# THE BUSINESS MODEL: WAY TO HIGHLIGHT THE CAUSE-AND-EFFECT RELATIONSHIPS BETWEEN STAKEHOLDERS AND MONEY

# **IONELA SAMUIL**\*

**ABSTRACT:** The business model is foundational to every organization, evolving through phases from initial definitions and classifications to innovations and the current development of open network-based models with systematic monitoring and strategy mapping capabilities. This evolution continually gives rise to specialized versions. Entrepreneurs widely embrace the CANVAS business model due to its visual nature, facilitating the visualization of business potential. Unlike mere lists, its nine dimensions are structured into a table that visualizes relationships between components. The model divides into left and right sections, with the value proposition central between them, fostering mapping, discussion, design, and innovation across the nine dimensions. In contrast, static business models face criticism for their inflexibility, prompting the rise of dynamic business models in dynamic economic landscapes. Dynamic models integrate traditional frameworks with dynamic system modeling, mapping value creation elements into causal relationships. Simulation enables analysts and entrepreneurs to understand how the organization responds to strategic changes in terms of performance, innovation, and value creation. The analysis of the evolution of business models, the exploration of the applicability of the CANVAS model, the examination of the advantages of dynamic models, and the study of the impact of dynamic systems modeling (SD) reflect the central themes of the research. These objectives are aimed at an in-depth exploration of the concept of business models within the context of contemporary dynamic environments.

**KEY WORDS:** business models, CANVAS, organization, value propositions, dynamic system.

JEL CLASSIFICATIONS: L21, L26, O21.

### **1. INTRODUCTION**

With the development of information and communication technologies in the 1990s, an ephemeral fascination with the concept of business models emerged.

<sup>\*</sup> Ph.D., University of Petroșani, Romania, <u>ionelasamuil@gmail.com</u>

Subsequently, economic and other forces, such as continuous transformation, technological changes, globalization, and sustainability policies, have rekindled interest in this concept. Since 2005, the Institute for Business Value's biannual studies on business development have presented data supporting the notion that decision-makers in large companies consider the development of innovative business models a major priority. A study conducted in 2009 highlights that seven out of ten companies are engaged in business model innovation, and an astounding 98% of these companies modify their business models to some extent (Casadesus-Masanell & Ricart, 2010). Recent technological and communicational advances have underscored the importance of creating a business model, which is considered fundamental for any organization.

To be successful, business models should be built with the customer (Kandampully, 2006) at the core and designed to support the overall strategy of the firm (Perić,2016). Cost control and value capture are among the most frequently mentioned components of a business model, along with value proposition, target customer, resources, and key processes. Given the interaction between these elements, they must be approached dynamically, with an emphasis on innovations that provide a competitive advantage to a tourism company (Souto, 2015).

Dynamic systems modeling (DS) is used to frame and understand the dynamic aspects of various complex social and managerial systems (Sterman, 2000). This modeling approach is adapted to specific managerial phenomena and involves mapping the structure of the business system to facilitate understanding of the behavior within management processes. It also quantifies causal interactions to simulate the system's possible behaviors over time (Warren, 2008). Specifically, the SD modeling of the business system highlights all the variables associated with the phenomenon under observation.

When real experimentation is too expensive, as is often the case when launching a new business, simulation becomes a valuable tool for discovering how complex systems work and identifying key levers (Davis, et al., 2006). Simulation can compress or expand time and space, allowing entrepreneurs to simulate the evolution of a business over years or even decades (Sterman, 2000).

Unlike other modeling and simulation approaches, dynamic systems take a holistic view of all relevant elements contributing to strategy implementation and awareness of its consequences. This holistic perspective focuses on incorporating feedback loops, accumulations, time delays, and nonlinear dynamics to capture dynamic feedback processes (Sterman, 2000). Several researchers emphasize the necessity of adopting such a holistic approach to outline business models, which highlights causal links between its elements (Baden-Fuller & Mangematin, 2012).

For instance, Casadesus-Masanell & Ricart (2010) argue that business models can generate virtuous cycles—reinforcing feedback loops that strengthen parts of the model over time. They define these virtuous cycles as critical factors for the successful operation of business models and recommend strengthening management implications across different aspects accordingly.

Furthermore, unlike other simulation methods, building System Dynamics (SD) models offers the opportunity to engage stakeholders actively (investors, business partners, collaborators). SD facilitates a shared understanding and integration of

strategic ideas among multiple actors during the model-building process. While all models are imperfect representations of reality (Greenberger, et al., 1976), stakeholder involvement can enhance model accuracy, legitimacy, and promote alignment of key players' mental models and consensus on actions to be taken (Vennix, 1996).

From a strategic learning perspective, this consensus among stakeholders can deepen understanding of potential causes and effects within the business system, as well as refine and calibrate assumptions associated with the model (Bianchi, 2002). Stakeholder engagement thus fosters a double-loop learning process, where management teams not only learn from past actions but also evolve their mental models of how the business operates (Kim, et al., 2013).

