

Determinants of Innovation in the Company: Literature Review

Les déterminants de l'innovation dans l'entreprise : revue de littérature

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Abstract:

This article proposes a conceptual model to analyze the internal and external factors influencing innovation in companies. By examining the evolution of economic theories of innovation, from Schumpeter's individual-centered approach to a systemic and integrated paradigm, the model recognizes the growing importance of interactions and collaborations within various components of an innovation system. Through a narrative literature review, this article provides an enriched understanding of innovation within a broader and interconnected framework. The presented conceptual model distinguishes itself by integrating the intrinsic capabilities of the company, external influences, as well as knowledge flows within the innovation system, an aspect often overlooked in previous studies. It offers a solid foundation for future research and presents significant strategic implications for decision-makers and managers, thus highlighting its practical and theoretical utility.

Keywords: Innovation, innovation in the company, determinants of innovation, literature review.

Classification JEL: M31

Paper type: Theoretical Research

Résumé :

Cet article propose un modèle conceptuel pour analyser les facteurs internes et externes influençant l'innovation dans les entreprises. En examinant l'évolution des théories économiques de l'innovation, de l'approche centrée sur l'individu de Schumpeter à un paradigme systémique et intégré, le modèle reconnaît l'importance croissante des interactions et des collaborations entre diverses composantes d'un système d'innovation. À travers une revue de littérature narrative, cet article fournit une compréhension enrichie de l'innovation dans un cadre plus vaste et interconnecté. Le modèle conceptuel présenté se distingue en intégrant les capacités intrinsèques de l'entreprise, les influences extérieures, ainsi que les flux de connaissances au sein du système d'innovation, un aspect souvent négligé dans les études antérieures. Il offre une base solide pour de futures recherches et présente des implications stratégiques importantes pour les décideurs et les managers, soulignant ainsi son utilité pratique et théorique.

Mots clés : innovation, innovation dans l'entreprise, déterminants de l'innovation, revue de littérature.

JEL Classification : M31

Type du papier : Recherche théorique

1. Introduction

Innovation is a key driver of economic growth, business competitiveness, and social progress (OECD, 2015), and an important factor in maintaining business sustainability and gaining a competitive edge (Voss, 1994; Bettis and Hitt, 1995; Boly V, 2004), remains a central concern for academics, public authorities, and business managers. The term 'innovation' originates from the Latin 'innovare,' meaning to renew or change. The Grand Larousse describes it as a process starting with an idea and leading to the materialization of a product, involving market research, prototype development, and initial production stages. It is a multidisciplinary and polysemic concept (Leymarie, 2003).

Our article addresses a significant gap in innovation theories, where, despite the evolution from Schumpeter's 'creative destruction' (Schumpeter, 1911, 1934) to systemic and integrated perspectives (Freeman, 1982), the crucial importance of knowledge flows remains underestimated. This study aims to fill this gap by examining innovation in a broader dimension, considering not only internal factors within the company, the interdependence of companies with their environment including political, economic, social, and technological factors, but also highlighting the vital role of knowledge flows, as identified by (Chesbrough, 2003; OECD, 2013), and OECD/Eurostat, 2018).

The objective of this study is to develop a conceptual model addressing a contemporary need to understand innovation within companies in a broader and interconnected context based on a narrative literature review. This research contributes to innovation theory by proposing a conceptual model that integrates the company's capacities for innovation, external determinants related to their environment, and knowledge flows among the different stakeholders of the innovation system.

The practical implications of this study are significant for business leaders and policymakers, providing strategic directions to stimulate innovation and strengthen the national innovation system.

2. Innovation: Definitions and Typologies

Economic literature has extensively explored the theme of innovation over the past century. The following provides a synthesis of works focusing on its definitions and typologies.

