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Contribution of sustainable innovation to supporting competitiveness company case of 'Danone' company

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Abstract:

This study aims to show the role of innovation as a basic mechanism in enhancing the sustainability of company, supporting its competitiveness, and building a new business model that depends on sustainability and achieves profitability at the same time. And then to clarify the contribution of sustainable innovation to support competitiveness through a case study of "Danone" company which works in the field of food industry during the period (2009 - 2019).

The study concluded that the greater interest in integrating sustainable innovations into the company production or commercial activity, the more positively this will be reflected on its performance and consumer behavior towards its products, thus raising its market share, which reflects an increase in company competitiveness.

Keywords: sustainability, sustainable innovation, competitiveness, business model, Danone company

Jel Classification Codes: O30 .Q

1. Introduction:

The implementation of a sustainable development model into practice has become a primary goal of public policy in both developed and developing countries with the aim of supporting the development effort, which the public authorities are no longer able to undertake on their own, on one hand, and to ensure the sustainable management of the available natural resources and the preservation of the ecosystem with its various components in an other hand. In this context, the behavior development of economic agents, whether in their capacity as consumers or producers, represents the engine of this new economy. Hence, institutions are called to develop socially responsible behaviors, in the sense of integrating social and environmental concerns in their production and commercial activities in their dealings with stakeholders voluntarily. Entrepreneurial strategies related to the development of green or environmental innovations have become an area of attraction for researchers and theorists in the field of economic sciences and engineering which study the ways and methods of initiating, disseminating, and adopting these strategies by the corporation, public authorities, and consumers.

For the enterprise that is at the center of this process, environmental sustainability is no longer just an issue of corporate social responsibility (CSR) but has become essential for doing business, beyond the opportunities and risks related to the environment. The strategies and approaches of operating company's across all sectors and functions underpin the choices of environmental strategy, which increasingly define the company's prospects and future in a highly competitive market. In this regard, the World Economic Forum's Global Risks Report 2020 notes that the top five business risks are associated with challenges Environmental issues, including extreme weather and climate action failures, so it is no surprise that investors and financial managers are increasingly incorporating sustainability criteria into their investment decisions as a recent study by IBM showed that nearly 80 percent of consumers indicate that sustainability is important to them. And that 60 percent are willing to change their shopping habits to reduce the environmental impact in the sense of moving towards companies with environmental friendly products, and these forces together are working to form a new corporate agenda, (Wayne s, 2020), from this standpoint it was necessary The enterprise must integrate the environmental dimension into its innovative activity to a competitive advantage that enables it to maintain its market share, and why not to increase it.

From the top, we can ask the following main question: How does sustainable innovation contribute to enhancing company's competitiveness? this problem can be broken down into the following subquestions:

What is the importance of the company's transformation to sustainability?

What is meant by sustainable innovation and what is competitiveness?

What is Danone's innovation strategy and what is its impact on its performance and competitiveness?

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The study aims to explain the importance of the environmental and social dimensions in enterprise's activity, highlighting the role of innovation as a basic mechanism in enhancing the sustainability of the company and clarify the role of sustainable innovation in raising of its competitiveness ,to answer previous questions, the following hypotheses can be put forward:

- -The enterprise's commitment to environmental requirements and social responsibility gives the title of the sustainable company, which qualifies it to lead.
- -Innovation represents a fundamental pillar of entrepreneurship and takes the form of sustainability if it is linked to reducing the impact of economic activities on the environment.
- -Sustainable innovation is the focus of Danone's strategy for growth and sustainability, which has qualified it for leadership in its field of activity and made it one of the largest global company's committed to the environment and society.

Many studies and researches have touched on this subject, from which we review:

- 1- In a study by M.D. Basseer Khalaf Khazal and M.A. Amer Rajab Diab on the impact of green innovation in enhancing sustainable competitive advantage, the study aimed to analyze and diagnose the relationship between green innovation (in products and processes) and sustainable competitive advantage. The most important results are that the green innovation significantly affects the sustainable competitive advantage, and the largest share of this effect wich on the part of product innovation (Basseer khlaf, 2019).
- 2- In a study by Arild Aspelund, Fanny Hermundsdottir entitled Sustainability Innovation and Company Competitiveness, the study aimed to determine the relationship between sustainability innovations and competitiveness and to identify the contextual factors that mediate and modify this relationship. The current study was a systematic review of the literature on this topic, including 100 publications. The study concluded that the vast majority of studies found positive relationships. Hence, the results support the view that sustainability innovations can create win-win situations for both the company and society. (Arild Aspelund, 2021).
- 3- In a joint study between Than Tiep and Muhammed Ikram for the purpose of revealing the relationship between sustainability innovation and the performance of small and medium-sized enterprises in southern Vietnam. The study concluded that sustainability innovation has an important role in promoting competition between companies and supporting performance indicators of companies with a sustainable orientation and that the competitiveness of companies mediates the relationship between sustainability innovation and operational, environmental and financial performance (Than Tiep, 2022).

Most of the studies that dealt with the subject of sustainable innovation and the competitiveness of the enterprise were qualitative studies aimed at revealing the relationship between the enterprise's adoption of sustainable innovation and its competitiveness through cleaner production and social responsibility, in this study we will try to reveal the contribution that sustainable innovation makes

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to the competitiveness of the enterprise through its reflection on the business model and its leadership in the sector of activity to which it belongs,

Structure Search

- 1 The enterprise and the inevitability of the transition towards sustainability
- 2 Sustainable innovation and enterprise competitiveness
- 3 Danone case study

2. - Enterprise and the imperative of transition towards sustainability:

Innovations aimed at cultivating sustainability arouse enthusiasm and skepticism, Muhammad Yunus's "social work" and CK Prallahad's "base of the pyramid" in particular have come under discussion, with some activists seeing it as promising a bright future, and others seeing it as glamor that will not change the substance. The debate remains, and a good way to understand this is to look at the companies that took the lead and can now learn from their experience.

