

Integrating sustainability in business process modeling

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Article Info	ABSTRACT
Keywords: Integration, sustainability, business process modeling	Sustainability is becoming increasingly important in the modern business context, where organizations are increasingly aware of the ecological and social impacts of their operations. This research will focus on developing an approach that allows business process modeling to not only take operational efficiency into account, but also include sustainability dimensions. This research uses a qualitative approach with descriptive methods. The research results show that integrating sustainability in business process modeling plays a key role in shaping a company's sustainability and success. Sustainable business models, which take into account economic, social and environmental aspects, not only increase financial value, but also create a positive impact on employees, consumers and the environment. An inclusive approach to company ownership can address the wage gap and create a fair work environment. Going green, while it may increase the price of a product, can improve a brand's reputation by engaging consumers in discussions about sustainability.
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INTRODUCTION

Creating a sustainable business model is not only an aspiration, but also a top priority for many companies in this era. Businesses that prioritize sustainability not only aim to generate financial profits, but also have a commitment to positive impacts on the environment and society (Franca et al., 2017). In an era where awareness of environmental and social issues is increasing, companies that are able to integrate sustainability principles into their operations and business strategies tend to be more sought after by customers (Bocken & Short, 2016).

The importance of sustainable business lies in understanding that sustainability is not only an ethical responsibility, but also a key factor in achieving long-term success. Modern consumers are increasingly inclined to choose products and services from companies that uphold sustainable values (Bansal & DesJardine, 2014). Companies that adopt sustainable business models not only contribute positively to the environment and society, but also build strong customer trust and gain competitive advantage. The importance of awareness of sustainability also motivates innovation in business practices. Companies committed to creating sustainable business models tend to look for new ways to reduce their environmental footprint, increase efficiency and support social initiatives (Boons & Lüdeke-Freund, 2013).

Sustainability is not only the prerogative of large companies, it can also be adopted by businesses of all sizes. Even for small and medium-sized businesses, working towards a sustainable business model can provide a strong foundation for long-term growth. In the face of environmental and social challenges, companies of all sizes can take concrete steps to improve their sustainability (Loucks et al., 2010).

Small businesses can start by following sustainable practices specific to their industry, such as using renewable energy, efficient waste management, or reducing their carbon footprint (Watson et al., 2008). Additionally, adopting a sustainable strategy can involve integrating sustainability values in the supply chain, ensuring the involvement of local communities, and supporting relevant social initiatives. By doing this, small businesses can make a positive contribution to environmental sustainability and provide added value to customers who are increasingly paying attention to sustainability aspects (Hillary, 2017).

In addition to long-term benefits, the decision to switch to a sustainable business model can also open up new opportunities and expand market share for small businesses. Customers and investors are increasingly likely to support companies that uphold sustainability, and this can create stronger and more sustainable relationships with consumers (Vesal et al., 2021). Therefore, sustainability is not just the domain of large companies, but is a valuable investment for businesses of any size to face a more sustainable future.

Literature Review

Sustainability

Sustainability is the ability of our society to live and develop without depleting all the natural resources necessary for life in the future. Sustainable development supports these long-term goals with the implementation of systems, frameworks, and support from global, national, and local entities (Kostaka & Kocarev, 2019). The concept of sustainability is built on the idea that the Earth's natural resources are limited, so supporting sustainable practices helps maintain a balance between the environment, the economy and justice. It is this movement and energy that ensures the Earth can continue to be habitable, while controlling and reducing resource depletion (Broman & Robert, 2017).

Sustainability is important for preserving our planet and natural resources such as water and air. Building a sustainable future and developing sustainable ways of living will reduce pollution and protect plant and animal habitats (Basiago, 1995). An important part of sustainability involves sustainable business practices and economic development, including green technologies, green supply chains, and more. When businesses and governments follow sustainable practices, it creates a ripple effect on individuals and communities to reduce greenhouse gas and fossil fuel emissions. All of this contributes to a better quality of life (Robertson, 2021).

The three pillars of sustainability (environmental, economic and social) can help us pave the way to a sustainable future.

- a. Environmental sustainability: The principle of maintaining ecological integrity and ensuring that the earth's environmental systems remain in balance as natural resources such as air, water, land, forests and animals are consumed by humans.

- b. Economic sustainability: The goal of humans on Earth to maintain independence and be able to find work or obtain other resources to meet their needs. An economic system must exist and be accessible to everyone.
- c. Social sustainability: The principle of ensuring that basic human needs can be achieved by everyone and that sufficient resources are available for everyone in a community. A strong social system can guarantee a healthy and happy society in which human rights such as employment, health care and equality are respected.