1.1. Definitions of Innovation:

Over time, various definitions have emerged, each providing a complementary perspective on the nature of innovation. Innovation, as an economic concept, was initially introduced by (Schumpeter, 1934), a precursor who introduced the idea of "creative destruction" (Schumpeter, 1911), considering innovation as the engine of a new economic cycle, a process that simultaneously eliminates old methods and technologies while opening new opportunities for entrepreneurs. Other researchers have followed, adding nuances to the definitions. (Rogers, 1962) emphasizes the perception of novelty by defining innovation as "an idea, practice, or object perceived as new by individuals," while (Zaltman, Duncan, and Holbek, 1973) describe it as ideas, methods, or objects perceived as new within their unit of adoption.

Furthermore, it is essential to consider the definition provided by the Organization for Economic Co-operation and Development (OECD), a global reference on innovation issues. The Oslo Manual defines innovation as an iterative process that transforms a technological invention into commercial success (OECD, 1997), and later as "the implementation of a new product (good or service), process, marketing strategy, or organization" (OECD, 2005, p46), and subsequently as a new or improved product or process (or a combination of both) that differs significantly from the unit's previous products or processes and has been made available to potential users (product) or implemented by the unit (process) (OECD| Eurostat, 2018).

Initially focused on technological advancement, we observe that the OECD's definition has evolved to also encompass innovation in the services sector, and it has further expanded to include innovations in marketing and organization.

1.2. Typologies of Innovation

Understanding innovation requires a meticulous approach, especially concerning the classification of its various typologies. Two key perspectives emerge in this discussion: typology by object, which focuses on specific domains of innovation, and typology by degree of novelty, which explores the revolutionary or evolutionary nature of changes induced by innovation. In the following, we will explore these two facets, highlighting the contributions of thinkers such as Joseph Schumpeter and the underlying principles of the Oslo Manual.

1.2.1. Typology by Object

(Joseph Schumpeter, 1942) proposes an extensive typology of innovations, including:

- New products: This type of innovation encompasses radical transformations to give rise to a new product, as well as improvements to existing products.
- New processes: Involves production methods such as tools, logistics, etc.
- New sources of supply: Involves the development of new sources of supply, raw materials, and energy.
- New markets: The creation of this innovation is linked to the opening of new markets and the emergence of a collaborative economy, leading to new market behaviors.
- New industrial organizations: Involves how employees collaborate within an organization.

The literature has widely used this classification to qualify and categorize innovation.

The **(OECD, 2005, p48)** recognizes the implementation of four forms of innovation within companies:

- Product innovation corresponds to introducing a new or significantly improved good or service in terms of its characteristics or use (,
- Process innovation refers to behind-the-scenes innovations involving the implementation of a new or significantly improved method of production or distribution.
- Organizational innovation corresponds to the implementation of a new organizational method in practices, workplace organization, or external relations of the company.
- Marketing innovation is defined as the implementation of new marketing methods involving significant changes in the design or packaging, placement, promotion, or pricing of a product.

In its latest version, the Oslo Manual **(OECD/Eurostat, 2018)** has transitioned to two types:

- Product innovation, refers to the introduction to the market of a new or improved good or service that differs significantly from the goods or services previously offered by a company.
- Business process innovation, designating a new or improved business process for one or more function(s), which differs significantly from the company's previous business processes and has been implemented.

The term 'business process' includes the core function of producing goods and services and support functions such as distribution and logistics, marketing, sales, and after-sales services, information, and communication technology (ICT) services to the enterprise, administrative and management functions, engineering and technical services related to the enterprise, as well as the development of business products and processes **(OECD/Eurostat, 2018)**.

1.2.2. Typology by Degree of Novelty

The differentiation between radical innovation and incremental innovation revolves around the intensity of the change induced by innovation and its impact on the market.

Radical innovation describes the creation of a new product leading to market disruption, in harmony with Schumpeter's concept of 'creative destruction.' This type of innovation brings about a novelty that renders existing solutions obsolete, disrupting industries by offering radically different products or services (**Christensen, 1997**).

As for incremental innovation, Joseph Schumpeter first identified it in 1934 as an innovation involving successive improvements to existing products. Incremental innovations generate changes of lesser magnitude, thereby preserving a certain continuity in the evolution of products or services.