I.1. The relationship of the social goal with the economic goal of business:

Returning to the two main reference models, "social work" as it's defined by Muhammad Yunus "a work which goal to solve some social, economic and environmental problems that affect humanity: hunger, lack of housing, disease, pollution, Ignorance." Organizations created for this purpose should mainly generate profits; but those profits, in Yunus' strict definition, are reinvested. The term "base of the pyramid" (sometimes abbreviated B.O.P) derives from the work of C. K. Prahalad and S. Hart and is used to denote a low-income population, It also refers to the economic models designed to give this population access to a certain number of basic products and services. It also relates to reconciling the struggle against poverty and the search for profit, and here we find that the social goal meets the economic goal (Boubaker, 2015)

I.2. - The vicious circle of the profit maximization model in the short term::

The current business model of company, prefers maximizing profits in the short term without taking into account its negative repercussions, the most important of which is the deterioration of the environment and the depletion of resources. However, enterprises play a key role in the transition process towards a new business model thanks to their ability to innovate and propose solutions to the problems raised to the environment and society. To continue its activity, the enterprise not only has to reduce the negative effects of its activities, but it must work positively to create common values for the community. An enterprise that deviates from this path will see its market share shrinking in favor of those that incorporate environmental and social dimensions into their plans, and that can stand out in a highly competitive environment by developing a strong sustainability advantage (Monitor-deloitte, 2019) This requires the enterprise to adopt a different way of thinking in which sustainable development is integrated at the heart of the business strategy, as well as in its culture and innovation process. Table No. 01: The vicious circle of the profit maximization model in the short run

	Business Goal	Business Model	Implications	Associated phenomena	Buslness results
Environment al Issues			-Climate change -Pollution -Loss of biodiversity	-Sever weather phinomena -Resorce wastage	-Hight isurance costs -Supply chain fluctuation
	Maximising profit in the short run	Linear economy (get red of)			
Social issues		Cut costs	-health and security -Poverty -Ineqquality -Job insecurity	- Political unrest -Bad health and breeding -Pressure on the state budget	-Loss of markets and organizational predictability - low productivity -Shrinking customer base
					-High taxes and state pressure

Source: Elaborated by researchers based on information obtained from

(Monitor-deloitte, 2019)

3. Sustainable innovation and enterprise competitiveness:

In order to be able to understand the relationship between the variables of the study, it is necessary to address the concepts of sustainable and competitive innovation.

3.1 Sustainable innovation:

It is one of the forms of innovation aimed at making a difference in the ways and methods of production, distribution, and organization to solve a problem or to satisfy a need and to define correctly the concept of environmental innovation, it is important to mention briefly the definition of classic innovation, which will allow us understanding the precise role of environmental innovation, wich means, as defined by the Organization for Economic Co-operation and Development: "the implementation of a new or significantly improved product (good or service) or method, a new marketing method or a new organizational method in company practices, workplace company or external relations. Sustainable innovation here is that process which its goal is sustainable development by reorienting efficiency and integrating it into the economic process by various actors, primarily companies, consumers and public bodies. In other words, it is related to reducing the environmental impact, so sustainable or environmental innovation is the sum of

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products, services, processes and methods that allow reducing the impact of human and economic activities in particular on the environment (gaseous pollution, waste disposal, waste of resources, impact on biodiversity) on one hand and promoting Public health, combating poverty and supporting energic security on the other hand (Boutillier, 2012).

Environmental innovation is also called "new or modified processes, technologies, systems, and products that aim to avoid or reduce adverse effects on the environment." (Kemp.R.Arundel, 1998), and give the "Lisbon Strategy" for sustainable development, environmental innovation is a key concept that achieves economic efficiency while saving resources and energy and also ensures the sustainable development necessary for the planet and future generations, In general, environmental innovations aim to reduce the impact of human activities on nature while maintaining the continuous nature of innovation to ensure its renewal and improvement (Boubaker, 2015, pp. 15-16). The goal of any environmental innovation is to change our consumption as well as to develop technologies, products, and services that reduce our impact on the environment. Environment and innovation come together to offer sustainable solutions that aim to make better use of resources and seek to reduce the negative impact of our economic activities on the environment.

3.1.1 Causes and incentives of sustainable innovation: Sustainable innovation represents one of the mechanisms that have become of great interest to theorists as a treatment to reduce the waste of resources and destruction of the environment as a result of the irrational exploitation of natural resources, and for entrepreneurs and company owners to empower their organizations in a world in which the levels of technological progress have converged between competing companies, and the pressure on sources of supply and distribution outlets has intensified, these companies needed to search for solutions to empower themselves amid strict environmental standards and a conscious and demanding consumer, It has this through sustainable innovation, which makes it a set of edges and pressures an urgent necessity for companies. We can explain them in the following figure:

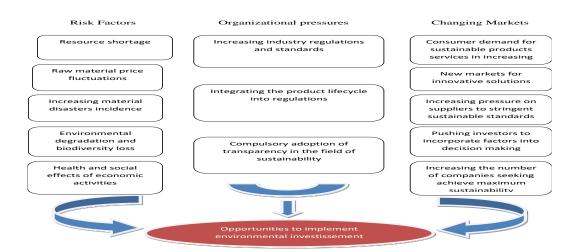


Figure No. 01: Motives and pressures motivating the adoption of sustainable innovation

Source : (tanga, 2014)

- **3.1.2** Advantages of sustainable innovation: Sustainable innovation provides new and effective solutions for the enterprise to empower itself amidst the ever-increasing competition due to scientific and technological progress and what open innovation has provided such as access to technology for all. Therefore, the enterprise must search for new ways of excellence, it is what sustainable innovation can provide. From this point of view, we can summarize the advantages offered by sustainable innovation in the following points (tanga, 2014, pp. 9-10):
- 1- Entering new and emerging markets Environmental standards and requirements are increasing, which drives the creation of innovative solutions in many sectors, which generates new and emerging markets, and companies begin to enter these markets to reach major supply chains of partners. Environmental innovation also involves cooperation between partners across value chains, including creating opportunities to gain knowledge.
- 2 Increasing profits along with the value chain Looking at the side of the company's value chain at a stage of the work achieves several benefits in terms of benefiting from the environmental innovation program to identify improvement opportunities and potential threats, by providing joint solutions to the problems at a hand, which provides common gains characterized by value Commercial, environmental and social are better than individual efforts.
- 3 Leadership is based on the commitment to standards and regulations. Regulations and standards are getting more stringent as a result of the growing need for sustainability. It should be noted that companies that adopt environmental innovation top the lists of compliance with environmental legislation and standards, and from it achieve a competitive advantage. Compliance with laws enables them to anticipate change and then innovate with appropriate materials And innovative solutions that have been tested because the continuity of innovation increases the responsibility of the company and reflects on its reputation and gives it the opportunity to lead the activity.

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- 4 Increasing investment opportunities for companies that adopt environmental innovation, as the process of buying high values and merging with these companies is an indication of this, as banks and long-term investment institutions such as pension funds are increasingly investing in companies that show greater flexibility towards the environment and the ability to succeed on the Long term banks also trade high investment options are based on the sustainability initiatives offered by emerging markets.
- 5- The organizational change provided by sustainable innovation plays an important role in increasing the technical capacity of the company and increasing its productivity, as it allows the exchange of information and participation in the innovation process by the various departments within the company as well as the acquisition of knowledge through cooperation with value chain partners, including technical institutes and research centers, The learning outcomes and the creative process enhance the technical ability to build a key competency that represents an advantage reflected in the main business performance indicators such as productivity and profitability,

The sustainability approach is highlighted in the enterprise's innovative activity through its business model.

Business model: The business model represents the platform that the enterprise takes in doing business through sales and proliferation policies and in its relations with the total competitive forces of customers, suppliers and competing enterprises so that it can raise its value, in this context Shafer see that while it has become common to discuss business models, there is no widely adopted definition of the term. The term defined twelve definitions from 1998 to 2002, covering a wide range of perspectives including e-business, strategy, technology and information systems, clearly, there is no single definition of the business model. Schaefer believes that business model activities can be divided into four categories including: strategic options, value network, value creation and value capture. They therefore suggested the following definition: "The business model is a representation of the company's basic logic and strategic options for creating and capturing value within the value network. (Lotta olofsson, 2006).

Ramon casadesus-masanell and John heilbron of Harvard business school say the business model is "a human activity in a competitive market environment that is usually characterized by the exchange of goods and services for money and the term "business" refers to a real group of people, decisions, resources, buildings, products, values, procedures and any other components necessary to conduct and maintain this particular human activity (Romonc cosadus-masanell, 2015).

From the above we can define the business model as the set of trends and policies that lead the enterprise's activity in its dealings and relationships with customers, suppliers and the environment in general across value chains in order to create value and what it raises and helps to achieve the mission of the company.

3.2 Competitiveness of the enterprise: The success of any enterprise, whether small or large, is the result of its ability to compete in the markets, whether local or global. Therefore, enterprises find themselves facing complex challenges that require them to find new ways and methods that lead to

the development of their policies and strategies, to acquire and raise the profile of the enterprise. their competitiveness to be competitive.

3.2.1 Definition of Competitiveness: The concept of competitiveness occupied an important space and position, despite the lack of agreement on a unified definition, economists unanimously agreed that it represents the strategic element that presents a fundamental opportunity for development and maximizing profitability. Where some defined it as: "the ability that the institution possesses at a certain time to resist its competitors" (Mourad mahboub, 2007)While we find that competition between enterprises means the ability to withstand competitors within the markets, this ability is considered unstable due to the multiplicity of desires and needs of consumers in the presence of severe and fierce competition, in addition to the permanence of the spirit of innovation and the disparity of financial positions (hafs, 1997). Competitiveness is the ability to provide consumers with products and services more efficiently and effectively than other competitors (Fares mazdour, 2003)

Accordingly, competitiveness can be defined as the capabilities that an organization possesses that allow it to place its products and commodities in a market characterized by competition over a long period.

