

Ministry of Education and Science of Ukraine
Ukrainian-American Concordia University
Department of International Economic Relations, Business & Management

Bachelor's Qualification Work

Technological innovations and their influence on green and environmental products

(on the basis of Domino's pizza)

Bachelor's student of
Field of Study 29 – International Relations
Specialty 292 – International Economic Relations
Educ.program – International Economic Relations

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“Technological innovations and their influence on green and environmental products”

Abstract:

The represented research is about technological innovations and their influence on green and environmental products aimed to show the interconnection of technologies, innovations, and the business's ecological footprint. The hypothesis of the work is that in an age of globalization, greening business and the environment; technological innovations become essential to countries and business competitiveness. Moreover, when humanity faces the problem of eco-innovation and pollution of the planet, radical changes are needed in all spheres, including fast-food restaurants.

The theoretical and methodological part of the research illuminated the main trends for innovations in the context of sustainable development. The decomposition of complex problems allows identifying the specific issues for the fast-food sphere. The deduction and induction approaches enable forming the recommendations for the business. The statistical analysis created the imprint of reality to create forecasts and recommendations.

The practical part of the research focuses on Domino pizza. It is an example of how much fast food restaurants can help. They have made much better progress than others have in developing technologies for their products and reducing the excess of hazardous waste. This work is an experiment in the flow of green innovations in developing countries and enterprises and promoting environmental products among businesses. Research the pizzeria market, study the company's competitiveness, and suggest ways to improve interaction within the technology and environmental industry.

Keywords: technological innovation, environmental products, globalization, Domino's pizza, businesses, green innovation.

Анотація:

Представлене дослідження присвячене технологічним інноваціям та їх впливу на зелені та екологічні продукти з метою показати взаємозв'язок технологій, інновацій та екологічного сліду бізнесу. Гіпотеза роботи полягає в тому, що в епоху глобалізації, екологізації бізнесу та навколишнього середовища, технологічні інновації стають важливими для країн і конкурентоспроможності бізнесу. Більше того, коли людство стикається з проблемою еко інновацій та забруднення планети, потрібні кардинальні зміни у всіх сферах, у тому числі і в ресторанах швидкого харчування.

Теоретико-методологічна частина дослідження висвітлювала основні тенденції розвитку інновацій у контексті сталого розвитку. Декомпозиція комплексних проблем дозволяє визначити специфічні проблеми для сфери фаст-фуду. Дедукційний та індукційний підходи дозволяють сформулювати рекомендації для бізнесу. Статистичний аналіз створив відбиток реальності для створення прогнозів і рекомендацій.

Практична частина дослідження присвячена Домінос піци. Це приклад того, наскільки можуть допомогти ресторани швидкого харчування. Вони досягли набагато кращого прогресу, ніж інші, у розробці технологій для своєї продукції та зменшенні надлишку небезпечних відходів. Ця робота є експериментом у потоці зелених інновацій у країнах та підприємствах, що розвиваються, та просуванні екологічної продукції серед підприємств. Дослідження ринку піцерії, вивчення конкурентоспроможності компанії та запропоновані шляхи покращення взаємодії в технологічній та екологічній галузі.

Ключові слова: технологічні інновації, екологічні продукти, глобалізація, Домінос піца, бізнес, зелені інновації.

PHEE-institute «Ukrainian-American Concordia University»

Faculty of management and business

Department of international economic relations, business and management

Educational level: **bachelor degree**
Specialty: 292 “International Economic Relations”
Educational Program “International Economic Relations”

APPROVED

Head of Department _____

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**TASK
FOR BACHELOR'S QUALIFICATION WORK**

Yuliia Ternova

(Name, Surname)

1. Topic of the work: Technological innovations and their influence on green and environmental products (on the basis of Domino's pizza)

Supervisor of the work

Dr of Sci. in Economics, L.V. Zharova

(surname, name, degree, academic rank)

Which approved by Order of University from “22” December 2022 №22-12/2022- 1C

2. Deadline for bachelor's qualification work submission “19” May 2022







3. Data-out to the bachelor's qualification work materials received during the internship, data from the open sources, results from the previous research works during studies, like projects and course-work

4. Contents of the explanatory note (list of issues to be developed) There are three Chapters: theory, general characteristics of the enterprise, and student recommendations. The theoretical background of technological innovations and their greening covers the essence of the green economy and its main approaches. It includes an analysis of industries that use technological innovation and green products and highlights the technical problems and trends. The study of eco-innovation implementation in business (case of Domino's pizza) contains the characteristics of the pizza market, an overview of technological innovations, and ecological products in Domino's pizza. Illuminate problems and solutions that Domino's pizza faced in the

eco-innovation process. The practical part focuses on Domino's pizza technology solutions and introducing eco products on the market.

5. List of graphic material (with exact indication of any mandatory drawings)
 Graphs, tables, and figures that illustrate the financial situation in the branch and enterprises, illustration of overall characteristics of the competitiveness in the branch

6. Consultants for parts of the work

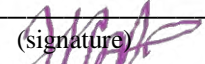
Part of the project	Surname, name, position	Signature, date	
		Given	Accepted
1	L.V. Zharova		
2	L.V. Zharova		
3	L.V. Zharova		

7. Date of issue of the assignment

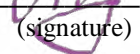
Time Schedule

№	The title of the parts of the bachelor's qualification work	Deadlines	Notes
1.	I chapter	14.02-13.03.2022	In time
2.	II chapter	14.03-10.04.2022	In time
3.	III chapter	11.04-24.04.2022	In time
4.	Introduction, conclusions, summary	25.04 – 01.05.2022	In time
5.	Pre-defense	08.06.2022	In time

Student _____


(signature)

Supervisor _____


(signature)

Conclusions: overall work is focused on analyzing the impact of technological innovations and environmental products. The student set himself the ambitious task of analyzing the possibilities of eco-innovation in the market, which is usually not traditional in terms of such innovations. Sustainable food and catering market development is an absolute priority of the EU, which makes the study relevant in light of Ukraine's European integration processes. All the studies have been completed, and the developed recommendations may be of interest to the company where the student had an internship; we believe they will not lose their relevance during the postwar recovery.

Work can receive a high grade in case of good public defense.

Supervisor _____


(signature)

TABLE OF CONTENTS

INTRODUCTION.....	3
CHAPTER 1. THEORETICAL BACKGROUND OF TECHNOLOGICAL INNOVATIONS AND ITS GREENING	7
1.1. The essence of the green economy, the main approaches and why it is important.....	7
1.2. Industries that use technological innovation and green products.....	12
1.3. Technological problems and their trends.....	19
CHAPTER 2. ECO-INNOVATION IMPLEMENTATION IN BUSINESS (CASE OF DOMINO'S PIZZA).....	31
2.1. Characteristics of pizza market	31
2.2. Use of technological innovations and ecological products in Domino`s pizza.....	36
2.3 The problems and solutions that Domino`s pizza faced in the process of eco-innovation.....	41
CHAPTER 3. ANALYSIS AND DEVELOPMENT OF RECOMMENDATIONS FOR DOMINO'S PIZZA.....	47
3.1. Domino pizza technology solutions.....	47
3.2. Introduction of eco products on the Dominos market.....	52
3.3. Economic effect of new Eco policy.....	55
CONCLUSIONS AND PROPOSALS.....	67

REFERENCES.....	71
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INTRODUCTION

The purpose of the study is to show the impact of technological innovations and environmental products.

The subject of this study is the study of technological innovations and their impact on green and environmental products.

Show how innovation contributes to the development of countries and businesses.

This paper will explore such tasks as:

1. Find out the essence of the green economy, the main approaches and why it is important.
2. Consider industries that use technological innovation and environmentally friendly products.
3. Consider technological problems and their trends.
4. Describe the pizza market.
5. Analyze the use of technological innovations and environmental products in Domino's pizza.
6. Consider the problems and solutions faced by Domino`s pizza in the process of eco-innovation.
7. Analyze technological solutions of Domino`s Pizza.
8. Consider the introduction of environmental products on the Dominos market.
9. Determine the economic effect of the new environmental policy.

Innovation is a new phenomenon, innovation or any change that an entity makes to its business in order to increase its competitiveness, both domestically and externally.

Researchers emphasize that innovations, including environmental ones, help to strengthen the competitiveness of companies, as there is a strong correlation between market activities and new environmental products. Product and technological innovations help to win and retain market share, increase profitability in these markets.

In the process of constant industrialization of the country, the amount of environmental pollution is increasing, which can cause self-destruction of nations. As production in Ukraine today is not closed, production waste constantly pollutes the environment. Thus, according to statistics, emissions of harmful substances into the air in 2000 amounted to 5908.6 thousand tons, while in 2006 their number increased to 7027.6 thousand tons. Increase its economic efficiency, competitiveness taking into account the environmental factor. This problem can be solved by moving production to innovative low waste, waste-free and environmentally friendly technologies. This will increase the economy, competitiveness and independence of both enterprises and the state as a whole.

Many scientists and scholars have studied the study of environmental innovation as an effective method of managing the economy of the enterprise. Among them, V. Semenova, O. Mykhailyk, V. Shevchuk, S. Stepanov, A. Nikitin, Y. Satalkin, V. Navrotsky and others, made the greatest contribution to the development of these issues.

The production and sale of environmental goods and competitiveness depend to a large extent on public opinion. Therefore, companies must shape their image through various promotions, sponsorships, issues of press releases and information materials about their activities, reports, press conferences, presentations, etc.

Today, environmental entrepreneurship is developing mainly in the following areas: manufacture, installation and operation of environmental (cleaning) tools; development and implementation of environmentally friendly technologies; production of environmentally friendly products; waste processing, transportation and disposal; trade in environmental technologies, products and waste; energy saving, conservation of land resources; water, air control, eco-audit and eco-examination; ecotourism, environmental medicine and occupational safety; Information Technology. Work in the market is usually complicated and at the same time stimulated by competition. This is especially true of the

market for environmental goods. [11]

Green economy is a field of economics that has developed in the last two decades, within which the economy is considered a dependent component of the natural environment in which it exists and is part of it.

The main impetus for the development of the "green economy" was the cultural revolution of the 60's of the twentieth century, the ideological basis of which was the book by R. Carson "Silent Spring" (1962). Government of the United Kingdom "Concept of Green Economy" (1989) in the framework of sustainable development.

Today, the world's green economists are proposing to set the Tobin tax at 1% of all international trade agreements in order to send the money raised to poor countries in order to slow down the growing differentiation between developed and underdeveloped countries. In addition, it is proposed to use the category of "natural capital" instead of the category of "natural resources", which indicates the passive role of nature in the economy.

Many countries use various tools of the "green economy" in their national policies and development strategies. The Republic of Korea was the first country to declare green growth as a national strategy. The share of Brazil, China and India in global investment in renewable energy increased from 29% in 2007 to 40% in 2008. In 2003, South Africa introduced a tax on plastic bags. In Brazil, 95% of all aluminum cans and 55% of all plastic bottles are recycled, half of all paper and half of all glass is reused. Moreover, the Danish capital, Copenhagen, plans to become the world's first capital with zero greenhouse gas emissions.

If we talk about the green economy in Ukraine today, we can say that in the process of drafting the Law of Ukraine "On Basic Principles (Strategy) of State Environmental Policy of Ukraine until 2020" and the National Action Plan for Environmental Protection for 2011-2015 Numerous proposals aimed at greening all sectors of the economy and the introduction of the following tools of the "green" economy have been made over the years: [1], [20]

- Cleaner production technologies
- Organic agricultural production

- "Green" construction
- "Green" procurement in the public and private sectors

On account of mechanical advancement, reusing assists with lessening the arrival of destructive substances out of sight. 260 million tons of plastic waste are produced every year on the planet, however just 16% is recyclable. The plastics business has the potential chance to get away from the take-it-yourself, reuse up plan of action and embrace a roundabout model that expects to dispense with squander in various areas, making financial, social and ecological advantages. One of the promising round processes is pyrolysis, which utilizes intensity and absence of oxygen to change over plastic waste once again into fluid unrefined substances. The advantages are no less monetary and natural, and reusing incomes are assessed at \$ 55 billion by the following 10 years. [21]

Domino's Pizza extraordinarily makes pizza boxes with the goal that they are 100% recyclable. Additionally, on account of electronic innovation don't utilize fuel bikes, so it isn't unsafe to the climate, or at least, harmless to the ecosystem pizza conveyance.

CHAPTER 1.

THEORETICAL BACKGROUND OF TECHNOLOGICAL INNOVATIONS AND ITS GREENING

1.1. The essence of the green economy, the main approaches and why it is important

The connection of the environment, society, and economics is recognized in a green economy. It aims to decrease pollution and make effective use of resources while also creating jobs, alleviating poverty, and promoting fairness.[33]

The global challenges to human civilization are exacerbated in the twenty-first century - by environmental imbalance, climate change, and global warming. The threat of famine, lack of adequate drinking water, and difficult access to safe and affordable energy supplies directly affect income, quality of life, and longevity, and determine the state and systemic difficulties of socioeconomic development. Since 2000, thanks to the efforts of the United Nations, the world has actively disseminated and implemented ideas for sustainable development, the core of which is the desire of current generations to secure prosperity and high economic growth without limiting the development and quality of life of future generations. Transitioning from extensive to intensive economic growth, harnessing the potential of international economic cooperation among all countries, especially in such important areas as resource conservation and energy saving, sharing innovative technologies in greening, organic farming and the circular use of natural

resources, and accelerating the development of "smart cities" and other forms of green economy are all necessary to achieve the goals of sustainable development.

The "green economy," built on the concepts of innovation, safety for people and the environment, and rational and cost-effective use of scarce natural resources, is best suited for countries seeking to transition to sustainable development and care for future generations. At the same time, the country cannot make the transition to sustainable development and a green economy alone. It requires the joint efforts of as many countries as possible and the development of effective international cooperation. Despite a chronic lack of resources and innovative experience, Ukraine has developed and is implementing the Ukraine 2020 strategy for sustainable socio-economic development.

Ukraine has committed to the Sustainable Development Goals and the principles of the "green economy" that promote environmentally sustainable or ecologically balanced economic growth, but it is still far from fully implementing the "green economy," which requires significant changes in all economic and political activities. For example, in 2018, Ukraine ranked 131st out of 141 countries in the Global Green Economy Index, alongside Mongolia and Togo. In the Global Green Growth Institute's 2019 ranking, Ukraine is among the countries with a moderate level of green economy, receiving 46.56 points out of 100. (Ranked 33rd among 38 European countries, 54th among all 115). Green economic opportunities were rated poorly, with low development of green trade and green innovation, and efficient and sustainable use of resources. Ukraine also has the largest gender imbalance in Europe. [25]

The need for a comprehensive state strategy for the transition to a "green economy" is confirmed by a study of landscaping methods in three major sectors of the economy. In Ukraine today, only a few components of them are developed. The "Basic Principles (Strategy) of the State Environmental Policy of Ukraine until 2020", the most complex document, gives the instruction to abolish the system of nature management and merge the concepts of specific statutes and target programs. With the help of the basic principles, the following strategic prices can be achieved:

- Strengthening public awareness of environmental issues

- Improving the state of the environment and raising the level of environmental protection

- Ensuring a safe and healthy human environment

- Improving the management of integrated environmental systems and integrating environmental policy

- Combating the decline of biological and landscape diversity and creating an ecological network

- Ensure ecologically sound environmental management

- Strengthening regional environmental policy

The formulation and adoption of this strategy by the European Commission testifies to significant positive developments in the country's economy towards "greening".

