Human & Social Sciences Journal

Volume 07, Issue 03, December 2021, P.P. 451-466.

THE IMPACT OF INNOVATION ON FIRM PERFORMANCE: LITERATURE REVIEW

L'IMPACT DE L'INNOVATION SUR LA PERFORMANCE DE L'ENTREPRISE : REVUE DE LITTERATURE

HMIOUI, Aziz [*1] ; BEDRAOUI, Oumayma [2]

Date of submission 05 /09 /2021 - Date of acceptation 17 /09 /2021 - Date of edition : 02 /12 /2021

Abstract :
The link between the dimensions of innovation and performance is the subject of many debates in the literature: some authors put forward a causal link between the dimensions of the two concepts (Geroski & Machin, 1992; Ledent & al , 2002; Terziovski, 2010): innovation would then be a determinant of performance that would influence it positively (De Winne & Sels, 2010; Liouville &Bayad, 1998) or negatively (Elango & al 2002). Other authors argue that this is more of an "independent" relationship: successful companies are not necessarily characterized by a high degree of innovation. The aim of this article is to enrich the characterization of the concepts of performance and innovation in research. We first propose to successively deepen the definitions of performance and innovation in all their types and to observe the way in which these concepts are measured through indicators. Next, we summarize the authors' contributions in literature to show the causal link between the two key concepts of our research

Keywords : innovation; performance; typology; indicators; literature contribution.

Résumé :
Le lien entre les dimensions de l'innovation et de la performance fait l'objet de nombreux débats dans la littérature: certains auteurs mettent en avant un lien causal entre les dimensions des deux concepts (Geroski & Machin, 1992; Ledent & al, 2002; Terziovski, 2010) : l'innovation serait alors un déterminant de la performance qui l'influencerait positivement (De Winne & Sels, 2010; Liouville & Bayad, 1998) ou négativement (Elango & al 2002). D'autres auteurs soutiennent qu'il s'agit davantage d'une relation «indépendante»: les entreprises qui réussissent ne se caractérisent pas nécessairement par un degré élevé d'innovation. L'objectif de cet article est d'enrichir la caractérisation des concepts de performance et d'innovation en recherche. Nous proposons tout d'abord d'approfondir successivement les définitions de la performance et de l'innovation dans tous leurs types et d'observer la manière dont ces concepts sont mesurés à travers des indicateurs. Deuxièmement, nous résumons les contributions des auteurs dans la littérature pour montrer le lien de causalité entre les deux concepts clés de notre recherche.

Mots clés : innovation ; performance ; typologie ; les indicateurs ; contribution à la littérature.

Introduction :

Maximizing profit is no longer the main objective of the company, but to survive, like any other living being according to the Darwinian theory of evolution. The contribution of evolutionary theory in business performance lies in challenging the purely economic logic of neoclassical theory, supporting the two concepts "learning" and "knowledge". For the neoclassical approach, the performance of the company is economic in nature, insofar as it aims to maximize its profits while minimizing production costs. This postulate of profit maximization was later criticized by evolutionary economists. According to evolutionary theory, competition is the source of development

* **Corresponding author.**
[1] حميوي عزيز, **Ecole Nationale de Commerce et de Gestion Université Sidi Mohamed Ben Abdellah de Fès Maroc**
[2] بدراوي أميمة, **Ecole Nationale de Commerce et de Gestion Université Sidi Mohamed Ben Abdellah de Fès Maroc,** oumayma.bedraoui@hotmail.fr

and performance. The company then finds itself in a situation of "natural selection" which forces it to develop specific skills and knowledge internally through organizational learning. These achievements are at the origin of the creation of new products / services or working methods, which allow the company to distinguish itself from its competitors and therefore to develop a competitive advantage.

According to evolutionary theory, performance is the culmination of a process of selection and organizational learning, avoiding competition, the knowledge and skills of the company will be reduced and therefore its performance, and consequently it will be the prey of natural selection.

Innovation intervenes to guarantee the company its competitiveness, and to allow it to create a competitive advantage, to gain market share and therefore to improve its performance.

Based on this, we formulate our main question as follows:

What effect has innovation on the firm performance?

The literature on innovation focuses on the sources that enable companies to access the generation of ideas and enable them to develop the innovation potential of products and / or services. These sources also provide contacts with external actors as a means of fostering innovation (Blommerde & Lynch, 2014, Denicolai & al, 2016). These studies tend to argue that the nature of innovation is the generation of ideas.

To answer this problem, we will follow the subsequent plan: first, we will start with a definition of the two key concepts of our research: Innovation and performance, then we will present the measurement indicators for each of the two concepts. Finally, we will summarize the contributions in literature of the authors who have dealt with the same research theme in order to be able to deduce the various results to which they lead.

The theoretical framework for our research suggests that each company strives to innovate new products, new services and new organizational methods and practices. These changes have a very significant influence on customer choice and satisfaction and consequently on the level of sales and consequently on the performance of the company. The research hypotheses can be formulated as follows:

H1: innovation would be a determinant of performance that would influence it positively.

H2: innovation would be a determinant of performance that would influence it positively.

H3: Innovation and performance have more of an "independent" relationship.

1. Definition of innovation

Innovation is seen as one of the main ways to gain competitive advantage by responding to market demands. Innovation is not only the creation of new products, but also the development of existing products and the optimization of their production systems, as well as the adoption of the latest technologies generated by fundamental research (S. Boutillier & al 2014). In particular, the implementation of innovations within the company has two components:

One-off innovation is the innovation or product innovation project, which consists of the creation or adoption of a new technology to a product, or the improvement of existing products.

