Article

Sustainable Frontrunners and Pathfinders—What Can Be Learnt from Their Practices?

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ABSTRACT

The escalating demand for sustainable business practices underscores the necessity of identifying and adopting innovative solutions tailored for enduring success. This study probes the critical questions of what distinguishes certain entrepreneurs as frontrunners in implementing sustainable solutions and how their practices can serve as blueprints for widespread adaptation. The gap this research addresses hinges on a detailed understanding of the mechanisms through which these entrepreneurs’ commitment to sustainability catalyzes broader organizational and cultural changes. Employing a qualitative case study methodology, in-depth interviews were conducted with six entrepreneurs renowned for their pioneering sustainability initiatives. The findings illuminate commonalities among these leaders, including a profound interest in sustainability issues and the courage to pioneer novel, sustainable practices. Their enthusiasm effectively permeates their respective organizations, fostering an environment ripe for continual sustainable evolution. The study contributes significantly to the literature by elucidating how personal commitment in leadership can translate into comprehensive organizational change, setting a new benchmark for sustainability in organizational practices. Furthermore, it provides practical implications by showcasing that sustainable development is an ethical imperative and a viable strategic approach that can enhance competitiveness and stakeholder engagement. The recommendations in this study advocate for businesses to cultivate leadership qualities that champion sustainability, encourage cultural shifts towards sustainable practices, and develop robust frameworks for sustainability integration across all operational levels.

KEYWORDS: sustainability; sustainable measures; change management; corporate culture; implementation

INTRODUCTION—EMBRACING SUSTAINABILITY FOR THE CHANGING WORLD

In recent decades, environmental issues such as pollution, deforestation, and desertification have intensified, reflecting the urgent
need for sustainable solutions in response to our escalating exploitation of natural resources. Concurrent shifts in manufacturing and consumption patterns accentuate these formidable environmental challenges [1].

The outcomes of the Brundtland Commission’s work continue to present complex challenges for nations and corporations striving to balance economic, environmental, and social considerations [1,2].

While sustainability has become a frequent topic in media and conversations, achieving a sustainable way of life requires profound shifts in attitudes, values, and behaviours. This necessity points to significant gaps in our understanding of effective sustainability transitions and highlights the need for further exploration into organizational change initiatives as potential pathways [3]. The definition of sustainable development remains a topic of debate, reflecting contradictions in its implementation across different organizational contexts [4,5].

Recent research has explored how companies can integrate factual information for sustainable solutions through diverse measures and using certifications as guidelines [6]. Notably, sustainability is an evolving target within planetary boundaries that outline a safe operating space for humanity [2,7]. From a systems perspective, sustainability is not a static state but a dynamic process. It involves the capacity of systems to persist, adapt, transform, or transition in response to changing conditions. This understanding of sustainability underscores its complexity and the need for adaptive strategies [8].

Organizations aiming for sustainability and adaptability rely heavily on the competencies of their leaders and members. Current studies underscore the importance of sustainability leadership skills and a holistic understanding of complex organizational dynamics. This perspective involves managing vast amounts of intricate information, where leaders play a pivotal role as change agents driving positive shifts towards sustainability, bridging strategic implementation gaps, and fostering competence, innovation, and ethical values. Their leadership is instrumental in steering the organization towards sustainability, making strategic decisions, and implementing necessary changes [9].

Leaders must also proactively address discrepancies between various strategic decisions, management roles, and organizational changes. Effective leadership is paramount for achieving sustainable development amidst complex and challenging adaptive changes. This includes preparing for future contingencies and leading diverse teams towards common organizational goals. Leaders must also introduce technological and adaptive changes essential for sustainability [10].

In summary, organizations on the pathway to sustainability must engage in effective knowledge sharing, view sustainability as a core responsibility, and involve all staff in co-creating values. Strong leadership committed to change management is essential to circumvent superficial sustainability efforts or greenwashing. The primary purpose of this article is to discuss what and which processes make some entrepreneurs thrive
in implementing sustainable solutions in their companies and businesses. The article is based on a case study where six entrepreneurs on the island of Gotland in Sweden were interviewed regarding their successful work towards sustainability.

THEORETICAL PERSPECTIVES

Understanding Assignments and Responsibilities in Organizational Contexts

Responsibility is increasingly important in society, particularly in matters of sustainability. It's a philosophical concept intertwined with questions about what responsibility and accountability are and what they should be. In organizations, responsibility involves a relationship between the commissioner and the actor, forming the arena for its enactment and assumption [11,12]. Responsibility is vital in organizations striving for sustainability and connects with professional development. How individuals and groups interpret their assignments and responsibilities varies, affecting how they assume and fulfill them. This understanding process influences competence and professional growth, contributing to collective learning. Understanding responsibility also has a pedagogical aspect, enhancing competence. Unlike understanding the mission, it's less explored, focusing on the professional obligation's nature. To distinguish between mission understanding and responsibility understanding, consider that the former relies on legal grounds, while the latter relies on ethical legitimacy. Legality involves formal actions sanctioned by the state or corporations, while legitimacy rests on ethical foundations. Both perspectives are crucial in fostering change and development towards sustainability in organizational contexts [4,12].