It should be noted that there is a difference between the term competitiveness and competition, which emerges in many studies is that the concept of competitiveness is broader than the concept of competition, as competitiveness indicates the existence of dynamics between competitors and their ability to dispose of their goods and services in a particular market, while competition indicates the existence of An arrangement between competitors and the conditions under which the flow and circulation of goods and services flow in a given market, but they overlap to a large extent within what is known as advantage or competitiveness (borni, 2007)

- **3.2.2 Types of Competitiveness:** Competitiveness is divided objectively and temporally into the following types (Lesca, 1982)
- Competitiveness of the enterprise: the competitiveness of the enterprise is evaluated based on the margins of all products.
- Product competitiveness: Product competitiveness evaluation is often based on cost price as a single indicator, but there are other, more significant indicators such as quality and after-sales services. Product competitiveness is a necessary condition for the competitiveness of the enterprise, but it is not sufficient.
- Competitiveness ability: It is represented in the future opportunities that extend over several cycles of exploitation and in the long term.
- Momentary competitiveness: it may result from a passing opportunity in the market or circumstances that led to making the enterprise in a monopolistic position, so it should not be optimistic about it, as it depends on the positive results achieved during one accounting cycle.

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3.2.3 Indicators for measuring competitiveness: The competitiveness indicators of the enterprise are subject to many variables and quantitative and qualitative factors, which can be measured through:

A- Profitability: Profitability is a sufficient indicator of the current competitiveness. It is a measure of the return in the form of profits obtained by shareholders for their investments in the institution. It can be calculated through the following ratios (lahouel, 2008)

Return on equity: is the profitability of the capital provided by shareholders;

Return on capital: This ratio reflects the performance of the institution by focusing on the efficient use of capital.

In addition, the future profitability of the enterprise depends on its current expenditures on research and development and patents, as it is based primarily on the relative productivity of the enterprise and the cost of production factors, as well as on the attractiveness of its products in the market in the long run (kababi, 2008)

b- Production cost: The enterprise is not competitive according to the theoretical model of competition, if the average cost of production exceeds the price of its products in the market, either because of low productivity or high cost of production factors, or for both reasons, It can also be the weakness of the average cost of production Compared to competitors, especially if the company belongs to a sector with homogeneous products (Douis, 2005).

C- Total factor productivity: This indicator measures the efficiency with which the enterprise transforms production factors into products. However, this indicator does not clarify the advantages and disadvantages of the costs of these factors.

D- Market share: When the local market is protected, the product can acquire a larger market share and be very profitable, without being competitive in the international market, so the costs of the local product must be compared with the costs of international competition (Issa bahdi, 2015). **3- A**

4. Case study of Danone company for the period (2009 - 2019)

It should be noted that the study period included ten (10) years, starting from the year 2009 to the end of 2019, The study stopped at the year 2019 due to the association of the year 2020 with an exceptional circumstance represented in the spread of the Corona pandemic and the subsequent quarantine procedures and border closures, which makes the disruption and interruption of supply and supply chains, which makes the data for this year inexpressive.

4.1 company presentation: With a mission to make food healthy for as many people as possible, Danone is one of the world's leading companies in the food sector by developing the robustly growing category of products geared toward nutrition and health, through its three business lines: Dairy and Related Products Plant origin, mineral water, and specialized nutrition.

Danone is presented in more than 120 countries and has more than 100,000 employees, with a turnover of 25.3 billion euros for the year 2019, Danone's portfolio consists of many international brands (notably Actimel, Activia, Alpro, Aptamil, Danette, Danio, Danonino, Evian, Nutricia, Nutrilon, and Volvic) as well as strong local and regional brands (eg AQUA, Blédina, Bonafont, Cow & Gate, Mizone, Shokti, Silk and Vega). Danone aims to promote healthier and more sustainable eating and consumption habits, in line with the "One planet one Health" vision, which reflects the belief that human health and the health of the planet are inextricably linked. To accelerate the food revolution and create sustainable and profitable long-term value for all stakeholders, this regard Danone has set its goals for Horizon 2030 in line with the United Nations Sustainable Development Goals for 2030, where Danone is committed to operating in an efficient, responsible and inclusive manner, evidenced by its ambition to become one of the first companies A B CorpTM-certified multinational for companies most committed to sustainability standards, Danone has been ranked in key sustainable development indicators: Dow Jones Sustainability Index, Vigeo Eiris, Sustainalytics, Ethibel Sustainability Index, MSCI Global Sustainability, MSCI SRI Global Indices, FTSE4Good, and Bloomberg Equity Index Genders.

- **4-2 Danone's business model**: Danone has set its goal to build a balanced, profitable, and sustainable growth model by adopting a set of basic concepts (Danone, 2020):
- **4.2.1 Profitable growth is at the core of the business model:** Danone occupies a position in the most dynamic categories of the food and beverage industry, enjoys a strong leadership position in all its markets. The company relies on a unique portfolio of strong brands and strong implementation capabilities in terms of innovation, brand activation, and development of new distribution channels. As Danone strives to enhance its growth model through disciplined resource allocation, efficiency gains, and cost optimization while always managing short, medium, and longterm horizons, the company prefers long-term strategic growth opportunities over short-term tactical plans.
- **4.2.2 Continuing the dual economic and social project with B Corp:** The cooperation with the international non-profit organization B Lab to obtain the B Corp certification marks a new milestone in the Danone dual economic and social project, which was first expressed by Antoine Rebeaud in his 1972 speech in Marseille.
- 4.2.3 A New Approach to Strategic Resource Management: As another example of its committed and responsible company approach, Danone is diverting the upstream flow of its business to improve its costs, protect the life cycles of its strategic resources (milk, water, and plastic) and create leverage to create value and differentiate from competitors.
- **4.3 Research and Innovation at Danone**: The models implemented by Danone, through its subsidiaries Grameen Danone in Bangladesh or Lématéki in Senegal, are real laboratories for breakthrough innovations, which fundamentally challenge the entire value chain (Tavignot, 2014)):

Designing or manufacturing radically new products, such as the nutrient-enriched yogurt of Bangladesh Shakti (a recipe developed to meet the nutritional needs of children - one yogurt = 30%

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of the daily requirement for vitamin A, iron, zinc, and iodine), or a 'bag' of local cereals and a little amount of milk stored at room temperature by an innovative and economical process that consumes very little energy produced by Or Lémateki, a social company aimed at improving the nutrition of Senegalese schoolchildren.