Permanent innovation, It is about making competitiveness sustainable and lasting more than acquiring it, innovation in this case is linked to the company's strategy, for that the company must

take more interest to put the customer at the heart of its decisions, create synergy with its partners, set up a system of communication and information sharing.

We can distinguish between three major typologies most commonly developed in the literature: the dichotomy between technological innovation and managerial innovation, product innovation and process innovation, radical innovation and incremental innovation.

2. Typology of innovation

2.1 Technological innovation Vs organizational innovation

To distinguish between technological innovation and managerial innovation, Cooper (1998) proposes to analyze the degree of proximity between the resulting change and the operational heart of the organization.

Technological innovation effects organizational changes through the introduction of a change in technology, these changes influence basic production processes through the use of new

systems and techniques. Technological innovation is considered to be directly linked to the main operational activity of the organization according to Damapour & Evan (1984), while for Brimm (1984), it is rather a question of transforming an idea into a new product / process or improved for which a market exists. Innovation is therefore considered technological when the novelty influences the material and operational characteristics of products and processes by giving rise to a new mode of production with the objective of meeting a market need.

Organizational innovation: Also known as "managerial innovation" (Birkinshaw & al, 2008), was first used by Kimberly (1981) to refer to "any program, product or technique that represents a significant breakthrough. with regard to the state of the art in management which affects, when it occurs, the nature, location, quality or quantity of information that is available in the decision-making process ", adoption by an organization of a new method or new practice compared to known management practices. This innovation aims to change the structure or administrative processes of the organization. It also corresponds to the implementation of ideas through new recruitments of staff, the allocation of resources, the structure of tasks or remuneration policies. It aims to modify the internal decision-making model of the organization.

2.2 Product Innovation Vs Process Innovation

The distinction between product innovation and process innovation is made at the level of technological innovation to differ between the transformation within the manufacturing process in terms of inputs and which serves to improve the attributes of the product, and that which concerns outputs and which serves to improve the manufacturing process and reduce the resulting costs.

Product innovation: concerns the fact of introducing a new good or service to the market or of significantly improving it in terms of its characteristics. It is therefore a question of either creating a new product or a new use of the existing product, this innovation concerns all the components of a product, we can distinguish between three types of product innovation: innovation which modifies the characteristics of product presentation, innovation that changes the technological design and innovation that concerns the functional concept of the product. The product concept includes both goods (tangible products) and services (intangible products).

Process innovation: Corresponds to the application of new, or significantly improved, production or sales methods and techniques aimed at simplifying them and reducing their costs by influencing the nature of the manufacturing process. To achieve this, adopting a process innovation requires the organization to apply the technology to improve the efficiency of product development

and marketing. Process innovation is generally linked to logistics and includes software, hardware, techniques, and aims to improve the effectiveness and efficiency of production, with a view to increasing quality while by reducing prices and production costs.

However, an interdependent relationship links these two innovations in that product innovation frequently requires new processes, so process innovation requires product modifications.

2.3 Radical innovation Vs incremental innovation

This involves determining the degree of novelty of new products, the level of technological impact, the level of economic and social influence and the degree of utility of the innovation.

Radical or disruptive innovation profoundly changes the rhythm of habits; it is a major innovation that changes both the habits of customers as well as those of suppliers by causing significant changes in industry and / or society. By adopting radical innovation, the organization will undergo changes.

By adopting radical innovation, the organization will undergo deep and fundamental structural and strategic changes that bring about a strong change in customer perception. Radical innovation serves to create a new market or else fundamentally transform one or more market (s), there is a before and an after, not only for the company, but also for its competitors.

Incremental innovation: (or progressive), it improves the product or the process, it does not suppose a profound and fundamental change because it is a question of adding new functionalities to an existing product, we can therefore adopt incremental innovation while retaining the same customers and suppliers. Incremental innovation does not require new know-how and leads to a gradual and minor improvement of current products or services. The adoption of incremental innovations generally aims to differentiate them-selves in an existing market to offer a better offer with lower costs, for this type of innovation, the organization needs less funds, less time and less effort communication, which means that the latter are more frequent than radical innovations.

We can add to these typologies and following more recent work (Kahn , 2018; Holmlund & al, 2016; Sabirova & al, 2017), the distinction between:

-Managerial innovation: Managerial innovation involves the introduction of new things into the organization, it can be defined as "the generation and implementation of a management practice, a process, a structure or 'a management technique, which are new to the state, with the intention of achieving organizational goals' (Birkinshaw & al 2008). Managerial innovation can then be defined as "the introduction of new management policies with the objective of improving the performance of the firm" (Besbes & al 2013), and this with a view to collaboration between staff through new relational modalities (Autissier & al, 2016). A more recent definition of managerial innovation proposes the main elements to better define this concept and which can be summed up in the adoption, generation or creation and application of a practice, a process, a renewed management structure or technique. This leads to the creation of value for customers, technological, competitive and commercial monitoring, the distribution of activities, the formalization of procedures and employee participatory postures.(Birkinshaw & al 2008).