Value Co-Creation: A Collaborative Endeavor

Sustainability is a value that unfolds through collective efforts within groups and teams. The concepts of value creation and co-creation are frequent subjects of exploration in business and management literature [13]. This paradigm extends beyond consumer-product relationships and can be applied to multiple entrepreneurs and stakeholders working together in groups, networks, or with other actors. In such contexts, project owners and entrepreneurs engage partners in a continuous learning process, presenting real-world challenges and maintaining ongoing involvement [4,5]. The process of co-creating value manifests in various forms, encompassing both individual and collective expressions. Within team dynamics, it involves the intertwining of meaning-making and sense-making. Meaning-making, as described in psychology, is the process through which individuals derive understanding and significance from life events, relationships, and self-identity [14]. The method of meaning-making aids in preserving, reinforcing, revising, or replacing components of an individual's orientation system towards a more
nuanced, intricate, and valuable perspective (e.g., [15,16]). This term is frequently employed in constructivist approaches and educational psychology [14]. One effective approach to generate value between distinct parties, such as entrepreneurs, their customers, and stakeholders, is to actively pursue sustainability in practice. Value creation can lead to the adoption of more sustainable practices, thus contributing to the advancement of a sustainable society. However, this transformation necessitates active participation in collective and collaborative learning, as well as ongoing processes of meaning-making, sense-making, and knowledge sharing [15,16]. These processes performed collectively form a framework for comprehending the intricate nature of innovative problem-solving within the context of sustainability issues in any group setting. Furthermore, this article posits that the creation of values represents a continuous learning journey. To embed these values within an organization, fostering a collaborative culture becomes imperative. Designing a collaborative culture demands the application of creative problem-solving, effective leadership, knowledge management, experiential learning, communication, quality management, and a commitment to continual improvement within an organization [17].

**Sustainability and Organisational Culture**

The recognition that sustainability must be intimately linked with culture and the assertion that achieving sustainable transformation necessitates comprehensive cultural changes is not a novel concept. Several scholars [18,19] have previously discussed this notion, and numerous academic and policy discussions regarding the intersection of culture and sustainability have evolved over recent decades (see [20,21]). In scientific literature, diverse definitions of cultural sustainability highlight varying normative frameworks, rather than reaching a consensus. A review by [22]. examined peer-reviewed articles on cultural sustainability from 1997 to 2011, revealing four dominant, divergent perspectives: The conservative view emphasizes the importance of preserving cultural heritage, emphasizing its intrinsic value. A variation within this perspective, often labeled cultural vitality, underscores the dynamic development of collective identities. The neoliberal perspective sees culture as an instrumental asset for achieving sustainable economic development, rather than an intrinsic goal. The communitarian stance emphasizes the rights and values of different cultural groups, placing significance on locality, cultural diversity, and their connection to the social aspect of sustainability. The environmentalist approach conceives of cultural sustainability through the lens of human-nature interaction, aiming to bridge the gap between nature and culture. It identifies eco-cultural resilience and eco-cultural civilization discourses, emphasizing the interconnection of local ecological and cultural processes and the need for cultural transformation through education and the arts. Sustainability researchers should recognize their own normative perspectives and
engage with the identified discursive and ideological contexts, understanding their situatedness. In this context, the researchers in question primarily align with the discourse of eco-cultural civilization while integrating elements from other frameworks [22].

Leadership and Management for Sustainable Organizational Development

In the pursuit of sustainable development and adaptation to both planned and unforeseen changes, organizations rely heavily on the competence of their leaders and the collective skills of their members. Research has highlighted the significance of sustainability leadership capabilities and a comprehensive understanding of the intricacies within embedded organizations [9,23,24]. Maintaining this holistic perspective necessitates the effective management of vast amounts of intricate information [24]. Numerous systems have been devised to oversee various organizational processes while integrating sustainability at a strategic level. In the realm of management control research, a consensus has emerged over time regarding the importance of adopting a holistic perspective, particularly in terms of how management control contributes to an organization's strategies and objectives. This holistic viewpoint is referred to as the Management Control System (MCS). Advocates of this approach contend that the study of management control should not focus solely on individual components, such as budget processes, but should consider the entirety of its components, encompassing financial and non-financial aspects, which together constitute a comprehensive control system [25]. For MCS to contribute to an organization’s development, its various components must align harmoniously with one another. In the field of management control and sustainable development, diverse theoretical concepts serve as the foundation for analysis.

These concepts include MCS as a package [26], sustainability control systems [27] environmental management control systems [28] environmental management accounting [29] and levers of eco-controls [30]. It is recommended (e.g., [26,27]) that there is a necessity to strengthen the connection between management control theory and practice to effectively integrate sustainability into existing MCS. Otherwise, Sustainability Control Systems (SCS) and MCS may exist in parallel with minimal influence on an organization’s sustainability strategies. Alternatively, if applied appropriately, MCS can drive organizations towards sustainability [28]. Leaders must maintain a long-term perspective [31] by considering diverse viewpoints and promoting decentralized decision-making in their operations [32]. Organizational leaders are crucial change agents responsible for driving positive changes towards sustainability. They must proactively bridge the gap between implementing strategic decisions, management roles, and organizational changes. Effective leadership necessitates competence, vision, innovative approaches, motivation, guidance, evaluation, and recognition of
employees to facilitate necessary change processes. Furthermore, sustainable development encompasses economic, environmental, social, and business dimensions [33]. Ethical competence among leaders is of paramount importance, as sustainability can be viewed as a core value [34]. Management scholars acknowledge that the complexity of highly interdependent systems requires a systems approach, where social systems are nested within natural systems [33].

**Entrepreneurship and Sustainability**

In exploring the theoretical underpinnings of sustainability within organizational contexts, it becomes clear that entrepreneurship is not just a pivotal element, but a powerful driver of change. While responsibility and value co-creation are foundational, the entrepreneurial aspect introduces a dynamic interplay that not only catalyzes but energizes sustainable practices within organizations. Entrepreneurship, fundamentally characterized by innovation and risk-taking, aligns intrinsically with sustainability’s demands for adaptive and transformative approaches. This alignment is not just a coincidence, but a strategic advantage that organizations can leverage to make a real impact on sustainability.