The supply chain is also undergoing a revolution with the implementation of local supply of materials (milk and grain), and local distribution of products, particularly through a network of pickup trucks and door-to-door women selling products.

- **4.3.1 Organization and management of innovation**: Danone's research and innovation sector includes about 1,700 people distributed between two international research centers in France and the Netherlands and four specialized centers: Danone Packaging Research in France, Nutrition Research in Singapore, Danone's fresh dairy expertise in Spain, and Danone Technology Research in Russia, in addition to local research teams in 55 branches of the company spread around the world.
- **4.4 Contributing to the UN Sustainable Development Goals through Our 2030 Goals:** The company's goals for 2030 included a set of long-term goals that reflect the company's reason for existence, its brand model and the confidence in its relationships with all stakeholders, so the company is strongly committed to respecting the sustainable development goals, in accordance with the strategy adopted by it, which states that "Providing Health Through food for as many people as possible" leads the company to focus its efforts on the sustainable development goals on which the company's activities have a direct impact, the most important of which are (Danone, 2020):

If the selected seven main axes (Goals 2, 3, 6, 8, 12, 13, and 17) embody Danone's strategic mission, the company nevertheless wishes to contribute to other goals, especially the first goal "Eradication of Poverty": the company implements assistance measures targeting the poor and the most vulnerable population groups vulnerabilities, in particulary through investments in a group of funds.

- **4.5 Danone Funds for Sustainable Innovation:** "One Planet, One Health" reflects the vision that the health of people and the health of the planet are interlinked. To support people in adopting healthier and more sustainable eating and drinking practices, through social innovation funds that include the Danone Ecosystem Fund, the Danone Communities Fund, and the Livelihoods Funds. This trend has grown in Danone's strategy by adopting the idea of social inclusion by establishing the Fond des comminutes by "Emmanuel Faber" General Manager of Danone and Muhammad Yunus, Director of Grameen Foundation Bangladesh (90% of the capital is invested in money markets and 10% in social businesses). This fund has benefited from the expansion of Grameen Danone and social projects for Danone in other developing countries. This experience is the foundation for building a new business model in which social projects are held alongside profitoriented projects. The missions of these funds are based on the following activities (Danone, 2018):
- **4-5-1 Danone Communities Fund**: It aims to combat malnutrition, improves access to drinking water, and reduces poverty in the areas where the company operates, by supporting local contractors

through capital and technical and managerial expertise. In 2017, on the occasion of the tenth anniversary of its establishment, it launched two projects to develop the water network Drinking in Haiti, Kenya, Rwanda, and Uganda. The outcome of the Fund's activity reached 2019 the establishment of 12 social enterprises and 15 projects benefiting nearly 06 million people.

- **4.5.2 The Danone Ecosystem Fund:** was established in 2009 to support vulnerable economic partners in the Danone value chain (from small farms, small contractors, and waste collectors). These projects aim to address social and economic challenges, including environmental aspects as well, as the project is jointly developed between Danone and another non-profit that gives Danone a competitive advantage, fosters job creation and opens new careers for local communities, and helps farmers transition from a subsistence model to a regenerative family farming model while benefiting from the milk supply and reaching new consumers through street vendors.
- **4-5.3 Livelihood Funds:** An investment model to serve rural communities established in 2011 to enhance food security and combat climate change for rural communities. The Livelihoods and Livelihoods Carbon Funds invest in family farming in many projects in Africa, Asia,and Latin America, and the Carbon Fund for Livelihoods Live environmental operations through agro-forestry and rural energy projects for the benefit of vulnerable population groups in developing countries. The results achieved have encouraged the creation of another fund in 2017 for 100 million euros aimed at improving the living conditions of more than 02 million people and reducing the emission of 25 million tons over the next 20 years, 09 projects were established, 130 million trees were planted and 120,000 families were equipped with an improved cooking stove during 2017. In the same context, the Livelihood Fund funded the 3000 family farms project in Madagascar to improve the quality of the vanilla product, preserve biodiversity and raise farmers' incomes. The project benefits from 02 million Thanks to him, 200,000 farms are converted to sustainable agriculture.
- **4.6 Danone's sustainable performance effectiveness:** The company's sustainable performance effectiveness card shows its commitment to progress in achieving the goals set according to four main axes, including climate change, renewable agriculture, protection of water resources, and the reuse of packaging materials according to a timetable ranging between 2020, 2025 and 2030, this card Suspended until 2019, and it included good results in all axes related to the company's activity from the raw material to the workshops to the transmission and distribution chain, and this is shown in the following table:

Table No. (02): Effectiveness of the sustainable performance of the company, suspended until December 31, 2019

Field	Achievments2019	Goals2020	Goals2025	Goals2030
1-climate change				
-Carbon reduction	24.8 %	_	_	50%
-Use of renewable energy	42.4%	50%	-	100%