-Marketing innovation: It brings together all of the marketing techniques or practices and consists of the implementation of a new strategy or a new concept, significantly different from already existing marketing methods. Marketing innovation includes significant changes in packaging or design and introduces new means or techniques by promoting a product, by introducing new

distribution methods or new sales channels, or new pricing methods. Goods and services. The innovation then affects the various variables of the marketing mix (product, price, promotion, distribution).

-Environmental innovation: This consists of the implementation of a product, process, organizational or marketing innovation that generates environmental benefits; these innovations are considered eco-responsible. Example: launch of a range of 100% recyclable products, reusable bottles and cups, Vegan catering (vegan burgers, vegan cheese, etc.).

-Social innovation: It aims to solve social problems and improve living conditions with a view to developing social and organizational practices (Smith, 2017). "Social innovation requires (or involves) innovating in the innovation process, reinventing innovation itself, it must involve the conscious and inventive participation of individuals and communities". (Le Bas, 2018). Social innovation is defined by its purpose and not by its methods, its aim is to develop social and entrepreneurial solutions to major social issues and to the various unmet needs of society: the integration of young people into life, professional and citizen, the improvement of living conditions, the fight against unemployment, the contribution to education, the integration of disabled people. To better understand the concept of social innovation, we propose the following definition: "Social innovation is the use / exploitation of any good, service, idea, practice, procedure, intervention, method, process… newly developed or reinvented in order to take charge of and respond to social needs and aspirations neglected by the market and / or the State for the benefit of disadvantaged individuals and groups, in order to solve the socio-economic problems that arise, to stimulate a dynamic of development on all levels, and thereby achieve comprehensive and lasting social change. Social innovation takes the form of several types of actions and projects developed by several categories of people and organizations "(Bouazza & al, 2019).

3. Innovation indicators

The variation in different indicators and the specification of the innovation variable constitute a great challenge, due to its complexity and the multitude of its types. In the literature, most of the elements used to measure the level of innovation in the company are tangible, such as the research and development budget, the number of patents and trademarks registered or the rate of introduction of new products on the market. the market. The application of these indicators is considered "commonplace" for large institutional surveys whether at national or international level (ECI, BRDIS, EISE). However, it is not considered very useful to apply these measurement tools for SMEs.

To better understand the reality of the level of innovation by taking more qualitative dimensions into consideration, the OECD (2010) attempted in the report: "measuring innovation: a new perspective", to mobilize new indicators in addition to those already mentioned, but not all the innovations are patented, they therefore only reflect part of the degree of innovation in SMEs, given the low allocation of resources intended for R&D and the non-existence of a department or service dedicated to this effect.

There are several loopholes in the number of patents filed because it only takes into account patent innovations, and some innovations are still not patented due to cumbersome management procedures. Crepon & al. (2016) therefore proposed a less rigorous measurement standard, i.e., based on the product update rate, the share of sales of products used for less than 5 years: this new measurement balances the innovation of each product. Sales, and take into account the real innovation, improvement and imitation. (Critique of the tool: it only concerns product innovation).

Other indicators are thus taken into consideration to measure the level of innovation in a company such as:

3.1 Factual or declarative indicators

The indicators for measuring innovation are presented in the form of factual indicators and declarative indicators.

For factual indicators, they generally relate to product / process innovation. They are represented through figures, more particularly the R&D budget, the acquisition of external knowledge, the acquisition of equipment, etc.). As for the declarative indicators, they are based on the declarative practices collected through surveys. These indicators also include organizational innovation (the implementation of organizational practices, organizational learning, etc.). However, this type of indicator is based on the respondents' appreciation and therefore giving it a subjective character, Ait Razouk (2011) demonstrated a significant correlation between the subjective and objective measurement of performance while including innovation, it is therefore considered more useful to choose the two indicators given their complementarities.

3.2 Absolute or relative indicators

Several works in the literature still use a single indicator to measure innovation, namely: the rate of introduction of new products. However, this research does not take into account the relativity of this indicator. Freel (2000) asserts that it is more appropriate to consider companies in terms of "more innovative" or "less innovative" and to identify best practices, through the number of new products / services / processes put on the market. Over the past three years by relating it to the company's product / service base. This makes it possible to measure the level of innovation in a company by degree and gradation from less innovative to more innovative and not by the fact whether it is innovative or not, this relativity indicator then makes it possible to broaden the concept of innovation to the instead of pinpointing it.

3.3 Direct and indirect indicators

It is frequently observed that research on innovation directly links innovation to firm growth or profitability and considers these signs to be a direct indicator of innovation. However, it is necessary to take into consideration the time gap between the introduction of innovation and its impacts as well as the industry.

The indirect variables for measuring innovation used in the literature are based on the analysis of the relationship between innovation and participation in knowledge networks and territorial structures. Other indirect indicators should also be mentioned, such as the obtaining by the company of a prize for an innovation or the submission of a file in order to receive an innovation bonus, as well as the synergy with other companies and its commitment to innovative projects.

4. Firm performance

Company performance, the subject of our research, refers to the degree of achievement of the objectives pursued. Performance enables the company to ensure and guarantee the survival and sustainability of the company and to increase its competitive advantage. The performance of the company makes it possible to improve and optimize the relationship between the value-cost ratios. It is not a question of minimizing costs, nor of maximizing value, but rather of improving net value creation.

4.1 Definitions of firm performance

The definition of the concept of performance encompasses several aspects:

-Performance is a comparative analysis of two or more results: there is only performance in relation to a benchmark.

