The target group is vaguely defined, and initial efforts to address their needs are in conceptual stages. Limited or anecdotal impact is observed.
2	2	The target group is identified, and structured initiatives are implemented, leading to some measurable impact, though still limited in scale.
3	3	A well-defined target group benefits from strategic interventions. Impact is consistently measured, and improvements are made based on data.
4	4	Social entrepreneurship initiatives are deeply embedded in the target group's ecosystem, with continuous impact scaling, innovation, and measurable long-term transformation.

Table 8. Level descriptions of performance impact on the general public (source: created by the authors)

Level	Points	Description of performance impact on the general public
0	0	No awareness or impact on the general public; initiatives remain unknown.
1	1	Initial efforts to engage the general public are conceptualized, with minimal outreach for the general public
2	2	Some public awareness is generated; initiatives begin to gain recognition, though impact remains localized/limited.
3	3	The social enterprise is recognized by the general public, with structured efforts to influence broader societal change and a growing reputation.
4	4	The social enterprise has a widespread and sustainable impact on society, shaping public perception, influencing policies, and driving systemic change.

5. Discussion

In our view, this research represents a pioneering effort in the field of SE by developing a conceptual maturity model specifically tailored for assessing and guiding SE initiatives and enterprises. The study contributes significantly to both theory and practice by offering a structured framework aimed at evaluating the developmental potential and long-term socio-economic sustainability of SE ventures. The primary objective of this research was to design a practically applicable model that can be used by social entrepreneurs, enterprises, and SE project evaluators to assess and enhance the impact and viability of their initiatives. The model seeks to support these actors not only in addressing short-term social challenges but also in envisioning and achieving long-term socioeconomic value creation. By doing so, it aims to help these initiatives transition from being temporary or pilot projects to becoming sustainable components of the broader socio-economic system.

To achieve this, the research used the <IR> due to its emphasis on long-term value creation through the integration of six capitals (financial, manufactured, intellectual, human, social and relationship, and natural capital) into one business model, while ensuring transparency of business operations and reporting for stakeholder engagement, including investors.

Within this framework, the study proposes a maturity model composed of defined indicator dimensions, indicator concepts, and developmental levels that provide a structured pathway for social enterprises to evaluate where they stand and how they can progress toward greater impact and sustainability. Importantly, this model can be applied across diverse contexts, including responses to urgent social challenges. For instance, in the United States, social entrepreneurship initiatives were mobilized to address urgent challenges stemming from the COVID-19 crisis (Bacq et al., 2020), while in other contexts, SE serves as a mechanism to combat poverty and facilitate the social reintegration (Bird et al., 2025) of disadvantaged population groups. Furthermore, since any SE initiative aiming to deliver meaningful social change must address an identifiable social need (Sottini et al., 2025), the proposed model equips users with practical tools to evaluate, guide, and scale their initiatives toward long-term, sustainable impact; in other words, the model enables its users to progress their ideas into structured, scalable, and sustainable solutions, which is consistent with the concept of “enabling” of Sottini et al. (2025).

The foundation of the model in linking financial and non-financial indicators into a unified business model aimed at long-term value creation, which fundamentally aligns with the principles of sustainability, and which is a feature of <IR>, is consistent with the perspective of Bird et al. (2025), Budumuru and Paruchuru (2025), Lashitew and Rosca (2025) and Sottini et al. (2025), who argued that social goals of SE must be grounded in a specific, sustainable, and revenue-generating business model to address an unmet social need. This holistic approach enables organizations to demonstrate how various forms of capital, which are beyond just financial, contribute to their overall performance and societal impact. Within the context of <IR>, this was achieved by integrating six types of capital, such as financial, manufactured, intellectual, human, social and relationship, and natural, into a single reporting and strategic framework. These capitals form the basis for assessing the maturity of social enterprises, encouraging them to articulate how they convert diverse resources into long-term outcomes.