2. Economic Theories of Innovation:

Innovation is a crucial domain for economic and social development. Over the years, various approaches have been proposed to understand the mechanisms of innovation and foster its emergence.

2.1. Schumpeterian Theory of Innovation (1930s)

Since (**Schumpeter, 1911**) introduced 'new combinations' and innovation (**Schumpeter, 1928**), this concept has been the subject of nearly constant research. This prominent economist asserts that innovation is the driving force of economic development (**Schumpeter, 1934, 1942**).

The concept of 'creative destruction' is central to Schumpeter's theory. It describes the process by which innovations displace and replace old methods of production and less efficient businesses. This disruptive dynamic is seen as inherent to economic progress.

For Schumpeter, the entrepreneur is not just a manager or business owner but the engine behind major economic changes. Entrepreneurs identify new opportunities, take risks, and implement innovations.

According to Schumpeter, innovation manifests through five types of economic changes: the introduction of new goods or services to the market, the use of new methods of production or organization in businesses, the opening of new markets, the exploration of new sources of raw materials or intermediate products, and the establishment of new industrial structures.

2.2. Innovation Diffusion Theory (1960s)

The innovation diffusion theory, conceptualized by (**Rogers, 1962**), provides an explanatory model of the process by which new ideas, technologies, products, or practices spread in society. It identifies five categories of adopters, describing the stages of adoption and the roles associated with each group.

Innovators: These individuals are the first to adopt an innovation. Constantly seeking new ideas and willing to take risks, innovators represent a small fraction of the population.

Early Adopters: This group consists of individuals who adopt the innovation fairly quickly after the innovators. They tend to be influential and serve as models for others.

Early Majority: This is the group that follows the early adopters. Early majority members are more skeptical and cautious, but they adopt the innovation once they see others benefiting from it.

Late Majority: This group is more conservative and adopts the innovation once it has become relatively common and accepted by the majority. They often do so under social pressure.

Laggards: Laggards are the last to adopt an innovation. They are often resistant to change and may even never adopt the innovation.

The diffusion process typically follows an S-curve, starting slowly before accelerating as different adopter groups join the movement.

2.3. Innovation Systems Theory (1980s)

The systemic approach to innovation offers a complex and interconnected perspective by considering the influence of the environment and interactions among various actors in a global system (**Freeman, 1982**).

Freeman highlights the fundamental idea that innovation is a dynamic process involving many actors, including businesses, governments, universities, and other institutions, forming an innovation system. This systemic approach recognizes that innovation does not solely result from the research and development efforts of companies but also emerges from the interaction, acquisition, adaptation, and use of knowledge from various stakeholders in the innovation system.

2.4. Open Innovation Theory (2000s)

(**Chesbrough, 2003**) described open innovation as a process involving collaboration between companies, universities, and other actors to develop new products and services. In the early 20th century, companies developed innovations primarily relying on their research and development and a linear innovation process (**Landry and al, 2002**). However, this model is becoming increasingly obsolete (**Loilier & Tellier, 2013**) due to the abundance of knowledge (**Becker, 2001; Brusoni & Prencipe, 2001; Kogut, 2008; McKelvey, 1998**). It is no longer about internalizing knowledge through the acquisition of patents or technologies but rather developing collaborative approaches. This paradigm shift has highlighted the growing role of external sources of innovation, as opposed to solely relying on internal resources.

3. Determinants of Innovation

The factors influencing innovation are diverse, some belonging to the development of innovative projects, others to the company, and the rest to the environment (**Dodgson and Rothwell 1995**). In the same vein, the latest version of the Oslo Manual distinguishes three major families of factors that can influence innovation in companies: the innovation capabilities of companies, external factors as well and the knowledge flow among the different components of the innovation system (**OECD/Eurostat, 2018**).