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2-Renewable agriculture -protecting soil and biodiversity -Supporting new generations of farmers -Animal health promotion	88% 28 % 81%	100% - 80%	-	- - -
3-Protect water resorces -Aquariums and estuaries -Economy in use of water	100% 49%	100% 60%	 - 	_ _
4-Use of packaging materials -100% Recycled or reused -Incorporating recycled materials	80% 16	-	100%	16%

Source: Elaborated by researchers based on information obtained from :(Danone, 2020)

4.7 **Effective economic performance of Danone:** In order to determine the effectiveness of the company's economic performance, the development of the following elements should be reviewed during the study period:

4.7.1 The company's market share: Danone has been at the forefront in its field of activity with its three branches alongside "Nestlé" and "Coca-Cola" for a long time until the year 2020. The company ranks first in the world in dairy and plant-based products and second in mineral water This prestigious position of the company comes as a result of its efforts in the field of continuous innovation and the good organization of its various activities, driven by its commitments to consumers about the quality and conformity of products on one hand, On the other hand, its integration of the company's economic goals with social and environmental goals through the value chain, which strengthened its position among consumers in All over the world, at the same time, it ranks first in Europe in medical nutrition products directed to certain categories of citizens who suffer from some chronic diseases such as diabetes and aging diseases, which reflects the company's commitment to providing healthy food for all categories of consumers, and the following figure illustrates this:

WORLDWIDE WORLDWIDE WORLDWIDE (2) (2) **(1)** Botteld mineral Milk and plant based product nutrition(Baby and medical nutrition BY PRODUCTS BY PRODUCTS Nr1 Aqua Nr1 Activia Nr2 Nutrution Nr3 Evian Nr3 Inter-delight Nr3 Sgm

Figure No. (02): Danone's global position in the food market

Source: Elaborated by researchers based on information obtained from (Danone, 2020)

4-7-2 Growth in the contribution of the company's branches outside Europe and the country of home in the turnover: Due to the specificity of the products related to nutrition and health that Danone provides to its consumers, It requires special production and storage conditions in terms of the cold chain during transportation and storage operations, and challenge that the company raises through food and health for all, bringing the product closer to The consumer and presenting it in the best conditions prompted the company to establish production units near the various markets it enters through partnership or purchase of incapacitated or bankrupt local units. The company also worked to take advantage of the opportunities offered by these young markets related to the supply of raw materials and labor related to the main activity of the company represented in milk products and products of plant origin, and by applying the bilateral model of social and environmental investment in the service of the economic goal, the company was able to reach large segments of local communities, whether in developed or developing countries, by providing quality food products with local raw materials and directed to treat specific problems such as poor Nutrition in Asia, Africa, and Latin America and obesity in the North American countries On one hand, and supporting the value chain and working with various partners to preserve resources and protect the climate, which is reflected in the significant growth in the contribution of the company's branches operating outside France and Europe to the company's turnover, as this contribution increased from 53% in 2009 to 67% in 2019, which is illustrated The following chart:

Growth of the contribution of the company's branches outside Europe and home country in the turnover

Figure No. (03): Growth in the turnover of the company's branches outside Europe and the country of home

Source: Elaborated by researchers based on information obtained from (Danone, 2020)

4-7-3 Evolution of Danone's turnover: Danone's turnover doubled during the ten years between 2009 and 2019, moving from \$14.9 billion to \$25.3. The sustainable innovation strategy was based on anticipating the real needs of consumers in obtaining healthy products and It has a high nutritional value and is environmentally friendly while preserving the available resources, through a variety of products directed to all age groups and in different regions, taking into account the material capabilities of the base of the pyramid by providing nutritious products at a low cost, which made it occupy the leadership in dairy and plant-based products that reached 52% of the total turnover compared to 30% for specialized nutrition and 18% for bottled water of various sizes. On the other hand, the growth of the company's turnover is due to the launch of the social innovation project by establishing Danone funds for local necessities and livelihoods improvement funds,

which had either an impact on empowering the company in various parts of the world, to protect the life cycles of strategic resources in family farms of vegetables, fruits, livestock, and cattle, to ensure continuity to supply and reduce costs Leaf and this represents a lever to create value and enhances the company's competitive advantage and raises the volume of sales, which is highlighted by the following figure:

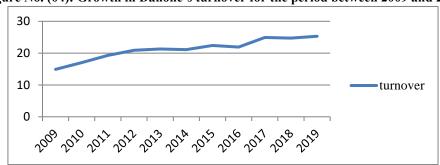


Figure No. (04): Growth in Danone's turnover for the period between 2009 and 2019

Source: Elaborated by researchers based on information obtained from (Danone, 2020)

4-7-4 Earnings per share growth: Earnings per share is a key factor in ensuring shareholder support for the company's activities and insights. In this context, Grameen Danone Bangladesh represents the main building block for the adoption of sustainable innovation based on taking into account the protection of resources along the value chains and the reduction of carbon emissions by the association of Danone shareholders by establishing funds Danone, and this trend was reinforced by the growth in earnings per share during the period from 2009 to 2019, where the net profit per share moved from 2.57 euros to 3.85 euros despite the increase in spending on sustainability activities during the same period of establishing Danone funds that finance capital Risks for companies engaged in waste collection, environmental and social protection, The following chart shows the development of Danone's profitability during the study period, that enhances the opportunities to diversify the company 's funding sources.