Theoretical frameworks such as the Entrepreneurial Theory of the Firm suggest that entrepreneurial activities are not merely economic processes but are also deeply embedded in societal and environmental contexts [35]. This theory posits that entrepreneurs identify opportunities within the market that align with broader societal needs, including sustainability. Furthermore, the Concept of Entrepreneurial Orientation [36] provides a lens through which to view sustainability. This orientation emphasizes innovativeness, proactiveness, and risk-taking, crucial for leading sustainable transformations within organizations. The interrelationship here is clear: sustainable practices often require innovative approaches to resource management, proactive engagement with environmental challenges, and a willingness to take risks on new sustainable technologies.

In the context of sustainability, entrepreneurship enhances value co-creation by leveraging collaborative networks and fostering innovation in sustainable practices. Entrepreneurs act as facilitators in co-creating sustainable values within their organisations and across their external networks, including suppliers, customers, and local communities. This collaborative effort is essential in promoting a sustainable business ecosystem. The integration of sustainability into organizational culture necessitates an entrepreneurial spirit that encourages a culture of experimentation and learning. The theoretical perspective of Cultural Entrepreneurship [37] highlights how entrepreneurs can influence and reshape organizational cultures to embrace sustainability. By embedding sustainable values into the corporate culture, entrepreneurs ensure that sustainability becomes a core element of organizational identity. The role
of entrepreneurial leadership in driving sustainable practices is critical. Leaders with an entrepreneurial mindset are better equipped to implement sustainable innovations and inspire a culture of sustainability. The Theory of Transformational Leadership [38] supports this, suggesting that transformational leaders can inspire and motivate employees towards a shared sustainability vision, enhancing the organization’s commitment to sustainable goals.

In summary, organizations embarking on a journey towards sustainability must engage in knowledge sharing on sustainability issues throughout the organization. Understanding sustainability as a core assignment and defining responsibilities are essential initial steps in this journey. Additionally, the process of co-creating values should extend beyond the organization’s boundaries to involve all stakeholders. Strong commitment to change management is vital for effective leadership in driving these processes. A profound understanding of these processes is indispensable for organizations to avoid merely superficial engagement with sustainability issues or engaging in greenwashing practices. These several theoretical perspectives presented are all related to sustainability in organizational contexts and highlight the importance of responsibility in organizations, particularly in the context of sustainability, and distinguishes between mission understanding (based on legality) and responsibility understanding (based on ethical legitimacy). It emphasizes the need for collective learning and the role of value co-creation in achieving sustainability. There seems to be a connection between sustainability and organizational culture, noting that sustainability requires cultural changes within organizations. Different viewpoints on cultural sustainability are explored, highlighting the necessity of acknowledging diverse normative frameworks. Additionally, the article examines theoretical perspectives on leadership and management for sustainable organizational growth, underscoring the critical role of leadership skills in attaining sustainability. It mentions the holistic approach of the Management Control System (MCS) and the need for alignment between its components. Various theoretical concepts related to management control and sustainable development are mentioned. Effective leadership and ethical competence are highlighted as critical for driving positive changes toward sustainability in organizations, considering economic, environmental, social, and business dimensions. A systems approach is recommended due to the complexity of interdependent systems. The theoretical frameworks elucidate also the essential interrelationships between sustainability and entrepreneurship. Understanding these connections provides a robust foundation for organizations aiming to integrate sustainability into their core operations. Entrepreneurship complements and energizes sustainable practices, fostering a proactive and innovative organizational environment conducive to sustainable development.
Research Design and Rationale

This study adopts a qualitative and exploratory approach, utilizing thematic content analysis to delve into the sustainability practices within six pioneering companies on the island of Gotland, Sweden. The choice of a qualitative design is justified by the need to obtain a deep, contextualized understanding of complex phenomena—specifically, how these companies integrate and operationalize sustainability into their business practices [39]. Thematic content analysis was selected for its flexibility in identifying, analyzing, and reporting patterns within data, thereby allowing the research to reflect the richness and complexity of sustainability practices [39].

Sampling Technique and Criteria

The six companies were carefully selected using purposive sampling to include various industries, sizes, and locations—from large corporations to small family-owned businesses in urban and rural settings. This technique comprehensively explores sustainability practices across different business contexts [39]. Companies were considered frontrunners and pathfinders based on their established reputation for pioneering sustainability initiatives and their alignment with the United Nations’ Sustainable Development Goals (SDGs). The inclusion criteria were based on their demonstrable leadership in sustainability, innovative practices, and influence within their sectors.

Data Collection Methods

Data were primarily collected through one-hour interviews with managers from the selected companies, conducted between November 2022 and January 2023. To complement interview data, a review of secondary sources, including company websites, published reports, and relevant online resources, was undertaken. This mixed-method data collection allowed for triangulation, enhancing the credibility and depth of findings [39].

Secondary Data Sources

Secondary data were sourced from various materials that provide insight into the companies’ sustainability frameworks and practices. These included publicly available corporate sustainability reports, official websites, and relevant government and industry publications on the SDGs. Such sources were indispensable for understanding the context and substantiating the interview data.

Analysis Techniques

The data analysis employed an abductive approach, allowing for a flexible interplay between theory and empirical findings to develop a rich understanding of the data [40]. Thematic analysis was used to distil
patterns and themes related to sustainability, mission, responsibility, leadership, and value creation.

Ensuring Data Quality and Addressing Biases

Several strategies were implemented to ensure the quality of qualitative data and mitigate biases. Firstly, data triangulation was used by combining interview data with extensive document reviews. To counter potential interviewer biases such as non-response bias, social acceptance bias, and standard method bias, interviewer training included techniques on neutral questioning and active listening. Respondent validation, or member checking, was employed to confirm the accuracy of interview data [41]. Additionally, using secondary data helped cross-verify the information obtained from interviews, reducing reliance on a single data source.

PRESENTATION, ANALYSIS AND INTERPRETATION OF THE RESULTS

In the following section answers from the six interviews with managers and secondary data material is first presented, then analysed and finally interpreted.