-The performance of a company is measured by performance indicators; there is no single indicator or an exhaustive list determining the various performance indicators. For Scherer for example; he distinguishes four types of performance indicators: profitability, growth, technological development, equity.

Table 1: Some definitions of firm performance

Definitions of firm performance	Authors
The concept of performance can be defined for a company, as being the level of achievement of results in relation to the efforts committed and the resources consumed. It applies widely to the concepts of effectiveness and efficiency.	Issor, Zineb. "" Company performance: a complex concept with multiple dimensions "", Projectics / Prouvéctica / Projectique, vol. 17, no. 2, 2017, pp. 93-103.
Performance measures both the adequacy between the initially defined strategic objectives and the results effectively achieved (effectiveness) and the adequacy between the results and the means employed (efficiency).	Babeau, O. (2015). "The overall performance of the company (other than financial)" GRH, (4), 95-96.
Performance is defined by multi-criteria and multi-actor indictors; its measurement must therefore provide information on both the effectiveness of the choice of policies and the efficiency of the management choices.	Belghanami Najdat, (2019), "Valuing Business Performance From And Through Skills: The Case Of Sdo Bechar Rural", Al Bashaer Economic Journal, Volume 1, Number 1, Pages 155-169.
It is the ability of the business to generate profits and benefits for its different parts, by designing products or services that can satisfy customers.	Ghozlene Oubya. (2016), Contribution to the study of the determinants of business performance: impact of customer value creation on the performance of hotel companies in Tunisia. Management and management. Côte d´Azur University, 2016.NNT: 2016AZUR0028.

Source: Our resarch

Thus, the concept of performance can be defined as the level of achievement of results in relation to the efforts made and the resources consumed. A successful business must be both effective and efficient.

Effectiveness and efficiency

Efficiency

Performance first incorporates the notion of efficiency; a company is efficient when it achieves the objectives it has set for itself. Performance then consists of achieving a certain result in accordance with a given objective, this objective must be:

- Defines and measurable beforehand.

- Consistent with the purpose of the business.

- Accompanied by the expected result.

An activity deemed effective, when the results obtained comply with or come as close as possible to the objectives set. To assess effectiveness, the objectives set must be measurable.

Effectiveness = Objectives achieved / objectives planned

Efficiency

Performance then integrates the notion of efficiency which can be defined as the ratio between the resources employed and the results achieved, it is a matter of ensuring that the company optimally uses its resources by maximizing the quality obtained from products or services from a given amount of resources.

An activity deemed efficient, when it achieves the expected results at the lowest cost.

Efficiency = Objectives achieved / Resources used

Performance is then the optimal result obtained by the most efficient use possible of the resources used.

4.2 Performance indicators

4.2.1 Financial performance indicators

The rate of return, the rate of return on assets, working capital or cash requirements, the operating cycle of products, payment terms for customers and suppliers are all financial indicators making it possible to analyze real health of a company. These KPIs also make it possible to compare two companies belonging to the same sector of activity and to identify the relevance of a merger (merger-acquisition or joint venture) in terms of external growth.

4.2.2 Organizational performance indicators

Organizational indicators relate more particularly to the company's human resources and its overall productivity. They detail the absenteeism rate, the accident rate, the production or subcontracting costs, the used or unused production capacity and the contribution to the margin, among others. Organizational indicators are thus used to identify the margins of progress within the company's departments.

4.2.3 Commercial performance indicators

When a company wishes to determine the most profitable activities which contribute to its internal growth, it establishes commercial indicators detailing the origin of its turnover. The purpose of commercial indicators is to measure the revenues generated by each production line or each site, the influence of advertising campaigns and the market share achieved by the company in a given sector through a study of the competition.

5. Literature Review: Impact of innovation on firm performance

Due to the importance that the literature gives to the development of innovation, several studies have studied the link between innovation and performance, in particular Rosli (2013) who conducted a study to analyze the influence of various dimensions of innovation on the performance of SMEs, the results indicate that product innovation and process innovation have a significant positive effect on the performance of SMEs. Likewise, according to Ismanu, & al. (2017), innovation with dimensions of product innovation and process innovation that have a significant influence on the financial performance of SMEs. Neely, Filipini & al (2001) in turn confirmed the impact of innovation on certain performance dimensions such as market share, customer satisfaction, competitive position and return on investment which is the product of lower costs generated by innovation in the production process. Thus, improving the distribution channel and creating new products and services positively influence the degree of customer satisfaction and therefore affect the company's market share. These researchers thus exposed the impact of managerial and organizational innovations on lowering operating costs and improving service delivery. Löfsten (2014) found that only a few dimensions of innovation influenced the performance of Swedish firms, indicating that innovative firms do not necessarily produce higher profits.

Among the motivations for innovation proposed in our literature, we have cited: the search for a competitive advantage and competitiveness, the development of a potential for unnecessary satisfaction and the strengthening of society and social legitimacy (Mzaim, 2020). Research on these

motivations, shows that innovation is a way to ensure the satisfaction of customers, employees, managers and society. Innovation is indirectly linked to different areas of innovation.

