

THE ROLE OF INNOVATION IN A SUSTAINABLE BUSINESS MODEL: THE CASE OF ALLEGORIE

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Abstract: *The last several years have had a significant impact on how opportunities are evolving and how adaptive the business sector must be to continue pursuing successful corporate plans. Many businesses have begun to innovate and reuse their resources as a result of these structures, allowing them to continue operating despite the current economic circumstances. The goal of this paper is to highlight the importance of innovation within the context of a sustainable company strategy. Furthermore, it leads to a clearer understanding of how this type of organization has been able to respond to changing market conditions and thrive rather than merely survive. Following an examination of the available literature, a summary of the most common traits and principles may be extrapolated, allowing the option of further investigation in forthcoming studies. The findings indicate that innovation plays a significant role in the success of some firms, generating distinct niches in which even a start-up can thrive. To better demonstrate their views, the writers chose Allegorie as an example, a company that relies on fashion innovations and employs this to keep its sustainable ideals. The study's findings can also be used to gain a better understanding of the current state of business models and the critical roles adaptability and sustainability play in this volatile economic climate.*

Keywords: *business models, innovation, sustainability, value creation, value proposition.*

J.E.L. Classification: *M1, M9.*

1. Introduction

Environmental, ethical, and societal concerns have been the subject of scholarly inquiry since the 1960s, but the pace of this inquiry has accelerated considerably over the past few decades. Sustainability studies has grown from merely assimilating existing hypotheses to incorporating novel frameworks, especially in the age of globalization (Cornescu et al., 2004; Toma, 2005). The development has centred around integrating aspects of institutional theory, stakeholder theory, the resource-based view, the political economy paradigm, and innovative conceptions. In order to provide scientifically driven foundations for pertinent business theory, sustainable business models must be founded on economic, social, and environmental considerations.

Existing business theory disregards the reality that the Earth is the primary stakeholder and origin, where everything begins and concludes (Svensson and Wagner, 2012). Additional elements of sustainable business theory and practise include return of goods, source optimisation, recycling, resource substitution, reuse of supplies, waste disposal, refurbishment, repair, and remanufacturing (Stock, 1998).

Increasing resource and energy efficiency facilitates business innovation in technology and enhancements to the production system. Innovation within the business model is an established topic and one of the most frequently employed buzzwords in management research. It discusses a new approach to conducting business that strives for profitability in an ever-changing marketplace by rethinking the logic underpinning value creation, capture, and delivery (Richardson, 2008; Teece, 2010).

Based on the prior context, the following research questions were formulated:

1. What is the definition of sustainable business model?
2. How does innovation correlate to this idea?
3. How would a strategy for a business model based on these concepts be constructed?

This research paper aims to emphasise the significance of innovation within the larger framework of a sustainable business strategy. In addition, it clarifies how this form of organisation has been able to adapt to shifts in market conditions and thrive, as opposed to merely survive. The article is organised as follows: the following chapter illustrates the literature review, which emphasises some of the most relevant contributions to this field. The study's methodology is described in the third section. The authors affirm the study's conclusions in the fourth section, and the final section serves as an overview of the findings.

2. Literature review

Business models constitute a major topic in the literature. The concept of business model is interconnected with the concept of strategy (Toma and Grădinaru, 2016; Toma et al., 2016a; Toma et al., 2016b). As change has been a certitude (Toma, 2013; Toma and Marinescu, 2015) in the Fourth Industrial Revolution, business models have become not only more and more innovative (Tohănean and Toma, 2018), digitalised (Tohănean et al., 2018; Toma and Tohănean, 2018) but also entrepreneurial (Grădinaru et al., 2017), socially responsible (Toma, 2006; Toma, 2008b; Toma et al, 2011; Imbrișcă and Toma, 2020; Zainea et al., 2020) and environmentalist (Toma and Tohănean, 2019), and related to modern managerial methods and techniques (Toma, 2008a; Marinescu and Toma, 2008; Toma and Naruo, 2009; Catană and Toma, 2021).