Interviews with the Managers

Firstly, there is an account of the compilation of results from questions on facts about the companies, the managers’ years of service. Then questions about sustainability implementation in the companies will be reported. Furthermore, the answers regarding the practical implementation and measures the companies in question have implemented in terms of sustainability are highlighted. Then the results that concern the measures that remain in the companies’ sustainability work are analysed. Finally, the best practices towards sustainable organization development are summarized.

Respondents

The companies and organisations included in the study were of different character and sizes, had several profiles, and were located in different geographical spots on the island of Gotland. In the following all six respondents’ statements are presented and then analyzed using the theoretical perspectives presented in the section above as well with the help of aspects of sustainability. In conclusion, the analyzes are compiled to finally include the gained and common tendencies to these entrepreneurs, which in turn can be said to make these for frontrunners and pathfinders in the practical work for sustainability.
Presentation of the Data from Interviews

Respondent A: A hotel manager in the cultural heritage town of Visby, Sweden

The hotel has been running for 15 years by the owner and manager. The hotel includes 30 rooms and 80 beds, housed in old buildings in the middle of the medieval city. Employee calls vary due to the season between 10 and 20 employees. Started to discover market share in having a profile with sustainability. Then they became more and more interested in sustainability work. The hotel is certified through the Nordic standard called Swan with 85 areas that mostly include ecological and economic dimensions of sustainability. The manager also added the diversity aspect into the standard. To the question: What is sustainability for you? The leader replied that sustainability has an environmental basis, and then comes the social and economic dimensions.

All these dimensions must also be seen in the daily work in practice. We water the flowers with rainwater, we use vinegar for cleaning, we recycle our garbage in 17 different containers, we buy green electricity only. Unfortunately, the solar cells are not allowed in the city due to world heritage status. We have installed geothermal heating instead.

The leader participates in the sustainability work within the region by working in a group that discusses issues around the hospitality industry and sustainability. The group deals with detailed planning of e.g., water use, code of conduct etc. The leader is working on climate accounting: how to better market sustainability to the guests. All the hotel's employees are unionized, which the manager considers is very good. The employees are highly involved in the daily sustainability work and sustainability meetings are held every week for all staff. At the moment, work is being done with value-based work and the cultural dimension of sustainability. It is important to convey the cultural values and historical knowledge of the city of Visby to the visitors by all employees. They are ambassadors for their city. In conclusion, the leader wishes for closer cooperation with the region and the tourist organizers.

We would invest more in nature tourism on the island—preferably in the off-season to extend the season and counteract the overexploitation of the town of Visby.

The analysis of respondent A's statements

Abrahamsson and Andersen [11] and Oxenswärdh [12] discuss responsibility within organizational contexts. The hotel manager's commitment to sustainability reflects this concept of assuming responsibility for environmental, social, and economic dimensions in their daily work. Bergman and Klefsjö [13] delve into value co-creation within groups and teams. The hotel manager's engagement of employees in sustainability meetings is in line with this concept of collaborative learning for sustainability [4,5]. Scholars like [19] and [18] emphasize the
link between sustainability and organizational culture. The hotel manager's emphasis on conveying cultural values of Visby aligns with these discussions on embedding cultural values for sustainability. Lozano [23] and Metcalf and Benn [24] highlight the significance of leadership in sustainable development. The hotel manager's participation in regional sustainability groups and initiatives demonstrates proactive leadership in driving sustainability [17]. References such as [28] and [25] discuss management control systems and sustainability. While not directly referenced in the practical actions of the hotel manager, elements like using rainwater, geothermal heating, and recycling could be related to aspects of environmental management and control systems.

**Respondent B is a unit manager at a government authority at County Board**

On the island of Gotland, she has worked at the agency since 2005. She has been working with social authority tasks, based on national goals, and is a government's representative collaborating with the region. Her department takes responsibility for issues of social sustainability. The assignment of the department deals with, among others, the questions of violence in the local society, health care, labour market for all, how to promote a democratic society for all, drug prevention, travel and environmental policies. The assignment is regulated by national politics and thus sensitive to political fluctuations. Practical work involves drug prevention, cooperation with the region, and crisis preparedness. The role of the authority is collaborative in society. The authority is divided into eight areas within the County Board. Several sections take care of sustainability issues. The authority is expected to have cross-sectional cooperation. Much about sustainability is still only on the paper—but it is difficult to know how it is in practice, is expressed by the respondent.

The social dimension of sustainability depends a lot on how we humans are towards each other, we have to educate people and start early with small children. We arrange integration programs. Create meetings between people. The ethical approach becomes visible, e.g., in the regulation of immigration to Sweden.

**Analysis respondent B's statements**

Respondent B's role as a unit manager at a government authority dealing with social sustainability aligns with the perspective of organisation's important role as striving forces for sustainability. The respondent B's statements indicates that the department takes responsibility for various social issues, including violence, healthcare, labor market, democratic society promotion, drug prevention, and environmental policies. The national politics sensitivity mentioned correlates the legal and ethical aspects of responsibility discussed by [11] and [12]. The concept of value co-creation emphasize collaboration within groups and teams. Respondent B's description of the authority's role as
collaborative in society and the expectation of cross-sectional cooperation is in line with the importance of collaboration for sustainability [4,5]. The respondent's mention of arranging integration programs and creating meetings between people reflects a practical application of value co-creation in fostering social sustainability. Sustainability must be linked with culture and that achieving sustainable transformation requires cultural changes [18–20]. Respondent B's mention of the social dimension of sustainability depending on how humans interact and the emphasis on education align with the cultural aspect of sustainability. The respondent's role in dealing with immigration regulations also ties into the broader cultural sustainability discourse [22]. Respondent B's role as a unit manager underscores the importance of effective leadership in addressing social sustainability issues. The reference to cross-sectional cooperation and crisis preparedness reflects the need for organizational development in alignment with sustainability principles. Respondent B's description of the authority's role in societal collaboration and the need for cross-sectional cooperation aligns with the holistic perspective of MCS discussed in theoretical section [25]. The emphasis on responsibility, collaboration, cultural aspects, leadership, and management aligns well with the challenges and responsibilities faced by a government authority working on social sustainability. The practical application of these theoretical perspectives contributes to a more comprehensive understanding of sustainability in organizational contexts.