The features that make System Dynamics (SD) simulation method suitable for strategy design are closely related to its theoretical logic, which focuses on describing and exploring how inputs into a complex system of interconnected causal loops generate outputs (Torres, et al., 2017). As noted by (Davis, et al., 2006), "simulation is particularly useful when the theoretical focus is longitudinal, nonlinear, or processual, or when empirical data are difficult to obtain". These characteristics align with the pragmatic scientific approach required for business model design research (Roome, 2001).

Unlike other modeling and simulation approaches, the SD methodology can provide a deeper understanding of how specific conditions (such as strategies) can influence the stability of a system (such as a new business and its performance) (Sastry, 1997).

The main objectives of the research are:

- **O1: Analysis of the evolution of Business Models**: Investigate the progression of business models from basic definitions and classifications to dynamic models that incorporate systems modeling, aimed at understanding and simulating strategic changes within organizations.
- **O2: Exploration of the applicability of the CANVAS Model**: Assess how the CANVAS model can be utilized to visualize and optimize business potential by examining the interactions between its various components.
- **O3: Examination of the advantages of Dynamic Models**: Investigate the benefits of adopting dynamic business models in unstable economic environments, with a focus on their capacity to simulate and predict long-term organizational performance.
- **O4: Study of the impact of Dynamic Systems Modeling (SD)**: Analyze how the implementation of dynamic systems modeling can enhance the understanding of causal relationships within a business model and how these relationships influence long-term performance and innovation.

#### 2. METHODOLOGY

The methodology of this research is structured around the four main objectives (see Figure 1), each addressing a distinct aspect of business model evolution and application. A combination of qualitative and quantitative methods is employed to achieve these objectives, ensuring a comprehensive analysis of both theoretical and practical elements of business models.



Figure 1. Methodology scheme

A comprehensive literature review was conducted to trace the evolution of business models from traditional static frameworks to more dynamic models. The review covered academic journals, books, and industry reports to identify key trends, definitions, and classifications of business models. Special emphasis was placed on understanding the CANVAS model's structure, components, and its application in different industries. The review also included an analysis of dynamic system modeling (DS) approaches to understand their integration into business model frameworks.

- **O1:** To investigate the progression of business models from basic definitions to dynamic models incorporating systems modeling, a systematic literature review was conducted. The review involved identifying key literature sources, including academic journals, books, and industry reports, that discuss the historical development of business models. This analysis identified the transition points from static to dynamic models and explored how systems modeling has been integrated to address organizational strategic changes.
- **O2:** To assess the applicability of the CANVAS model in visualizing and optimizing business potential, a case study approach was utilized. The selection of case studies focused on businesses that have successfully implemented the CANVAS model. Businesses from various industries, such as technology, retail, and manufacturing, were selected to demonstrate the versatility of the CANVAS model. Each case study provided insights into how the nine components of the CANVAS model interact within different business contexts. The interactions between components, such as key activities, value propositions, and customer relationships, were examined to understand how the model aids in visualizing business potential and identifying areas for optimization.

- **O3:** The benefits of adopting dynamic business models in unstable economic environments were explored through a comparative analysis of traditional static models versus dynamic models.
- The research compared traditional static business models with dynamic models, highlighting their respective strengths and limitations. The analysis focused on how dynamic models can adapt to changing economic conditions, using real-world examples from industries that operate in volatile markets.
- **O4:** To analyze the impact of dynamic systems modeling on understanding causal relationships within business models, the research employed SD modeling techniques. This multi-faceted methodology allows for a robust investigation of business model evolution, the applicability of the CANVAS model, the advantages of dynamic models, and the impact of dynamic systems modeling on organizational strategy and innovation.

# 3. INSIGHTS INTO THE BUSINESS MODEL CONCEPT

However, despite the interest in the business model concept, researchers do not universally agree on a common definition and vocabulary. Consequently, there exists a plethora of definitions that vary in scope (see Table 1).

Author	Conceptualization		
Amit și Zott (2001)	It outlines the design of transaction content, structure and governance to create value by exploiting business opportunities.		
Stahler (2002)	It is always a simplification of complex reality and helps to understand the fundamentals of an existing business or to plan what a future business should look like.		
Hedman şi Kalling (2003)	It is a term often used to describe the key components of a particular business as well as longitudinal components of the process to cover the dynamics of the business model over time.		
Leem și colab. (2004)	A set of strategies for corporate establishment and management, including a revenue model, high-level business processes and alliances.		
Osterwalder și colab. (2005)	A conceptual tool that contains a set of elements and their relationships and allows the expression of a firm's business logic.		
Kallio și colab. (2006)	The means by which a firm is able to create value by coordinating the flow of information, goods, and services among the various participants with which it comes into contact.		
Rajala și Westerlund (2007)	Ways to create value for customers and how a business turns market opportunities into profit.		
Al-Debei și colab. (2008)	Abstract representation of all architectural and financial arrangements designed and developed to achieve the organization's strategic objectives.		
Casadesus-Masanell și Ricart (2011)	It is a reflection of a company's strategy.		
Upward și Jones (2016)	Systemic model of concepts that describe and guide business as a social system within economic, social and environmental systems.		

