

Kyiv National University of Trade and Economics
Hotel and Restaurant Business Department

FINAL QUALIFYING PAPER

on the topic:

«PRODUCT INNOVATION OF THE HOTEL OPERATOR HOLIDAY INN»

Student of the 2nd year, group 8a,
Field of study 241
«Hotel and Restaurant Business»
Specialization
«International Hotel Business»

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Task
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Purpose of research is to substantiate and deepen the study of theoretical foundations and to develop practical recommendations for the formation of innovative potential of enterprises of hotel business in modern conditions, create guidelines and suggestions for implementation of product innovation in hotel business based on the study of new conceptual framework and methodological approaches.

The subject of research is theoretical, methodological and practical aspect of product innovation in the hotel business.

The object of research is implementation of economic strategy in product innovation of the hotel «Holiday Inn», Kyiv.

4. Illustrative material:

Figures: Views on innovation, the sphere of product innovation, categories of product innovation, general scheme of the process of the product innovation, global presence of IHG, overview of the InterContinental Hotels Group, IHG brand portfolio, gender of the Holiday Inn staff, types of product innovation chosen by staff, gender of Holiday Inn guests, types of product innovation chosen by customers, carbon footprint per occupied room 2015-2018, water consumption pattern in Holiday Inn, Holiday Inn waste statistics, skipping the towel change, Holiday Inn food waste in hospitality industry, keyless application for smartphone.

5. Contents of a final qualifying paper:

INTRODUCTION

PART 1. THEORETICAL AND METHODOLOGICAL ASPECTS OF PRODUCT INNOVATION IN THE HOTEL INDUSTRY

- 1.1. Essence and preconditions of innovations at the enterprises.
- 1.2. The process of product innovation in the hotel industry.

PART 2 ANALYSIS AND ASSESSMENT OF THE PRODUCT INNOVATION IN THE HOTEL CHAIN

- 2.1. Organizational characteristics of the hotel chain.
- 2.2. Analysis of product innovation of the hotel chain.

PART 3. DIRECTIONS OF IMPROVEMENT OF PRODUCT INNOVATION IN THE HOTEL «HOLIDAY INN», KYIV

- 3.1. Detailed scope of ecological product innovations in the hotel chain.
- 3.2. Implementation of the ecological product innovations in the hotel chain.

CONCLUSION

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		de jure	de facto
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11	Presentation of the final qualification work to the Dean's Office for receiving a referral for an external review	16.11. 2019 p. 18.11. 2019 p	16.11. 2019 p. 18.11. 2019 p
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13	Defending of the final qualifying paper in the Examination Board	Accor ding to the schedu le	Accor ding to the schedu le

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Margarita H. Boyko

10. The task received by a student

Anastasiia O. Dvoinyh

11. Resume of a scientific adviser of a final qualifying paper:

Student Anastasiia O. Dvoynh performed the final qualifying paper in a due time according to the schedule. According to content, structure and design the performed work meets the requirement. Final qualifying paper performed the actual theme. In the first chapter the theoretical position dedicated to theoretical and methodological aspects of product innovation in the hotel industry.

In the second chapter of final qualifying paper analysis and assessment of the product innovation in the hotel chain was analyzed, organizational characteristics of the hotel chain and analysis of product innovation of the hotel chain was given.

The third chapter is dedicated to directions of improvement of product innovation in the hotel chain which were checked. The purpose of the final qualifying paper was achieved and scientific tasks which were put met the execution. The work is recommended for the defense in the examination committee.

Scientific adviser of a final qualifying paper _____ Margarita H. Boyko

12. Resume about a final qualifying paper research:

A final qualifying paper (project) of the student Anastasiia O. Dvoynh
(last name, initials)

can be admitted to defense in the Examination Board.