**Respondent C: A manager of the grocery store**

Respondent C is a manager at a consumer association's grocery store established by members for the purpose of collectively purchasing and selling goods to the association's members. In most cases, it is also possible to purchase goods from the consumer association without membership. Service options include in-store shopping, in-store pick-up, and delivery. The manager has been working with the company for 5.5 years and has 30 years of experience in the business sector. The grocery store employs 100 people (190 on whole Gotland), and in summertime the employee count is around 180 persons. When the manager initially started to work in this company, the objective was to find a unique niche that would allow for competition with another major grocery chain located just a few hundred meters away. The manager learned about the White Guide Green, a competition and guide that assesses how the country's grocery stores approach sustainability in relation to food and beverages. It includes 180 criteria for evaluating the sustainability of products sold in stores. The manager decided to adhere to this guide, and within one year, the store was awarded the title of the best vegan food store in Sweden. In 2019, the store also received the award for the most sustainable food store in EU.

My personal commitment to sustainability has been the driving force behind a more sustainable boutique. In practice, the store has focused on
waste management, resulting in a reduction from 120,000 kg of annual waste to just 7000 kg today.

The store implemented an application to monitor the expiration dates of all products, yielding positive results, including the ability to sell some items to consumers at reduced prices. Additionally, the store now processes residual products into soil, which can be purchased by consumers, with an annual production capacity of 36,000 kg.

Our Food Rescue application has also played a significant role in waste reduction, particularly among students on the island. Every Thursday, they have the opportunity to select a bag containing products with extremely short expiration dates.

The manager's ultimate goal is to become the most sustainable store in the world. Despite the higher costs, the store primarily sources products from local food producers in Gotland. This choice aims to minimize long-distance transportation and the use of foreign goods. The staff has undergone sustainability training through a central digital program and participates in daily meetings, where topics like waste management are discussed and monitored. The manager also sought to educate customers about sustainability but believed in inspiring them rather than imposing mandates. The older customers already have a sustainability mindset, having lived sustainably throughout their lives. The manager also recognized that young people, who have grown up in the current environmental movement, would be future consumers demanding more sustainable food practices. However, the message is clear: all of us must make conscious choices for a more sustainable world. In the future, we must learn to collaborate across company boundaries, even with our competitors.

Analysis, respondent C's statements

Firstly, the emphasis on responsibility in organizational contexts, particularly in matters of sustainability, aligns with the manager's approach. The commitment to reducing waste, monitoring expiration dates, and transforming residual products into soil demonstrates a clear sense of responsibility towards sustainability, in line with the conceptualization of responsibility discussed in [11,12]. Moreover, the concept of value co-creation is evident in the manager's actions. By implementing initiatives like the Food Rescue application, offering products at reduced prices, and sourcing locally to minimize transportation, the store engages in collaborative efforts with consumers and local producers towards a more sustainable approach [13]. The manager's approach to educating staff and customers reflects the connection between sustainability and organizational culture. The emphasis on daily meetings to discuss sustainability topics and staff training harmonizes with the idea that sustainability must be integrated into the culture of the organization [17]. Additionally, recognizing the different mindsets of older and younger customers reflects an understanding of cultural perspectives on sustainability [22]. Regarding
leadership for sustainable organizational development, the manager's vision of becoming the most sustainable store in the world and the proactive steps taken to achieve this seem to align with the discussions on effective leadership and the importance of a systems approach discussed by [23,32]. The focus on inspiring customers rather than imposing mandates corresponds with the notion of ethical competence among leaders, encouraging conscious choices for sustainability [34]. Finally, the discussion around Management Control Systems (MCS) correlates with the manager's approach to monitoring expiration dates and waste management through applications and daily discussions. The holistic view of management control aligns with the store's initiatives to manage various aspects of sustainability collectively [25].

Respondent D: The sustainable journey of entrepreneurial couple

Respondent D, a married couple, are not just your average entrepreneurs but dedicated trustees of the land. Background: Chemistry and biology teacher and an artist, both hailing from Gotland, these two took over their family farm. The transition came during a challenging time, as Respondent D's father fell seriously ill and eventually succumbed to ALS. One pivotal moment came when it was time to spray the strawberry crops. Instead of resorting to chemical pesticides, they chose to take the organic route, forming a partnership with an eco-friendly farmer. Their commitment to sustainability extended to addressing water scarcity by constructing water reservoirs. Diversifying their endeavours, they ventured into agriculture, running a restaurant, and a shop. They also offered a unique self-picking experience for vegetables and strawberries. Sustainability has since been the cornerstone of their operations, as they even had their wastewater treatment facility. Their ultimate goal was to be energy self-sufficient, but they faced hurdles due to national regulations. Their dedicated team consisted of 9–10 employees, plus the couple themselves. Today even two of the couple's children are working for the company. Sustainable practices were not confined to the fields but permeated into their store and kitchen. They invested in training their staff and held daily discussions on sustainable practices. Innovating with everyday ingredients, they created new recipes and revived old preservation methods. They utilized antique stoves to conserve energy and assumed responsibility for efficient energy use across all their operations. Challenges loomed on the horizon. Maintaining a balance with 10-30 seasonal employees during the summer months proved demanding. Retaining seasonal workers year after year was another challenge, especially when 50% of their revenue was concentrated from June to August. They aspired for a longer season but faced a shortage of service staff post-pandemic. They were committed to hiring locals, although summer accommodation was a constant issue. Their hospitality extended to people from different cultures, exemplifying their openness. Sustainability in Gotland faced its own set of challenges. Respondent D
noted a lack of collaboration among entrepreneurs on the island. They questioned why they weren't showcased as an example of sustainable practices, given their expertise. They believed that Gotlanders often overlooked their abundant resources and knowledge, fearing competition. They emphasized that sustainability incurred significant expenses when exporting their products, yet they proudly held the title of the best organic restaurant in the EU. Their website contains a wealth of information about their activities, and they believe that Gotland could become an even more ecologically conscious island. They remained determined to prove that it was not an impossible feat. Their commitment to sustainability extended to historical preservation, as they unearthed a 2500-year-old cooking pit at their farm and revived an old nutrient-rich variety of wheat. Their vision for the farm is intergenerational, ensuring its sustainability for the future, using only locally sourced ingredients—except for fish due to contamination in the Baltic Sea. Their innovative approach extended to utilizing local snails instead.