#### Table 1. Business model visions

According to (Bocken, et al., 2014), businesses can adopt one or a combination of business model archetypes to facilitate their own transformation. These archetypes

are designed to explore new methods of creating and delivering sustainable value, and to structure the business model, offering guidance for realizing new opportunities.

Model	Business Model Canvas, Osterwalder & Pigneur, 2013	
	The BMF is made of 9 building blocks to describe how an organisation	
The Eastern Wald Laws	creates, delivers and captures value. These building blocks are organized in	
	the categories infrastructure (key activities, key resources, key partners),	
• •	offering (the value proposition), customers (customer segments, channels,	
and the second s	relationship) and financial (cost structure, revenue stream).	
Model	Flourishing Business Canvas, Upward, 2016	
	In order for a company to do "well" and "good", only five more questions	
	were added to the existing 9 of the business model canvas which resulted in	
	the 16 new building blocks of the Flourishing Business Model Canvas that	
	takes respect of economy, society and environment. The building blocks are	
arran analar ar	valued co- creation and co-destruction, relationships, channels, stakeholders,	
	ecosystem actors, needs, partnerships, governance, resources, activities,	
	biophysical stocks, ecosystem services, goals, benefits and costs.	
Model	IBM's Component Business Model (CBM), IBM, 2006	
	The BMF depicts the activities of the company on an operational level. Each	
Allen bland bland	of the 25 building blocks of the CMB is defined in five dimensions: business	
	purpose, activities, resources, governance model and business services. It is	
	very much technologically oriented and doesn't depict the values other BMF	
	normally set the focus on.	
	Fluidminds framework for a successful business, Stähler & Hobcraft,	
Model	Fluidminds framework for a successful business, Stähler & Hobcraft,	
Model	Fluidminds framework for a successful business, Stähler & Hobcraft, 2013	
	Fluidminds framework for a successful business, Stähler & Hobcraft, 2013 The BMF sets the focus on a company's values, therfore it depicts the value	
Model	Fluidminds framework for a successful business, Stähler & Hobcraft, 2013   The BMF sets the focus on a company's values, therfore it depicts the value proposition for the customer, but as well the architecture and the value chain.	
	Fluidminds framework for a successful business, Stähler & Hobcraft, 2013   The BMF sets the focus on a company's values, therfore it depicts the value proposition for the customer, but as well the architecture and the value chain. Unlike other BMF it as well shows the internal values of the company. In	
Model	Fluidminds framework for a successful business, Stähler & Hobcraft, 2013   The BMF sets the focus on a company's values, therfore it depicts the value proposition for the customer, but as well the architecture and the value chain. Unlike other BMF it as well shows the internal values of the company. In each building block except the revenue model, the BMF explores different	
Model	Fluidminds framework for a successful business, Stähler & Hobcraft, 2013 The BMF sets the focus on a company's values, therfore it depicts the value proposition for the customer, but as well the architecture and the value chain. Unlike other BMF it as well shows the internal values of the company. In each building block except the revenue model, the BMF explores different aspects of the value creation.	
Model	Fluidminds framework for a successful business, Stähler & Hobcraft, 2013   The BMF sets the focus on a company's values, therfore it depicts the value proposition for the customer, but as well the architecture and the value chain. Unlike other BMF it as well shows the internal values of the company. In each building block except the revenue model, the BMF explores different aspects of the value creation.   VARIM model, Afuah, 2014	
Model	Fluidminds framework for a successful business, Stähler & Hobcraft, 2013   The BMF sets the focus on a company's values, therfore it depicts the value proposition for the customer, but as well the architecture and the value chain. Unlike other BMF it as well shows the internal values of the company. In each building block except the revenue model, the BMF explores different aspects of the value creation.   VARIM model, Afuah, 2014   Afuah argues that a BM is about making money, and the money comes from	
Model	Fluidminds framework for a successful business, Stähler & Hobcraft, 2013   The BMF sets the focus on a company's values, therfore it depicts the value proposition for the customer, but as well the architecture and the value chain. Unlike other BMF it as well shows the internal values of the company. In each building block except the revenue model, the BMF explores different aspects of the value creation.   VARIM model, Afuah, 2014   Afuah argues that a BM is about making money, and the money comes from the customer, so in order to sell so the customer the company needs a good	
Model	Fluidminds framework for a successful business, Stähler & Hobcraft, 2013   The BMF sets the focus on a company's values, therfore it depicts the value proposition for the customer, but as well the architecture and the value chain. Unlike other BMF it as well shows the internal values of the company. In each building block except the revenue model, the BMF explores different aspects of the value creation.   VARIM model, Afuah, 2014   Afuah argues that a BM is about making money, and the money comes from the customer, so in order to sell so the customer the company needs a good value proposition. To target that, the company needs to know the target	
Model	Fluidminds framework for a successful business, Stähler & Hobcraft, 2013   The BMF sets the focus on a company's values, therfore it depicts the value proposition for the customer, but as well the architecture and the value chain. Unlike other BMF it as well shows the internal values of the company. In each building block except the revenue model, the BMF explores different aspects of the value creation.   VARIM model, Afuah, 2014   Afuah argues that a BM is about making money, and the money comes from the customer, so in order to sell so the customer the company needs a good value proposition. To target that, the company needs to know the target market and how to structure the monetisation of these markets. To grow	
Model Wodel Model Model	Fluidminds framework for a successful business, Stähler & Hobcraft, 2013   The BMF sets the focus on a company's values, therfore it depicts the value proposition for the customer, but as well the architecture and the value chain. Unlike other BMF it as well shows the internal values of the company. In each building block except the revenue model, the BMF explores different aspects of the value creation.   VARIM model, Afuah, 2014   Afuah argues that a BM is about making money, and the money comes from the customer, so in order to sell so the customer the company needs a good value proposition. To target that, the company needs to know the target market and how to structure the monetisation of these markets. To grow against competitors, the company needs to have a growth strategy. To	