Table 2: Principle studies 'results about the impact of innovation on firm

Authors	Themes	Results
Artz, K. W., Norman, P.M., Hatfield, D. E & Cadinal, L. B (2010)	"*A longitudinal study of the impact of R&D, patents and product innovation on firm performance*" Journal Of Product Innovation Management, 27, 725-740.	These authors found that investments in R&D help increase patents and new products. However, a negative relationship between the number of patents and financial performance was found. Firms that invest in R&D tend to have more patents, but a firm may not necessarily achieve higher returns relative to its performance.
Hojnik, J., &Ruzzier, M. (2016)	"*The diving forces of process eco-innovation and its impact on performance: Insights from Slovenia*" Journal of Cleaner Production, 13, 812-825, doi: 10.1016/j.jclepro.2016.06.002.	Emphasize a significant and positive relationship between innovation and business performance in audit firms. Survey of 66 auditors working in audit firms in Turkey. It can be said that company performance has increased where audit firms have attached importance to innovation.
Kumar, V., &Sundarraj, R. P (2016)	"*Schumpeterian innovation patterns and firm-performance of global technology companies*" European Journal of Innovation Management, 19, 276-296, doi: 10.1018/ESIM-05-2015-0034.	The authors found that the adoption of models of creative accumulation led to better business performance, working as a moderator in the relationship between economic innovation. Several quintile and panel regression data were used in these studies to assess innovation and performance.
Lee, C., Park, G., Marhold, K., & Kang, J. (2017)	"*Top management team's innovation related characteristics and the firm's explorative R&D: an analysis based on patent data*"Scientometrics, 111, 639-663. Doi: 10.1007/s11192-017-2322-1.	The study of these researchers revealed that the training of senior executives in specific fields, such as science or engineering, together with their experience in the field of R&D, has a positive impact on innovative activities.
Lee, D. H., Dedahanov, A. T., & Rhee, J. (2015).	"Moderating role of external networks and mediating effect of innovation performance on the relationship between technology orientation and firm performance" Asian Journal of Technology Innovation, 23, 321-334, doi: 10.1018/19761597.2015.1120.498	The generation of new patents, products and services contributes to the company's performance in terms of sales and profitability. Innovation therefore also acts as a mediating variable in the relationship between technological orientation in networks and financial performance. The use of new technologies and equipment should be discussed by business leaders. New technologies and equipment can be integrated into the organization by qualified personnel to improve performance (including production, market share, bottom line, sales and others.)
Lichtenthaler, U. (2016)	"*Toward an innovation-based perspective on company performance*", Management Decision, 54, 66-87, doi: 10.1108/MD-05-2015-0161	Emphasizes that the innovation-driven perspective goes beyond the focus of many companies on product innovation by examining its interdependencies with other essential first-rate innovations such as service, process, model innovations commercial and management. The innovation-based perspective further addresses the dynamic and intertemporal transformations of innovation activities based on second-order innovations,

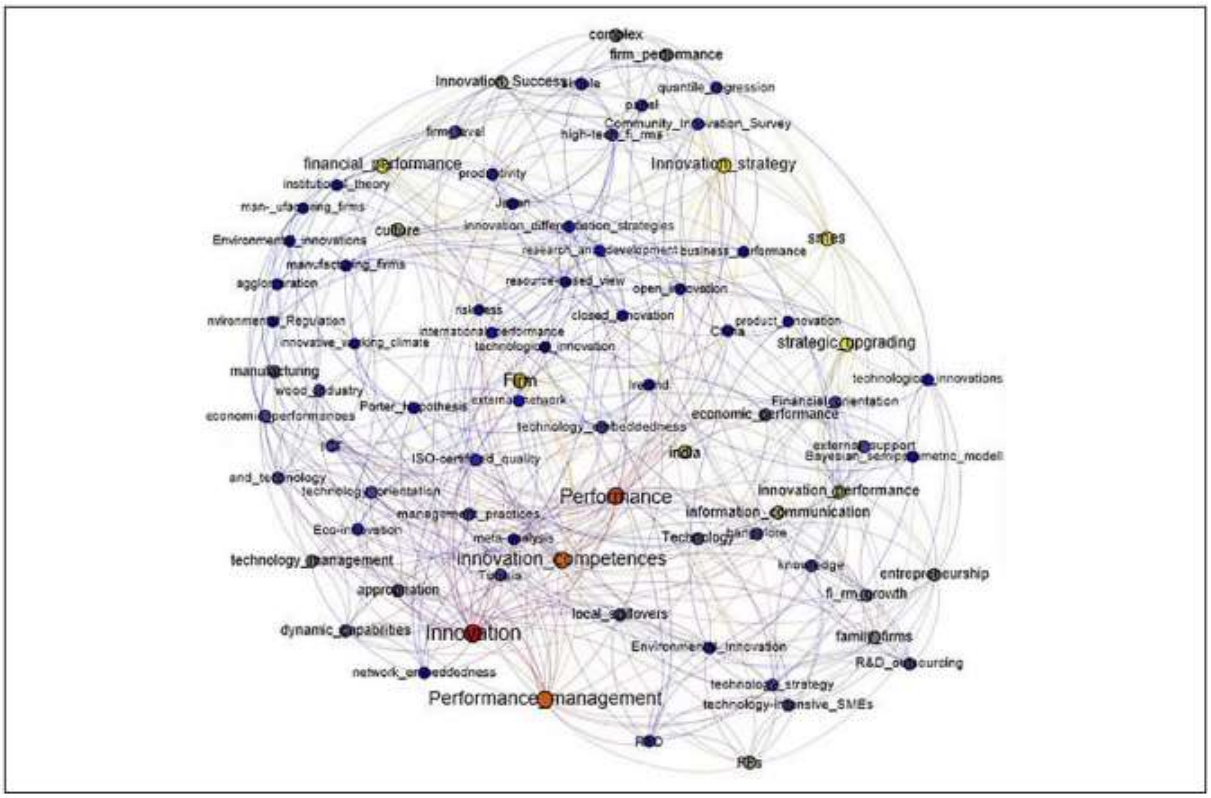
		which provide a more realistic view of organizational innovation over time. This transformation affects organizational boundaries and the way a business maintains superior performance.
Taalbi, J., (2017)	"*What drives innovation? Evidence from economic history*" Research Policy, 46, 1437-1453.	Empirical evidence has shown that innovative firms tend to perform better in the same way that countries which invest public resources to develop innovation also improve development.
Tajeddini, K (2016)	"*Financial orientation, product innovation and firm performance: En empirical study in the Japanese SMEs*" International Journal and Technology Management, 13(3), article 1640005, doi: 10.1142/s0219877016400058.	A positive influence on product innovation indicates that small and medium-sized enterprises are likely to embrace process innovation, which also has a positive relationship with financial performance.
Tavassoli, S., & Karlsson, C. (2015)	"*Innovation strategies and firm performance: Simple or complex strategies*?" Economics of Innovation and New Technology, 25, 631-650. Doi: 10.1080/10438599.2015.110809.	The main findings indicate that firms that choose a complex innovation strategy and allow themselves to do so perform better in terms of future productivity compared to both firms that choose not to innovate (core group) and firms that choose simple innovation strategies. Moreover, looking in more detail at the innovative combinations that make up these innovation strategies, it turns out that there is a moderating role of process and organizational innovations on the effect of product innovation.
Tsai,. M.& Wang, C. (2017)	« *Linking service innovation to firm performance: The roles of ambidextrous innovation and market orientation capability*" Chinese Management Studies, Vol 11, N°4, 730-775, doi: 10.1108/CMS-03-2017-0045.	The authors find that companies offering more innovative services tend to perform better. This finding suggests that the innovation strategy can bring more direct and immediate benefits to service-oriented firms, which supports the proposition that the innovation strategy can enhance firm performance. The results refine this point of view by showing that the implementation of the innovation strategy is a key contributor to the creation of value for customers, in particular in service-oriented companies.