Manager of the educational program _____ Margarita H. Boyko

Head of the Department _____ Margarita H. Boyko

_____, _____, 2019

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INTRODUCTION

Relevance of the topic. The hospitality sector is one of the world's most dynamic industries. Over the past few years the competition in this sector has grown intensively due to markets globalization, evolution in technology, tourists' demands that remain unsteady and many other reasons. That is why it is hotel managers' duty to come up with new ideas and methods to outperform their competitors.

It is recognized that innovation is the key for ensuring a sustainable competitive advantage in any industry, especially in the hotel industry due to the fact that this sector faces important challenges such as changing demographics of tourists' lifestyles and the relatively low barriers to imitation, saturated market and fast change of customers' needs and wants. In other words, companies must "innovate or die" to keep up with the global exponential economy.

This environment of challenges and changes has raised the importance of innovation to improve the competitive position of hospitality industry in an increasingly competitive global environment. Innovation involves introducing a new concept, whether it is a product, process, service, marketing technique, organizational structure, or market.

Innovation can take place in different aspects of hospitality industry. It may refer to:

- products (for example coming up with new hotel services or new attractions in a destination);
- sources of supply (such as adding new niche of tour operators);
- new markets (focusing and directing existing destination brands to attract new markets);
- new ways to organize a leisure (such as improving hotel services by using new technologies that enhance the experience for guests).

It is a common fact that innovation in hospitality industry has a positive impact on customer preferences. Innovation improves quality of service, increases employee productivity, firms' market value and share and customer retention is significant.

Analysis of research and publications. Several authors and scientists have been working on identifying the main aspects that affect product innovation in hospitality industry. Among these scientists are: Presenz A., Baradarani S., Chen Wen-Jung, Amara N., and Landry, R., Kemp, R., and Pearson, P., Kesidou, E., and Demirel, P., Kassinis, G., and Soteriou, A., Bagur-Femenias, L., Llach, J., Alonso-Almeida, Bohdanowicz, P., Zientara, P., Novotna, E., Blanco, E., Rey-Maqueira, J., Lozano, J. and many others.

Purpose of research is to substantiate and deepen the study of theoretical foundations and to develop practical recommendations for the formation of innovative potential of enterprises of hotel business in modern conditions, create guidelines and suggestions for implementation of product innovation in hotel business based on the study of new conceptual framework and methodological approaches, to distinguish types of innovation in the hospitality industry and investigate how certain structural and organizational aspects impact them.

Tasks of research. Within the stated purpose of the final qualifying paper the following tasks are put forward:

- to reveal theoretical and methodological aspects of product innovation in the hotel industry;
- to research essence and preconditions of innovations at the enterprises;
- to research the process of product innovation in the hotel industry;
- to analyze and assess product innovations in the hotel chain;
- to determine organizational characteristics of the hotel chain;
- to research product innovations in the hotel chain;
- to analyze directions of improvement of product innovation in the Holiday Inn;
- to give a detailed scope of product innovations in the hotel chain;
- to give suggestions for implementing ecological innovations in the hotel chain.

The subject of research is theoretical, methodological and practical aspect of product innovation in the hotel business.

The object of research is implementation of economic strategy in product innovation of the hotel chain.

Methods of research. The theoretical basis of this paper achievements of foreign and domestic scientists whose fundamental assumptions of innovations had a huge impact in the hospitality industry. In order to achieve a particular purpose different scientific methods were used such as:

- qualitative method of knowledge which is based on collecting opinions and attitudes in order to understand basic features of the product innovations in the hospitality industry and be able to implement this knowledge;
- deductive reasoning which is based on thinking about generalizations, then proceeding toward the specifics of how to implement the generalizations;
- dialectical and system method which is based on process of researching works of leading scientists about the nature of product innovations;
- the method of economic analysis which is based on analyzing data of hospitality industry.
- the method of logical generalization, graphical method and method of construction of analytical tables - for visual representation of research results and methods of economic and mathematical modeling.

Publications. The main theoretical position of the master diploma elucidation in the scientific article «Ecological innovations in the hotel industry», published in a collection of articles KNTEU.

Work structure. Master diploma paper includes an introduction, three chapters, references in items, conclusions, proposals and appendices.