Model Wodel Model Model	Fluidminds framework for a successful business, Stähler & Hobcraft, 2013   The BMF sets the focus on a company's values, therfore it depicts the value proposition for the customer, but as well the architecture and the value chain. Unlike other BMF it as well shows the internal values of the company. In each building block except the revenue model, the BMF explores different aspects of the value creation.   VARIM model, Afuah, 2014   Afuah argues that a BM is about making money, and the money comes from the customer, so in order to sell so the customer the company needs a good value proposition. To target that, the company needs to know the target market and how to structure the monetisation of these markets. To grow against competitors, the company needs to have a growth strategy. To execute all that, the company requires certain capabilities in for of resources	
Model	Fluidminds framework for a successful business, Stähler & Hobcraft, 2013   The BMF sets the focus on a company's values, therfore it depicts the value proposition for the customer, but as well the architecture and the value chain. Unlike other BMF it as well shows the internal values of the company. In each building block except the revenue model, the BMF explores different aspects of the value creation.   VARIM model, Afuah, 2014   Afuah argues that a BM is about making money, and the money comes from the customer, so in order to sell so the customer the company needs a good value proposition. To target that, the company needs to know the target market and how to structure the monetisation of these markets. To grow against competitors, the company needs to have a growth strategy. To execute all that, the company requires certain capabilities in for of resources and assets.	
Model Wodel Model Model	Fluidminds framework for a successful business, Stähler & Hobcraft, 2013   The BMF sets the focus on a company's values, therfore it depicts the value proposition for the customer, but as well the architecture and the value chain. Unlike other BMF it as well shows the internal values of the company. In each building block except the revenue model, the BMF explores different aspects of the value creation.   VARIM model, Afuah, 2014   Afuah argues that a BM is about making money, and the money comes from the customer, so in order to sell so the customer the company needs a good value proposition. To target that, the company needs to know the target market and how to structure the monetisation of these markets. To grow against competitors, the company needs to have a growth strategy. To execute all that, the company requires certain capabilities in for of resources and assets.   Business Model Navigator, Gassmann & Frankenberger, 2014	
Model	Fluidminds framework for a successful business, Stähler & Hobcraft, 2013   The BMF sets the focus on a company's values, therfore it depicts the value proposition for the customer, but as well the architecture and the value chain. Unlike other BMF it as well shows the internal values of the company. In each building block except the revenue model, the BMF explores different aspects of the value creation.   VARIM model, Afuah, 2014   Afuah argues that a BM is about making money, and the money comes from the customer, so in order to sell so the customer the company needs a good value proposition. To target that, the company needs to know the target market and how to structure the monetisation of these markets. To grow against competitors, the company needs to have a growth strategy. To execute all that, the company requires certain capabilities in for of resources and assets.   Business Model Navigator, Gassmann & Frankenberger, 2014   The BMF focuses on answering four associated questions: explicating the	
Model Wodel Model Model Model	Fluidminds framework for a successful business, Stähler & Hobcraft, 2013   The BMF sets the focus on a company's values, therfore it depicts the value proposition for the customer, but as well the architecture and the value chain. Unlike other BMF it as well shows the internal values of the company. In each building block except the revenue model, the BMF explores different aspects of the value creation.   VARIM model, Afuah, 2014   Afuah argues that a BM is about making money, and the money comes from the customer, so in order to sell so the customer the company needs a good value proposition. To target that, the company needs to know the target market and how to structure the monetisation of these markets. To grow against competitors, the company needs to have a growth strategy. To execute all that, the company requires certain capabilities in for of resources and assets.   Business Model Navigator, Gassmann & Frankenberger, 2014   The BMF focuses on answering four associated questions: explicating the target customer, the value proposition towards the customer, the value chain	
Model Wodel Model Model Model Model	Fluidminds framework for a successful business, Stähler & Hobcraft, 2013   The BMF sets the focus on a company's values, therfore it depicts the value proposition for the customer, but as well the architecture and the value chain. Unlike other BMF it as well shows the internal values of the company. In each building block except the revenue model, the BMF explores different aspects of the value creation.   VARIM model, Afuah, 2014   Afuah argues that a BM is about making money, and the money comes from the customer, so in order to sell so the customer the company needs a good value proposition. To target that, the company needs to know the target market and how to structure the monetisation of these markets. To grow against competitors, the company needs to have a growth strategy. To execute all that, the company requires certain capabilities in for of resources and assets.   Business Model Navigator, Gassmann & Frankenberger, 2014   The BMF focuses on answering four associated questions: explicating the target customer, the value proposition towards the customer, the value chain behind the creation of this value, and the revenue model that captures the	
Model Wodel Model Model Model Model Model	Fluidminds framework for a successful business, Stähler & Hobcraft, 2013   The BMF sets the focus on a company's values, therfore it depicts the value proposition for the customer, but as well the architecture and the value chain. Unlike other BMF it as well shows the internal values of the company. In each building block except the revenue model, the BMF explores different aspects of the value creation.   VARIM model, Afuah, 2014   Afuah argues that a BM is about making money, and the money comes from the customer, so in order to sell so the customer the company needs a good value proposition. To target that, the company needs to know the target market and how to structure the monetisation of these markets. To grow against competitors, the company needs to have a growth strategy. To execute all that, the company requires certain capabilities in for of resources and assets.   Business Model Navigator, Gassmann & Frankenberger, 2014   The BMF focuses on answering four associated questions: explicating the target customer, the value proposition towards the customer, the value chain behind the creation of this value, and the revenue model that captures the value. By doing so, the business model of a company becomes tangible and	