3.1. Innovation Capabilities of Companies

The capabilities of a company include the knowledge, skills, and resources it accumulates over time and draws upon to achieve its objectives (**OECD/Eurostat, 2018**). To understand why some companies innovate while others do not, it is crucial to collect data on their capabilities to analyze the drivers, effects of innovation, categories of innovation activities conducted by companies, and their impacts. Thus, measuring the innovation capacity of a company involves measuring the following four elements: the company's resources, its management capabilities, personnel skills, and human resources management, as well as the use of technological tools and data resources (**OECD/Eurostat, 2018**).

3.1.1. Company Resources:

The resources of a company are key determinants of its innovation capacity (**Gallouj & Weinstein, 1997; Schumpeter, 1939; Weiermair & Peters, 2006**). The size of the company, measured by the number of employees, turnover, and asset value, is often used as an indicator to assess its propensity to innovate (**Cohen et Klepper, 1996; Divisekera and Nguyen, 2018**).

(a); Divisekera and Nguyen, 2018 (b)). From a resource-based perspective, larger companies generally have an advantage in innovation due to their larger material resources and access to financing **(Hewitt-Dundas, 2006; De Mel et al., 2009)**. The company's assets, both tangible and intangible, such as real estate, patents, and software, are crucial elements influencing its innovation capacity **(OECD/Eurostat, 2018)**.

The age of the company is also a significant factor, reflecting the accumulation of experience over time. Older companies often have a richer knowledge reserve, positively impacting their ability to innovate **(Huergo et Jaumandreu, 2004)**. In contrast, younger companies may be more agile in implementing change.

Additionally, internal funding plays a crucial role in innovation, enabling companies to take risky initiatives. Moreover, ownership structure, particularly belonging to chains or franchises, can provide additional resources and knowledge to stimulate innovation **(Martínez-Ros & Orfila-Sintes, 2009)**.

3.1.2. Management Capabilities:

The management skills of a company can play a crucial role in its ability to undertake innovation initiatives, implement these innovations, and achieve tangible results **(OECD/Eurostat, 2018)**. Indeed, the company's business strategy, defining medium and long-term objectives, guides innovation efforts. Strategic choices, such as competing on price or quality, determine the nature of the innovations undertaken. Furthermore, the decision to serve a single market or multiple markets influences the innovative approach **(OECD/Eurostat, 2018)**. Organizational and management capabilities, encompassing the mobilization, control, and exploitation of resources, are essential to achieving strategic objectives **(OECD/Eurostat, 2018)**. This includes the management of human, intangible, physical, and financial resources. Additionally, the characteristics of owners and executives, such as intellectual level, entrepreneurial experience, and professional background, influence human capital and management skills. Entrepreneurial experience and professional background are key indicators of management skills **(Schumpeter, 1939; Peters, 2008; Asheim & Isaksen, 2000; Soete & Freeman 2012; Porter, 1990; Divisekera and Nguyen, 2018 (a))**. Innovation management capabilities encompass all activities related to innovation, from identifying to exploiting results. Establishing the number of innovation projects completed or interrupted provides insights into the allocation of resources to innovation **(OECD/Eurostat, 2018; Klingebiel et Rammer, 2014)**. Finally, the management and appropriation of intellectual property, involve strategic decisions regarding procedures for filing, registration, and use of types of Intellectual Property Rights. The registration of intellectual property serves as an indicator of outgoing knowledge flows, with the mere act of filing an application implying information disclosure **(OECD/Eurostat, 2018)**.

3.1.3. Employee Skills and Human Resource Management:

Human capital is the most critical competency supporting innovation through individual skills and cooperation. Assessing the qualification levels of employees and the human resource management of the company is indicative of its innovation capacity **(Soete & Freeman 2012; Malerba & Brusoni, 2007; Bouncken et al, 2007; Hipp & Grupp, 2005)**. Additionally, human resource management practices can impact a company's ability to leverage the creative potential and skills of its personnel **(Keller, 2002; Falk, 2007; Mattsson et al, 2005; Scotchmer, 2004)**, particularly: Creativity-focused recruitment, training, and skill development, promotions and career advancement, strengthening employee satisfaction and loyalty (flexible schedules, telecommuting, sabbatical leave, etc.), and social initiatives enabling a balance between personal and professional life.