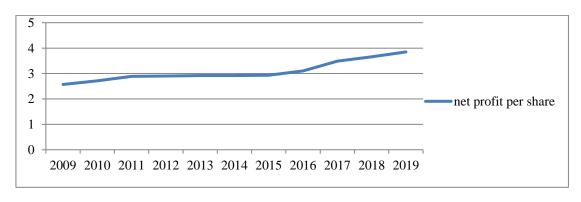


Figure No. (05): Earnings per share growth during the period (2009 – 2019)

Source: Elaborated by researchers based on information obtained from (Danone, 2020)

4.8 Actions taken by the company to address the repercussions of the Covid 19 pandemic

Danone's priority in dealing with the exceptional challenges posed by the Covid-19 pandemic is to ensure the safety of its 100,000 employees around the world as well as the safety of its business partners, in order to protect the supply chain and maintain the availability of its daily food supplies to consumers. In each region, the company works closely with the Government and public health authorities to ensure that support is provided wherever possible to strengthen the value chain, including the following measures:

- 1. Securing employment contracts and guaranteed wages for all Danone employees worldwide for three months.
- 2. Extensive coverage (health, childcare and quarantine) for all staff around the world.
- 3. A specific reward for all on-site staff during the epidemic.
- 4. Financial support of 300 million euros, including extended payment terms and credit to farmers, suppliers and smaller customers in its global ecosystem, funded by Danone's cash flow and a relief fund, dedicated to supporting entrepreneurs in the Danone Manifesto Ventures portfolio, and supporting danone ipecweg communities.

Overall, there are two specific short-term business challenges imposed by government closures in March 2020 to prevent the COVID-19 pandemic.

First: the need to address significant changes in consumer purchasing behaviors, with unprecedented fluctuations in weekly demand reinforced by storage patterns in the first weeks, a shift from out-of-home food consumption to home food consumption, as well as shifting preferences to larger packaging sizes.

Second: The need to maintain service levels and address the low efficiency of the supply chain resulting from spacing requirements, low productivity, high transport costs and other logistical constraints (DANONE, 2020).

4.9 Business Prospects: In the context of the tipping point in attitudes and expectations to climate and nature issues and growing industry disruption, Danone is working to increase the speed and depth of its transformation processes to put climate at the heart of its growth model, and move from setting goals to bold action. This will translate into an accelerated investment plan of around €2 billion cumulative over 2020-2022 on brands, climate, agriculture, packaging, and digitalization to build the most attractive business platform in the food industry, with greater consumer appreciation for climate action and creating a virtuous cycle that fuels a superior growth model, The accelerated investment will support bold new commitments to further some of the company's 2030 goals, by accelerating the B Copt journey with the Waters business. The company is expected to achieve B Copt certification by 2022. This certification represents a sign of confidence for companies that demonstrate the highest standards of social and environmental performance. For packaging in

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addition to the current goal of reaching 50% of used packaging materials worldwide by 2025, Danone is now committed to reaching 100% in Europe as of 2025. (Danone, 2020)

5. Conclusion:

The new business model is based on the long-term strategic vision that aims to achieve longterm growth and not profit maximization in the short term, which has led the world to deplete and waste resources, in addition to its negative effects on the climate and environment on the one hand, and its social effects that have resulted in more poverty, exploitation, and lack of Equality, d in this context, the enterprise represents the main link whose responsible behavior towards this problem is the key to its success and continuity, by integrating the procedures and processes related to sustainability in the core of its strategy and embodying it through investment decisions and daily activities of production and distribution by providing sustainable products that are environmentally friendly and fulfill the desires of the consumer and make greater efforts to preserve biodiversity, protect, develop supply sources and value chains, this can only be achieved by adopting a sustainable innovation approach, whether it is related to production, operations or methods of organization and management, which is the case of Danone, the subject of the case study, the company thus links its economic goals with sustainable development goals, which is highlighted by the situation of companies that have adopted this approach, and they are now reaps its fruits by pioneering its field of activity, as well as its position on the throne of companies that are committed to standards and legislation related to sustainability, which has strengthened its position among consumers and earned it a competitive advantage over its less committed by competitors, both in terms of its reputation or in terms of securing stable and sustainable sources of supply, which answers the problem raised and proves the validity of the hypotheses established. The study concluded with the following results:

- ✓ The new solutions offered by innovation to environmental issues, resource economy, and recycling in all sectors of economic activity generate new and emerging markets that represent good opportunities for investment and expansion for enterprises.
- ✓ The enterprise 's commitment to integrating sustainable development goals in all its environmental and social aspects within research and innovation programs allows for obtaining adequate funding given the tendency of banks and investment funds toward this type of company aiming for long-term success.
- ✓ Developing partnership with stakeholders through the enterprise 's value chains, including institutes and research centers, enhances the company's technical capabilities and increases its production efficiency.
- ✓ Continuous and responsible commitment of the enterprise to standards and legislation related to the environment and climate, the protection of natural resources, biodiversity, and all environmental requirements, allows permanent access to all developments related to this matter for the institution to respond quickly and adapt its activities, which gives it a competitive advantage over its peers.
- ✓ Innovation for sustainable production allows the enterprise to adapt to all consumer requirements on one hand and direct its products to serve the sustainable development goals

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aimed at enabling poor groups to access basic goods and services at reasonable quality and prices by exploiting local raw materials resulting from the developed and upgraded sources of supply.