The model’s structure and intent are particularly consistent with three key themes identified by Budumuru and Paruchuru (2025): strategic sustainability in social enterprises, which is directly embedded through the focus on long-term value creation; social entrepreneurial ecosystems for sustainable development, which is addressed through the emphasis on relationship and social capital; and policy and stakeholder collaboration for social innovation, which aligns with the model’s call for transparency and ecosystem-wide accountability. These thematic overlaps reinforce the relevance and applicability of the maturity model, particularly in its capacity to guide social enterprises in embedding their social missions within a robust, sustainable, and strategically aligned business model. By aligning with this integrated, multi-capital approach, the model proposed in this study offers a practical framework for social enterprises to evaluate and communicate their capacity for long-term socioeconomic value creation.

This approach to model construction is also aligned with the concept of corporate Social Entrepreneurship (SE) grounded in the Knowledge-Based View (KBV). KBV can be regarded as a foundational theory for organizational competitiveness by addressing both social and economic challenges (Scuotto et al., 2022). KBV positions knowledge as the most critical resource for developing capabilities in complex and uncertain environments, which is

particularly relevant for social enterprises responding to issues such as labor precarity and social fragmentation (Scuotto et al., 2022). However, the present study extends this foundation by applying the <IR> concepts, which operationalize long-term value creation through the integration of six capitals – not only knowledge-related assets, but also social, financial, human, and natural dimensions. This broader lens enables a more actionable model for assessing and advancing social enterprise maturity. In this way, while KBV underpins the strategic logic of SE, the integrated framework provides the structural and evaluative tools necessary for sustainable growth and stakeholder accountability.

In addition to helping identify the current stage of development of a Social Entrepreneurship (SE) initiative and offering a structured pathway for future growth, the proposed model may also support social entrepreneurs and their teams in upholding ethical and moral standards in their decision-making. Muldoon et al. (2022) identify moral disengagement as a serious threat to the development of SE, whereby social entrepreneurs may rationalize unethical behaviors, such as misreporting outcomes or exaggerating impact, to secure funding or maintain stakeholder support. According to Eissa and Lester (2025) and Zhao et al. (2023), moral disengagement is a cognitive strategy that individuals use to bypass moral self-discipline, particularly in response to relational or situational pressures, through justification of unethical actions through changing interpretation of ethical and non-ethical behavior. As further noted by Li et al. (2025), this process occurs when individuals suspend their self-sanctioning mechanisms, allowing them to engage in immoral behavior without experiencing psychological discomfort or guilt. Over time, the strategy of moral disengagement can evolve into a stable information-processing mechanism, making unethical behavior appear psychologically acceptable and even operationally justifiable. When such tendencies are repeated and reinforced, they risk becoming embedded as systemic practices that gradually erode organizational ethics and integrity. This process not only undermines leadership but can influence employee behavior as well (Zhao et al., 2023), allowing moral disengagement to permeate both business operations and socially driven activities of SE. Because it manifests in varying degrees and interpretations, it can diffuse quickly and subtly, ultimately contributing to the decline of the enterprise's mission and sustainability. The maturity model proposed in this study offers a practical safeguard against these risks. By integrating six capitals into a single value creation business framework, the model encourages balanced, multi-dimensional performance assessment and transparency. It shifts the focus from isolated, outcome-driven metrics to a holistic understanding of value creation, reducing the incentive to distort or selectively report results because the performance is measured not only through a handful of indicators. Furthermore, through its emphasis on stakeholder engagement, ethical governance, and developmental progression, the model embeds accountability mechanisms that can help detect and correct early signs of moral disengagement. In this way, it serves not only as a strategic roadmap but also as a built-in ethical compass, supporting the integrity and long-term resilience of social entrepreneurship initiatives.