In the past ten years, the focus of business model research switched from delineating elements to business model innovation. It disputes the notion that innovation is only feasible when applied technologically to an item or operation. Thus, it lies in the evolution of the business model and conveys a new approach to conducting business. Business model innovation has become recognised as an essential endeavour that companies must engage in to successfully counter the threat posed by new and creative entrants (Lantano et al., 2022).

Business model innovation typically refers to the creation of a business model which is unique to the product-market arena in which a new company competes. A business model strategy of an established firm is innovative when the firm modifies its operations system so that its new structure is original for the firm and perhaps also in the product-market arena in which it engages (Amit and Zott, 2020).

A sustainable business model is characterised by four major components (Figure no. 1.):

- a. The integration of sustainable values or objectives into the present value proposition;
- b. the expansion of the notion of value creation from financial benefit to shared value;
- c. the inclusion of nonfinancial interests in the process of making decisions; and
- d. executives who serve as leaders in sustainability to encourage a new mindset throughout the entire organisation.

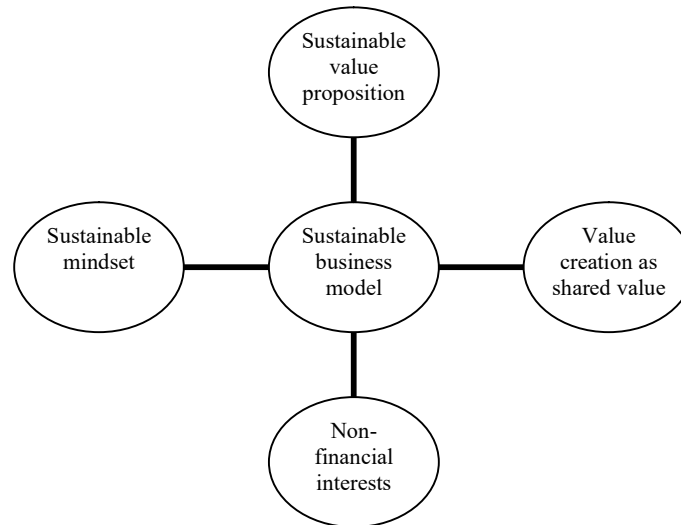


Figure no. 1. Sustainable business models

Source: adapted from Ferlito and Faraci, 2022

The primary task consists of converting the value proposition into a sustainable value proposition that enables value creation by taking into account the requirements of consumers, investors, vendors, collaborators, community, society, and the natural world (Baldassarre et al., 2017). It must demonstrate economic, environmental, and social results. Managers who wish to avoid value degradation by means of innovation in business models should adopt a sustainable value proposition (Roome and Louche, 2016). The sustainable business strategy has to minimise the loss of societal and environmental value. In order to accomplish this, managers must comprehend precisely what value is on the cusp of being lost and act accordingly according to the business model. The sustainable business model additionally takes into account the value creation in the conducted activities and its distribution as eco-social advantages that are distributed equitably among all stakeholders. In other words, it may involve altering energy inputs in the industry through the utilisation of alternative sources of energy, such as solar power and the wind, or altering the method by which products are transported to the market. The final aspect about a sustainable business model that innovation needs to take into account is the system for value capture, or the quantity of value that each stakeholder appropriates for themselves. It requires enterprises to capture both economic and social as well as environmental benefits for stakeholders (Ferlito and Faraci, 2022).