The program "Eastern Partnership GREEN" is the main development program of Ukraine in the field of "green economy". The program "Greening the Economy in Eastern Partnership Countries" is a major regional initiative.

The United Nations Economic Commission for Europe (UNECE), OECD, UNEP, and UNIDO are working together to help the six Eastern Partnership countries (Armenia, Azerbaijan, Belarus, Georgia, Moldova, and Ukraine) transition to a "green" economy.

The European Commission, four implementing organizations and other donors are funding the program. The goal of the program is to transition the Eastern Countries (EaP) partnership to a "green" model of business development and enterprise by defining the boundaries between economic growth and environmental degradation and resource depletion, specifically:

- Incorporating sustainable consumption and production (CER) into national development plans, laws, and regulatory frameworks in building a trustworthy legal framework for developing "green" growth strategies in line with European Union approaches.

- Facilitating access to new markets, especially the EU market

- Strengthening the technical and institutional capacity of government agencies in the areas of development and green growth policies

- Poverty reduction and job creation [16]

A green economy, according to the United Nations Environment Program (UNEP), is "one that improves human well-being and social fairness while considerably lowering environmental dangers and ecological scarcities." The goal of a green economy is to bring the environment, society, and economics together. Several impediments, however, have hampered the shift to a green economy. The first is firms' unwillingness to invest in the environment. It is mostly due to a misconception that it would not boost the economy. The investment would result in more jobs, more commerce, and increased output. Poverty eradication, equity, and growth would all be aided by a well-crafted approach.

Under a "business as usual" scenario, energy-related CO₂ emissions in the United States would rise to 6.9 billion metric tons (MT) by 2030, according to a Green Intelligence Report. Emissions are expected to reach 42.3 billion MT by 2050, according to projections. According to the "Environmental Outlook to 2050," air pollution will be the leading cause of death by 2050, surpassing the lack of safe drinking water and sanitation. According to The Global Alliance on Health and Pollution, air pollution causes almost 8.3 million premature deaths each year. India and China have the most pollution-related deaths per year, with 2,326,711 and 1,865,566 deaths respectively. Their massive population and increasing industrialization appear to be the reasons for this.

According to Greenpeace's Centre for Research on Energy and Clean Air, the economic impact of air pollution in both countries was 5.4 percent and 6.6 percent of GDP in 2018. The cost of air pollution was estimated to be \$ 2.9 trillion, or 3.3 percent of global GDP. These forecasts show that immediate action is required, as the cost of damages is increasing exponentially and would increase if not addressed through a strategic framework.

The Global Green Index has ranked Sweden first in 2018. It was also one of the wealthiest countries in the world, with a GDP per capita of roughly 51,615 USD (World Bank). As a result, the concept of a green economy offers a possible answer to these issues.

A green economy recognizes the interconnectedness between the environment,

society, and economy. It aims to reduce pollution and make effective use of resources while also creating jobs, alleviating poverty, and promoting equity. As a requirement for developing and implementing effective policies, it seeks systematic, responsible, and transparent government. A circular economy is a potential long-term economic paradigm that addresses the issues that plague a linear economy. Materials are reused, recycled, or recovered in a Circular Economy. It reduces or eliminates waste, as well as greenhouse gas emissions. UNEP's circular economy model and Sustainable Development Goal (SDG) 12 on sustainable consumption and production (SCP) complement each other. SCP is all about generating things and services that meet basic necessities while also improving quality of life by reducing harmful waste.

People must recognize that the concept of a green economy entails more than just renewable energy and resource conservation. It is, on the contrary, much more complex. Its ambit extends to elements like social inclusion in terms of Social Equity, Gender Equity, and other factors like quality of life where everyone has access to basic essentials like sanitation or nourishment. It focuses not just on growing GDP growth, but also on achieving inclusive growth, in which no segment of society is left behind or denied of development. For these reasons, the Green Growth Index also considers factors such as social inclusion. A collaborative effort with active civil society participation is required.

The project would be made easier because civilians are familiar with the needs and priorities of the local population. It would also promote equity and poverty reduction, which are key to the green economy's goals. People must recognize that the environment, society, and economy are all interdependent. To develop towards a green economy, people need integrated policymaking and effective methodology. [17]

Ecological economy, sustainable consumption and resource efficiency and sustainable development and sustainable development, as well as the production process and the consumption process of all life cycles, as well as the resources for improving the production processes and consumption processes and for To improve the efficiency of resources is the goal. It reduces not only the cost of resources and the amount of resources necessary, but also the amount of resources, as well as emissions, discharge, discharge and

download, products or units. The ecological economy is a macroeconomic strategy for long-term economic growth, which gives priority to investments, labour and technology

Figure 1.1. [14]

The importance of the green economy is that it encourages economies to become more sustainable and low-carbon, as well as ensuring that natural resources and environmental services are available for our continued well-being. [31]

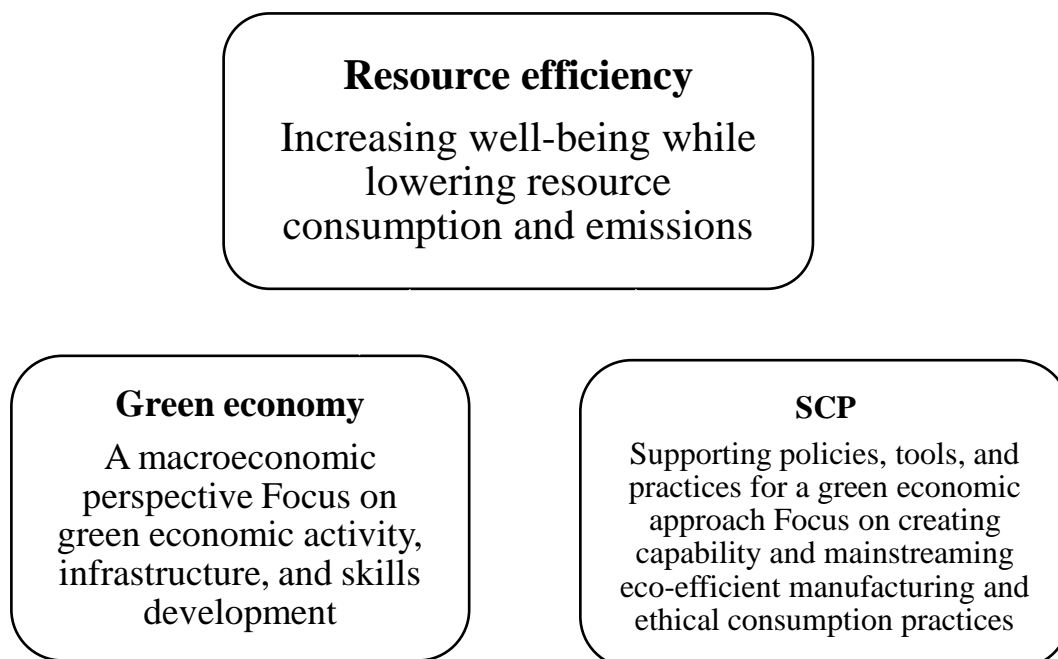


Fig. 1.1: Resource efficiency

Source: compiled by the author based on data from <https://www.unep.org/regions/asia-and-pacific/regional-initiatives/supporting-resource-efficiency/green-economy>

1.2. Industries that use technological innovation and green products

In terms of green recovery, one of UNDP project conducted a community safari in Kiev, Lviv and Bila Tserkva to test innovative nature-based solutions. "Moss modules, rain gardens, living forts, biodiversity ribbons, living walls and composters for organic

waste are just a few examples of such sustainable, nature-based solutions that are already being taken up by businesses."

UNDP is also exploring how nature-based solutions can be incorporated into Ukrainian legislation and cities' strategic plans. As part of the Ukrainian Cities Forum "After Tomorrow," it continues to organize safaris for communities in other Ukrainian cities and has initiated a discourse with the country's mayors on ways to apply nature-based solutions in cities.

Along with such undertakings, however, a dramatic shift in scientific research and development is needed, as well as a new vision and mindset. For this reason, UNDP has begun to explore biomimicry, a field in which natural models are studied and mimicked or used as inspiration to develop products and processes to solve humanity's challenges. Biomimicry technologies, when combined with other UNDP green programs, could accelerate the building of a new green and fair economy in Ukraine and globally.

The Biomimicry project, which included an online course, a competition, and the creation of initiatives, selected teams to participate in the final round of the Biomimicry Global Design Challenge in 2021. The following teams are currently representing Ukraine in the competition at the international level:

The "MOL eats my plastic" project uses the wax moth to help safely dispose of polyethylene. The team of Ukrainian scientists Lyubomyr Matsekh-Ukrainyskyi and Vasyl Poluyko discovered that the larvae of the wax moth feed on polyethylene and, under favorable warm temperature conditions from the 25th to the 40th day of the year, they can digest it. The larvae confuse the chemical structure of polyethylene with that of wax, which leads to digestion thanks to the synergistic action of enzymes produced by the larvae and enzymes produced by microorganisms in their intestines. The idea behind this company is that wax moth larvae would decompose polyethylene waste in certain containers without additional energy or chemical resources, producing organic matter - ethylene glycol, which is widely used in industry and agriculture.

A team from Lviv Polytechnic College led by Natalia Figurka, candidate of chemical sciences, is working on a project titled "Biodegradable Ropes for Fixing Greenhouse

Crops," which aims to reduce the use and production of plastics while reducing greenhouse gas emissions (by reducing the amount of plastic burned) and preventing plastic pollution of farmland (the rope developed by the team decomposes under natural conditions). The lifespan of the rope corresponds to the life cycle of the crop grown - as the crop grows and bears fruit, the rope maintains its strength and stability. At the end of the season, the rope does not need to be manually removed and disposed of separately - it can be composted together with plant material and decomposes completely in the soil. Without cleaning or fertilizer, this compost can be used the very next season. The cable is non-toxic to plants, microbes, water and soil and is in harmony with the environment. Local greenhouse operations have already expressed interest in the product. They have studied and tested the biodegradability with the product developers and confirm the success of the product's closed-loop technology in growing plants in greenhouses. [30]

Green marketing refers to companies that emphasize the environmental benefits of their products or services. Businesses and people all across the world are following a worldwide trend of going green. According to a Futerra international survey, 88 percent of buyers respect businesses that help them live more ecologically friendly and ethical lifestyles. [34]

The 17 Greenest Businesses:

1) Nike is a global firm based in the United States that produces and distributes footwear, clothes, sporting goods, and accessories. Nike is a leader in putting green concepts into effect, in addition to promoting the value of green projects through advertising. Nike is pushing hard for a range of sustainable items produced from recycled polyester and other ecologically friendly materials. They also manufacture utilizing green energy sources. Nike's "Move to Zero" project is a reaction to environmental concerns. It includes commitments like removing single-use plastics from Nike's campuses and introducing the Circular Design idea to the worldwide design community.

2) Apple

The Cupertino, California-based Corporation focuses on three facets of sustainability: reducing climate impact, conserving natural resources, and employing safer materials in its

products and workplace. Apple has built multiple wind and solar farms to power their data centres, retail locations, and corporate headquarters as part of this commitment. The company is also aggressively protecting materials by increasing manufacturing efficiency, using renewable resources, and producing long-lasting products.

3) Patagonia

If people are not an outdoor enthusiast, they have probably heard of Patagonia, one of the most successful sports businesses in the world. Since outdoor enthusiasts are often environmentally conscious, Patagonia's business philosophy should come as no surprise. The company has invested in repair shops around the world to extend the life of its goods and reduce its environmental footprint when developing new products. Patagonia's corporate concept is "100% For the Planet," although the company is not entirely sustainable. They are, however, forthright about it. They confess, for example, that they still use fossil fuels to make rainproof shells for their garments.

4) Starbucks

When getting a coffee on the run, many individuals choose for disposable coffee cups made of 5% polyurethane plastic, which makes recycling difficult and impossible. Starbucks, the world's largest coffeehouse chain and a symbol of America's second wave of coffee culture, is working on an environmentally friendly cup that will increase recycled content and reusability by 2020. This environmentally conscious firm is also noted for purchasing only ethically produced coffee, making coffee the world's first internationally sustainable agricultural commodity. Starbucks has also committed to provide 100 million healthy coffee plants to growers whose plantations have been harmed by disease or climate change.

5) IKEA

Although IKEA is best known for its ready-to-assemble furniture and homeware, it is also a leader in environmentally friendly business practices. The Swedish firm gets nearly half of its timber from sustainably harvested forests and all of its cotton from producers that follow the Better Cotton guidelines. These guidelines include reducing energy and water use, as well as regulating fertilizer and pesticide use. IKEA's shops across the world

are powered by more than 700,000 solar panels, and the company has set a target to be 100 percent renewable energy by the end of 2020.

6) Seventh Generation

Seventh Generation is a personal care and cleaning products firm that started becoming green in 1988. The company's objective has been "to turn the globe into a healthy, sustainable, and egalitarian place for the next seven generations" from its inception. Seventh Generation employs a packaging solution that is equally as ecologically friendly as their plant-based goods composed of sustainably derived components, realizing that packaging used for selling and delivering products is a big source of waste.

Brand, like Patagonia and a few other firms on this list, aims to be waste-free by 2025.

7) A Good Company

Although not all e-commerce enterprises are ecologically good, A Good Company is laying down the challenge to Amazon. Being green means more to A Good Company than simply not harming the environment. Anders Ankarlid, the firm's creator, is committed to doing everything he can to combat climate change, which is reflected in every product his company produces. The world's first climate-positive notebook made of stone paper and premium pens made of melted down illicit guns from El Salvador are among their offerings. The finest part is that consumers are involved in every choice concerning the raw materials utilized and every step of the manufacturing process.

8) Honda

Many people believe that vehicles and ecology are incompatible, but Honda is ready to change that perception. Honda launched the Tree Fund Program in 2004 to combat rising carbon emissions. Since its inception, the initiative has planted over 700,000 trees across New Zealand's terrain. One of its objectives is to cut CO₂ emissions by 30% for motorbikes, autos, and power goods made between 2000 and 2020. Honda has signed a long-term virtual power purchase agreement (PPA) for sustainable wind and solar energy in North America, which will meet more than 60% of the company's energy demands.

9) Disney

When it comes to energy efficiency, Disney is a powerhouse, just like it is in the animation and film industries. All of the company's facilities have zero net direct greenhouse gas policy. Disney is also working hard to cut its consumption of electricity and water, lowering indirect greenhouse gas emissions. In addition, Disney is a pioneer in environmental sustainability measures such as:

- Waste-free (nothing goes to the landfill)
- Positive environmental effect overall (giving more to the environment than taking from it)

By 2030, the corporation plans to create or acquire 100 percent carbon-free power for its global operations.