Overall, this research contributes to the evolving discourse on sustainability of SE. Specifically, it aligns with calls for structured, sustainable business models (Budumuru & Paruchuru, 2025; Lashitew & Rosca, 2025), while also responding to emerging concerns around ethical integrity and organizational behavior (Muldoon et al., 2022; Zhao et al., 2023). By engaging

with diverse theoretical perspectives, including the knowledge-based view and the concept of enabling, this study integrates multiple strands of literature into a coherent framework. In doing so, it underscores the importance of not only advancing social objectives but also maintaining ethical, strategic, and accountable practices across the life cycle of social entrepreneurship initiatives.

6. Conclusions

The aim of the research was to design a conceptual maturity model for social entrepreneurship, addressing the challenge of balancing social and economic sustainability. The construction of the model rested on three research tasks, all of which were completed. Specifically, first, the components of the maturity model were grouped into two dimensions – value creation for sustainability and enabling dimension with the following dimension areas: business model/reporting (14 sub-dimensions), industry-enterprise (5 sub-dimensions), and SE (4 sub-dimensions). Second, weights for the sub-dimensions ranged from 0.05 to 0.25, depending on the total number of sub-dimensions within each dimension or area. This weighting ensured that the total sum equalled 1, maintaining balance across the model. Third, the maturity levels for SE were defined, ranging from Level 0, when no activity was implemented, to Level 4, representing the most advanced level of performance, and were constructed in relation to the identified impact on 3 target groups of social entrepreneurship – the social enterprise /initiative itself, its target group, and the general public.

By incorporating principles of long-term value creation, stakeholder engagement, and structured performance assessment, the study developed a model offering a systematic approach to evaluating and enhancing the maturity of social enterprises. The structured framework provides enterprises with a way to assess their progress and refine their strategies while ensuring alignment with both financial and social objectives. The model's structure based on dimensions and weighted sub-dimensions indicators ensures a comprehensive method for evaluating sustainable growth in the sector consistent with generalized priority of long-term value creation and SE.

The proposed model is built on two core pillars: value creation and enabling dimensions, with four key dimensions – business model/reporting, industry-enterprise, and social entrepreneurship – each assigned a weighted index. These components allow for a transparent assessment of organizational maturity, guiding enterprises through a structured progression across five levels, starting with the initial level of needs' identification. The model is designed in the Excel-compatible format with formulae for automated calculations, which ensures practical usability, making it accessible to both social enterprises and evaluation agencies. By providing a structured way to track and benchmark progress, the model helps organizations measure their development and make data-driven decisions to enhance long-term sustainability.

However useful this model might be, it has certain limitations, including the lack of its verification in applied contexts. While conceptually robust, it needs to consider factors specific to cultural and regional norms and inclusive of local legislation and technological progress. Future research should focus on applying the model across various industries and geographic

regions to test its effectiveness and refine its applicability in different social enterprise settings.

Despite these limitations, the conceptual maturity model offers a valuable contribution to the field of social entrepreneurship by providing a structured and measurable approach to performance assessment of social entrepreneurship initiatives. By integrating key aspects of integrated reporting with maturity modelling, the study presents a novel tool that enables organizations to navigate the complex interplay between social impact and financial viability. As the social entrepreneurship landscape continues to evolve, this model can serve as a foundation for future refinements, ensuring that enterprises have the strategic tools necessary to foster resilience, innovation, and sustainable growth.

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Author contributions

K. Uzule conceptualized the paper, identified the need for the maturity model, designed the model in full, developed the complete research methodology, created and analyzed the corpora, conducted the interview-survey analysis, wrote and edited the entire manuscript. A. Sannikova co-contributed to identifying the need for the model and co-authored the sections on social entrepreneurship. E. Čerkovskis co-verified the formulae and indicator weights, and designed Figure 8. J. Dehtjare and L. Kiladze distributed the interview-survey to social entrepreneurship experts in Latvia. L. Kiladze also distributed it to experts in Georgia.

Disclosure statement

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APPENDIX

A. Integrated reporting corpus

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