Figure 2. Types of Business models

The research and development of business models has evolved through various phases, from initial definitions and classifications (Magretta, 2002), to their composition and construction (Osterwalder & Pigneur, 2010), and from business model innovation (Chesbrough, 2010), to the development of open network-based business models (Lindgren, et al., 2010). These advancements now encompass systematic monitoring systems and strategy mapping capabilities. As an external approach, business model archetypes offer a means to visualize the potential impacts of business model innovations, fostering creative confrontation and cross-pollination of ideas. When archetypes from one context or industry are reinterpreted or applied elsewhere, they inspire innovation.

The emergence of these phenomena has spurred the development of specific ontologies and design methods, such as the Business Model Canvas (Osterwalder & Pigneur, 2010), STOF model (Bouwman, et al., 2008), VISOR (El-Sawy & Pereira, 2013), Business Model Navigator (Gassmann, et al., 2015), Business Model Cube (Lindgren & Rasmussen, 2013), Lean Startup (Lean Canvas) (Maurya, 2013), Four-Factor Template (Johnson, et al., 2008), Six-Element Circle Template (Business Model Institute) (Muehlhausen, 2013), Six-Factor Open Innovation (Chesbrough, 2006), Six-Element Key Values Model (McGrath, 2010), Seven-Block Template (Lindgren, 2012), Template with 10 Elements (Doleski, 2015), Social Business Model with 13 Elements (Michelini, 2012), and more.

While these ontologies serve distinct purposes and focus areas, they commonly address elements such as customer, value proposition, and revenue generation (Haaker, et al., 2017). Designing new business models entails balancing multiple design modes (Bouwman, et al., 2008). The concept of business models is continuously evolving, with specialized versions emerging that necessitate consideration of their limitations (see Figure 2). Additionally, the components of business models remain a subject of ongoing clarification in the literature. Various conceptualizations have been proposed by researchers from fields including eBusiness, eCommerce, business management, economics, and information systems, each approaching research accordingly (Shafer, et al., 2005).

## 4. CANVAS BUSINESS MODEL

The CANVAS business model (Osterwalder & Pigneur, 2010) is highly favored among entrepreneurs for its visual modeling approach, which facilitates the visualization of business potential. Unlike simple listings, the model organizes its nine dimensions into a table, enabling clear visualization of relationships between different components. The process is typically divided into two main sections: left and right, with the value proposition positioned between them (see Figure 3).