Through what we have concluded from the results of the study, we can make the following recommendations:

- ✓ The need to integrate the dimensions of sustainable development into the strategy of enterprises, whether small or large, which is the case for Algerian institutions if they want to empower themselves in the national or international market.
- ✓ Focusing on paying more attention to upgrading supply sources and value chains to avoid supply disruption or disruption, thus avoiding the institution losing markets that it has made great efforts to reach.
- ✓ Adopting sustainable innovation programs to benefit from what financial institutions, governments, and international development institutions provide in terms of financing, tax facilities, and financial aid that help them achieve their goals of growth and profitability.
- ✓ Paying more attention to social development, both within the company and its surroundings, through social protection and training its workers to ensure their consensus around its goals, on the other hand, contributing to social activities aimed at eliminating poverty, malnutrition, and public health in a way that consolidates the image of the socially responsible enterprise among consumers and society as a whole .

6. Referrals and references:

Arild Aspelund, F. H. (2021, January 20). Sustainability innovation and Firm cometitiveness. *Cleaner production*, 281 (1).

Basseer khlaf, A. r. (2019). Green innovationand its impact on enhancing sustainable com petitive adventage. *Journal of economics and Administratives Sciences*, *25* (112), pp. 133-148.

borni, L. (2007). The role of environmental management in achieving competitive advantages for industrial enterprises. *Majister thesis*. Biskra, Algeria: Mohamed khieder University.

Boubaker, W. (2015). *Eco-innovation.Performance environnementale et impact economique sur les entreprises : etude de cas des groupes papetiers.* Nice: universite Sophia Antipolis.

Boutillier. (2012). *L innovation verte de la theorie au donnes pratiques.* Bruxelle: Business and innovation petre long.

DANONE. (2020, April 21). *DANONE: Resilience amid COVID-19*. Retrieved April 22, 2022, from GlobeNewsWire: https://www.globenewswire.com/news-release/2020/04/21/2019022/0/en/DANONE-Resilience-amid-COVID-19.html

Contribution of sustainable innovation to supporting competitiveness company case of ''Danone'' company

Danone. (2020). *Danone's growth brands model - Danone*. Retrieved 05 14, 2021, from World food company - Danone: https://www.danone.com/about-danone/sustainable-value-creation/our-unique-growth-model.html

Danone. (2020). *Rapport Annnuel 2019 - Danone*. Retrieved 05 03, 2021, from World food company - Danone: https://www.danone.com/content/dam/danone-corp/danone-com/investors/fr-all-publications/2019/integratedreports/rapport-annuel-danone-2019.pdf

Danone. (2018). *Rapport Annuel 2017 - Danone*. Retrieved 04 14, 2021, from World food company - Danone: Rapport Annuel 2017 - Danone

Danone. (2020). *Rapports annuels archives - Danone*. Retrieved 05 10, 2021, from World food company - Danone: https://www.danone.com/fr/integrated-annual-reports/integrated-annual-report-archives.html

Douis, M. t. (2005). The patent is an indicateur to measure the ompetitivness of countries case of Algeria. *majister thesis* . Ouargla, Algeria: Kasdi merbah University.

Fares mazdour, K. r. (2003, april 22). Enhancing the competitivness of the economic entrprise and the challenges of the new clima of the new climate. ! Ouergla, Algeria.

hafs, A.-e. a. (1997). competitiveness and game-changing. Faculty of commerce Alexandria, Egypte: Chuaa.

Issa bahdi, S. g. (2015, decembre). competitovness of smal and medium industrial enterprises in Algeria in light of the new economic opness. *Algerian journal of economic development*, p. 21.

kababi, K. (2008). Competitivness and the problem of integration in the global economy case stady of Algeria, Morocco and Tunisia. *Masjister thesis*. Batna, Algeria: Hadj lakhdar University.

Kemp.R.Arundel. (1998). R ProgrammSurvey indicators for envvinmental innovation. (S. Group, Ed.) *IDEA Project for EU-TSER Programme*, p. 25.

lahouel, S. (2008). Marketing and competitive advantages case stady case stady the saidal complex for the pharmaceutical in algeria. *Majister thesis faculty of Economics and Management Sciences*. Batna, Algeria.

Lesca, H. (1982). Structure et système d'information: Facteurs de compétitivité. Paris: Masson.

Lotta olofsson, R. f. (2006). Business model tools and deffenition. (V. c. menbers, Ed.) p. 6.

Monitor-deloitte . (2019). *Metre le developpement durable au coeure de la strategie de l'entreprise*. paris: Monitor-deloitte cabinet des services en audit.

Mourad mahboub, T. d. (2007, November). Enhancing the Enteprises competitivness by achieving stratigic success. *Journal of human Sciences* (12), p. 38.

Romonc cosadus-masanell, J. h. (2015). The business model: nature and benefits. *Business models and modelling*, p. 4.

tanga, C. (2014). Feasibility stady for environmental managegent innovation. *United Nations Environment*, 8. Paris, France: European Commission.

Contribution of sustainable innovation to supporting competitiveness company case of "Danone" company

Tavignot, B. F. (2014, 01 24). Le cas Danone, ou comment l'innovation sociale peut aider une multinationale à se réinventer - Paris Innovation Review. Retrieved 04 25, 2021, from Paris Innovation Review: http://parisinnovationreview.com/article/innovation-sociale-le-cas-danone-benedicte-faivre-tavignot-2

Than Tiep, M. I. (2022, january). Do sustainability innnovation and competitiveness heip improve firm performence, evidence from the SMEs sector in Vietnam. sustainability production and consumption, 29, pp. 588-599.

Wayne s, a. a. (2020). The rise of the sustainable entreprise. IBM Istitute of business value. New york: IBM Istitute of business value.