**Analysis respondent D's statements**

The story of Respondent D, the entrepreneurial couple dedicated to sustainable practices on their family farm, resonates strongly with several theoretical perspectives discussed in the article. Their commitment to sustainability aligns with the emphasis on responsibility in organizational contexts, especially in matters of sustainability. They made deliberate choices to opt for organic farming methods, collaborate with eco-friendly partners, address water scarcity, and even establish a wastewater treatment facility. These actions mirror the understanding that responsibility in organizations involves relationships between actors (in this case, the couple and their partners), enacted and assumed in the arena of their operations [11,12]. Furthermore, their efforts reflect the notion of value co-creation within their community. They engage in continuous learning processes by innovating with new recipes, reviving old preservation methods, and involving their staff in daily discussions on sustainable practices. Their engagement with the local community, offering unique self-picking experiences, and hiring locals also echoes the collaborative endeavours emphasized in the literature on value co-creation [4,5,13]. Their challenges with seasonal employees and accommodation issues align with the complexities organizations face in maintaining sustainable practices. Despite their dedication, they encountered hurdles in balancing seasonal demands and retaining staff, akin to the challenges discussed regarding the need for commitment to change management and fostering a collaborative culture within organizations [17]. Moreover, the observations of Respondent D regarding the lack of collaboration among entrepreneurs on the island of Gotland and their desire to showcase sustainable practices resonate with the discussions on the necessity of integrating sustainability into organizational culture. The couple's frustration about the overlooked
resources and knowledge on the island, stemming from fear of competition, reflects the challenges in integrating sustainability and cultural changes within a community context [18–20]. Their commitment to historical preservation, utilizing local resources, and striving for intergenerational sustainability seems to connect to the perspective that sustainability must be intimately linked with culture and requires comprehensive cultural changes within organizations and communities [20,21]. Overall, Respondent D's entrepreneurial journey showcases a real-world embodiment of the theoretical perspectives discussed in this article, highlighting the challenges, commitments, and endeavours necessary to embed sustainability within organizational practices and community culture.

**Respondent E: An old farmer**

This respondent is an 86-year-old biologist with a master's degree in genetics. After completing his studies, he focused on studying bird chromosomes and observed the damaging effects of various substances on them. For instance, he found that mercury made the birds sterile. About 40 years ago, he and his wife relocated to Gotland and purchased a farm. During this time, he unexpectedly found employment in Övertorneå (a resort in northern Sweden near the boarder to Finland) and witnessed how phenoxyacids caused harm. This led to protests, and eventually, the substance was banned in the entire region. Upon retirement, he constructed an energy-efficient house and installed a substantial 5000 kg furnace. Additionally, he set up solar panels, initially with 62 panels that provided year-round electricity. He also adopted an electric car. As of now, he has invested in an additional 84 solar panels. His lifestyle includes keeping animals and hunting. He makes his shopping in a local, small village store. He believes hunting is a sustainable practice, as there is an abundance of roe deer on the island. When it comes to Gotland and sustainability, his concern is excessive transportation, deforestation, and monoculture farming practices, which he refers to as "biological simplicity". He led a workshop in training in sustainable forestry but lamented that the knowledge wasn't widely disseminated. He emphasizes that deforestation results in carbon loss during the first 40 years, after which it begins to accumulate again. Simultaneously, it leads to a loss of biodiversity. In terms of social and cultural sustainability, he has been involved with multiple associations. He highlights the positive role played by community centres in sustainability efforts. He expresses frustration with the region's resistance to accepting new and sustainable better technological solutions, often favoring a single approach. In the realm of education, he advocates for more practical solutions and the use of local stores to support their survival. He notes the significant increase in both average temperatures and carbon dioxide levels since his birth, underscoring the importance of addressing climate change. In addition to his farming and environmental work, this respondent also collects and
preserves rare apple varieties, maintaining a clone archive. He actively educates others on cultivating different apple types and grafting techniques. He finds that many eager learners are young and hope that they can pass on this knowledge to the next generation. He stresses the importance of remembering that we are all biological beings.