This structured approach enhances business model mapping, discussion, design, and innovation across nine key areas: **Key Partners:** Highlights suppliers, resources procured, and other key partners contributing to the company's activities; **Key Activities:** Establishes distribution channels, customer relationships, and revenue generation methods; **Key Resources:** Determines the types and quantities of resources necessary for operations; **Value Proposition:** Identifies the value the product/service

offers customers, addresses customer needs, and defines products/services tailored to different segments; **Customer Relationships:** Defines how the company interacts with different customer segments, strategies for service delivery, and associated costs; **Distribution Channels:** Determines optimal channels to reach target customers, their effectiveness, and customer preferences; **Cost Structure:** Decides the level and importance of costs associated with resources necessary for operation; **Customer Segments:** Profiles main customer groups and their significance to the business; **Revenue Streams:** Identifies reasons why customers pay, preferred payment methods, and contributions of each income type to total revenue.



Figure 3. CANVAS scheme

In practice, various CANVAS business model templates are tailored to different types of businesses. Banking and telecommunications corporations, for example, manage three distinct business types—customer relationship, innovation, and infrastructure—using separate and often disjointed business models. While these three businesses can coexist within the corporate structure, they are often managed as separate entities to prevent conflicts. In contrast, industries like book publishing and companies like LEGO focus on the long tail business model, emphasizing the sale of a large number of niche products with low individual sales volume but collectively significant revenue. This model targets interested customers who value niche offerings.

Meanwhile, companies like Google, Nintendo (Wii), Sony (PSP), and Microsoft (Xbox) employ the platform business model. These platforms bring together multiple customer groups whose interactions generate value through network effects, amplifying their overall value proposition.

Companies such as Procter & Gamble, GlaxoSmithKline, and InnoCentive utilize open business models to create and capture value through collaboration with external partners. This approach involves either integrating and capitalizing on external ideas or sharing internal innovations with external partners for mutual benefit. Static business models are often criticized for their rigidity, particularly in turbulent economic environments. As an alternative, dynamic business models integrate conventional business model frameworks with dynamic system modeling. This approach maps key elements of value creation into cause-and-effect relationships, allowing strategic analysts and entrepreneurs to simulate and understand how their company responds to organizational and strategic changes in terms of performance, innovation, and value creation.

A business model representation scheme serves as a tool for structural analysis (Chesbrough, 2010), while methodologies based on dynamic systems simulation enable analysis and provide strategic insights adaptable to internal and external changes (Morecroft, 2007). Through strategic assumptions, business model design and experimentation using System Dynamics (SD) modeling aim to predict the dynamic implications of strategies. This helps determine whether interventions will lead to better or worse outcomes compared to no intervention (Cosenz, 2017). Entrepreneurs can practically explore these models and simulate alternative scenarios, such as different investment policies, to anticipate potential outcomes under varying assumptions and decision options (Bisbe & Malagueno, 2012). Dynamic business models thus serve as simulation tools to explore how strategies, decisions, and external factors interact over the long term, shedding light on the reasons for outcomes and potential unintended consequences.

Samuil & Ionică (2022) proposes a dynamic business model for developing the Petrila Theme Park, focusing on community-based industrial tourism. Their approach structures the dynamic business model around seven fundamental elements that correspond to the core components of the CANVAS business model, essential for describing how a company operates to achieve its objectives. These elements include: Key Partners, Strategic Resources, Value Proposition and Performance Indicators, Key Processes, Customer Segments, Cost Structure, Revenue Streams. The use of System Dynamics (SD) modeling emphasizes the causal relationships among these business model elements, providing readers with a holistic view of the business's strategy and operations. These causal relationships form closed feedback loops, either reinforcing or balancing, which influence the behavior of the business system over time. This model enhances understanding of how the business operates and generates value for stakeholders by illustrating the causal links between variables within the business system. Simulation further enriches this model by enabling the exploration of alternative growth strategies. Consequently, it identifies performance patterns that lead to sustainable development of the company over time. This integrated approach not only supports strategic decision-making but also facilitates continuous adaptation to changing market conditions and stakeholder needs in the context of industrial tourism.

# 5. CONCLUSIONS

This research analyzes static and dynamic business models as strategic tools designed to formalize conceptual representations of organizational operations and value creation. A business model transcends a simple description of what a firm does; it serves as a complex characterization capturing the cause-and-effect relationships between stakeholders and financial outcomes.

A critical inquiry arising from this overview concerns the fundamental building blocks of a business model. Analysis of a significant number of publications

over the past two decades reveals key elements frequently discussed in the context of business models: value proposition, product, customer, resources, revenue model, technology, value network, relationship, cost structure, financials, processes, customer interface, revenue stream, value capture, mission, partners, target customer, and value creation. These elements must align coherently; the firm's capabilities should effectively deliver planned customer value. Moreover, the business model must align with the internal structure and overall management model of the company. Major transitions in a business model—such as entering new technology domains or customer bases, or organizational reengineering—typically require substantial financial resources and sustained commitment to succeed.