PART 1. THEORETICAL AND METHODOLOGICAL ASPECTS OF PRODUCT INNOVATION IN THE HOTEL INDUSTRY

1.1. Essence and preconditions of innovations at the enterprises

It is a common fact that hospitality industry in general is one of the most competitive businesses in the world. But still as study shows in comparison with other sectors of the economy hotels' productivity is really low. One of the reasons that can stand behind this problem is that it is hard for hospitality industry to keep up with all the innovations and technological know-hows that happen in the world and adjust to them.

Up to this day there is not much of information in the hospitality industry literature about how to combine technology-driven innovations and non-technological forms of innovations into one complex innovation strategy. This is why there is still a need to research and analyze different innovation strategies and the correlation between these strategies and effectiveness of the hospitality industry in order to increase its competitiveness and create more opportunities for this sphere of economy.

To learn about innovations and innovation behavior first we need to understand what innovation is. There are a lot different definitions for this concept which are listed below:

Table 1.1

Definitions of innovation

Definition	Author
Innovation is often associated with aspects such as creativity, novelty, value creation and economic growth. Schumpeter described innovation as “the creation of new possibilities for additional value added, taking into account not only the typical product/process innovation of manufacturing but also market, organizational, and resource input innovation” [36].	Remneland Wikhamn

Continuation of table 1.1

Definition	Author
Innovations are functions of “creative destruction”, which challenges market equilibriums and provide new opportunities for exploration and revitalization by existing and new firms [25].	Martinez-Ros
Innovation is “everything that differs from business as usual or which represents a discontinuance of previous practice in some sense for the innovating firm” [22].	Kallmuenzer
Innovation is the specific instrument of entrepreneurship, the act that endows resources with a new capacity to create wealth [12].	Peter Drucker
Adoption of new or significantly improved elements to create added value to the organization directly or indirectly for its customers [13].	Business Council of Australia
Any policy, structure, method, process, product or market opportunity that the manager of a working business unit should perceive as new [13].	Nohria and Gulati
Innovation can be defined as a process that provides added value and a degree of novelty to the organization, suppliers and customers, developing new procedures, solutions, products and services and new ways of marketing [13].	Lumpkin and Dess
The ability to discover new relationships, of seeing things from new perspectives and to form new combinations from existing concepts [13].	Evans
Innovations are new ideas that consist of: new products and services, new use of existing products, new markets for existing products or new marketing methods [13].	Kenneth Simmonds
The degree to which specific new changes are implemented in an organization.	Mohr

Nowadays hospitality industry highly depends on their capacity of being able to innovate in order to reach economy growth because it is said that innovations add to the competitiveness of firms [31, 34].

In this complex industry, products and innovative processes that are often jointly provided by a large number of factors are constantly developed, modified or changed. However, the communication of these factors shows to be rather complex and informal, leading to questions about which factors in particular influence innovation of hospitality firms and how this collaboration takes place [5].

So far, most studies and scientific works on innovation in tourism and hospitality organizations mostly neglected to investigate these drivers of innovation in hospitality firms but rather focused on the role of entrepreneurship and innovation for firm growth or on the influence of firm and market characteristics on innovation. This is why the necessity to find and develop the understanding of drivers of innovation in the hospitality industry exists [15].

To understand these drivers, we have to look into classification of innovations in the hospitality industry. A vast variety of classifications exists for identifying types of innovations but the concept stays the same.

In 1997 such author as Hjalager divides innovation into five classes. They are:

- products (and services);
- classical processes (innovation improving existing production processes);
- information handling processes (information technology related innovation);
- management (human resources; including staff, residents and travelers);
- institutional (organizations and traditions) [18].

In 2003 Jacob, M., Tintoré, J., Aguiló, E., Bravo, A. and Mulet, J. classified hospitality innovations into such categories as: products and services, delivery processes, internal and external organization (management processes and communication with customers and partners) and market development (marketing and entering new markets) [21].