Business Process Modeling

Business process modeling (BPM) is an activity that aims to represent processes in a company so that they can be analyzed, improved and automated. Typically, BPM is performed by business analysts who have expertise in modeling, field experts who understand the processes being modeled, or a team consisting of both. Alternatively, process models can be created directly from event logs using process mining tools (Indulska, 2009).

The main goal of business process modeling is to increase speed, reduce cycle time, improve quality, or reduce costs such as labor , materials, waste, or capital costs. Management decisions to invest in business process modeling are often driven by the need to document information technology project requirements or achieve operational efficiencies. In a practical context, BPM is a strategic instrument for companies to achieve their business goals. By understanding and effectively modeling business processes, organizations can identify potential areas for improvement, innovation, and automation, thereby increasing competitiveness and responsiveness to evolving market and technology needs (Laguna & Marklund, 2018). Top of Form

Business processes can be represented in three model categories, namely management processes, operational processes, and supporting processes. The management process is responsible for overseeing and controlling the operation of the entire system. Meanwhile, operational processes cover the core business and create flows that lead to key goals. Supporting processes are processes that are needed to support the smooth running of the core process (Burlton, 2001). Every business process must have a goal or objective that it pursues. Apart from that, business processes also involve input and output which are important elements in the process. Resources are needed to process input in the course of business processes. The implementation of business processes should be carried out sequentially and involve more than one part or department in the organization. In carrying out its activities, business processes can provide benefits and convenience for all customers involved.

METHOD

The method used in this research is qualitative with a descriptive approach. Qualitative research methods according to Gerring (2017) "that qualitative research methods are naturalistic research methods because the research is carried out in natural conditions (natural settings); It is called a qualitative method because the data collected and the analysis is more qualitative in nature. The qualitative approach was chosen with the consideration that this research explores and collects information and facts from informants

as they are, according to the informants' own views by collecting data in the form of facts they express, in accordance with the language and views of the informants. Therefore, researchers provide the widest possible opportunities to informants, so that all informant information is revealed completely and holistically.

RESULTS AND DISCUSSION

Sustainable business models play a key role in creating sustainable value for all parties involved, without destroying the resources that support their existence. By focusing on an approach that considers economic, social and environmental impacts, this business model not only generates financial returns, but also ensures long-term sustainability. In its efforts to create value, sustainable business models empower communities, minimize environmental footprints, and support shared prosperity. In this way, sustainable business models prove that business growth can be achieved without compromising the interests of society, the environment or future generations (Evans et al., 2017).

A fundamental difference lies between sustainable business models and business models that prioritize sustainability reflecting a broader view of social and environmental responsibility. A sustainable business model paints an ideal picture for every business leader, with a focus on achieving rapid growth and sustainable profits over the long term. On the other hand, business models that prioritize sustainability emphasize a holistic approach, where sustainability is not only defined as achieving profits, but also as a responsibility towards all stakeholders (Bocken et al., 2014).

Business models that prioritize sustainability not only consider financial aspects, but also assess environmental impacts and ensure fair involvement of all stakeholders, including communities and employees. Transparency and integrity in reporting are also the main focus, so that all parties involved can understand the business's contribution to sustainability. Thus, a business model that prioritizes sustainability reflects a more comprehensive and responsible vision for a business world that is not only financially successful, but also has a positive social and environmental impact.

In order for sustainable business process modeling to be successful, four key elements are needed.

1. A commercially profitable sustainable business model.

The first pillar of a sustainable business model is commercially profitable sustainability. In developing this business model, the most important essence is being able to gain financial profits without neglecting social responsibility. The key to success here is understanding and formulating a strong value proposition. Critical questions such as who your target customers are, why your business is valuable, and how you fill a market niche are the basis for forming a business identity. A sustainable business model does not only consider profits, but also creates value for customers and society at large. By answering these questions, businesses can formulate marketing and operational strategies that not only generate profits, but also address social needs and values. Thus, the business's ability to continue to attract customers and provide added value on an ongoing basis is the foundation for the sustainability of this business model.

2. A sustainable business model can achieve success in the future

Businesses that are trending or rely on limited resources may be able to make a profit in the first few months, but the critical question that arises is how they will perform over the next year or two. Resource availability and pricing can never be guaranteed or fixed, so building the foundation of a business on trends that may fluctuate can be a significant risk. Similar to building a castle on an unstable rock, long-term business success requires resilience and adaptation to dynamic environmental changes . Therefore, business sustainability is not only related to current market trends or resources, but also involves long-term strategies who can adapt to change. Sustainable businesses understand the need for diversification, innovation and readiness to change with market developments. Thus, building a business that does not only rely on trends or limited resources, but is also able to adapt to long-term uncertainty, is the key to sustainability and success in an ever-changing business world.