To fully understand how innovation would integrate into the aforementioned model, one must comprehend the constraints concerning innovation within a company. Someone in management might not succeed at innovation if they are incapable of generating creative ideas or avoids implementing and scaling such concepts. Rarely do conditions that foster creativity facilitate the implementation of projects. Maximising the conditions that foster inventiveness is unlikely to result in a rise in innovation because the type of knowledge rearrangement required for creativity generates uncertainty regarding the future applicability of ideas. Likewise, conditions that facilitate practise may not be conducive to innovative thought. For example, eliminating uncertainty may improve implementation since it depicts standard procedures for execution and decreases the cost of incorrectly estimating a project's value. Thus, incremental innovation is more prevalent than radical innovation. It is unlikely that a manager who chooses to stay away from uncertainty will pursue extremely innovative ideas. In conclusion, managers who desire to increase sustainable innovation may attempt to

boost creativity, improve their tolerance for unpredictability, or separate creativity from the apparent risk of an idea (Calic et al., 2020).

In the following sections, we will examine a case study of an innovative and sustainable startup and discuss their business model, as they do not present the same limitations that an already established business has and as such, has more liberty to explore innovatively and create a strategy and a model that can be based on such ideas.

4. Research methodology

The present study employs qualitative research methods, acquiring and analysing secondary data on the topic from previously published books, reviews, reports, and research papers. In the first part, the authors examine the definition of the notions of innovation, sustainability, and business models before listing their essential components. Consequently, this strategy employed a number of pertinent concepts, such as business model innovation, the creation and capture of value and sustainable business models.

As is conventional in previous studies, the investigation began with a briefing and discussion of the principles that were subsequently assimilated and demonstrated via the use of a case study in an attempt to meet the declared purpose of this research. The perspective of this paper is based on research performed over the past decade by an array of eminent academicians in the same field.

5. Case study and findings: Allégorie

The following company was chosen by the authors based on its business model and long-term objectives. This business has been able to pursue profit without compromising its sustainability goals and has found a novel method to attract customers to its products. Allégorie has remained true to its ethical and sustainable paradigm since its inception. Allégorie is distinguished by its pursuit of eco-friendly materials, passion for uplifting communities, and desire for positive change, which enables the development of purposeful and enduringly attractive objects. Allégorie, a women-owned, autonomous, and socially-responsible company, is committed to stretching the boundaries of sustainable fashion whilst addressing the issue of food waste, one fruit at a time. A forthright conversation about a shared astonishment in the food waste as well as greenwashing practises of the fashion industry led to a desire to improve fashion. With the assistance of family and friends, the two proprietors began their search for sustainable replacements to animal-derived leather and PVC (or "vegan leather"). After innumerable obstacles, this adventure became a company, an innovative business that transforms unwanted fruits into useful accessories. Allégorie's development is guided by humanist principles: the company is dedicated to reducing food waste, conserving resources, supporting its suppliers, and caring for the community. Every move ahead is taken with the utmost regard for people and the environment. According to the data uncovered by this business, the world's food waste generates 4,4 gigatonnes of carbon dioxide equivalence per year. This accounts for approximately 8% of the world's total GHG emissions, which is nearly equal to the pollutants from all automobiles. If food waste were a nation, it would rank as the third largest emitter following China and the USA. Every single bag at Allégorie serves to reduce food waste by repurposing discarded produce from supermarkets and juice factories. They go above and beyond to ensure that every bag they sell is genuinely eco-friendly and cruelty-free. In order to minimise their effect on the environment and animals, they also use numerous plant-based and recycled materials, such as non-edible crops as well as post-consumer recycled polymers. In contrast with the majority vegan leathers, the components are 100 percent PVC-free. Their manufacturing collaborators share their vision and adhere to stringent guidelines that minimise their environmental