The Oslo Manual (OECD and Eurostat, 2005) in its turn defines four classes of innovations which are based on improvements both new or significant [30]. These classes are represented in table 1.2.

Table 1.2

Four classes of innovation

Class	Explanation
1 st class	Improvement in products or services which is called product innovation;
2 nd class	Improvement in delivery and production methods which is called process innovation;
3 rd class	Improvement in marketing methods along the four Ps of marketing (product design, price, placement, promotion) which is called marketing innovation;
4 th class	Improvement in business practices (external relations and workplace practices) which is called organizational innovation

The Oslo Manual also points out presents two views on innovation where the first one is about improving production and workflow and the second one stands for implementing new strategies [10]. This duality is also especially visible in tourism and hospitality industry, where most innovations are incremental, especially in the case of technological innovation (figure 1.1).

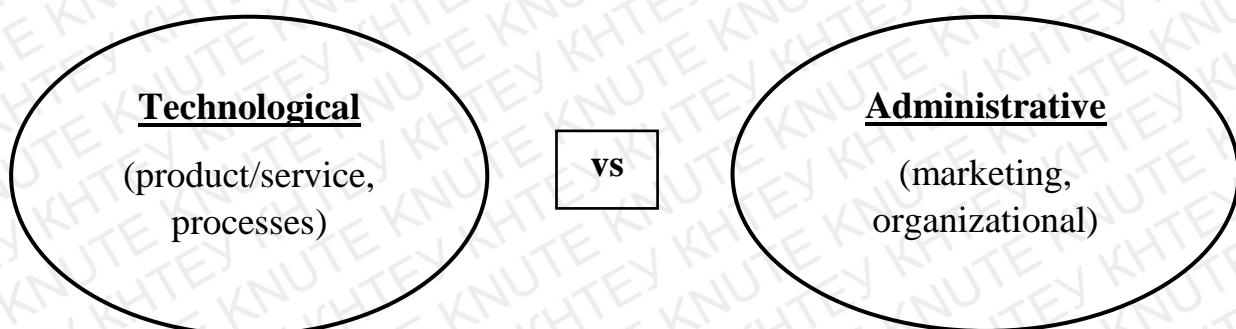


Figure 1.1 Views on innovation

Such authors as Bieger and Weinert identified three innovation categories [6]. They are represented in table 1.3:

Table 1.3

Innovation categories by Bieger and Weinert

Category	Description
First category	product and service innovations that create value for customers when using a hospitality product;
Second category	process innovations that enable more efficient and effective production ranging from new technologies to managerial decisions that affect human resources management, business models (internal orientation) and stakeholder management (external orientation);
Third category	market innovations to gain market share by expanding existing brands (opening new properties in new geographic markets) or launching new brands (market segmentation).

It is impossible to have dynamic socio-economic development of a country without comprehensive and continuous usage of innovations that are a catalysts of the overall development. Innovations are one of the main driving forces and their essence is determined by the ability to adapt new creative ideas to existing process of doing things so that it will create added value to the industry directly and to the customers indirectly [9].

1.2. The process of product innovation in the hotel industry

In order to achieve a commercial success hospitality industry is obliged to create products that are able to attract consumers' attention, despite the existence on the market of many analogues. Product innovations in the hotel industry are developing rapidly. The reasons for this are as follows:

- to attract as many customers as possible by making them interested in the hotel, in its brand;
- to attract the customers to create long-lasting relationship and thereby make him a regular guest;
- increase the profit of the enterprise.

A new idea arises on the basis of a new knowledge which is a theoretical basis of material production. In modern conditions, new knowledge is usually a result of the hard work of many specialists: scientists - theorists, research laboratories scientists and many others. Innovative infrastructure is in charge of organizational, legal and economic support of innovation which is provided at different levels and in different forms [1].

Not all hotels have sufficient financial and intellectual capacity to create original products. Totally new so to say original products or services are few. Throughout the history of the mankind there are only a few hundreds of them. However, thanks to the product innovation, which is, the launch of a new product (services) that can meet or even exceed the needs of consumers better than existing products, they can increase their entrepreneurial income [7].