Source: Our research

Innovation is seen as a real imperative for companies which stipulate strengthening their competitive position in markets, improving the quality of their products / services, increasing their productivity and developing skills. Porter (1982) emphasizes the importance of innovation for business and its role in maintaining and creating sustainable competitive advantages in changing markets. Innovation is a key success factor essential to the competitiveness and profitability of companies and is subsequently an essential element of company strategy. Thus, innovating allows the company to have a competitive advantage in terms of cost or product offer. Rosenbusch et al (2011) find that innovation activities

create value and a competitive advantage for SMEs. These types of activities, as they say, have a direct impact on the performance of companies. To study such a relationship, these researchers adopted a multidimensional perspective on performance based on the conceptual model of Combs et al (2005), according to its theoretical foundations; company performance refers to the links between accounting returns, the stock market and growth.

Figure 19: Relationship between keywords in the articles studied.



The figure below illustrates the main words of the titles and keywords used in the articles studied and cited in the table above. As expected, the most frequently used words (through relationship) are: innovation, performance, strategic innovation, skills, management, R&D, ROI….

Conclusion

We should now focus on the contributions and research perspectives that this article brings. On the one hand, the contribution presented here is threefold: in terms of approach, first, it was a question of testing a framework of critical analysis in management to the study of constructs particularly significant in management research. : Innovation and company performance. Our article presents an original presentation of indicators and forms of innovation and performance. Our contribution is manifested in the synthesis of the contributions in literature of the authors having studied the link between innovation and the performance of the company. After analyzing the different literary contributions of the authors who have dealt with this theme, it can be concluded that innovation would be a determinant of performance that would influence it positively or negatively . Other authors argue that this is more of an "independent" relationship: successful companies are not necessarily characterized by a high degree of innovation. Our contribution is evident in the synthesis of the literature contributions of authors who study the link between innovation and business performance.

On the other hand, this article opens up stimulating research perspectives, aimed at completing and testing the analytical tool, but also at extending the implications of such a broadening of perspective in management. Moreover, this product opens exciting research opportunities and experience to complement the analytical tool, but also to extend the implications of such a broadening of perspective in management. However, it is recommended to check the validity of these results

taking into account the different sectors of activity and the size of the different companies knowing that these criteria could impact our analysis.