10) New Belgium Brewing

Since its foundation in 1991, New Belgium Brewing has been a supporter of environmental causes and one of the leading craft beer firms in the United States. The brewery, based in Fort Collins, Colorado, is committed to working with only sustainable vendors and boasts a Platinum-certified Zero Trash Business accreditation, indicating that 99.9% of their waste is recycled. To mitigate the impact of greenhouse gas emissions in the brewing business, the firm plans to reduce its carbon footprint by conserving energy, generating power on-site, and instituting an available energy tax.

11) Pela

Jeremy Lang, the company's founder, saw the effect of plastic on the oceans in 2010. Pela has developed the world's first 100 percent biodegradable phone cover and has set a target of preventing the production of 1 billion pounds of plastic in the next five years. Pela phone covers have 45 percent plant-based materials. The firm purchased carbon credits in 2019 to offset its total carbon impact and now proudly has the Climate Neutral Certificate. Pela is also a member of 1 percent for the Planet, which implies that at least 1% of company profits are donated to environmental organizations.

12) Johnson & Johnson

This personal care and beauty product producer has been a leader in environmental

sustainability for more than 20 years. The Global Aquatic Ingredient Assessment Tool (GAIA), which helps the corporation better assess and regulate the environmental effect of its consumer products, was patented in 2010. Johnson & Johnson was also one of the first cosmetic and personal care businesses to eliminate plastic microbeads. By 2025, they want to be using 100% recyclable, reusable, or compostable packaging, as well as certified post-consumer and pulp-based packaging.

13) Imperfect Foods

This eco-friendly firm based in San Francisco is on a quest to eliminate food waste and make fresh produce more affordable and accessible. They buy fruits and vegetables from farms that would otherwise go to waste and bring them to clients' doors for up to 30% less than grocery store costs. The product they offer is in no way spoiled or unsafe to consume. It is only visually flawed. Apart from assisting its food sector partners in reducing waste, Imperfect Foods strives to create an environmentally friendly atmosphere and supply chain in each area where it operates.

14) Salesforce

Salesforce is a platform software firm that specializes in service quality and sells corporate solutions for customer care, marketing automation, and analytics. In 2018, the corporation unveiled the Step up Declaration challenge, which aimed to cut greenhouse gas emissions across all economic sectors by utilizing innovative technology. Salesforce made one environmental pledge, announcing its most ambitious renewable energy deal to date, with the goal of reaching 100 percent renewable energy by 2022.

Among the company's objectives are:

- Collaborating with environmentally conscious vendors
- Using green building techniques
- Including environmental innovation in their corporate strategy

15) Native Shoes

Leather uppers are created from carbon-intensive animal ranching, whereas most synthetic shoes are made from toxic materials that cannot be recycled or composted. Native Shoes chose to defy the odds by employing innovative production processes and

vegan materials. They also collect old Native Shoes and use them into insulation and playground flooring. This decreases production waste as well. Their limited-edition Plant Shoe is described as a 100 percent biodegradable shoe constructed entirely of natural materials that can be composted after usage.

16) Numi Organic Tea

Numi Tea's initiatives are all root and branch ecological. Sustainability in manufacturing, measuring CO2 emissions during the manufacturing process, and making donations to environmental charities are all crucial to this organization. OSC2 (One Step Closer to an Organic Sustainable Community), a network of CEOs and business executives from sustainable enterprises in the natural goods industry, was founded by Numi Tea. The company is committed to not just enhancing their own environmentally friendly goods, but also disseminating eco - friendly alternatives across all sectors.

17) Who Gives A Crap

Who would have guessed that the COVID-19 outbreak would result in such a high demand for toilet paper? Toilet paper should be environmentally friendly because it is a home essential that people use in large quantities and discard instantly. Who Gives A Crap is an Australian manufacturer of environmentally friendly toilet paper. The paper is 100 percent plastic-free, you can choose between 100 percent recycled paper, and 100 percent recycled bamboo, as stated in the advertisement. The company provides half of its revenue to help needy communities around the world build toilets. [34]

1.3. Technological problems and their trends

A technological innovation is a new or further developed item or interaction whose innovative attributes are altogether not the same as in the past. Carried out mechanical item advancements are new items (item developments) or cycles in application (process developments) that have been brought to highlight. [12]

Technological development brings benefits. It expands efficiency and brings residents new and better labour and products that work on their general way of life. The

advantages of advancement are in some cases delayed to emerge. They frequently fall comprehensively across the whole populace.

While Ukrainian communication rules are being updated, the country's technology sector nevertheless suffers from a lack of acceptance of new technologies, a widening digital divide between urban and rural areas, distrust of the state, and a disinformation problem.

In terms of technological progress, Ukraine lags behind EU countries. There is a significant digital divide between the urban and rural population. Twenty-nine percent of the population has no Internet connection. Only 44% of rural residents have access to the Internet, compared to 76% of urban residents. Despite the low cost of connections, Internet speeds are still slow.

Kyivstar, Lifecell, Ukrtelecom, and Vodafone compete in the telecommunications market, offering a wide range of telephone, cable, and Internet services.

With a few exceptions, Ukrainians largely follow global trends when it comes to their online behaviour. As everywhere, Google dominates the search and browsing market, although Ukrainians prefer Opera, which has a 13 percent market share.

Ukrainians spend a lot of time on Internet activities such as communication, watching or downloading movies, playing games and reading news. Video streaming services, on the other hand, are not very popular in Ukraine. The reason is the abundance of freely downloadable, pirated movies in Ukrainian and Russian on the Internet.

Although Windows remains the most widely used operating system, Android is gaining ground. Apple's operating system is far behind, due to the exorbitant cost of Apple products, which are still prohibitively expensive for many ordinary Ukrainians. To buy a new iPhone 12 Pro (US\$1,088), an average Ukrainian has to work for 87 days, compared to 28.3 days in Poland and 9.7 days in Germany.

Social media is the most popular news source among Ukrainians in 2020. Almost half of Ukrainians said they get their news from Facebook, followed by YouTube and Telegram. The latter has become a dangerous source of misinformation.

Due to Telegram's anonymity policy, it is almost impossible to block channels that

spread false information about various political and social issues. This is a particularly hot topic because many local MPs regularly use Telegram conversations.

In response to the disinformation campaigns, a number of projects have been implemented to combat the problem, most of which are funded globally. Still, the public lacks the ability to distinguish between true and fake news.

The Ukrainian Parliament has taken an important step toward modernizing the legal framework by adopting the Law on Electronic Communications, which is scheduled to come into force on January 1, 2022. The drafting of Ukraine's digital communications legislation took more than 15 years.

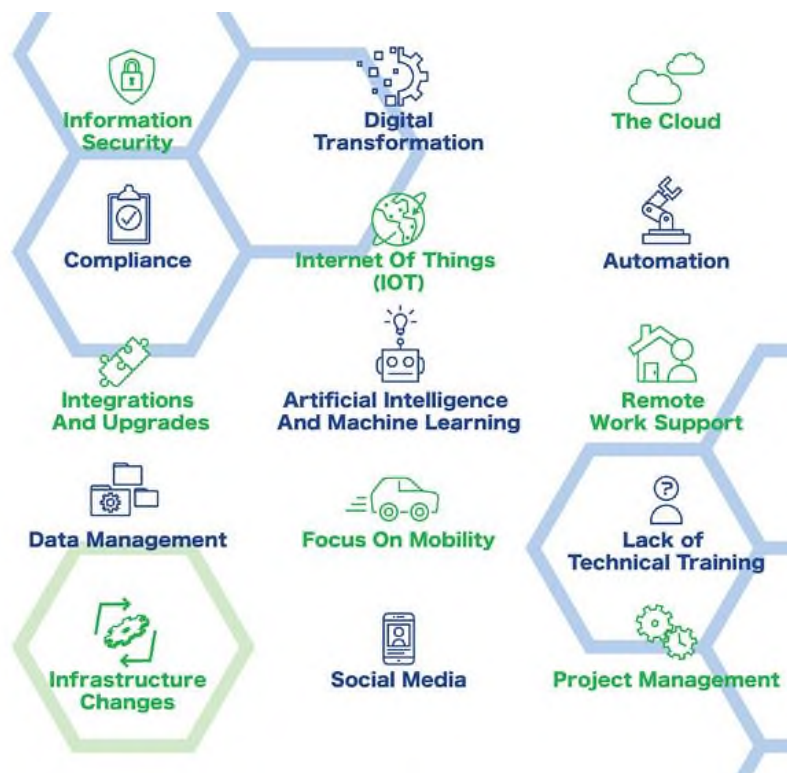
While the Ukrainian government recently launched a "state in the smartphone" campaign to promote digitization, many as a threat perceive it because it expands the government's influence on Ukrainian society as a whole. The government's activities during the outbreak of COVID -19 reinforced these fears. In April 2020, Ukraine's Ministry of Digital Transformation used data from Kyivstar, Lifecell, and Vodafone to monitor individuals returning to Ukraine from abroad after March 17, 2020, for compliance with quarantine procedures. [25]

These advances have harmed our reality in two primary ways: contamination and the consumption of regular assets. Air contamination happens when unsafe or extreme amounts of gases, for example, carbon dioxide, carbon monoxide, sulphur dioxide, nitric oxide and methane are brought into the world's air. [29]

Green product ideas have gained traction in recent years as businesses view them as a way to stay competitive in the market.

GPIs, like traditional innovations, provide new information, resources, and technology to businesses, allowing them to make the required adaptations to changing client preferences and needs, as well as institutional expectations. [23]

15 technology challenges businesses may face in 2022:



1) INFORMATION SECURITY

Any company's information security is a critical concern. It is critical to safeguard sensitive intellectual property (IP) data, financial papers, and customer data in order to maintain the company healthy and competitive. The average cost of a data breach in the United States is \$8.64 million, according to IBM statistics, making the United States the most expensive country for data breaches.

The problem is that dealing with cybersecurity may be quite tough. Because:

- Different firms must adhere to different information security rules.
- Malicious actors are continually developing new cyber dangers and attack techniques; qualified cybersecurity IT specialists are both expensive and difficult to come by.

This is why many organizations, especially those with limited resources, choose to use outsourced cybersecurity solutions.

2) DIGITAL TRANSFORMATION

Businesses seldom set out to achieve digitalization, or the incorporation of technology into practically every element of their operations. Instead, the widespread use

of technology in corporate processes frequently results in an unplanned type of digital transformation, resulting in an uneven experience for users of the organization's apps. Adopting a more deliberate approach to digital conversion, one that analyses how each piece of technology (from mobile applications to data collecting tools) is incorporated into the overall operations of the company, can be critical to ensuring a seamless transition. This is where an IT consulting firm may help.

3) THE CLOUD

The "cloud" is often seen as the vague and mistakenly identified panacea for all of a company's problems. Cloud-based services such as platforms (PaaS), software (SaaS), and disaster recovery as a service (DRaaS) can help companies quickly solve real-world problems. Not all are available, but cloud solutions are created identically. It is important for companies to have a clear strategy for using cloud solutions, including a work plan with older systems that may not be compatible with cloud-based technologies. Having a professional partner who can provide you with a customized cloud solution can be very helpful in solving the problem of integrating the cloud with your company's operations.

4) COMPLIANCE

Every company must cope with a range of regulatory regulations. The problem is that the particular standards that a company must achieve might change based on a number of circumstances, including:

- Business size
- Vertical industry
- A distinct business model
- Operational area
- Customers were accommodated

For example, EU customer service companies must comply with the EU General Data Protection Regulation (GDPR) and consumer payment card data processing companies must comply with the Payment Card Data Security Standard (PCI. DSS) and healthcare services. Companies must meet HIPAA requirements. Understanding the rules and compliance requirements that apply to your company's technology is important to

avoid fines and other penalties that could harm your company's operations.

5) INTERNET OF THINGS (IOT)

Consumer and enterprise IoT devices have become indispensable. The Internet of Things, on the other hand, might be a big, unforeseen IT impediment in a company's digital strategy. When firms design out their IT architecture, IoT devices are frequently overlooked, resulting in cybersecurity holes. A bad actor to breach the network might use an unprotected IoT device, such as a smart speaker, linked to the company's secure Wi-Fi network, for example. "Lack of firmware validation on device, absence of secure distribution (un-encrypted in transit), lack of anti-rollback methods, and lack of alerts of security changes due to upgrades," according to Network World, all contribute to IoT device security issues.

6) AUTOMATION

Many firms benefit from automation. Manufacturers to optimize industrial processes, improve employee safety, and cut manufacturing costs while boosting throughput use automation tools extensively. Other firms, on the other hand, may employ business process automation technologies to automate the gathering and transfer of data required for certain workflows. Introducing new automation technologies into any corporate operation, on the other hand, might cause issues. Employees may require some time to acclimatize to new automated tools, and some may be resistant to change.

7) INTEGRATIONS AND UPGRADES

Handling integrations and updates is an important aspect of any digital transition. Integrating old systems with new technologies and platforms, or upgrading/replacing those systems to operate with new architectures, may be a lengthy and expensive process that does not always proceed as intended. There is always the risk that an application-programming interface (API) would fail to communicate correctly between systems, that equipment and software updates will be more expensive than anticipated, and that certain changes will take a long time, consuming resources and cash. Modern firms must have an IT management strategy that eliminates or reduces the risks associated with integrations and upgrades.

8) ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

Several of the automation technologies that organizations rely on are powered by artificial intelligence (AI) solutions. Many start-ups proposing AI solutions to common business difficulties are focusing on machine learning, or the process through which AI algorithms utilize aggregated data to develop prediction models or learn how to do certain tasks without human input. However, not all artificial intelligence (AI) and machine learning algorithms are made equal. Finding the correct AI and machine-learning algorithm for a company's business operations requires a lot of time and work.

9) REMOTE WORK SUPPORT

The COVID-19 pandemic has greatly accelerated the process, as many companies are moving to remote work. The "work from home" rule is now standard and will not be repealed any time soon. More than two-thirds of Americans working remotely plan to continue doing so, according to a Gallup poll. Integrating mobile applications and cloud-based solutions that allow remote workers to work together is essential to stay connected to remote work. In addition, the company must find a way to improve foreign employees to help external employees in the general computer and other problems.

10) DATA MANAGEMENT

To ensure uniformity, employees need regular and quick access to the information they need to do their job. However, companies must protect confidential information from unauthorized access by unscrupulous people. Effective information management is a challenge because it provides role-based access to certain databases, provides uninterrupted access to data in the event of an emergency (such as a cyber-attack, or a data centre outage), and prevents intruders from accessing corporate data. . Everything requires extensive planning and resources.

11) FOCUS ON MOBILITY

For good reason, mobile apps have become an integral element of many corporate operations. Thus according Pew Research Centre statistics, 81 percent of Americans currently own a smartphone of some form. As a result, the great majority of workers are likely to have access to a smartphone, and many of them use it for both work and play.