3.1.4. Technological Capabilities:

The technological capabilities of a company, crucial for driving innovation, encompass the practical application of knowledge in converting resources into products (OECD/Eurostat, 2018). Three types of technological capabilities are of particular importance: technical expertise, design capabilities, and skills related to digital technologies and data analytics (OECD/Eurostat, 2018).

A company's technical expertise refers to its knowledge of technologies and its ability to use them. It derives this knowledge from the skills and qualifications of its employees (engineers, technical teams, etc.). Design capabilities represent the innovation activity aimed at planning and designing procedures, technical specifications, and other usage or functional characteristics for new products and business processes (OECD, 2016). Additionally, digital transformation offers companies a plethora of innovation possibilities (d'Oslo; 1997). This involves the use of various digital technologies, including IT infrastructure, Artificial Intelligence, connected devices, automation, mobile communication technologies, etc.

3.2. External Factors Influencing Innovation:

The systemic view of innovation emphasizes the importance of the external environment by conceptualizing the innovation activities of companies as an integral part of political, social, organizational, and economic systems (Edquist, 2005; Granstrand et al, 1997).

The external environment of a company includes factors beyond the direct control of its leaders. These factors represent both challenges and opportunities that they must consider when making strategic decisions. They can involve customer, competitor, and supplier activities, labor market conditions, legal, regulatory, competitive, and economic conditions. These external factors can influence a company's motivation to innovate, as well as its innovation activities, capabilities, and outcomes. They can also be the subject of corporate strategy or government policy.

In the following, we will examine the characteristics of the external business environment through four factors, following the Oslo Manual (OECD/Eurostat, 2018), namely: geographic factors, markets, society, and the natural environment, as well as government actions.

3.2.1. Geographic Factors:

Geographic factors correspond to the administrative location of the company and its proximity to product markets and the labor market. These factors can influence costs and knowledge of consumer demand (Krugman, 1991).

The position of a company in the market is also shaped by its choices regarding the geographical location of its specific activities. A company may decide to manage some of its activities internally or outsource them to an external service provider. The choice between internal management and outsourcing will impact the types of innovations the company seeks to develop.

The natural environment is also a crucial external factor influencing business decisions regarding innovation. Beyond sectors whose activity is intrinsically linked to natural conditions (tourism, agriculture, fishing, mining, etc.), all businesses must assess whether they need to overcome or leverage environmental factors through innovation (OECD/Eurostat, 2018). Unfavorable environmental conditions, such as environmental crises or sustainability issues, can prompt tourism businesses to rethink their practices and innovate to address these challenges (Divisekera and Nguyen, 2018 (a); Divisekera and Nguyen, 2018 (b)).

3.2.2. Markets:

Markets are the arena where companies exchange products and services to achieve their objectives; they are key contextual factors. In this section, we highlight market-related elements impacting innovation, including the role of customers and suppliers of the company, the level

of competition and coordination, the labor market, financial markets, as well as intermediaries and electronic platforms.

Customer and user demand plays a decisive role in all forms of innovation. User innovation, where consumers modify products with or without the company's consent (**von Hippel, 2005, 1988; OCDE/Eurostat, 2018**), illustrates the direct influence of customers on innovation.

Innovation ideas can also emerge from suppliers, the labor market, and financial markets. Suppliers are essential partners and sources of information for innovation (**Emden et al, 2006; OCDE/Eurostat, 2018**); labor market characteristics can have major implications for the company's strategy and performance (**Cohen et Levinthal, 1990; Jones et Grimshaw, 2012; OCDE/Eurostat, 2018**), and financial markets influence innovation investments by playing a central role in resource allocation (**Kerr et al, 2014**), offering companies opportunities for internal or external financing, with various forms of participation, debt, or financial transfers (**OECD/Eurostat, 2018**).