impact, such as zero emissions of dangerous chemicals, the use of green energy, and net zero water consumption. This company's claim that their bags are produced from apples is not an attempt at greenwashing. For instance, every one of their Gala Backpacks repurposes approximately 550 fruits, with bio content comprising about 80% of the bag. Apples are one of the most popular fruits in the world, and they are revered in both faith as well as popular culture to be a fruit with numerous symbolic meanings. The apple is the most utilised fruit in the United States, with annual consumption of apple juice at the rate of 1.6 gallons per individual, freshly picked apples at 10.7 pounds per person, and preserved, dried out, and frozen apples at 3.3 pounds per person, according to a 2015 USDA study. China, the European Union, and the United States produce over 75 percent of the world's supply of raw apples. In contrast to exotic produce, apples are consumed predominantly locally. 25% of apples produced in the United States are exported, whereas only 5% of apples consumed within the United States are imported. Apples are not an exception to the global food waste crisis. Each year, an estimated 3,7 trillion fruit are discarded. That's nearly 50 fruits per individual. 30% of apples are thrown away by consumers, at home, after purchase, and 47% of apples are squandered annually in the United States. Apples are turned into an array of items, the most common of which is apple juice. It is projected that 13% of the raw apple crop is used to produce apple juice.

In large-scale apple juice production, approximately 75% of an apple is utilised for juice, while the balance, or 25%, is the by-product, apple pomace, and this is produced in millions of tonnes around the globe. Due to its high moisture content and organic compounds that are susceptible to enzyme breakdown and rapid oxidation, which apple pomace requires a high concentration of oxygen to decompose within a specific temperature range. If not disposed of appropriately, this byproduct contributes to high greenhouse gas (GHG) emissions and health risks. The good news is that apple pomace contains natural fibres that can be repurposed into valuable products. Due to the high concentrations of cellulose and lignin, numerous plant materials are extremely resilient. For instance, bamboo fibres contain nearly 50 percent cellulose, which explains why the plant is so resilient. Lignin-rich vegetation is more resistant to decomposition. Jute is an example of a material with extremely high MPa for its tensile strength. Apple peels along with other fruit scraps discarded by the beverage industry are an ideal source of natural fibres. In fact, apple shells comprise more than 50 percent of an apple's fibre content. By combining these discarded fibres with additional bio-contents along with water-based PU, an original, cruelty-free, and environmentally friendly substitute to leather is created (Allégorie, 2022).

What the authors of this paper have observed from this case is that this startup has identified a long-term issue they wish to address and recognised a novel and innovative idea that has enabled them to develop a business model around it. According to the previous section, it is clear that this business not only meets the criteria for sustainable business models, but also the criteria for innovation. One can observe the subsequent process (Figure No 2.) :