Additionally, determining the target market segment is crucial in business model design. While not strictly part of the business model design process, targeting the right segment is vital for success and scalability across multiple segments. Identifying and addressing existing potential within any industry is key to conceptualizing innovative business models. Despite numerous perspectives and elements identified in business model compositions, existing approaches may not fully meet practical needs. Hence, industry-specific characteristics necessitate redefining the business model concept and its elements. Dynamic business models emerge from integrating conventional representations with dynamic system modeling. This methodological fusion allows businesses to experience and understand how they respond to strategic and organizational changes in terms of performance, innovation, and value creation. Moving from a static to a dynamic analysis perspective helps overcome limitations of traditional business model representations by adopting a systemic view that identifies and analyzes cause-effect relationships among model elements.

Applying simulation techniques like dynamic system modeling enhances understanding of a firm's internal and external functioning, as well as its prospective performance over time. It serves as a valuable tool for measuring and forecasting company performance. This study proposes new directions for developing dynamic simulation-based business modeling tools. Addressing sustainable business modeling challenges through systemic and dynamic approaches opens opportunities for exploring innovative simulation and design tools. Conceptualizing dynamic business models enriches understanding of how business models evolve, adapt, and generate sustainable value over time. Policymakers can also use this framework to derive scenarios and responses to hypothetical questions across various contexts.

### **REFERENCES:**

- [1]. Baden-Fuller, C.; Mangematin, V. (2012) *Business models: a challenging agenda*, Strategic Organization, 11(4), pp.418-427, http://dx.doi.org/10.1177/1476127013510112
- [2]. Bianchi, C. (2002) Introducing SD modeling into planning & control systems to manage SMEs growth: a learning-oriented perspective, System Dynamics Review, 18 (3), pp.315-338, http://dx.doi.org/10.1002/sdr.258
- [3]. Bisbe, J.; Malagueno, R. (2012) Using strategic performance measurement systems for strategy formulation: does it work in dynamic environments?, Management Accounting Research, 23 (4), pp.296-311, http://dx.doi.org/10.1016/j.mar.2012.05.002

- [4]. Bocken, N.M.P.; Short, S.W.; Rana, P.; Evans S. (2014) A literature and practice review to develop sustainable business model archetypes, Journal of Cleaner Production, 65, pp.42-56, https://doi.org/10.1016/j.jclepro.2013.11.039
- [5]. Bouwman, H.; Faber, E.; Haaker, T.; Kijl, B.; De Reuver, M. (2008) Conceptualizing the STOF model. In Bouwman, H.; de Vos, H.; Haaker, T. (Eds.), Mobile service innovation and business models, Verlag Berlin Heidelberg.: Springer, pp.31-70, http://dx.doi.org/10.1007/978-3-540-79238-3\_2
- [6]. Casadesus-Masanell, R.; Ricart, J.E., (2010) From strategy to business models and onto tactics, Computer Science, Long Range Planning, 43 (2), pp.195-215, https: //doi.org/10.1016/j.lrp.2010.01.004
- [7]. Chesbrough, H. (2010) Business model innovation: opportunities and barriers, Long Range Planning, 43 (2-3), pp.354-363, http://dx.doi.org/10.1016/j.lrp.2009.07.010
- [8]. Chesbrough, H.W. (2006) Open Business Models: How to Thrive in the New Innovation Landscape, Journal of Product Innovation Management, 17, Harvard Business Review Press: Brighton, NY, USA
- [9]. Cosenz, F. (2017) Supporting start-up business model design through system dynamics modelling, Management Decision, 55 (1), pp.57-80, http://dx.doi.org/10.1108/MD-06-2016-0395
- [10]. Davis, J.P.; Eisenhardt, K.M.; Bingham, C.B. (2006) Developing theory through simulation methods, Academy of Management Review, 32 (2), pp.480-499, http://dx.doi.org/10.5465/AMR.2007.24351453
- [11]. Doleski, O.D. (2015) Integrated Business Model: Applying the St. Gallen Management Concept to Business Models, Springer Fachmedien Wiesbaden: Wiesbaden, Germany, http://dx.doi.org/10.1007/978-3-658-09698-4
- [12]. El-Sawy, O.; Pereira, F. (2013) Business modeling in the dynamic digital space: An ecosystem approach, Heidelberg: Springer
- [13]. Gassmann, O.; Frankenberger, K.; Csik, M. (2015) *The business model navigator: 55 models that will revolutionize your business*, Upper Saddle River, NJ: FT Press
- [14]. Greenberger, M.; Crenson, M.A.; Crissey, B.L. (1976) *Models in the Policy Process: public Decision Making in the Computer Era*, Russell Sage Foundation, New York
- [15]. Haaker, T.; Bouwman, H.; Janssen, W.; De Reuver, M. (2017) Business model stress testing: A practical approach to test the robustness of a business model. Futures, 89, pp.14-25
- [16]. Johnson, M. W.; Clayton, M. C.; Henning K. (2008) *Reinventing Your Business Model*, Harvard Business Review 86 (12), pp.52-60
- [17]. Kandampully, J. (2006) The new customer-centred business model for the hospitality industry, International Journal of Contemporary Hospitality Management, 18 (3), pp.173-187, http://dx.doi.org/10.1108/09596110610658599
- [18]. Kim, H.; MacDonald, R.M.; Andersen, D.F. (2013) Simulation and managerial decision-making: a double-loop learning framework, Public Administration Review, 73 (2), pp.291-300, http://dx.doi.org/10.1111/j.1540-6210.2012.02656.x
- [19]. Lindgren, P. (2012) Business Model Innovation Leadership: How Do SME's Strategically Lead Business Model Innovation?, International Journal of Business and Management, 7 (14), pp.53-66, http://dx.doi.org/10.5539/ijbm.v7n14p53
- [20]. Lindgren, P.; Rasmussen, O. (2013) *The business model cube*, Journal of Multi Business Model Innovation and Technology, 1 (2), pp.135-182
- [21]. Lindgren, P.; Taran, Y.; Boer, H. (2010) From single to network based business model innovation, International Journal of Entrepreneurship and Innovation Management, 12 (2/3), pp.122-137