The dynamics of competition in product markets are crucial and characterized by a U-shaped relationship between competition and innovation (**Aghion et al., 2005, OCDE/Eurostat, 2018**), **Divisekera and Nguyen, 2018 (a)**). In a competitive environment, companies face constant pressure to reduce costs and introduce new products and services to maintain their competitive advantage in the market (**Soames et al., 2011**). It is essential to note that the nature and intensity of prevailing competition are determining factors in innovation (**OECD, 2006; OECD/Eurostat, 2018**). Thus, competition stimulates companies' innovation efforts, creating an environment conducive to the emergence of innovative solutions and constant improvement to remain competitive in the market. Effective coordination through specific standards can also influence the characteristics of innovations (**Frenz et Lambert, 2014**). These standards are often the result of consensus. They are approved by an authoritative body, providing rules or guiding principles for the common and repeated use of product, process, and organizational characteristics (**Blind, 2004**).

Also, the presence of intermediaries and the emergence of electronic platforms have altered market dynamics. These actors facilitate exchanges between suppliers and customers, creating an environment conducive to the development and diffusion of innovations (**Evans et Gawer, 2016; OECD/Eurostat, 2018**). Online platforms have become crucial spaces for the creation and sale of technologies, products, or complementary services, illustrating the impact of the digital revolution on innovation.

3.2.3. Public Action:

Public authorities' actions can influence companies' activities directly or indirectly; they can also impact companies' ability to introduce and effectively exploit their innovations through various levers, namely regulations, public aid programs, public infrastructure, and macroeconomic policies.

Regulations, established by public authorities to guide economic activities, play a crucial role in markets and the behavior of private actors (**OCDE, 1997; OECD/Eurostat, 2018**). Various regulatory areas, such as product markets, trade, tariffs, financial affairs, corporate governance, accounting, intellectual property rights, health, safety, employment, immigration, environment, and energy, can all influence innovation initiatives within companies (**Blind, 2016; OECD/Eurostat, 2018**).

Public aid programs constitute a direct or indirect allocation of resources to businesses. These resources can be transferred directly or indirectly, in the form of financial support or in-kind assistance. Companies can benefit from subsidies targeted at their activities, such as experimental research and development (R&D) or the acquisition of new machinery, as well as from the results of their previous initiatives, such as revenues generated by previous innovations or the reduction of pollutant emissions (**OECD 2016; De Frascati, 2015**).

Moreover, the characteristics of public infrastructure exert a significant influence on operational capabilities, evolution, and overall economic performance. It is essential to include these infrastructures among external factors impacting innovation. The evaluation of these infrastructures (transportation, energy, information, and communications, waste management, water distribution, knowledge infrastructure, and health, etc.) should consider aspects such as accessibility, costs for users, resilience, and their ability to adapt to changing needs (OECD/Eurostat, 2018).

It is relevant to analyze how companies perceive government macroeconomic policies, whether they involve monetary, fiscal, or public spending measures. Macroeconomic factors such as inflation, exchange rates, or consumer demand can impact companies' innovation projects (OECD/Eurostat, 2018).

3.2.4. Social Context and the Natural Environment:

Society can directly and indirectly influence the activities of businesses in terms of innovation. Indeed, societal aspects play a crucial role in how the public perceives and adopts new innovations. In particular, individuals' attitudes as consumers or employees are influenced by factors such as intellectual property, entrepreneurship, and technological advances. These societal elements have a significant impact on the acceptance of innovations. Societal factors are not limited to individual adoption; they also affect the policies and strategies of businesses. They shape companies' decisions regarding social responsibility and innovation (OECD/Eurostat, 2018).