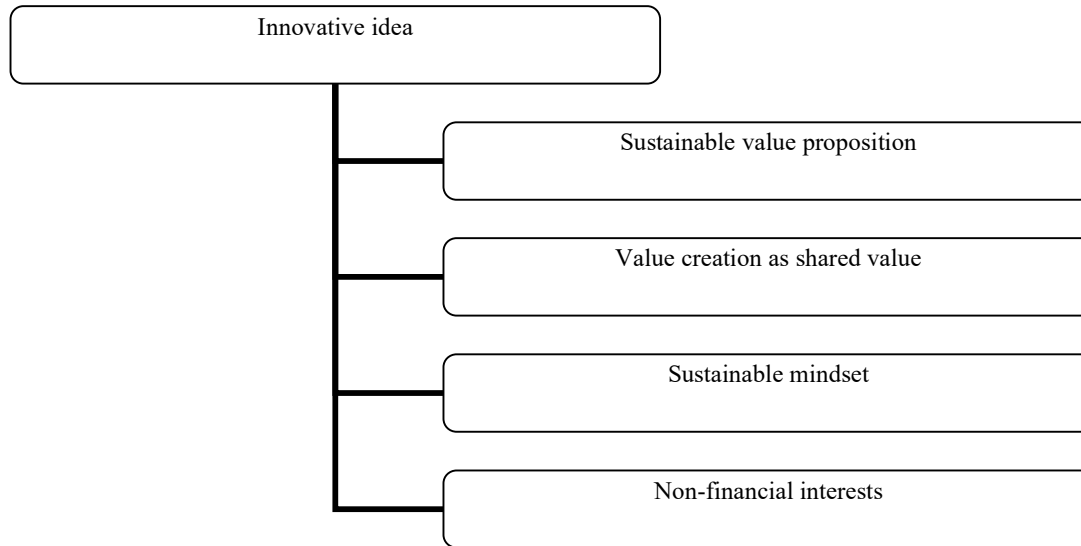


Figure no. 2. Business model: Allégorie

Source: authors' contribution

By employing their innovative concept, the company was able to create a sustainable business proposition. This company's primary objective is to generate a profit, but they also have a non-financial interest, as evidenced by their entire production process and the way they choose to conduct business. Their commitment to sustainability permeates their complete business strategy and value generation. Creating shared value is the practise of generating economic value in a manner that produces value for the community by meeting its needs and challenges, therefore one could argue that this startup has been doing so since its inception.

6. Conclusions

In conclusion, the purpose of this research paper was to highlight the important role of innovation within the context of a sustainable business model. In addition, it sought to explain how this type of business has been capable of adapting to changing market conditions and flourish, rather than merely endure. In this regard, this paper summarised and synthesised the published literature on the topic over the past decade. In the subsequent chapter, the methodology for conducting quantitative and qualitative research for the present research was set forth. In the fifth section, the study's findings, observations, are explored. The authors have concisely explained the study's central concerns and showed their responses at every turn. However, the aforementioned study has certain limitations. One such limitation is that it concentrates on the procedures of a single business, a start-up, a nearly perfect example of how such a model is utilised. It may be advantageous to conduct additional research to determine what other already established companies could achieve by implementing these strategies.

References

1. Allégorie, 2022. *Our Story- Allegorie Design*. [online] Available at: <<https://allegoriedesign.com/pages/about-us>> [Accessed 5 May 2023].
2. Amit, R. and Zott, C., 2020. *Business model innovation strategy: Transformational concepts and tools for entrepreneurial leaders*. Hoboken, NJ: John Wiley & Sons.

3. Baldassarre, B., Calabretta, G., Bocken, N. M. P. and Jaskiewicz, T., 2017. Bridging sustainable business model innovation and user-driven innovation: A process for sustainable value proposition design. *Journal of Cleaner Production*, 147, pp.175–186.
4. Calic, G., Shevchenko, A., Ghasemaghaei, M., Bontis, N. and Ozmen Tokcan, Z., 2020. From sustainability constraints to innovation: Enhancing innovation by simultaneously attending to sustainability and commercial imperatives, *Sustainability Accounting, Management and Policy Journal*, 11(4,) pp.695-715.
5. Catană, Ș. and Toma, S.-G., 2021. Marketing mix and corporate social responsibility in automotive industry - Case study: Mazda Motor Corporation. *Annals of the „Constantin Brâncuși” University of Târgu Jiu, Economy Series*, 1, pp.205-209.
6. Cornescu, V., Curteanu, D., Marinescu, P. and Toma, S.-G., 2004. *Management from Theory to Practice*. Bucharest: University of Bucharest Publishing House.
7. Ferlito, R. and Faraci, R., 2022. Business model innovation for sustainability: a new framework. *Innovation & Management Review*, 19(3), pp.222–236.
8. Grădinaru, C., Toma, S.-G. and Papuc, R., 2017. Entrepreneurship in the world: The analysis of the Global Entrepreneurship Index in the period 2015-2017. *Ovidius University Annals: Economic Sciences Series*, XVII(2), pp.14-18.
9. Imbrișcă, C. and Toma, S.-G., 2020. Social responsibility, a key dimension in developing a sustainable higher education institution: The case of students' motivation. *Amfiteatru Economic*, 22(54), pp.447- 461.
10. Lantano, F., Petruzzelli, A. M. and Panniello, U., 2022. Business model innovation in video-game consoles to face the threats of mobile gaming: Evidence from the case of Sony PlayStation. *Technological Forecasting and Social Change*, 174(1), pp. 121210.
11. Marinescu, P. and Toma, S.-G., 2008. Implementing Lean Management in the Romanian Industry. In: T. Koch, ed., 2008. *Lean Business Systems and Beyond*. New York: Springer, New York, pp.269-276.
12. Richardson, J., 2008. The business model: An integrative framework for strategy execution. *Strategic Change*, 17(5-6), pp.133–144.
13. Roome, N., and Louche, C., 2016. Journeying toward business models for sustainability: A conceptual model found inside the black box of organisational transformation. *Organization & Environment*, 29(1), pp.11–35.
14. Stock, J. R., 1998. *Development and Implementation of Reverse Logistics Programs*. Lombard: Council of Logistics Management.
15. Svensson, G. and Wagner, B., 2012. Business sustainability and e-footprints on earth's life and ecosystems – generic models. *European Business Review*, 24(6), pp.543-552.
16. Teece, D. J., 2010. Business models, business strategy and innovation. *Long Range Planning*, 43(2-3), pp.172–194.
17. Tohănean, D. and Toma, S.-G., 2018. Innovation, a key element of business models in the Fourth Industrial Revolution. *Network Intelligence Studies*, VI(12), pp.121-130.
18. Tohănean, D., Toma, S.-G. and Dumitru, I., 2018. Organizational performance and digitalization in industry 4.0. *Journal of Emerging Trends in Marketing and Management*, 1(1), pp.282-293.
19. Toma, S.-G., 2005. Fordism, postfordism and globalization. *Amfiteatru Economic*, 7(17), pp.135-138.