The analysis of respondent E’s statements

The farmer’s actions demonstrate a profound sense of responsibility toward environmental sustainability. His experiences with observing the damaging effects of substances on bird chromosomes underscore a personal understanding of the consequences of human actions on nature. His active involvement in protests against harmful substances and advocating for sustainable practices in forestry highlights a keen sense of responsibility towards environmental stewardship, akin to the discussions in the text about responsibility in organizational contexts [11,12]. His emphasis on the detrimental effects of monoculture farming and deforestation corresponds with the discourse on the need for cultural changes to achieve sustainability, emphasizing the importance of recognizing different normative frameworks, as discussed in the literature. The farmer’s engagement in workshops for sustainable forestry, sharing knowledge about rare apple varieties, and advocating for practical solutions in education align with the concept of value co-creation discussed in the literature [13]. He actively engages in collective learning by imparting knowledge to younger generations, hoping they will continue the legacy of preserving rare varieties and sustainable practices. His emphasis on the importance of local stores and community centers resonates with the idea of involving all stakeholders in the process of value creation, extending beyond organizational boundaries [18–21]. The farmer’s frustration with resistance to accepting new and sustainable technological solutions reflects the challenges discussed in the literature regarding the intersection of culture and sustainability [18–21]. His involvement in multiple associations, advocacy for practical education, and concern about excessive transportation seems to be in line with the discourse highlighting the importance of cultural changes within organizations for achieving sustainability [22]. His emphasis on community centres echoes the literature’s recognition of the role of the community in fostering sustainability efforts. The farmer’s proactive actions in setting up an energy-efficient house, installing solar panels, and adopting an electric car demonstrate leadership in personal sustainability practices. His advocacy for practical solutions, engagement in workshops, and efforts to educate others highlight ethical competence and a commitment to driving positive changes toward sustainability, akin to the emphasis on the significance of leadership capabilities in achieving the goal [31].
Respondent F works as a project manager at a concrete manufactory

The company has 230 employees but indirectly employs 400 people. They produce 2 million tons of cement per year, which accounts for about 60% of Sweden’s cement needs. The company anticipates a need for more labour in the coming years. Emissions of carbon dioxide are approximately 1.5 million tons per year from this company. The project manager has a background in chemistry and has been involved in environmental issues for 18 years, working as an environmental manager at the company. Currently, she works as a sustainability project manager, focusing on forward-looking sustainability issues. She believes that sustainability means leaving the world as we have experienced it for the next generation. The company produces cement, which is a vital component of concrete, the world’s most important building material. Concrete is used in infrastructure, water and sewage systems, and construction. Cement production can release carbon dioxide due to the heating of limestone, which accounts for 60% of the total carbon emissions in their process. The company is actively working to become carbon-neutral by 2030 through carbon capture technology, storing the captured CO₂ in geological formations to eventually transform it back into limestone. They also work on using biogenic fuels for about 30% of their energy consumption, exploring alternative raw materials, resource management, reducing cement usage, and improving energy efficiency. The company's customers are society, and demand depends on societal needs. There is a continuous experimenting with alternative building materials. These materials also have their environmental impacts, though. The company is committed to addressing the environmental impact of limestone extraction by implementing different programs and carefully planning water use. They aim to compensate for quarrying by increasing the land's value and consider measures to encourage e.g., butterflies to relocate. Regarding the sustainability of Gotland as an island, Respondent F believes that everyone must take responsibility for different aspects of society. She wishes for smoother EU legislation, more clarity, and faster decision-making processes. Better planning of energy supply for industries in Sweden is also needed. The company is supporting local entrepreneurs and communities through various projects. Respondent believes that their operations are relatively cleaner compared to many other producers. Cement has been in use for thousands of years, and the interviewee believes it will still continue to be essential for the future.

Analysis of respondent F

The concept of responsibility within organizations, as described by [11] and [4,12] emphasizes the relationship between the commissioner and the actor in enacting and assuming responsibilities. Respondent F, working as a sustainability project manager, embodies this understanding by actively taking responsibility for sustainability initiatives within the company. The
discussions about value creation and co-creation align with the company's endeavors to experiment with alternative building materials and address environmental impacts. The company's efforts resonate with the idea of value co-creation through collective actions, as discussed by [13]. Respondent F's mention of the need for smoother EU legislation and better energy planning reflects the discussions in the literature about the intersection of culture and sustainability. The company's advocacy for clearer legislation and faster decision-making resonates with the scholarly discussions on the necessity of comprehensive cultural changes for sustainable transformations, as highlighted by [18–20]. The significance of leadership for sustainable organizational development, emphasized by [23] and [24], is evident in the actions of the sustainability project manager (Respondent F) and the company's initiatives led by individuals with a background in environmental issues. Their focus on carbon capture, alternative fuels, and resource management reflects an understanding of the importance of leadership in driving sustainability efforts. The company's actions to reduce emissions, manage resources, and plan for environmental impact mitigation resonate with the theoretical concepts presented in the literature references. These actions align with the discussion of Management Control Systems (MCS) and sustainability control systems, advocating for holistic approaches that integrate financial and non-financial aspects for sustainable organizational development [25,26,28–30].

DISCUSSION AND THE CONCLUSION

The main purpose of this article was to discuss what and which processes seem to make some entrepreneurs successful in the way of implementing sustainable solutions in their businesses. These individuals and businesses stand out as frontrunners and pathfinders for sustainability due to several common characteristics and practices.

The analysis of the interviews with the managers of six pioneering companies in Gotland uncovers a unique blend of socio-cultural, political, and institutional factors that distinctly shape their sustainability practices. These influences, which are not commonly found in other contexts, play a pivotal role in Sweden's deeply ingrained sustainability culture and regulatory frameworks. Swedish culture, which emphasizes collective responsibility, transparency, and long-term planning, heavily informs the sustainability initiatives of the companies studied. For instance, the hotel manager's efforts to integrate the cultural values of Visby into their sustainability practices reflect a broader Swedish value of preserving cultural heritage alongside environmental conservation. This is consistent with findings from similar studies in other Nordic countries where cultural preservation aligns with sustainability efforts [42]. The Swedish government's solid regulatory frameworks and incentives for sustainable development create an enabling environment that supports companies like the ones on Gotland. For example, the grocery store manager's
adoption of the White Guide Green standards aligns with Sweden's national policies promoting ecological sustainability in the food sector. This regulatory support contrasts with findings from studies in countries with less stringent sustainability regulations, where companies often need more institutional support to integrate comprehensive sustainability practices [43].

The success of entrepreneurs in implementing sustainable solutions seems to revolve around several key processes highlighted in the following:

1. Holistic Approach: Each respondent approaches sustainability from a comprehensive viewpoint, integrating environmental, social, and economic dimensions. They don't prioritize one aspect over another but instead create a balance, understanding that sustainability encompasses various interconnected facets.