Bibliography

- Abidin, S. B. Z., Mokhtar, S. S. B., & Yusoff, R. Z. B. (2011). « A systematic analysis of innovation studies: A proposed framework on relationship between innovation process and firm's performance». The Asian Journal of Technology Management, 4(2), pp: 65-83.
- Ahn, J.M.Minshall, T., & Mortara, L. (2015). « Open innovation: a new classification and its impact on firm performance in innovative smes». Journal of Innovation Management, 3(2), pp: 33-54, ISSN: 2183-606.
- Artz, K. W., Norman, P. M., Hatfield, D. E., & Cardinal, L. B. (2010). « A longitudinal study of the impact of R&D, patents, and product innovation on firm performance ». Journal of product innovation management, 27(5),pp: 725-740.
- Babeau, O. (2015). « The overall performance of the company (other than financial) ». GRH, (4), pp: 95-96.
- Belghanami Najdat, (2019), « Valuing Business Performance From And Through Skills: The Case Of Sdo Bechar Rural», Al Bashaer Economic Journal, Volume 1, Number 1, pp: 155-169.
- Besbes, A., Aliouat, B., & Gharbi, J. E. (2013). « L'impact de l'innovation managériale sur la performance ». Revue française de gestion, (6), pp : 161-174.
- Birkinshaw, J., Hamel, G., & Mol, M. J. (2008).« Management innovation ». Academy of management Review, 33(4), pp: 825-845.
- Brimm, M. (1984), « La diffusion des innovations en matière d'organisation », Revue française de gestion, vol. 44, pp : 68-79.
- Blommerde, T., & Lynch, P. (2014) « Dynamic capabilities for managing service innovation: Towards a conceptual framework». Irish Academy of Management Conference, Limerick, Ireland.
- Bouazza, A., & Nafil, Y. (2019). «Innovation sociale: analyse approfondie de ses relations avec les services». Focus sur les services sociaux. Revue Marocaine de Recherche en Management & Marketing, 11(2), pp:1-26.
- Caputo, M., Lamberti, E., Cammarano, A. & Michelino, F. (2016). «Exploring the impact of open innovation on firm performance», Management Decision, vol (54), n°7, pp: 1788-1812, doi: 10.1108/MD-02-2015-0052.
- Combs, J. G., Crook, T. R., & Shook, C. L. (2005). «The dimensionality of organizational performance and its implications for strategic management research». In Research methodology in strategy and management. Emerald Group Publishing Limited.

- Cooper, J. R. (1998). «A multidimensional approach to the adoption of innovation». Management decision.
- Damanpour, F., & Evan, W. M. (1984). «Organizational innovation and performance: the problem of" organizational lag». Administrative science quarterly, pp: 392-409.
- Corral de Zubielqui, G., Lindsay, N., Lindsay, W., et al (2019) «Knowledge quality, innovation and firm performance: a study of knowledge transfer in Smes». Small Bus Econ.53, pp: 145-164, doi: 10.1007/s11187-018-0046-0.
- Crépon, B., & Van Den Berg, G. J. (2016). «Active labor market policies». Annual Review of Economics, 8, pp: 521-546.
- Denicolai, S., Ramirez, M., & Tidd, J. (2016). «Overcoming the false dichotomy between internal R&D and external knowledge acquisition: Absorptive capacity dynamics over time». Technological Forecasting and Social Change, 104, pp: 57-65.
- De Winne, S. & Sels, L. (2010). « Interrelationships between human capital, HRM and innovation in belgian start-ups aiming at an innovation strategy». The International Journal of Human Resources Management, 21(11), pp: 1863-1883. Google Scholar 10.1080/09585192.2010.505088.
- Freel, M. S. (2000). «Barriers to product innovation in small manufacturing firms». International Small Business Journal, 18(2), pp: 60-80.
- Geroski, P., & Machin, S. (1992). «Do innovating firms outperform non innovators?». Business Strategy Review, 3(2), pp: 79-90.
- Ghozlene Oubya. (2016), «Contribution to the study of the determinants of business performance: impact of customer value creation on the performance of hotel companies in Tunisia». Management and management. Côte D´Azur University, 2016. NNT: 2016AZUR0028.
- Gurel, E (2017) «The relationship between innovation and firm performance: A survey on auditing in Turkey». Journal of Economics Finance and Accounting, 4 (3), pp: 237-244, Doi: 10.17261/Pressaccademia.2017.691.
- Hojnik, J., & Ruzzier, M. (2016). «What drives eco-innovation? A review of an emerging literature». Environmental Innovation and Societal Transitions, 19, pp: 31-41.
- Kumar, V & Sundarraj, R. P. (2016). «Schumpeterian innovation patterns and firm-performance of global technology companies». European journal of innovation management. 19(2), pp : 276-296.
- Holmlund, M., Kowalkowski, C., & Biggemann, S. (2016). «Organizational behavior in innovation, marketing, and purchasing in business service contexts— An agenda for academic inquiry». Journal of Business Research, 69(7), pp: 2457-2462.

- Huggins, R., & Johnston, A. (2009). «Knowledge networks in an uncompetitive region: SME innovation and growth». Growth and Change, 40(2), pp: 227-259.
- Issor, Zineb. (2017) «Company performance: a complex concept with multiple dimensions », Projectics / Prouvéctica / Projectique, vol. 17, no. 2, pp: 93-103.
- Ismanu, S., & Kusmintarti, A. (2019). « Innovation and firm performance of small and medium enterprises». Review of Integrative Business and Economics Research, 8, pp: 312-323.
- Kahn, K. B. (2018). «Understanding innovation». Business Horizons, 61(3), pp: 453-460.
- Kimberly, J.R. (1981) «Managerial Innovation. In: Nystrom, P.C. and Starbuck, W.H., Eds., Handbook of Organizational Design», Oxford University Press, New York, Vol. 1, pp: 84-104.
- Le Bas, C. (2018). « La recombinaison de connaissances comme processus past et path dependent: clarification et implications pour le management». Innovations, (1), pp: 41-59.
- LEDENT, P., SALMON, C. Et CASSIERS, I. (2002). «Capital humain et disparités régionales de la croissance. Éléments de comparaison entre la Wallonie et la Flandre», pp : 395-412.
- Lee, C., Park, G., Marhold, K., & Kang, J. (2017). «Top management team's innovation-related characteristics and the firm's explorative R&D: An analysis based on patent data». Scientometrics, 111(2), pp: 639-663.
- Lee, D. H., Dedahanov, A. T., & Rhee, J. (2015). Moderating role of external networks and mediating effect of innovation performance on the relationship between technology orientation and firm performance». Asian Journal of Technology Innovation, 23(3), pp: 321-334.
- Lichtenthaler, U. (2016), "Toward an innovation-based perspective on company performance», Management Decision, Vol. 54 No. 1, pp. 66-87.
- Liouville, J. & Bayad, M. (1998). « Human resource management and performances : proposition and test of a causal model». Human Systems Management, 17(3), pp: 183-194.
- Google Scholar 10.1177/239700229801200304.
- Löfsten, H. (2014). «Product innovation processes and the trade-off between product innovation performance and business performance». European Journal of Innovation Management. 17 (1), pp : 61-84.
- MZAIZ, M. (2020). Innovation et Recherches en Sciences de Gestion. Revue Du contrôle, De La Comptabilité Et De l'Audit, 2(3). Retrieved from https://www.revuecca.com/index.php/home/article/view/253.