3. Sustainable business models use resources that can be utilized for the long term.

Developing a sustainable business model cannot be separated from linkages with sustainable resources. Many business activities are limited by resource availability or high prices, which can be a serious obstacle to the sustainability of the business model. Conversely, some resources may be available cheaply and abundantly, but may have adverse environmental impacts. Palm oil, as an oft-discussed example, is cheaply accessible and abundant, however, the process of obtaining it is often associated with massive deforestation and serious environmental damage. In developing a sustainable business model, it is important to look at the big picture rather than taking shortcuts now. Considering resource availability, environmental risks, and the long-term impact of business decisions is key to creating a business model that is not only financially profitable, but also has a positive impact on the environment and society. Therefore, sustainable strategies must be based on a deep understanding of the resources used, as well as a commitment to be responsible for the resulting social and environmental impacts.

4. Sustainable business models provide benefits

The theory that states that a truly sustainable business model is one that gives as much as is needed carries an innovative concept known as the cyclical loan-use-return model. This concept encourages a responsible consumption paradigm, where sustainable businesses not only utilize resources, but also commit to "borrowing" those resources with the aim of returning them to natural cycles. With this approach, sustainable businesses aim to have a positive impact on the environment, by seeking to minimize their ecological footprint through wise use of resources.

The cyclical loan-use-return model challenges traditional paradigms that tend to drain and consume resources without considering sustainability. Instead of seeing the earth as an unlimited resource, this model recognizes the limitations of resources and views the earth as a partner that needs to be cared for and respected. This concept is not only a theory, but also a practice that can be promoted and implemented by the business world and consumers. By implementing a cyclical loan-use-repay model, businesses can be pioneers in creating a sustainable business environment, while meeting consumer needs without harming the planet and future generations.

So how can integrating sustainability in business process modeling be successful? There are two things that need to be considered, namely, first, the form of company ownership is a crucial consideration in forming a sustainable business model. The traditional top-down business model, where decisions and ownership are centralized at the top of the corporate hierarchy, can lead to significant wage gaps between the highest and lowest levels. These difficulties arise when pay disparities become unreasonable, creating inequalities that can harm morale, productivity and business sustainability.

Initiating more inclusive forms of company ownership, such as employee ownership or cooperative models, could be an important step in addressing these inequalities. Involving everyone in sustainability goals not only creates a fair and responsive work environment, but can also increase employee motivation and engagement. Thus, this model is not only beneficial for keeping businesses on track, but also provides greater opportunities for those who may be less fortunate at the lower levels of the corporate hierarchy.

More distributed ownership and involving all staff in the decision-making process can create stronger bonds between individuals and the organization, along with increased awareness of sustainability goals. In this way, companies not only achieve financial sustainability, but also create a positive impact on social and environmental sustainability, reflecting a deep commitment to corporate social responsibility.

Second, acting environmentally friendly can not only improve your brand's reputation with consumers, but may also come at the cost of higher prices. Nevertheless, this is nothing to worry about. In a blog post, series of posts, or a compelling dedicated brand story page, providing customers with a transparent explanation of the reasons behind higher prices for your products can build their understanding and support for your sustainability principles.

You have the option to involve customers in your company's sustainability journey in various ways. For example, you could pledge a percentage of revenue to support a charity or offer more sustainable shipping or packaging options. Involving customers in discussions about sustainability can create greater engagement and make them committed brand ambassadors. Providing space for customers to participate in business decision making through online forums or groups can also provide new inspiration and innovative ideas that can support the company's sustainability goals.

By making sustainability an integral part of your brand story, it not only builds customer loyalty, but also adds significant value. Customers who feel involved and have a contribution to a company's sustainability efforts tend to be more engaged with long-term success, creating a mutually beneficial relationship between the company and consumers.

CONCLUSION

Sustainable business models play a central role in shaping modern business views and practices. The importance of including sustainability aspects in business models is not only to create financial value, but also to take into account social and environmental impacts. Sustainability-focused business process modeling allows companies to analyze, improve and automate processes with sustainability principles in mind. Additionally, inclusive forms of corporate ownership can help address unreasonable wage gaps and create a fair and

responsive work environment. This approach reflects the responsible consumption paradigm and can increase employee motivation and engagement. Acting environmentally friendly, while it may impact product prices, can improve a brand's reputation. Transparency and communication with customers about the reasons behind higher prices, as well as involving them in discussions about sustainability, can create greater engagement and support. In this context, the cyclical loan-use-return concept becomes an innovation that emphasizes corporate social responsibility in managing resources. Overall, a sustainable business model not only generates financial benefits, but also creates a positive impact on the environment, society and company reputation. By involving all parties, both employees and consumers, in sustainability efforts, companies can form strong relationships, making sustainability a key element in long-term success.

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