2. Innovation and Adaptation: They showcase innovation in their respective fields by implementing unique solutions tailored to their circumstances. For instance, they use geothermal heating in heritage buildings, advocate for carbon capture in cement manufacturing, or introduce technology to monitor expiration dates in grocery store.

3. Community Engagement: These frontrunners actively involve their communities, whether through employee engagement, customer education, or collaboration with local entities. They recognize the importance of shared responsibility and inclusivity in driving sustainable practices.

4. Education and Advocacy: There's a strong emphasis on education and advocacy for sustainability. Whether it's through staff training, customer education, or active involvement in societal issues, these frontrunners aim to spread awareness and inspire others to adopt sustainable practices.

5. Long-Term Vision and commitment to the sustainability efforts: All these respondents have vision that extends beyond short-term gains. They aim for long-term sustainability, investing in measures that might be more expensive initially but contribute significantly to a sustainable future.

6. Adaptability and Collaboration: They adapt to changes, navigate through challenges, and advocate for collaboration among competitors or stakeholders for the greater cause of sustainability.

7. Cultural and Historical Preservation: Some of these frontrunners prioritize preserving cultural heritage alongside sustainability efforts, recognizing the significance of local values and history.

8. Emphasis on Responsibility: All respondents emphasize the importance of assuming responsibility for sustainability, be it in organizational, social, or environmental contexts. This includes a commitment to reducing waste, advocating for sustainable practices, and actively engaging in initiatives to address societal or environmental issues.
9. Value Co-Creation: Entrepreneurs who succeed in implementing sustainability often engage in collaborative efforts. They involve stakeholders, employees, consumers, and local communities in creating sustainable solutions. This includes initiatives like collaborative learning, involving staff in discussions, and fostering partnerships within the community.

10. Cultural Integration: Cultural change seems to be integral to sustainability. Entrepreneurs who effectively embed sustainability into their businesses recognize the importance of integrating sustainability into organizational culture. This involves educating stakeholders, understanding different mindsets, and aligning cultural values with sustainability goals.

11. Leadership and Management: Successful entrepreneurs exhibit proactive leadership in driving sustainability. They actively participate in regional sustainability groups, showcase their vision and commitment to becoming more sustainable, and engage in practical solutions.

12. Management Control Systems (MCS): While not directly mentioned in practical actions, elements like monitoring expiration dates, waste management, and resource optimization in some cases align with the concept of holistic Management Control Systems (MCS). Overall, the synthesis of these statements showcases how successful entrepreneurs implementing sustainable solutions tend to incorporate responsibility, collaboration, cultural integration, leadership, and holistic management approaches within their businesses.

The results indicate that some organisations and companies in Gotland succeed in sustainability by adopting a multifaceted approach that is both innovative and inclusive. This approach aligns with corporate social responsibility (CSR) theories and sustainable business practices that emphasize stakeholder engagement and long-term planning [44]. Unlike findings from studies in less regulated environments [43], Swedish organisations and businesses benefit from a supportive institutional framework that encourages holistic sustainability integration. Comparatively, the emphasis on cultural and historical preservation observed in the case of Gotland provides a unique contrast to similar studies conducted in regions like the United States, where sustainability efforts are often driven more by economic incentives than cultural values [45,46]. The Swedish case illustrates how deeply ingrained cultural values can significantly enhance the adoption and integration of sustainability practices. This study underscores the importance of Swedish organisations and businesses leveraging their cultural heritage and strong regulatory support to advance their sustainability agendas. It suggests that other companies and organisations in similar regulatory environments could adopt these practices to enhance their sustainability outcomes. Additionally, the findings advocate for adopting management control systems that align sustainability efforts with business operations, ensuring
that these practices are adopted superficially and deeply embedded within the organizational culture and operational strategies.

Theoretically, this research contributes to the literature on sustainable entrepreneurship by highlighting how cultural, historical, and community engagement factors intertwine with economic considerations to foster sustainability within companies and organisations. It challenges traditional models of business sustainability that prioritize economic benefits, presenting a more integrated approach that includes cultural and historical dimensions. This research contributes to a nuanced understanding of sustainability in companies and organisations, particularly within the Swedish context. It highlights the role of comprehensive management strategies and the potential for cultural integration to enhance sustainability practices. The study's findings can serve as a benchmark for academics and practitioners aiming to implement or study sustainability strategies in similar socio-economic environments.

Limitations of the Study

This study, while providing insightful findings, has several limitations that should be noted: The focus solely on entrepreneurs in Gotland may limit the generalizability of the findings across different regional contexts within Sweden or internationally. The purposive sampling of only six companies may only partially represent the diverse range of sustainability practices across various industries. Larger samples could provide a more comprehensive overview. Although measures were taken to reduce bias, the qualitative nature of the study inherently involves a degree of subjectivity, which may affect the interpretation of data. The data primarily rely on interviews, which are susceptible to biases such as social desirability or recall bias, potentially skewing the representation of company practices.

Suggestions for Future Research

To build on this study, future research could include companies from different regions of Sweden or other countries with similar economic environments, enriching the understanding of cultural and regional dynamics in sustainability practices. Engaging a more extensive and diverse group of companies would enhance the robustness and representativeness of the findings. Employing a mixed-methods approach could offset some of the limitations of qualitative analysis, providing a more balanced view through quantitative data. Following companies over time would offer insights into the sustainability of practices and the long-term impacts of entrepreneurial actions on sustainability. Researching before and after effects of significant policy implementations could clarify how external factors drive or impede sustainable practices in companies and organisations.
DATA AVAILABILITY

All data generated from the study are available in the manuscript.

CONFLICTS OF INTEREST

The author declares that there is no conflict of interest.

REFERENCES


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