- Naala, M. I. N., Nordin, N., & Omar, W. A. W. (2017). «Innovation capability and firm performance relationship: A study of pls-structural equation modeling (pls-Sem)». International Journal of Organization & Business Excellence, 2 (1), pp: 39-50, ISSN 2504-8589.
- Neely, A., Filippini, R., Forza, C., Vinelli, A., & Hii, J. (2001). «A framework for analysing business performance, firm innovation and related contextual factors: perceptions of managers and policy makers in two European regions». Integrated manufacturing systems. 12(2), pp : 114-124.
- Phan, T. (2019) «Does organizational innovation always lead to better performance? A study of firms in Vietnam». Journal of Economics and Development, vol (21), n°1, pp: 71-82, doi: 10.1108/JED-06-2019-0003.
- Porter M. (1982), « Choix stratégiques et concurrence, Economica, Paris, 1982.
- Prifti, R., Alimehmeti, G. (2017). «Market orientation, innovation, and firm performance: an analysis of Albanian firms». Journal of Innovation and Entrepreneurship, 6(1), pp: 1-19, doi: 10.1186/s13731-017-0069-9.
- Razouk, A. A., & Bayad, M. (2011). « GRH mobilisatrice et performance des PME». Revue de gestion des ressources humaines, (4), pp: 3-18.
- Rosli, M. M., & Sidek, S. (2013). «The Impact of innovation on the performance of small and medium manufacturing enterprises: Evidence from Malaysia. Journal of Innovation». Management in Small & Medium Enterprises, 2013, pp: 436-453.
- SIMON, M., ELANGO, B., HOUGHTON, S.M. et SAVELLI, S. (2002). «The successful product pioneer : maintaining commitment while adapting to change». Journal of Small Business Management, 40(3), pp: 187-203.Google Scholar 10.1111/1540-627X.00050.
- Smith, A. (2017). «Social innovation, democracy and makerspaces».
- Taalbi, J., (2017) «What drives innovation? Evidence from economic history». Research Policy, 46, pp: 1437-1453.
- Tajeddini, K (2016) «Financial orientation, product innovation and firm performance: En empirical study in the Japanese smes». International Journal and Technology Management, 13(3), article 1640005, doi: 10.1142/s0219877016400058.
- Tavassoli, S., & Karlsson, C. (2015) «Innovation strategies and firm performance: Simple or complex strategies? ». Economics of Innovation and New Technology, 25, pp: 631-650. Doi: 10.1080/10438599.2015.110809.
- Terziovski, M. (2010). «Innovation practice and its performance implications in small and medium enterprises (smes) in the manufacturing sector: a resource & hyphen; based view». Strategic Management Journal, 31(8), pp: 892-902.

- Tsai, M & Wang, C. (2017) « Linking service innovation to firm performance: The roles of ambidextrous innovation and market orientation capability». Chinese Management Studies, Vol 11, N°4, pp: 730-775, doi: 10.1108/CMS-03-2017-0045.
- Tuan, N, Nhan, N., Giang, P., & Ngoc, N. (2016). «The effects of innovation on firm performance of supporting industries in Hanoi, Vietnam». Journal of Industrial Engineering and Management. 9(2), 413-431. Doi: 10.3926/JIEM.1564. ISSN: 2013-0953.
- Vasconocelas, R. & Oliveria, M. (2018) «Does innovation make a difference? An analysis of the performance of micro and small enterprises in the food-service industry». Innovation & Management Review, vol (15), n°2, pp: 137-154, doi: 10.1108/INMR-04-2018-011.
- Wadho, W., & Chaudhry, A. (2018) «Innovation and firm performance in developing countries: The case of Pakistani textile and apparel manufacturers». Research Policy, 47(7), pp: 1283-1294, doi: 10.1016/j.respol.2018.04.007.
- Wei, Z., Sang, X & Xie, P (2019) «How does management innovation matter for performance: Efficiency or legitimacy? ». Chinese Management Studies, vol (25), N°3, pp: 275-296, doi: 10.1108/CMS-11-2018-0760.
- Wu, L., Hitt, L., & Lou, B (2019). «Data Analytics, Innovation, and firm productivity». Management Science. Doi: 10.1287/mnsc.2018.3281, pp: 1-23. ISSN :1526-5501.