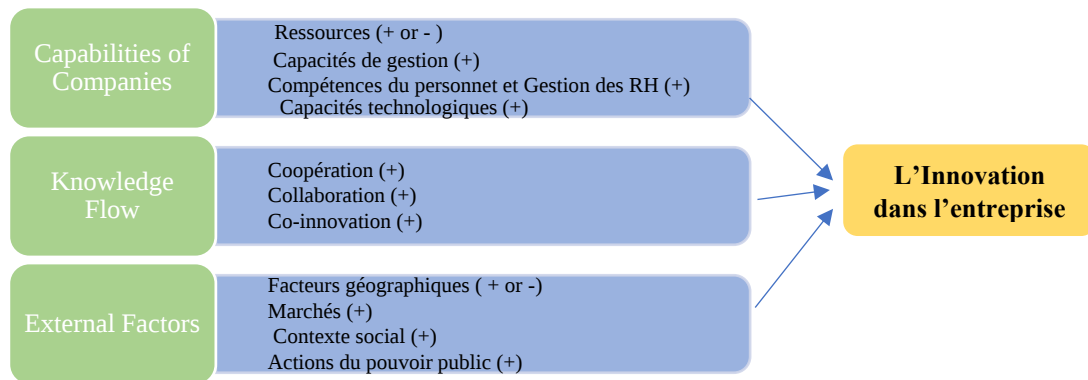
3.3. Knowledge Flow:

Companies attach significant strategic importance to knowledge, emphasizing the need to leverage knowledge flows, whether intentional or serendipitous. These flows involve the conscious transmission of knowledge between different entities (OECD, 2013). In innovation systems, various actors, such as businesses, universities, and clients, contribute to the creation, diffusion, and use of knowledge. Companies benefit from external sources of knowledge (Chesbrough, 2003; Dahlander and Gann, 2010), explore organizational boundaries, and establish partnerships with clients, investors, and experts (Enkel, 2010). The diffusion of innovation encompasses the spread of ideas underlying innovations and the adoption of innovative products or processes by other companies (OECD/Eurostat, 2018). Companies play an active role in this process by adopting significant innovations, leveraging ideas from other actors, and enabling the use of their innovations. Within a network, companies exchange knowledge based on sharing know-how, including elements such as knowledge bases, references, and individuals involved in knowledge creation (Phelps et al, 2012; OECD/Eurostat, 2018). This knowledge can be codified and easily transferred or tacit, residing in individuals' minds (Polanyi, 1958; von Hippel, 1988). In this regard, open innovation (Chesbrough, 2003) emphasizes the strategic use of incoming and outgoing knowledge flows to accelerate internal innovation and expand markets. 'Ambidextrous' companies combine these flows, implementing coupled processes that involve seeking new sources of knowledge and merging internal and external origins (Cosh and Zhang, 2011). Cooperation involves the association of companies sharing resources, collaboration implies active coordination to solve a problem, and co-innovation results from collaborations leading to genuine innovation (Chesbrough and Bogers, 2014).

Through this work, we observed that innovation within the company can be determined by internal variables, which we referred to as 'company capabilities,' external variables related to the company's environment, and the various knowledge flows among the different stakeholders in the innovation system.

The figure below presents the conceptual model of our work:

Figure No. 1: Conceptual Model of Innovation in the Company



Source: Authors

4. Conclusion:

Our literature review has highlighted the complex and multidimensional role of innovation in the development and survival of businesses. We have explored the evolution of innovation theories, from Schumpeter's perspective of 'creative destruction' to systemic and open innovation approaches. Our conceptual model integrates internal and external determinants of innovation, with a particular emphasis on the flow of knowledge, a component often underestimated in previous studies.

Theoretically, our study expands the understanding of innovation in businesses by emphasizing the importance of interactions between companies and their external environment. Practically, it provides business leaders and policymakers with a strategic framework to stimulate innovation, highlighting key levers of innovation and the importance of effectively managing knowledge flows. Our study is limited by its nature as a literature review, which does not allow for an in-depth exploration of the practical application of these determinants in specific business contexts. Future research could examine the impact of these innovation determinants in specific case studies or different industry sectors.

In conclusion, this literature review makes a significant contribution to understanding innovation in business, highlighting the complexity of factors that influence it. Our conceptual model, by integrating internal and external determinants as well as the flow of knowledge, offers a comprehensive framework for understanding and stimulating innovation in businesses. While recognizing the limitations inherent in a literature review, this study lays the groundwork for future research that could further enrich our understanding of this subject.

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