Employers can use mobile enterprise apps to provide their employees with the tools they need to collaborate more effectively while working remotely. However, due to the wide range of mobile operating systems (Apple iPhone, Android devices, etc.), it can be difficult to ensure a reliable and consistent business experience for mobile applications.

12) LACK OF TECHNICAL TRAINING

Because not every employee in a firm may be an IT expert, IT professionals' compensation can occasionally surpass six figures, depending on their unique talents. It is vital to ensure that workers have a baseline degree of technical proficiency so that they can successfully use corporate applications, automation tools, and other IT assets given by the organization.

13) INFRASTRUCTURE CHANGES

The introduction of new solutions and technologies can cause large changes to a company's IT infrastructure, which can cause severe disruptions in business operations. Employees struggle to learn how to operate with (even around) major changes, which can cost time and money. Furthermore, coordinating infrastructure changes internally may be an expensive and time-consuming procedure. Doing things internally may be a huge time and money drain, from provisioning IT capacity to overseeing the installation of improved systems, handling upgrades, and troubleshooting new solutions. This may explain why many businesses choose for outsourced IT management services to assist them in planning infrastructure modifications.

14) SOCIAL MEDIA

Every day, billions of individuals utilize social media networks. Employees may, however, find themselves surfing their social network accounts while at work thanks to easy-to-use smartphone apps. This can make it difficult for employees to focus and be productive at work, especially if they work from home. Businesses, on the other hand, can use social media platforms to market their goods and services. If used correctly, this provides opportunity to grow their reach and earn clients. Setting and implementing social media policies can help organizations reduce the negative effects of their use at work on productivity, but it is a touchy issue. Employing mobile device management (MDM)

solutions to restrict the adoption of popular applications like Facebook and Twitter can keep employees from checking their feeds, but it can be off-putting if the topic is not handled properly.

15) PROJECT MANAGEMENT

Planning, configuring and implementing IT management or IT initiatives is a complex subject. Inefficient project management can easily lead to reductions, over budget and long delays in critical IT projects. This can negatively affect your return on your IT investment. Tracking the costs and revenue of your IT project is key to avoiding overpayments, wasting money on inefficient initiatives, and optimizing future projects.

Technologies Businesses of all sizes and industries will face new problems in 2022 and beyond, some of which may be simpler to forecast than others. According to Gartner, IT investment will reach \$3.8 trillion in 2021, up 4% from 2020. Businesses who are not connected to the future of technology and what is coming next may have a harder time competing with those that are. There is really no end to the ever-changing trends that organizations must adapt to in order to succeed, from remote work and cloud-based software to mobile device use and artificial intelligence. [34] Block chain technology, distributed brochures and fixed markers (NFT) will revolutionize our society, and advances in these technologies will continue until 2022. These developments extend beyond non-Bitcoin to smart contracts that use NFTs to prove ownership.

No one does it better than Domino's when it comes to pizza delivery. Domino's has introduced several innovations over the years that have significantly influenced the pizza and delivery industry as an early pioneer in the efficient delivery of pizzas to order. Here are some of Domino's most notable innovations:

1) DOMINO'S HEATWAVE , HOT BAGS



Heatwave hot bags were invented by Domino's in 1998 to keep pizzas warm during delivery. Each heat bag had its own heating mechanism that was charged by plugging it into a power outlet in the store. The outer material of the bag is water-resistant nylon, which replaced the less durable vinyl used in the past. Domino's has continued to develop and improve the technology. For example, the power cord has been removed and an induction heating system has been used to heat each bag. The latest version of Domino's Heatwave heating bags uses only a unique insulation system to keep pizzas hot and crispy - without electricity.

2) SPOODLE



Domino's is always looking for ways to improve efficiency, and the Spoodle is no exception. Developed by Domino's, this tool combines the best features of a spoon and a ladle to reduce the time it takes to add sauce to a pizza.

3) DOMINO'S SUPPLY CHAIN CENTERS



Domino's has set up a central commissary system so that stores can focus on making and delivering pizzas. As a result, store employees spend less time baking the dough, grating the cheese and preparing the toppings. Domino's supplies high-quality dough and ingredients nationwide through a network of domestic dough production and food distribution locations to ensure that the pizza is reliably delicious. Typically, more than 240 commodities are delivered to more than 6,000 Domino's locations across the United States, allowing customers to order a single Domino's pizza 34 million different ways.

This approach has since been adopted by other pizza and quick-service restaurants in the United States.

4) ONE BETTER BOX



Domino's invented the sturdy, corrugated pizza box, which prevents moisture from softening the box and cheese from sticking to the top during delivery, because no one wants a dirty pizza. It is also good for the environment because it is recyclable.

5) PIZZA SCREEN DEVELOPMENT



One of the most important aspects of pizza is its delicious and crunchy crust. To get the perfect crust, Domino's has invented a pizza filter that cooks the pizza base more evenly than the wooden or stainless steel pizza base.

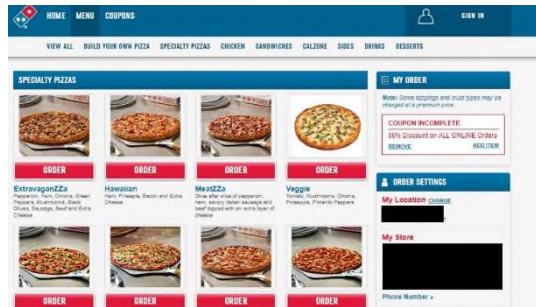
6) CAR-TOP SIGN - IN 3D



Domino's has made pizza delivery trucks hard to miss. The 3D car decal was designed by Domino's and is currently being used by a number of industries, including

cabs and driving schools.

7) DOMINO'S ONLINE ORDER



Domino's began its tech innovation with the launch of its online and mobile ordering system in 2007, and today digital ordering channels account for more than 70% of Domino's sales.

8) DOMINO'S TRACKER & PIZZA BUILDER



Domino's transformed the customer experience in 2008 with the introduction of the unique Domino's Tracker and Pizza Builder technology. Domino's Tracker was the first in the industry to become the first tracker developed and implemented by a national pizza chain to help consumers track their progress. From order to delivery. Domino's Pizza Builder has revolutionized the industry by allowing consumers to choose a crust and see how pizza is baked on a computer screen. Since then, many other pizza makers have introduced similar technologies, following Domino's Tracker and Pizza Builder. [18]

CHAPTER 2.

ECO-INNOVATION IMPLEMENTATION IN BUSINESS (CASE OF DOMINO'S PIZZA)

2.1. Characteristics of pizza market

Domino's Pizza is the global leader in the quick-service pizza industry. In 1960, the firm was created and in 1965, it was christened Domino's Pizza. In 1967, it started its first Pizza franchise. In the last 60 years, the company has evolved into one of the most well-known consumer brands on the planet. Throughout its existence, it has remained dedicated to product quality, innovation, client pleasure, and convenience.

By the end of 2020, the firm has opened 17,644 locations throughout the world, with 6,355 in the United States and the remainder outside the country. During the epidemic, the company was quick to adapt its business model to meet the changing circumstances and demands of customers both inside and outside the US. As a result, although other firms in multiple industries suffered large losses during the epidemic, Domino's saw tremendous sales and revenue increases. The firm makes money from its supply chain offerings in addition to its company-owned and franchised locations. Its revenue for 2020 was \$4.1

billion, down from \$3.6 billion the previous year.

Despite the epidemic, the firm has continued to invest in expanding its capacity in order to sustain long-term development. To help its franchisees build their businesses, it launched two new supply chain facilities and a Thin Crust Production line in 2020. Aside from that, the company debuted two new products for its American customers.

Domino's success is due to its solid and stable business strategy, as well as its emphasis on product quality and customer service. The company is investing in electronic technology to improve operations and maintain a strong brand image. Domino's serves a wide range of clients, including people from many socioeconomic groups and backgrounds. Aside from that, it caters to people of all ages. The company's primary target category is middle-class clients in the youthful to middle-age range. In recent years, the emergence of middle-class customers as a viable client sector has driven fast-food companies to adjust their product and marketing tactics to this demographic. Domino's caters primarily to clients aged 18 to 40.

These have marketed its products such that they are accessible to a wide range of customers, including lower middle class, middle class, and affluent customers. Professionals and college students are among its target client demographic. To accommodate to the tastes and interests of various consumer categories, the organization offers a large and diversified menu. Customers who are vegetarians choose Domino's above other fast food chains because of the vast number of vegetarian options available on the menu.

The company's financial performance is another of its key assets that has helped it achieve tremendous success and expansion potential in the United States and other markets. The company is primarily a franchisor, with franchisees owning and operating 98 percent of its locations. Despite the fact that it is mostly reliant on franchises, it is not a complicated business plan. Domino's Pizza has a plain and uncomplicated business plan.

Its outlets offer high-quality food at reasonable costs. The business offers high-quality meals at reasonable costs, as well as convenient ordering and prompt service. Using technical breakthroughs, the organization has improved its product offers and

customer experience. The licenses and fees it collects from its franchisees are its primary source of revenue and profit. Through its supply chain activities, it also offers food equipment and supplies to its franchisees, mostly in the United States and Canada. The company is primarily run by franchisees, but it does own a small number of restaurants whose income and profits flow directly to the corporation.

The Domino's Business Model's advantage is that it creates considerable profits for both the franchisee and the franchisor. Aside from that, the company's low operational expenses have helped it create large profits. The majority of Domino's revenue comes from its US business. The company's international operations make for a very modest fraction of its net annual revenues.

This is Domino's foremost operating segment, based on 2020 revenues. The company's franchised and company-owned stores in the United States are included in this segment. However, it mostly comprises the company's franchised stores, which are far more numerous (94 percent of the overall US store count) than the company's own stores in the US. Domino's has 5,992 franchised restaurants in the United States as of 2020. In addition, the corporation managed a network of 363 corporate-owned stores in the United States in 2020. It is the company's second-largest segment in the United States. In 2020, this division accounted for 35% of the company's net revenues. In the last fiscal year, Domino's reported net income of \$ 1.45 billion in the United States (Domino Annual Report, 2020).

The company's foreign franchise sector generates the smallest amount of net revenue. Outside of the United States, this sector covers all Domino's franchised locations in 90 countries. The corporation had 11,289 international franchise stores at the start of 2021. Apart from the royalty payments received from these overseas franchised restaurants, other technology-related fees also contribute to the income generated by Domino's in this area.

The supply chain segment, based on the percentage of net annual sales generated, is the largest business unit of the company. This segment will represent 59% of the company's total net income by 2020. According to Domino's 2020 report, the company's

net sales are \$ 2.42 billion. In the United States, Domino's has 21 regional dough production and supply centres, two thin-skinned factories, and a vegetable processing plant. Domino's has five centres in dough production and the Canadian supply chain.

Domino's supply chain department frequently supplies over 6,800 outlets with various goods and materials. Domino's intends to increase its investment in expanding its supply chain capacity in the future because it is the company's largest section.

Domino's is a well-known fast-food chain with a significant global client base and a global presence. In the US and globally, the company enjoys a significant lead over its competitors in the QSR Pizza category. Its competitive advantage comes from a variety of sources, and while not all of them provide a long-term competitive advantage, the majority have helped the company strengthen its position in the industry.

Domino's main strength is the brand's significant capital. It has successfully maintained a strong brand image as a high quality, consumer-friendly fast food chain. It is the largest retail pizza brand in the world. It is one of the most popular consumer brands in the world. It is a recognized world leader in pizza delivery as well as a significant removal operation.

Domino's Pizza is synonymous with on-time delivery, high-quality products, and technical advancements around the world. Technology has aided the corporation in maintaining its positive image and increasing brand equity. Despite its great brand awareness and market position, the corporation spends a significant amount of money on paid advertising. Almost the last five years, the company's US base stores (both company-owned and franchised) have spent over \$2.2 billion on advertising.

Although market share does not always mean a competitive advantage, it does reflect Domino's strong competitiveness in the United States. In its 2020 annual report, the company boasted that it is the largest pizza supplier in the United States, with a market share of 36%. In the sales sector, the company's market share has also increased, reaching 14% annually in the United States in 2020, and the company has a high internal and external market share in the QSR pizza sector. [3]

Domino's Pizza's top competitors include Pizza Hut, Little Caesars, Yum! Brands,

McDonald's, Starbucks and Subway. Domino's Pizza is a pizza delivery company.

Table 2.1

Top competitors of Domino's pizza

Name	Domino's Pizza	Pizza Hut	Little Caesars	Yum! Brands	McDonald's	Starbucks	Subway
Description	Domino's Pizza is a pizza delivery company .	Pizza Hut is an international restaurant chain specializing in the sale of ready-made pizza products.	Little Caesars is a company operating as a carryout pizza chain and offering pizzas, sauces, drinks, and other related food products.	Yum! Brands (formerly Tricon Global Restaurants) is a company that develops, operates, and franchises quick-service restaurants.	McDonald's is an international chain of hamburger fast food restaurants.	Starbucks is a company operating as a roaster, marketer, and retailer of specialty coffee.	SUBWAY is an American fast food restaurant franchise that sells mainly underwater sandwiches (salads) and salads.
Founding Date	1960	1958	1959	1997	1955	1971	N/A
Type	Public	Subsidiary	Private	Public	Public	Public	Private
Tags	Food & Beverage delivery restaurants supply chain	Food & Beverage delivery nutrition restaurant	Food & Beverage delivery restaurant supply chain	Food & Beverage hospitality restaurant	Food & Beverage hospitality restaurant	Food & Beverage Retail consumer goods hospitality restaurant	Food & Beverage restaurant
Locations	Ann Arbor, US HQ	Plano, US HQ	Detroit, US HQ	Louisville, US HQ	Chicago, US HQ	Seattle, US HQ	Milford, US HQ
Employees	14,400 10% increase	54,956 1% increase	18,261 2% increase	36,000 5% decrease	200,000	383,000 10% increase	77,564 1% increase
Valuation (\$)	12.4 b	N/A	N/A	33.1 b	183.1 b	95.2 b	N/A
Twitter followers	1.4 m	1.7 m	362.7 k	24 k	173.2 k	11 m	2.3 m
Number of tweets (last 30 days)	928	955	840	17	37	789	413

Average likes per tweet (last 30 days)	5.6	2.1	3.2	1.3	10.6	13.2	7.3
Percentage of tweets with engagement (last 30 days)	7.97%	36.54%	37.14%	82.35%	91.89%	67.3%	32.93%
Alexa Website Rank	3484	13056	45966	140952	8427	2879	22717
Employee Rating	3.7	N/A	3.4	3.9	3.5	3.8	3.4

Source: compiled by the author based on data from <https://craft.co/dominos-pizza/competitors>

This table provides general information about Domino's Pizza competitors internationally. Here we can see the basic information and description of competitors, such as the number of employees, their assessment, what type of company and social network. As well as the rating of workers, and it is Domino's Pizza rating is higher than competitors. Compared to other information, the company has slightly lower rates, but they are growing steadily over time. [5]

Without a doubt, Domino is a global brand sold in 90 countries. The United States and Canada are one of the largest markets, but the company generates most of its revenue from the US market alone, competing with industry leaders such as the famous McDonald's and Subway brands.