20. Toma, S.-G., 2006. From quality to the corporate social responsibility. *Amfiteatru Economic*, 8(20), pp.145-149.
21. Toma, S.-G., 2008a. What is Six Sigma? *Manager*, 8, pp.152–155.
22. Toma, S.-G., 2008b. Social responsibility and corporate citizenship in 21st century. *Amfiteatru Economic*, 10(23), pp.80-85.
23. Toma, S.-G. and Naruo, S., 2009. Quality assurance in the Japanese universities. *Amfiteatru Economic*, 11(26), pp.574-584.
24. Toma, S.-G., Stanciu, C. and Irimia, E., 2011. *Landmarks in the evolution of social responsibility of organizations in the twentieth century*. Proceedings of the 5th International Scientific Session Challenges of the Knowledge Society. Bucharest: PRO Universitaria, pp.1352-1360.
25. Toma, S.-G., 2013. *Economia Întreprinderii*. București: Editura Universității din București.
26. Toma, S.-G. and Marinescu, P., 2015. Strategy and change. *Manager*, 21(1), pp.145-150.
27. Toma, S.-G. and Grădinaru, C., 2016. From military strategy to business strategy. *Strategii Manageriale*, 31(1), pp. 227-233.
28. Toma, S.-G., Marinescu, P. and Constantin, I., 2016a. *Approaches to strategic thinking in business organizations*. Proceedings of the 10th International Conference on Business Excellence, Academy of Economic Studies, Bucharest, Romania, pp.184-191. [online], Available at: <https://accord.edu.so/course/material/energy-and-climate-change-289/pdf_content> [Accessed 28 April 2023].
29. Toma, S.-G., Marinescu, P. and Grădinaru, C., 2016b. Strategic planning and strategic thinking. *Revista Economică*, 68(5), pp.168-175.
30. Toma, S.-G. and Tohănean, D., 2018. Internet of Things, digitalization and the future of business models. *Strategii Manageriale*, IV(42), pp.130-137.
31. Toma, S.-G. and Tohănean, D., 2019. Green business models: The case of a German automaker. *Quality-Access to Success*, 20(S2), pp.635-640.
32. Zainea, L. N., Toma, S.-G., Marinescu, P. and Chițimiea, A., 2020. Combating unemployment through social entrepreneurship in the European context. *Business Ethics and Leadership*, 4(4), pp.85-98.