a	· 7 T
Nam	1111
Sum	<i>nii</i> , <i>i</i> .

- [22]. Magretta, J. (2002) Why Business Models Matter, Havard Business Review, 80, pp.86-92
- [23]. Maurya, A. (2013) Iteracja od planu A do planu, który da Ci sukces. In Metoda Running LEAN, Helion, wyd. II: Gliwice, Poland
- [24]. McGrath, R. (2010) Business Models: A Discovery Driven Approach. Long Range Plan, 43 (2-3), pp.247-261, http://dx.doi.org/10.1016/j.lrp.2009.07.005
- [25]. Michelini, L. (2012) Social Innovation and New Business Models. Creating Shared Value in Low-Income Markets, Springer: New York, NY, USA
- [26]. Morecroft, J. (2007) Strategic Modelling and Business Dynamics: a Feedback System Approach, Wiley, Chichester
- [27]. Muehlhausen, J. (2013) Business Models for Dummies, John Wiley & Sons: Hoboken, NJ, USA
- [28]. Osterwalder, A.; Pigneur, Y. (2010) Business Model Generation: A Handbook for Visionaries, game Changers and Challengers, John Wiley and Sons Ltd., Chichester, UK
- [29]. Perić, M.; Vitezić, V.; Mekinc, J. (2016) Conceptualising innovative business models for sustainable sport tourism, International Journal of Sustainable Development and Planning, 11 (3), pp.469-482, http://dx.doi.org/10.2495/SDP-V11-N3-469-482
- [30]. Roome, N. (2001) Editorial conceptualizing and studying the contribution of networks in environmental management and sustainable development. Business Strategy and the Environment, 10 (2), pp.69-76
- [31]. Samuil, I.; Ionică, A. C. (2022) Ingineria și managementul turismului postindustrial în Valea Jiului, Editura Universitas, ISBN 978-973-741-845-6
- [32]. Sastry, M.A. (1997) Problems and paradoxes in a model of punctuated organizational change, Administrative Science Quarterly, 42 (4), pp.237-275
- [33]. Seidenstricker, S.; Scheuerle, S.; Linder, C. (2014) Business Model Prototyping— Using the Morphological Analysis to Develop New Business Models, Procedia - Social and Behavioral Sciences, 148, pp.102-109, http://dx.doi.org/10.1016/j.sbspro.2014.07.023
- [34]. Shafer, M.S.; Smith, H.J.; Linde, J.C. (2005) The Power of Business Models, Business Horizons, 48 (3), pp.199-207
- [35]. Souto, J. E. (2015) Business model innovation and business concept innovation as the context of incremental innovation and radical innovation, Tourism Management, 51, pp.142-155, https://doi.org/10.1016/j.tourman.2015.05.017
- [36]. Sterman, J.D. (2000) Business Dynamics Systems Thinking and Modeling for a Complex World, McGraw-Hill Higher Education
- [37]. Torres, J.P.; Kunc, M.; O'Brien, F. (2017) Supporting strategy using system dynamics, European Journal of Operational Research, 260 (3), pp.1081-1094
- [38]. Vennix, J.A.M. (1996) Group Model Building: facilitating Team Learning Using System Dynamics, John Wiley & Sons, Chichester, England
- [39]. Warren, K. (2008) Strategic Management Dynamics, Wiley, Chichester

This article was reviewed and accepted for presentation and publication within the 11th edition of the International Multidisciplinary Symposium "UNIVERSITARIA SIMPRO 2024".