In the twenty-first century, customer experience has become a major emphasis for enterprises. However, in the QSR market, whether for restaurants that offer dine-in and carryout or solely carryout, it takes on a greater significance. Customers come to Domino's not only to fulfill their hunger, but also to enjoy a superior customer experience.

Domino's provides a fantastic dine-in experience that is unrivaled in the restaurant industry. Aside from that, product quality and technological innovation have also contributed to the company's improved customer satisfaction. The Domino's app allows customers to effortlessly place orders and take advantage of special offers. In the United States, the app has a 4.7 rating. [3]

2.2. Use of technological innovations and ecological products in Domino's pizza

Domino's has been steadily improving its brand image and customer encounter. However, technology has undoubtedly aided the company in improving customer satisfaction and increasing revenues in both domestic and international markets.

Technology is currently playing a crucial role in the QSR industry, where it has helped enterprises enhance their efficiency in various areas, including marketing and finance, in addition to helping them streamline their operations. Customers, on the other hand, like how simple it is to buy pizza from Domino's. Digital channels will account for more than half of the company's global retail sales by 2020.

Domino's is known for paying close attention to product quality. While its emphasis on product quality attracts a significant number of new customers, it also leads to improved customer retention rates. Its signature hand-tossed pizza recipe has contributed to increasing customer reorder rates, traffic, and revenue over time. The company has introduced significant product advancements during the course of its 60-year history.

However, quality is an important aspect of the QSR market that leads to high sales and retention rates. Consumers' desire for healthy, high-quality food and dominoes has made them the preferred choice for millions of consumers in the United States and around the world. In the QSR industry, quality is also an important differentiating factor that influences sales and market share. [3]

Domino's Pizza was a brick pizza that guarantees delivery in 30 minutes. This strategy worked until the competitors started beating them with entertainment. The dominoes needed a challenge.

In 2011, Domino's CEO Patrick Doyle left a seemingly incomprehensible question to the IT team. The goal is to create an easy and effective way for any consumer who uses a smartphone to sort their pizza in 17 seconds before the traffic light turns green. jump. The IT team answered the call using the "Build and Customize Complaint Pizza" app. According to Nation's Eatery News (NRN), today, "Domino customers work more on

automated platforms than on iPad network applications, rather than on phones."

Moreover, much obliged to their commitment to digital-first advancements like this, Domino's developed from pizza put to tech titan.

Self-propelled vehicles and electric bicycles optimize transportation processes. Before electric bikes and driverless transportation, third-party services such as DoorDash and UberEats preceded the Domino transportation business. According to TechCrunch, "Domino's may not offer enough menu options to compete with DoorDash or UberEats, but they can compete for discounts and delivery times." Especially now, with most restaurants offering transportation, Domino's is ready to challenge itself to stay ahead of the competition. This ingenuity is especially important today, as consumers interested in picking it up and delivering it have seen a 148% increase in popularity compared to popular Yelp data.

Therefore, Dominos invested in two digital-first advancements to form the conveyance prepare smoother (and to remain ahead of the competition): conveyance via autonomous vehicle and conveyance via electric bicycle. Those advancements brought about in 2019 advanced deals of "more than half of all worldwide retail sales."

Domino's partnered with Passage in 2019 to launch independent (driverless) transportation. The Nuro R2 travels at a speed of 40 miles per hour to a designated transit area in Houston, Texas. Customers who choose independent delivery will receive a code that allows them to enter the external display of the vehicle and place an order.

Nuro has a look at Domino's proprietary transportation system, which attempted self-propelled transportation through a refurbished overpass in Ann Arbor, Michigan, where Domino's headquarters are located in 2017. This measure allowed security personnel to go, but not there was room for people in Nuro. Both companies strive for one thing.

Over time, driverless vehicles will be less costly to run than conveyances made via a traveller vehicle. Kroger, the basic need chain, is additionally testing and seeing victory with Nuro-powered basic supply conveyance in Arizona and Texas.

Domino's will also work with Rad Control Bikes to begin delivering electric bikes in 2019. A bike can carry 12 large pizzas and reach speeds of up to 20 miles per hour. In

many markets, such as Seattle, cycling reduces the problem of stopping problems, while electrical assistance is changing to speed up the delivery process.

Greg Keller of the Seattle Domino franchise said in a press release: “The electric bike has changed the game for us and we've been shipping with them for a while. We have managed to reduce costs, offer better discounts, increase contracts and keep an active workforce.”

Consumers can track their Nuro or e-bike through the Domino app, just like any other food delivery app.

GPS following maximizes labour efficiencies. Domino's has continuously been a pioneer in advancement, from concocting the 3D car-top sign, presently utilized by taxis, to protects packs that keep nourishment hot amid delivery. Domino's was also influential in joining live arrange tracking—now standard innovation within the eatery and conveyance industries—further situating the company to effectively compete with third-party conveyance companies. Not to mention GPS offer assistance to optimize in-store coordination planning and, give computerized straightforwardness to its customers.

The chain presented online requesting in 2007. In 2008, it rapidly turned around and propelled its Domino's Tracker, permitting for “better conveyance procedures,” as well as more proficient kitchen forms.

Domino's CEO Ritch Ellison said in a call for revenue: "We know that labour costs are rising over time, so we're looking at all the prospects for our operations to find differences in performance." GPS tracking is effective outside the home, and store managers can see where drivers are to skilfully reconcile store orders. QSR Magazine agrees: "Drivers themselves benefit from random routes, one-click customer call-back options and a much better organized customer service to meet customers when they arrive." "Kitchen staff also know when to make orders ready in case they know where a driver is and can instruct drivers on how to adjust their path for the next round of orders," according to Eatery Plunge's examination of the invention.

AI requesting expels contact from the requesting experience. From the 17-second challenge to nowadays, Domino's authority is devoted to making reliable changes to its

computerized requesting forms. Domino's cutting-edge artificial-intelligence requesting bot, Dom, permits clients to put orders with small exertion. When it was propelled in 2014, Domino's called it "a genuine to begin with inside both conventional and e-commerce retail."

Domino's is one of a few computerized developments to extend deals for the around the world chain. Within the U.S. alone, "Domino's produces over 65% of deals through computerized channels and has created a few inventive requesting platforms," concurring to a Q2 2020 profit call.

In parallel, Domino's Any Ware brings requesting openings to the computerized apparatuses that shoppers utilize every day, counting work communication apparatus Slack, Amazon Alexa, Facebook Flag-bearer, and more. Innovations like Dom and Any Ware offer assistance Domino's differentiate the company's offerings and open up more income streams. By 2018, "Domino's counted more than 60 percent of its U.S. deals by means of computerized orders, accomplished its 30th straight quarter of same-store deals development, and saw its stock rise 22 percent in a riotous market," agreeing to Quick Company.

Domino's 17-second team was the beginning of Domino's technical glory. Although now the largest pizza company in the world, as a technology company, Domino's is dedicated to good engineering and has built a building called Advancement Carport, where many of the developments mentioned so far have been tested and documented. Advancement Carport is a reasonable indication that Domino refuses to rest in its fertile bush. Domino's chief technology officer, Kelly Garcia, said the company's growth engine was driven by a desire to "fight back." The company is doing this by gradually focusing on automatic progression in wet kitchens.

So, moving forward, advancements and innovation to optimize both front- and back-end operations, economical hones, and off-premises choices like contactless pickup and conveyance, are front and center for eatery victory.

Since it propelled it has to begin with site in 1996, Domino's has set a high-water stamp for utilizing innovation to do fair that. Nowadays, clients can arrange through

Domino's portable app, a shrewd observe, Twitter, Slack, shrewd TV, Passage Adjust, Amazon Alexa, Facebook Courier, and more. [27]

By June 30, 2021, more than 710 Domino's locations across the country will be free of single-use plastic straws and spoons. The pizza business believes that switching to biodegradable straws and wooden spoons will save two metric tonnes of plastic each year, or up to 2.85 million pieces.

Domino's is also testing a recyclable 'lineless box,' which uses cutting-edge technology to attach an authorized food-grade lining, removing additional plastic packaging from the supply chain. The new approach is being explored and is anticipated to boost franchisees' business with decreased wastage and improved food preparation times in stores. The trial's results, according to ANZ chief procurement officer Paul Connors, might revolutionize the supply chain forever.

"At Domino's, we feel there is a big opportunity to improve the way we effectively distribute food and packaging to outlets in a more ecologically friendly and sustainable way," he said.

Domino's Australia and New Zealand CEO Nick Knight stated that the company is happy to be helping to reduce plastic waste in the country.

"As Australia's largest pizza company, we recognize our responsibility and opportunity to make a huge difference, and we are happy to be taking good steps forward by decreasing plastic usage and our environmental footprint."

"By eliminating single-use plastic straws and silverware such as spoons from Domino's locations, we will eliminate almost 2 metric tons of plastic from our system."

"Recycling is also a terrific method to help reduce the growing garbage problem, which is why we're delighted to employ recycled materials in our sundae packaging and use PET in our thick shake cups."

Since 2015, the company has been using electric delivery bicycles to lessen its carbon footprint; the goal is to reach two million e-bike deliveries per year in Australia. [2]

2.3 The problems and solutions that Domino's pizza faced in the process of eco-

innovation

Domino's was looking for a solution that would reduce the cost of producing pizza boxes and reduce their impact on the environment. After years of trial and error, they came up with the design of a new pizza box with the two front corners cut to reduce the use of cardboard. According to the Forestry Board, Domino boxes contain 80% recyclable waste and 20% responsibly harvested wood. Three of the United Nations Sustainable Development Goals are being addressed through this innovation. (№8) decent jobs and growth by saving on company costs that are reinvested in employee salaries and community initiatives; (№9) as industry, innovation and infrastructure are the first pizza companies to adopt this design; (№12) Responsible production and consumption by reducing the use of cardboard and using ethically responsible materials.

Every Domino's pizza delivery experience is incomplete without the distinctive boxes. They have trimmed corners to save cardboard and are made from ethically sourced, environmentally friendly materials. Although the amount of material used on each box is minimal, the millions of boxes used each day result in a significant reduction in their carbon impact.

Sustainability and boosting company efficiency are at the centre of Domino's initiatives, therefore the pizza box innovation came organically over time. "The boxes are a work in progress that changes from year to year. Management realized there was not just money to be saved, but also a more environmentally responsible approach to serve clients."

The Domino's headquarters (in Ann Arbor, Michigan) is in charge of innovation and sustainability strategies. They are included into all Domino's franchisees after they have been finished, reviewed, and tested in a few locations. "The invention came mostly from head office, where they have a team committed to enhancing the company's sustainability." This endeavour was not spearheaded by a single employee, but rather by a group of people who are always trying to improve the product. They've approached the pizza box from every angle, decreasing the heights, cutting the corners, and experimenting

with new forms all while preserving as much heat as possible."

Domino's was looking for methods to save expenses while also lowering their environmental impact when they realized that pizza boxes are an unavoidable part of their business, therefore changing the design would be beneficial in the long run. "Because of the company's size, every minor advantage Domino's may gain will result in massive benefits."

Domino's is dedicated to leading by example; everything they do is to improve the pizza business and deliver the finest possible customer service. "This innovation is in line with Domino's Canada's objective to inspire through our actions and provide consistently great service." The money they save allows them to offer discounts on pizzas and give more money to employees, allowing them to provide outstanding service." [27]

Domino's makes sure that this innovation is good for the environment, making sure we do not buy from illegal loggers or anyone who violates ethical forest rules. Domino's works with regular forestry suppliers and is accredited by organizations such as the Sustainable Forestry Initiative, the Forestry Commission and the American Timber Systems Group. Domino's boxes are also made from 80% recycled waste and 20% solid wood.

Domino's designed corner-cut design eliminates excessive cardboard found on standard pizza boxes. With almost 2 million Domino's pizzas served every day, simply eliminating the corners of each box has a significant influence on reducing the company's carbon footprint.

Water is a valuable resource that is becoming more variable and scarce as a result of climate change. Water usage was included in Domino's first environmental footprint so that we could better understand its impact and prospects. The water footprint of Domino's in 2019 was 85.6 million m³. Purchased items (including the processing of ingredients and packaging materials) accounted for 91 percent of water consumption at Domino's. Utility use accounted for 4% of total water use (bought tap water, wastewater discharge, and water consumption connected with purchased electricity). Finally, logistics (energy extraction and transportation fuel generation) accounted for 4% of their water

consumption. Ingredients accounted for roughly 88 percent of total corporate water consumption, primarily due to irrigation of commodity crops and liquid products (such as sauces and dressings).

The quality of supplier data as well as corporate store and supply chain operations was not as detailed or robust as desired during the follow-up measurement. Improving the quality of this data is essential to achieving specific goals and identifying suppliers and business expectations. Next, we will work to create systems and programs that better control water use and understand the impact of river basins on the key suppliers that have the greatest impact on water.

Domino generates a lot of waste as part of its business, including cardboard and excess pizza dough from production in its supply centres, packaging materials for private stores and unused food and office waste at our headquarters.

In their 2019 benchmark analysis, Domino's created around 15.8 thousand tons of waste, with nearly 37 percent diverted to recycling and the remainder transported to landfills, based on data available from their supply chain centres, corporate outlets, and office locations at the time. Domino's is looking for ways to enhance their diversion rate in their supply chain facilities, and they're working with garbage vendors across the firm to improve data quality, as there's currently minimal information on waste creation rates in certain markets for specific categories. Property owners frequently control recycling and trash procedures in corporate stores, but plans will be developed in the future to establish a better grasp of what improvements can be done at the retail level as well. Franchisees will be informed of best practices and lessons learned in order to accelerate change.

The vast majority of Domino's products are packaged in corrugated boxes before leaving the store. Domino's boosted the percentage of recycled content in their boxes from 40% to 70% in 2020, with all of their paper-based packaging coming from responsibly managed forests and recycled sources. Our principal supplier uses regulated wood, and their box suppliers maintain verified fibre sourcing and chain-of-custody certifications through third-party audits. Their laws prohibit the purchase of fibre derived from illegal logging, as well as the sale of illicit wood and forest products.

Their box suppliers do not buy from operations that have a negative impact on high-value conservation areas. They also have policies and procedures in place to promote and use sustainable forestry, and they engage in substantial outreach and education with landowners about scientifically validated sustainability methods. They have received certificates from the Sustainable Forest Initiative, the Forest Management Board, the Forest Certification Approval Program, the Brazilian Forest Certification Program, and the US Timber System.

Domino's the largest pizzeria in the world, is at the forefront of educating consumers about the importance of recycling pizza boxes in the United States.

According to the American Forest Paper Association (AF&PA), corrugated cardboard can be recycled at least seven times, and butter and cheese have little impact on recycling. Consumers are often surprised because this knowledge is not well understood and they do not know what to do with the rest of the pizza box.

Domino's wants to raise awareness about the recyclability of pizza boxes, and recycle.dominos.com provides tools and information for consumers. This website allows consumers to learn more about pizza box recycling in their area, learn how to recycle cardboard packaging, and then encourage local recycling programs to update their pizza box recycling standards.

As a member of The Recycling Partnership, a non-profit organization dedicated to improving the quality and access to recycling in the United States, Domino's is ready to continue this effort. Domino's wants to move pizza boxes from landfills to a recycling stream for complete reuse of corrugated fibre. [18]

Domino's discovered a solution to their pizza dilemma by using customer information to build a whole new pie and brand image.

Consumers are rewarded with the Piece of the Pie Rewards loyalty program, which is easy to understand and easy to use. Customers who participate in the program become members of the rewards program and can earn points for their online orders. Prize members can earn certain points and earn them for free pizza. Rewards members also receive exclusive benefits and bonuses for members. In addition, we may from time to

time offer consumers additional opportunities to take advantage of the Pie of the Pie rewards program. This enhancement is designed to work with PULSE™ point-of-sale system Domino's. Their Domino's PULSE technology is designed to help franchisees operate their businesses autonomously and achieve operating efficiencies for franchisees and corporate management. As of January 3, 2021, Domino's PULSE is in operation in every Company-owned store in the United States, as well as more than 99 percent of our franchised locations in the United States and around 77 percent of our overseas stores. We believe that implementing Domino's PULSE throughout our system, together with their integrated technology solutions, gives us a competitive advantage over competing concepts. They plan to improve and expand their online ordering, digital marketing, and technology skills in the future.

Their basic hand-tossed pizza recipe, they say, has contributed to long-term increases in customer reorder rates, consumer traffic, and sales. Other markets throughout the world are now using this recipe. Numerous innovative product breakthroughs have resulted from their 60 years of innovation. They introduced three new goods in the United States in 2020, including new and enhanced chicken wings and new chicken taco and cheeseburger speciality pizzas, all of which were well appreciated by customers. Product innovation is also prevalent in our global marketplaces, where master franchisees can offer goods that are tailored to the preferences of their local markets. Mayo Jaga (bacon, potatoes, and sweet mayonnaise) is a Japanese product, whereas Saumoneta is a French product (light cream, potatoes, onions, smoked salmon and dill).

A vertically integrated dough and supply chain system will improve product quality and consistency, strengthen franchise relationships and bring significant cost savings to the UK, while reducing store costs while generating significant revenues and earnings United States and Canada. It also frees up store managers to spend more time running the store and serving customers, freeing the store from the burden of mixing dough and buying other ingredients. Many of our experienced offshore franchises make money in the supply chain business in their respective markets. [10]

Table 2.1

Problems and solutions Domino`s pizza

Problems	Decision
Using scooters on gasoline	Switch to electric scooters / bicycles and regular bicycles
Garbage disposal without sorting and without recycling	Transition to waste recycling
Use of disposable packages	Transition to cardboard cups and wooden appliances
Use of plastic cups and utensils	Production of eco boxes
Use of non-recyclable boxes	Reduce water use
Extensive use of water	Cooperation with suppliers at the global environmental level

Source: compiled by the author

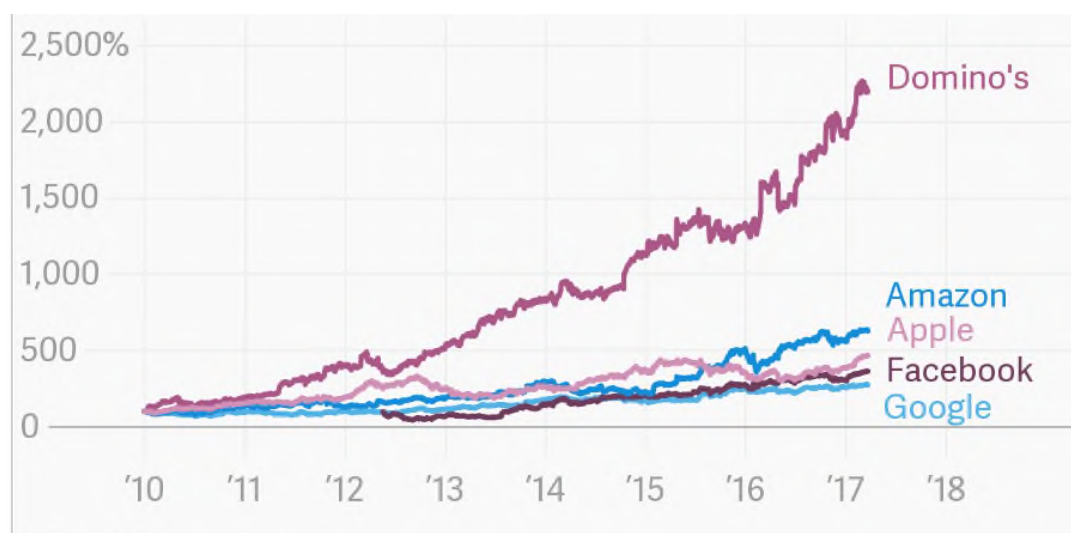
CHAPTER 3.

ANALYSIS AND DEVELOPMENT OF RECOMMENDATIONS FOR DOMINO'S PIZZA

3.1. Domino pizza technology solutions

When people think of digital innovation or technology, pizza is not the first thing that comes to mind. Nevertheless, the winners and losers of the digital economic transformation cannot rule out that pizza will be on the table. Specifically, Domino's Pizza

from 2010 to March 2017, Domino's shares surpassed those of well-known technology companies such as Amazon, Apple, Facebook and Google. Similarly, since March 2014, Domino's (+ 214%) has sold its parent company Yum! Pizza Hut! Brands (+ 79%), McDonald's (+ 90%), Restaurant Brands International (+ 76%) and Papa Jones (-15%). While digital transformation may not explain all the benefits, Domino's commitment to technology is a key differentiator from its competitors. **Figure 3.1**



Source: <https://digital.hbs.edu/platform-digit/submission/dominos-pizza-delivering-innovation-and-profit/>

Fig.3.1 Domino's stock price grows vs. Big Tech

Domino's boldly adopted a multi-pronged approach to initiate a turnaround when the company's stock price bottomed out in 2008. Domino's has revealed a new menu and pizza recipe in an effort to rehabilitate its reputation. At the same time, Domino's began to invest in digital capabilities that would allow them to deliver their goods in new ways. However, before implementing these digital advances, Domino's needed to establish a more powerful internal IT function capable of generating these new digital breakthroughs internally. In 2016, about half of Domino's 800 employees worked in software and analytics. The new IT department and marketing partners have managed to follow a fast and iterative process thanks to the management's support for the company's digital

transformation.

Domino's became a digital pioneer in the quick serve restaurant (QSR) business thanks to this digital foundation. Domino's "Pizza Tracker" technology was introduced in 2008, allowing consumers to track the status of their online orders through the Domino's website. Following that, in 2011, Domino's developed its popular iPhone app, greatly simplifying the purchasing process for customers. With the improvements in menus and ingredients, these innovations quickly became popular. In 2011, approximately 25% of the company's internal sales were ordered online or via handheld devices. In 2017, this percentage had risen to 60%. This early drive towards digital is still going strong. Domino's was the first company to deliver pizza via drone, and it is also testing deliveries using self-driving trucks. Though some of these projects may appear to be "gimmicky" attempts at innovation, Domino's dedication to digital has clearly added value for customers by removing barriers to ordering and receiving pizza. [6]

Domino's survives thanks to innovative technology. Businesses large and small are looking for solutions to difficulties they have never encountered before as a result of COVID-19. Social distance, cleanliness, and openness are required. As mobile solutions improved to satisfy customers' new expectations during the epidemic, digitization became increasingly important. Domino's Pizza is taking extra precautions and relying on technology in novel ways as new challenges arise throughout the restaurant's recovery.

Restaurants must innovate beyond the box to stay current and ahead of the competition, from the Delta variation to the labour scarcity. Domino's is planning something similar. They are concentrating on enhancing efficiency in order to increase sales without increasing personnel expenditures. It all comes down to allowing humans to take care of what they can and allowing technology to fill in the gaps.

Drivers at 2K sites, for example, no longer fold takeout packages before their shift. This allows them to concentrate on getting food to consumers as soon as possible. Sometimes technology solutions are as simple as making room for robots to do their work. Other times, technology works as expected. They are also equipping their couriers' phones with GPS. Although there is an initial cost, the return on investment is high because

drivers can get to their drop-off sites and back faster.

This not only speeds up order turns and makes the process more efficient, but it also expedites and simplifies on boarding. Instead of spending months studying the area, best routes, and regular customers, new staff can simply follow the map. To get more out of your operations without breaking the bank on personnel costs, go outside the box with technology.

Although innovative savings tactics can be very effective, nothing beats powerful point of sale software designed to simplify restaurant operations. Intelligent systems track orders so managers can make informed decisions based on historical data. You may have noticed that certain nights of the week have more or less sales than others. Using this information, you can prevent your staff from under- or over-scheduling for those shifts.

Domino's sales climbed 3.5 percent in the United States and over 10% worldwide in the second quarter using all of these tools. The best aspect is that they can enhance workers' pay with these savings. Employee retention is extremely vital given the current labour shortage, and giving greater benefits than your competitors is one fantastic method to entice people back. Domino's recognized that the restaurant industry's challenges required innovative solutions. That is where technology's adaptability comes into play. [9]

Domino's deliveries outperformed its competitors in terms of innovation. GPS hotspots are two examples where pizza can be delivered to parks, beaches and other unspecified locations with an electric bike. Domino's recently began testing autonomous vehicles and drone deliveries. While many other restaurants were severely affected by COVID-19, Domino's prospered and others collapsed. Domino's is testing technology that allows customers to pick up orders without going to the store, allowing car delivery to spread quickly across the country.

Curating, analysing, and segmenting client data is one of the ways D'Elia assists Domino's focus on customer centricity. Domino's maintains a database of 85 million unique customer profiles thanks to their reward program (which has over 25 million active customers) and several digital channels.

"Having that data is a great luxury because it opens up a lot more chances to employ

digital technologies that allow us to segment people and execute precision marketing in a way that is very tough to accomplish on the supplier side, such as in consumer packaged products," says the executive. Customer data, as well as the capacity to properly quantify the impact of their order and delivery innovations, are also important factors in obtaining the buy-in required to undertake innovation efforts in the first place.

98 percent of Domino's locations in the United States are franchised. Such franchisees must entrust a centralized organization with the task of investing in activities that will increase traffic and sales.

D'Elia believes that voice technology will help them reduce friction in the ordering process and better communicate with customers during the ordering and delivery process. "Our pizza tracker has made us famous, and speech is another technology that can improve the tracker experience and increase openness between us and our customers." It's an area where a lot of innovation will happen."

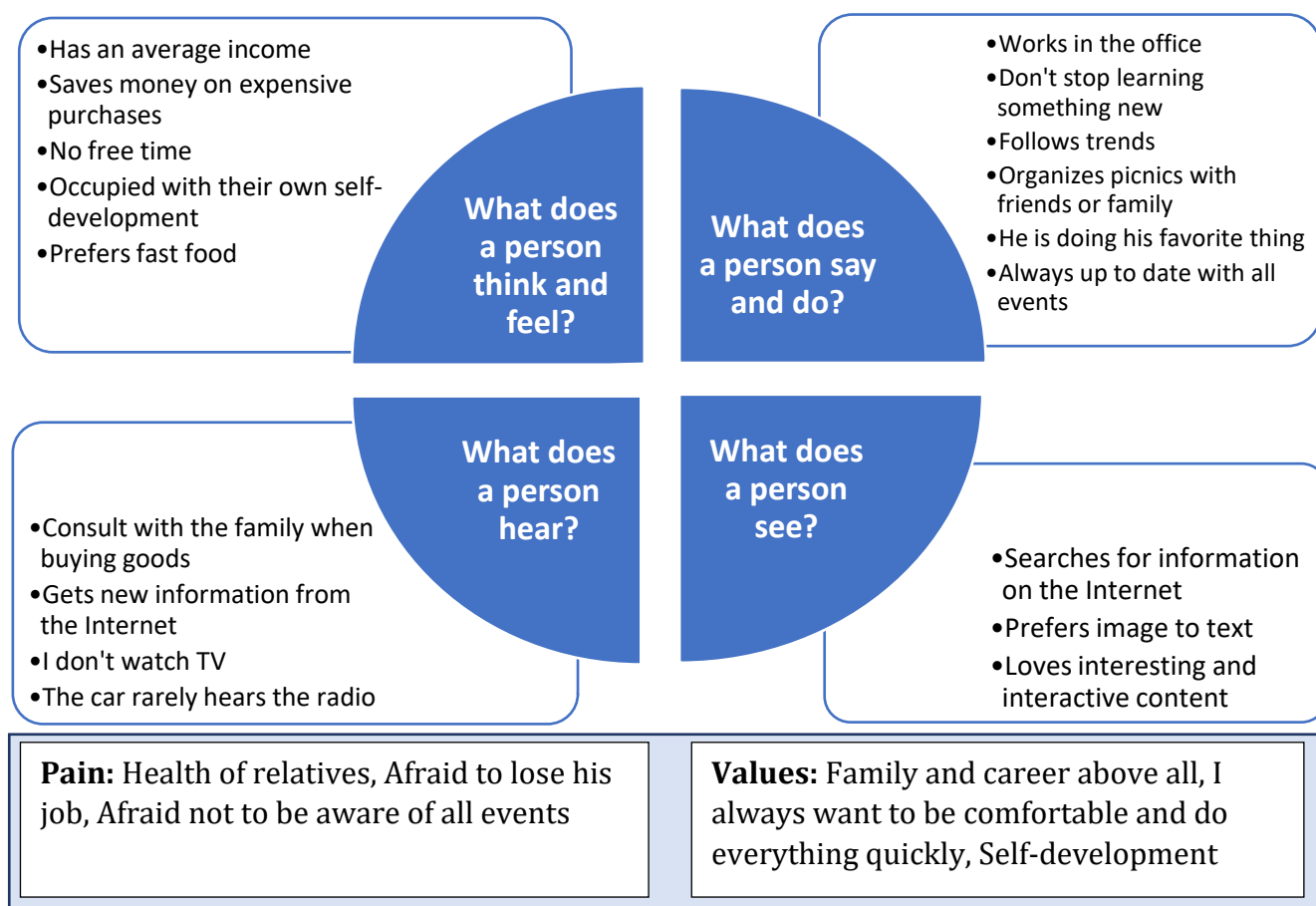
Domino's focus on technology has allowed the company to make more than half of its global sales through digital channels, including about 70% in the United States. D'Elia's tireless focus as a marketing manager - using technology to make things easier for consumers - is a strategy that every retail leader should benefit from. [23]

During the COVID-19 outbreak, the Internet made it easier for companies and their consumers to interact and stay safe. For almost two years, we have worked and studied from home, shopped online, and placed food orders. Most restaurants have begun to use courier delivery on a regular basis, following all quarantine and safety laws. As a result, companies have focused their advertising and public relations efforts on the Internet, spurring their development and thorough research in this area, as the success of online advertising and public relations campaigns will be determined by corporate profits, consumer loyalty, brand image, and overall business reputation.

Domino's is the market leader in its segment, accounting for over 30% of the pizzeria market in Kyiv. The organization's principal purpose is to enhance sales. This company was the first in Ukraine to provide a unique offer eight years ago: "The second pizza is free!" This slogan is still used in the company's ads.

Domino's marketing and public relations efforts in several countries are built on previous promos and deals. In Ukraine, for example, typical promotional offers include "Crazy Tuesday," "Shake the weekend!," "Medium pizza - 119.99 UAH, large pizza - 139.99 UAH!," "30 percent for every second pizza!," and "30 percent on the side!" Because the range of Domino's Pizza products and the composition of pizzas might vary, the content of promotional offers in advertising varies. It all relies on a country's traditions and tastes.

Each country with a representative office has its own official website and social media sites. As a result, in order to determine which Internet platforms are the most beneficial for the firm, you must conduct a preliminary study and fully grasp who the company's key consumer is: where the client spends the most time on the Internet, why they are there, and for how long. With the use of an empathy card, a portrait of the client was created. A useful Internet marketing tool helps you to develop a comprehensive portrait of a company's customer by asking questions like "What does a person think and feel?" "What does a person hear?" "What does a person see?" "What does a person say and do?" The responses to these questions aid in gathering and visualizing detailed information about the target audience, such as their challenges, values, accomplishments, and objectives. Domino's empathy card was also useful in determining who the primary food purchasers were. **Figure 3.2**



Source: compiled by the author based on data from

http://dspace.nuft.edu.ua/bitstream/123456789/37361/1/Tom_28_%23_1.pdf#page=32

Fig.3.2 : Domino Pizza Ukraine LLC target audience empathy map

The result is a general description of the company's target audience, which gives an understanding of how and where to move next. [13]

3.2. Introduction of eco products on the Domino`s market

By 2025, Domino's aims to reduce emissions from its European Supply Chain Centre fleet by 20%. By 2030, Domino's hopes to have carbon-neutral electricity in all of its locations.

Farmers and their methods are at the heart of their food and ingredient sustainability. It is critical that they comprehend their processes and assist them in finding strategies to

become more long-term sustainable. They also collaborate with their direct suppliers to promote and support sustainable and ethical sourcing practices across their entire supply chain.

Domino's code of conduct for business partners, supply agreements, ingredient initiatives (such as the Roundtable on Sustainable Palm Oil) and evaluation of generic suppliers are part of this strategy. Since April 2021, their chocolate lava cakes are made from UTZ cocoa responsibly made in Europe.

Their stores are energy efficient and their food waste is limited. To be ecologically conscious while simultaneously saving money, they work hard to limit food waste in their businesses, which is often lower per meal than the average family.

They therefore exclusively work with excellent suppliers who are committed to zero or low food waste for environmental and commercial reasons. They are constantly seeking for ways to lower their energy consumption and choose energy-efficient equipment and appliances. This includes their local stores, which are implementing a variety of energy-saving strategies.

Domino's makes every effort to eliminate packing more than possible. Through the Australian Packaging Covenant Association, they report on their packaging levels (APCO). The advancements they have achieved in enhancing packaging sustainability, notably in terms of plastic reduction and material efficiency, have gotten a lot of favourable comments in their 2020 APCO Annual Report and Action Plan.

Their pizza boxes are constructed entirely of recycled cardboard where local regulations allow, and they encourage their customers to recycle them in accordance with local legislation. They employ the highest amount of recycled materials allowed by local rules if 100% recycled cardboard is not allowed. In France, for example, recycled paper accounts for 70% of the paper used in pizza boxes.

Their company has taken steps to eliminate packing. In Europe, their "Less is more" strategy aims to eliminate packaging in commissaries and with suppliers. This includes tasks like replacing cardboard boxes with recyclable plastic crates and analysing the quantity of packaging used with each product to find ways to reduce it.

These efforts are yielding great results. For example, in France, equivalent paper consumption in packaging has been cut by more than 26 tonnes per year, equivalent to 3180 trees. They have also installed in-store recycling bins for customers to utilize at stores across the globe.

Solitary plastics are being phased out at Domino's. This complies with local legislation in many of the markets where they operate. Single-use plastics were phased out in Japan on July 1, 2020, and will be phased out in Europe on July 3, 2021.

Plastic bags are not accessible in Australia, and only paper straws are available in Europe. Eco thick shake straws, which are Oxo-biodegradable, are used in Australia and New Zealand. This change took effect on July 1, 2019, and ensures that the straws degrade in 18 months, as opposed to over 30 years for ordinary plastic straws.

It does not contain plasticizers, semi carbazide, epoxidase soybean oil or mobile mineral oil. Fluoridation prohibits chemicals and cadmium in cardboard packaging, and glass packaging is not allowed in the unit. Polyvinyl chloride, melamine, styrene monomer, acetaldehyde, bisphenol A and all nanoparticles are prohibited in plastic packaging.

Domino's is delighted to collaborate with partners who are related to sustainable excellence. Their providers are devoted to a variety of environmental preservation policies and practices. The following are some of the initiatives of our important suppliers Kagome (tomatoes), Visy (packing), and Asahi (beverages).

Kagome, Domino's main tomato supplier, is dedicated to soil and biodiversity management in agricultural production. It is currently Fresh care Food Safety and Environmental, as well as Unilever SAC 2017 certified. They also have an environmental policy that outlines their environmental obligations.

- Kagome Farms supports sustainable soil and biodiversity management through its Biodiversity Action Plan (BAP) to enhance and protect sensitive ecosystems in agricultural areas. Several steps are also required, including:
- Programs to protect soil health through nutrient management
- To establish fertilizer management strategies for optimum soil health, an annual soil

analysis is required

- To avoid nutrient depletion and erosion, use crop rotation and cover crops
- Cover-cropping stubs (corn and cereals) are worked back into the soil
- Member of the Australian Tomato Processing Research Council (APTRC), which provides up-to-date information on growing tomatoes for research and training

The Fresh Care Environmental Policy and Fresh Care Environmental Water Management Program and Unilever SAC2017 to reduce water consumption and agricultural pollution certify Kagome. Aspects of this also promote sustainable farming practices to reduce the impact of farming practices on the climate. Soil drip irrigation is used on all Kagome farms and daily irrigation programs and moisture checks are monitored and documented.

As a packaging supplier for Domino's, Visy has been a global leader in packaging and resource recovery and a pioneer in sustainability since its inception. World-class experience in sustainable forest management, sustainable textile production and ethical artisanal paper production. Their policy can be viewed here. Visy's Tumut plant also uses less water than its Australian counterparts, which drain less water.

Furthermore, Asahi Lifestyle Beverages has made significant commitments to climate change both inside the corporation and throughout its supply chain. By 2025, Asahi aims to reduce carbon emissions by 25% across the full value chain (including agricultural components). The organization has developed a methodology for reliable reporting and inventory of greenhouse gas emissions in its value chain in 2019, including those related to purchase raw materials. This reporting is mandatory annually. [22]

3.3. Economic effect of new Eco policy

Excluding the negative impact of exchange rates, global retail trade increased by 3.6% in the first quarter of 2022. Excluding the currency impact, global retail trade increased by 0.3% in the first quarter of 2022.

Retail sales in the US fell by 3.6% in the first quarter of 2022. International sales per

store increased by 1.2% in the first quarter of 2022 (excluding currency effects), resulting in 113 quarters of growth. The company added 213 net locations in the first quarter, including 37 net stores in the United States and 176 stores abroad. Diluted EPS for the first quarter of 2022 was \$ 2.50, down 16.7% from the previous quarter.

The company's Board of Directors announced on June 30, 2022 a quarterly dividend of \$ 1.10 per share for outstanding ordinary shares paid to shareholders on June 15, 2022, after the end of the first quarter of 2022.

"During the first quarter, we experienced a variety of obstacles, including the Omicron increase, staffing constraints, and extraordinary inflation, all of which weighed on our performance." "We are aggressively adopting initiatives to overcome them," said Ritch Allison, Domino's Chief Executive Officer. "However, we expect some of these obstacles to linger well into 2022." "Our long experience and continued loyalty to our team members and franchisees demonstrates the strength of the Domino brand, highlighted by the steady growth of our stores, including the launch of the 19,000th store globally during the quarter. The company's executives told Russell Weiner on May 1 that he and his qualified staff are confident that this big global brand will take the next step in the years to come. "

Table 3.3

First Quarter Highlights (Unaudited)

<i>(in millions, except share and per share data)</i>	First Quarter of 2022	First Quarter of 2021
Net income	91.0	117.8
Weighted average diluted shares	36,435,038	39,208,383
Diluted EPS	2.50	3.00

Source: compiled by the author based on data from <https://www.prnewswire.com/news-releases/dominos-pizza-announces-first-quarter-2022-financial-results-301535053.html>

In the first quarter of 2022, sales climbed \$27.5 million, or 2.8 percent, over the first quarter of 2021, owing principally to higher supply chain revenues due to increases in our market basket pricing to shops. During the first quarter of 2022, prices in our portfolio markets increased by 11.9%. Franchise sales abroad increased due to the increase in international retail transactions, but suffered a loss of \$ 4.3 million due to exchange rate fluctuations. The decline in US retail sales was offset by a 1.4% decline in US retail sales.

Net revenue for the first quarter of 2022 decreased by \$ 26.8 million (22.8%) from the first quarter of 2021. Revenue decreased by \$ 22 million, primarily due to lower operating margins and general expenses, and large retail and supply chain in the US. This has led to a decrease. The \$ 2.5 million decrease in other revenues was the result of unrealized gains on the company's investment in DPC Dash Ltd in the first quarter of 2021 and an increase in net interest expense of \$ 7.4 million due to the increase in debt. Company averages. Balance due to recapitalization. The transaction was completed in April 2021. This decrease in net income was offset by a decrease of \$ 5.1 million in the first quarter of 2022 to prepare for income tax payments, primarily due to a decrease in income before reserves tax. The effective tax rate increased from 21.3% in the first quarter of 2021 to 22.7% in the first quarter of 2022, increasing the impact of additional tax benefits from equity compensation by 0.5 percentage points. Income tax guarantee.

Diluted EPS for the first quarter of 2022 was \$ 2.50, down \$ 0.50 (16.7%) from \$ 3.00 in the first quarter of 2021 compared to the same period last year. Compared to the previous quarter, the decline in net income for the first quarter of 2022 was offset by a slightly lower weighted average number of liquidated shares, which led to a diversified BPA decrease as the company acquired shares in the previous quarter.

Table 3.4

The tables below show how the Company analyses its performance using several statistical measurements (unaudited)

	First Quarter of 2022	First Quarter of 2021	First Quarter of 2020
Same store sales growth: (versus prior year period)			
U.S. Company-owned stores (1)	(10.5)%	+ 6.3%	+ 3.9%
U.S. franchise stores (1)	(3.2)%	+ 13.9%	+ 1.5%
U.S. stores	(3.6)%	+ 13.4%	+ 1.6%
International stores (excluding foreign currency impact)	+ 1.2%	+ 11.8%	+ 1.5%
Global retail sales growth: (versus prior year period)			
U.S. stores	(1.4)%	+ 15.3%	+ 4.9%
International stores	+ 2.0%	+ 18.0%	+ 3.9%
Total	+ 0.3%	+ 16.7%	+ 4.4%
Global retail sales growth: (versus prior year period, excluding foreign currency impact)			
U.S. stores	(1.4)%	+ 15.3%	+ 4.9%
International stores	+ 8.4%	+ 12.8%	+ 6.8%
Total	+ 3.6%	+ 14.0%	+ 5.9%

Source: compiled by the author based on data from <https://www.prnewswire.com/news-releases/dominos-pizza-announces-first-quarter-2022-financial-results-301535053.html>

Table 3.4: (1) In Q1 2022, 23 franchise locations in the United States were purchased from existing franchises. In the first quarter of 2022, the increase in sales per store of these stores will be reflected in individual locations in the United States.

Table 3.5

	U.S. Company-owned Stores	U.S. Franchise Stores	Total U.S. Stores	International Stores	Total
Store counts:					
Store count at January 2, 2022	375	6,185	6,560	12,288	18,848
Openings	2	38	40	217	257

Closings (1)	-	(3)	(3)	(41)	(44)
Transfers (2)	23	(23)	-	-	-
Store count at March 27, 2022	400	6.197	6.597	12.464	19.061
First quarter 2022 net store growth	2	35	37	176	213
Trailing four quarters net store growth	13	193	206	1.036	1.242

Source: compiled by the author based on data from <https://www.prnewswire.com/news-releases/dominos-pizza-announces-first-quarter-2022-financial-results-301535053.html>

Table 3.5: (1) Temporary store closures are not counted as store closures and are included in the final store count. According to information provided to the Company by its master franchisees, there were roughly 200 foreign outlets temporarily closed as of March 27, 2022. (2) The effect of transfers is not included in net store growth. During the first quarter of 2022, the Company acquired 23 franchised outlets in the United States from current franchisees.

In the first quarter of 2022, the company bought and sold 100,810 common shares for a total of \$ 47.7 million. As of March 27, 2022, the total amount available for the purchase of shares in the company is \$ 656.4 million.

The Company had roughly as of March 27, 2022:

- \$165.0 million in cash and cash equivalents with no restrictions
- Total debt is \$5.06 billion
- Under its 2021 variable funding notes, the company has \$155.8 million in borrowing capacity available, less \$44.2 million in letters of credit issued

During the first quarter of 2022, operating activities generated net cash of \$ 78.8 million. In the first quarter of 2022, the company spent \$ 12.5 million on capital expenditures. Free cash flow in the first quarter of 2022 was approximately \$ 66.3 million compared to net cash from operating activities, as measured by generally accepted accounting principles (GAAP) in the United States. **Table 3.6** [4]

Table 3.6

<i>(in thousands)</i>	First Quarter of 2022
Net cash provided by operating activities	\$ 78,789
Capital expenditures	\$ (12,454)
Free cash flow	\$ 66,335

Source: compiled by the author based on data from <https://www.prnewswire.com/news-releases/dominos-pizza-announces-first-quarter-2022-financial-results-301535053.html>

Table 3.6: Liquidity was obtained from operating activities for the first quarter of 2022.

Table 3.7

Domino's Pizza, Inc. and Subsidiaries
Condensed Consolidated Statements of Income (Unaudited)

	Fiscal Quarter Ended			
	March 27, 2022	% of Total Revenues	March 28, 2021	% of Total Revenues
<i>(In thousands, except per share data)</i>				
Revenues:				
U.S. Company-owned stores	\$ 103,895		\$ 112,744	
U.S. franchise royalties and fees	122,285		124,486	
Supply chain	609,547		568,338	
International franchise royalties and fees	68,833		66,770	
U.S. franchise advertising	106,589		111,360	
Total revenues	1,011,149	100 %	983,698	100 %
Cost of sales:				
U.S. Company-owned stores	87,375		85,742	
Supply chain	555,150		508,805	
Total cost of sales	642,525	63.5 %	594,547	60.4 %
Operating margin	368,624	36.5 %	389,151	39.6 %
General and administrative	97,494	9.7 %	91,253	9.3 %
U.S. franchise advertising	106,589	10.5	111,360	11.3

		%		%
Income from operations	164,541	16.3 %	186,538	19.0 %
Other income	—	0.0 %	2,500	0.2 %
Interest expense, net	(46,823)	(4.7) %	(39,400)	(4.0) %
Income before provision for income taxes	117,718	11.6 %	149,638	15.2 %
Provision for income taxes	26,754	2.6 %	31,877	3.2 %
Net income	\$ 90,964	9.0 %	\$ 117,761	12.0 %
Earnings per share:				
Common stock – diluted	\$ 2.50		\$ 3.00	

Source: compiled by the author based on data from

<https://www.prnewswire.com/news-releases/dominos-pizza-announces-first-quarter-2022-financial-results-301535053.html>

In 2021, Domino's global sales exceeded \$ 17.8 billion, of which \$ 8.6 billion was generated in the United States and \$ 9.1 billion in other countries. Domino has announced that its global retail sales for the first quarter of 2022 will exceed \$ 1.9 billion in the United States and over \$ 4 billion internationally, valued at approximately \$ 2.1 billion. The system will consist of an independent franchise holding 98% of Domino locations by the end of the first quarter of 2022. By 2021, Domino's focus on technological innovation will account for more than half of global sales through digital channels. In the US, Domino's will account for more than 75% of digital retail sales by 2021, and the company owns Google Home, Facebook Messenger, Apple Watch, Amazon Echo, Twitter and more. We have created several new control platforms for you. Domino's has collaborated with Nuro in 2019 to expand its research and testing of unmanned pizza delivery. In mid-2020, Domino's will offer Domino's Carside Delivery, a new way to buy contactless food nationwide, which consumers can choose when making a prepaid online purchase.

Domino's Pizza, Inc. and Subsidiaries
Condensed Consolidated Balance Sheets (Unaudited)

	March 27, 2022	January 2, 2022
(In thousands)		
Assets		
Current assets:		
Cash and cash equivalents	\$ 164,962	\$ 148,160
Restricted cash and cash equivalents	168,241	180,579
Accounts receivable, net	246,978	255,327
Inventories	77,711	68,328
Prepaid expenses and other	27,857	27,242
Advertising fund assets, restricted	175,488	180,904
Total current assets	861,237	860,540
Property, plant and equipment, net	319,647	324,065
Operating lease right-of-use assets	209,099	210,702
Investments	125,840	125,840
Other assets	158,199	150,669
Total assets	\$ 1,674,022	\$ 1,671,816
Liabilities and stockholders' deficit		
Current liabilities:		
Current portion of long-term debt	\$ 55,632	\$ 55,588
Accounts payable	92,353	91,547
Operating lease liabilities	37,384	37,155
Advertising fund liabilities	168,161	173,737
Other accrued liabilities	241,294	232,714
Total current liabilities	594,824	590,741
Long-term liabilities:		
Long-term debt, less current portion	5,002,092	5,014,638
Operating lease liabilities	182,369	184,471
Other accrued liabilities	93,379	91,502
Total long-term liabilities	5,277,840	5,290,611
Total stockholders' deficit	(4,198,642)	(4,209,536)
Total liabilities and stockholders' deficit	\$ 1,674,022	\$ 1,671,816

Source: compiled by the author based on data from

<https://www.prnewswire.com/news-releases/dominos-pizza-announces-first-quarter-2022-financial-results-301535053.html> [4]

Most digital orders are processed through Domino's proprietary operating system, which helps franchisees keep transaction costs low while also providing Domino's with customer data. A competitive advantage is the database.

The new pizza king is Domino's. Domino's sales surpassed Pizza Hut thanks to smart marketing, cutting-edge technology, and inventive ordering techniques.

"What the customer wants is delivery. Besides, Domino's is the best at it," agrees Euro Monitor International analyst Stephen Dutton. "You'll think of Domino's when you are watching Netflix at home".

Domino's Pizza has had a successful couple of years. The company just reached a big milestone after quarter after quarter of robust sales around the world and significant changes in its digital approach. With the inauguration of a new store in La Junta, Colorado, Domino's has reached 18,000 locations worldwide. Subway is the largest quick-service restaurant chain (QSR) in terms of store count.

Domino's is the world's largest 7th biggest pizza chain, trailing only Pizza Hut's "more than 18,000 restaurants" but far ahead of eighth-placed Dunkin' Donuts' "more than 11,3000" locations. Domino's claims to be "the world's largest pizza company based on global retail sales," clearly a shot at Pizza Hut. In 2020, the former's global revenue was over \$4.1 billion, while Pizza Hut's was less than a fourth of that - little over \$1 billion.

The announcement comes as eateries throughout the world change from a short-term survival strategy that got them through the pandemic to a longer-term perspective that is becoming achievable as customers return to restaurants. According to Open Table's State of the Industry report, despite the global number of seated diners each week is just 2% lower than pre-pandemic levels, settings are on the rise. Furthermore, the percentage of restaurants around the world that accept reservations is increasing every week, already exceeding 80%.

New openings present an opportunity to rejuvenate the business as restaurants strive to restructure outlets to integrate the manner in which the industry has altered since the initial breakout of the COVID-19 pandemic. CEO Ritch Allison stated on Domino's most recent earnings conference with investors that the company is looking forward to expanding its store count both domestically and internationally.

To that end, the corporation has recently made substantial investments in its carryout business. For example, Domino's recently stated that all car side delivery orders — in

which a Domino's staff delivers the food directly to the customer's car outside the restaurant — will be delivered within two minutes.

The firm is investing in advertising to raise awareness of its carryout capabilities, an ordering channel that allows Domino's to capitalize on the growing demand for off-premises meals without incurring the labour costs of delivering orders to customers' doors. Also these delivery orders, though, may not be as labour-intensive for Domino's for much longer, as the firm is currently pilot-testing autonomous delivery with Nuro's self-driving on-road delivery trucks. Domino's "fortressing" approach includes increasing shop count and focusing on carry-out. [8]

Known as one of the last companies to reject third-party delivery services, Domino prefers to give up intermediaries. This has put Domino's out of the way of catching up or outperforming restaurant start-ups.

Domino's can better control quality and output by continuing to use its own pizza delivery people, giving the company a competitive advantage.

"When a customer requests delivery, the only thing that has to do with the brand is door-to-door delivery, and we want a uniform expert for that door," says Ellison. "This food is always managed by food safety experts and is never given to anyone you've never seen before."

Further advantage of Domino's relying only on its own delivery drivers is unrestricted access to consumer data, which the company can utilize to improve the customer's digital experience. They can undertake thorough AB testing with customer data to try to remove friction, make ordering easier, and upsell additional things that fit with the meal or consumer. Domino's, as an outlier in the delivery area, may take use of this to gain a competitive edge, keep transaction costs low, and convince customers that their data stays in-house. [31], [36]

Table 3.9

Domino's Pizza, Inc. and Subsidiaries

Condensed Consolidated Statements of Cash Flow (Unaudited)

	Fiscal Quarter Ended	
	March 27, 2022	March 28, 2021
(In thousands)		
Cash flows from operating activities:		
Net income	\$ 90,964	\$ 117,761
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	18,976	16,465
Loss on sale/disposal of assets	195	161
Amortization of debt issuance costs	1,319	1,203
Provision for deferred income taxes	1,319	1,578
Non-cash compensation expense	7,265	5,204
Excess tax benefits from equity-based compensation	(86)	(914)
Provision for losses on accounts and notes receivable	1,462	180
Unrealized gain on investments	—	(2,500)
Changes in operating assets and liabilities	(34,718)	(1,634)
Changes in advertising fund assets and liabilities, restricted	(7,907)	15,347
Net cash provided by operating activities	78,789	152,851
Cash flows from investing activities:		
Capital expenditures	(12,454)	(16,561)
Purchase of investments	—	(40,000)
Purchase of franchise operations and other assets	(6,814)	—
Other	(1,368)	121
Net cash used in investing activities	(20,636)	(56,440)
Cash flows from financing activities:		
Repayments of long-term debt and finance lease obligations	(13,861)	(704)
Proceeds from exercise of stock options	266	3,693
Purchases of common stock	(47,661)	(25,000)
Tax payments for restricted stock upon vesting	(789)	(1,044)
Payments of common stock dividends and equivalents	(51)	(64)
Net cash used in financing activities	(62,096)	(23,119)
Effect of exchange rate changes on cash	374	161
Change in cash and cash equivalents, restricted cash and cash equivalents	(3,569)	73,453
Cash and cash equivalents, beginning of period	148,160	168,821
Restricted cash and cash equivalents, beginning of period	180,579	217,453
Cash and cash equivalents included in advertising fund assets, restricted, beginning of period	161,741	115,872
Cash and cash equivalents, restricted cash and cash equivalents and cash and cash equivalents included in advertising fund assets, restricted, beginning of period	490,480	502,146
Cash and cash equivalents, end of period	164,962	267,719
Restricted cash and cash equivalents, end of period	168,241	176,029
Cash and cash equivalents included in advertising fund assets, restricted, end of period	153,708	131,851

Cash and cash equivalents, restricted cash and cash equivalents and cash and cash equivalents included in advertising fund assets, restricted, end of period	\$ 486,911	\$ 575,599
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Source: compiled by the author based on data from

<https://www.prnewswire.com/news-releases/dominos-pizza-announces-first-quarter-2022-financial-results-301535053.html> [4]

CONCLUSIONS AND PROPOSALS

Finally, examining technological innovation and the impact on environmental products, we can conclude that innovation, green economy and eco-products have contributed to significant development in the field of economic economy, business, culture and politics. Innovation paves the way for a bright future together with concern for the environment, first and foremost caring for the environment, many enterprises and businesses are rapidly developing in this direction and gaining a larger customer base.

The green economy is based on alternative energy and fuel sources, environmentally friendly manufacturing technologies, clean agricultural technologies, "green building," and pollution reduction, recycling, and waste management programs, among others.

Today it is clear that the green economy only encourages the creation of jobs and the production of material goods, as the issue of investment in the green sector in Ukraine is becoming more and more important. However, the transition to a green economy requires new conditions that require urgent action. The actions required for this transition will require the phasing out or elimination of environmentally harmful subsidies, the use of market incentives, better regulation, and green public procurement and investment incentives.

At the legal level, the state is taking steps to strengthen the position of the green economy in Ukraine, but so far, we are far behind the European Union.

Many scientists are researching this topic and developing new ideas. A "green economy" has the potential to promote Ukraine's development. Therefore, opportunities for the development of Ukraine's green economy are needed and can be realized.

The first thing Ukraine needs to do is to create a body at the highest legislative level that is fully responsible only for the development of the green economy. This body would be fully responsible for determining the direction vector, creating a holistic concept of development, developing new strategies and goals, determining penalties for environmental violations and encouraging people to support the green economy.

It would not be superfluous to create a specialized publication with news that relate

only to the space of green economy development. Thus, the legislation would be closer to the people, would specifically convey its goals regarding the economic preservation of the natural environment.

In addition, it would be great to give the Ukrainian people the opportunity to make a profit and at the same time follow the European trends of green economy. For example, the creation of private mobile recycling plants. Which would not only clean our country, but also be able to generate electricity with minimal damage to emissions.

Humans must recognize that the concept of a green economy entails more than just renewable energy and resource conservation. It is, on the contrary, much more complex. Its scope includes social inclusion in terms of Social Equity and Gender Equity, as well as other variables such as quality of life, where everyone has access to basic necessities such as sanitation and nourishment. It emphasizes not just on growing GDP growth, but also on achieving inclusive growth, in which no segment of society is left behind or denied of development. For these reasons, the Green Growth Index also considers issues such as social inclusion. A collaborative approach with robust social movement participation is required. The project would be made easier because civilians are familiar with the needs and priorities of the local population. It would also promote equity and poverty reduction, which are key to the green economy's goals. People must recognize that the ecology, society, and economy are all interdependent. To develop towards a green economy, humans need integrated policymaking and effective methodology.

Innovative natural solutions have been used through various UNDP projects in Ukraine. "Moss modules, rain gardens, living fortresses, biodiversity tapes, living walls and composters for organic waste are just a few examples of such environmental solutions based on nature that are already used by businesses." UNDP is also exploring how natural solutions can be incorporated into Ukrainian legislation and urban strategic plans. As part of the Forum of Ukrainian Cities "After Tomorrow", he continues to organize safaris for communities in other cities of Ukraine and initiated a discussion with the country's mayors on ways to apply natural solutions in cities. For this reason, UNDP has begun to study biomimicry, an area in which natural models are studied and simulated or used as

inspiration to develop products and processes to solve human problems. Biomimicry technologies in combination with other UNDP green programs can accelerate the development of a new green and fair economy in Ukraine and around the world.

Green marketing refers to companies that emphasize the environmental benefits of their products or services. Businesses and people around the world are following the global trend towards environmental friendliness. Through an international survey conducted at Futerra, people know that 88 percent of customers are impressed and support businesses that help the environment and lead a cleaner and more ethical lifestyle. Such enterprises include Nike, Apple, Patagonia, Starbucks, Ikea, Seventh Generation, A Good Company and many others.

Technological innovation is a new or improved subject or interaction, the innovative properties of which are not at all the same as in the past. Technological innovations are also understood as enterprise activities related to the development and implementation of both technologically new and significantly technologically advanced products (product innovations) and processes (process innovations).

It has become clear that the development of technology is beneficial. This increases efficiency and brings residents a new and better workforce and products that work for their overall lifestyle. In some cases, the benefits of promotion come late. They often apply to the entire population.

Implemented mechanical improvements of objects are new objects (object development) or cycles in application (process development), which were brought to the demonstration.

The development of technology is beneficial. This increases efficiency and brings residents a new and better workforce and products that work for their overall lifestyle. In some cases, the benefits of promotion come late. They often apply to the entire population.

Ukraine's technology sector still suffers from the adoption of new technologies and the widening digital divide between urban and rural areas. 29% of the population do not have an Internet connection, and 44% of rural residents have access to the Internet compared to 76% of urban residents. Despite the low cost of connection, the speed of the

Internet is still low.

Due to the integration of technology into its strategic methods, Domino's has become one of the main competitors in the pizza market. As a result, Domino's considered the technology aspect of the overall business environment in order to increase its market share. The development of the zero-click application, which improves the convenience of placing orders, is the most famous example of the company's innovation. Domino's capacity to adequately examine its operating environment has resulted in a profitable outcome.

Exploring the international pizzeria chain, one of the world's largest chains of pizza restaurants, we can safely say that the pizzeria is an innovator in the discovery of technological innovation and is growing rapidly in the greening of its business. This is what significantly affects the rapid flow of customers in the pizzeria and its support among people and other companies.

Summing up and analysing the market of Dominos pizzeria, greening and innovation of technological products, we can say that all trends are growing rapidly and changing in different directions, improving and driving change in business, politics, economics and other areas of business, bringing a surge of green technology and care for our environment. This is what unites all people from all over the world for a common goal - to green our planet and move into the digital future.

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