Product innovation is the most common and well-understood type of innovation and is connected to:

- creating a completely new product;
- adding a new feature in the existing one;
- or enhancing features of the product that exists.

The use and implementation of product innovations helps to improve the quality of service, increase the competitiveness and image of the hotel, making it unique.

If we talk about the sphere of product innovation in the hospitality industry, it is presented in Figure 1.2 below.

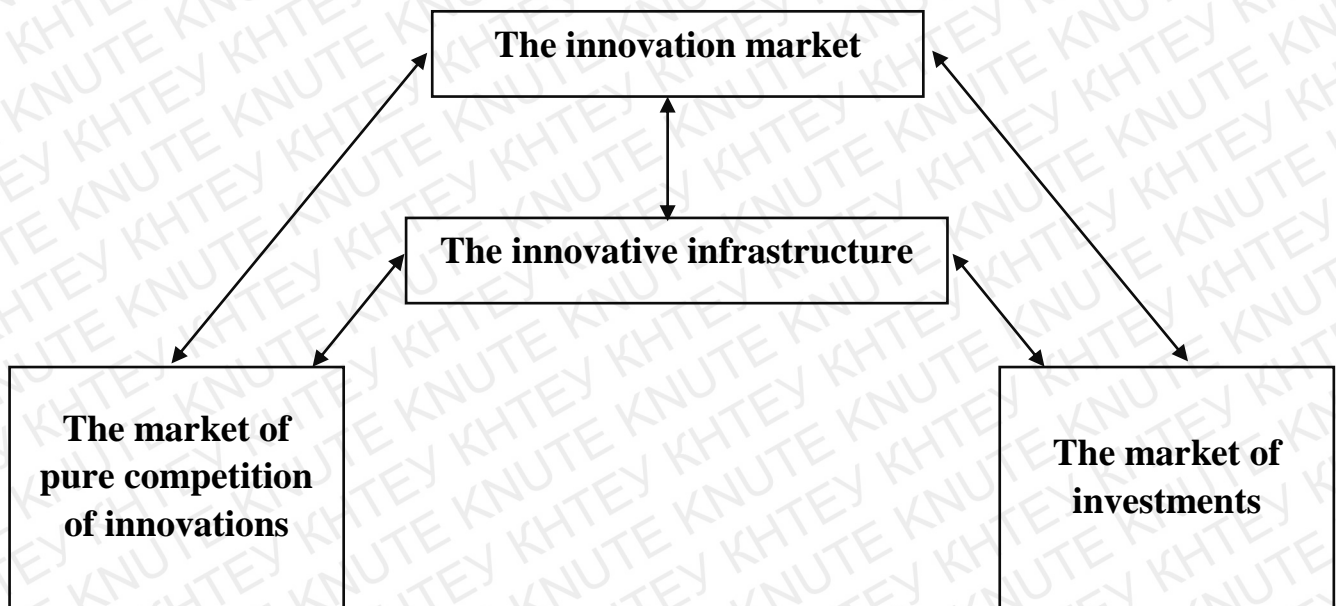


Figure 1.2 The sphere of product innovation

The hotels' innovative activity aims to create and involve such product innovations from the outside environment that would improve their competitiveness, reinforce market positions and guarantee future development. However, different hotel chains have different possibilities regarding involving innovations in their business activities which is determined by existing resource constraints, especially financial ones [38].

Managing product innovation activities should therefore be carried out, on the one hand, in perspective of the potential opportunities of innovations that create the hotels' competitive benefits, and on the other hand – taking into account hotels' investment possibilities.

This needs financial justification of the feasibility of implementing any successful product innovation, even at first glance, which will allow management to make a favorable choice only on the novelty, which will generate important competitive benefits for the business and ensure proper economic return [4].

There is a list of the most common categories of product innovations that are mentioned on the Figure 1.3.

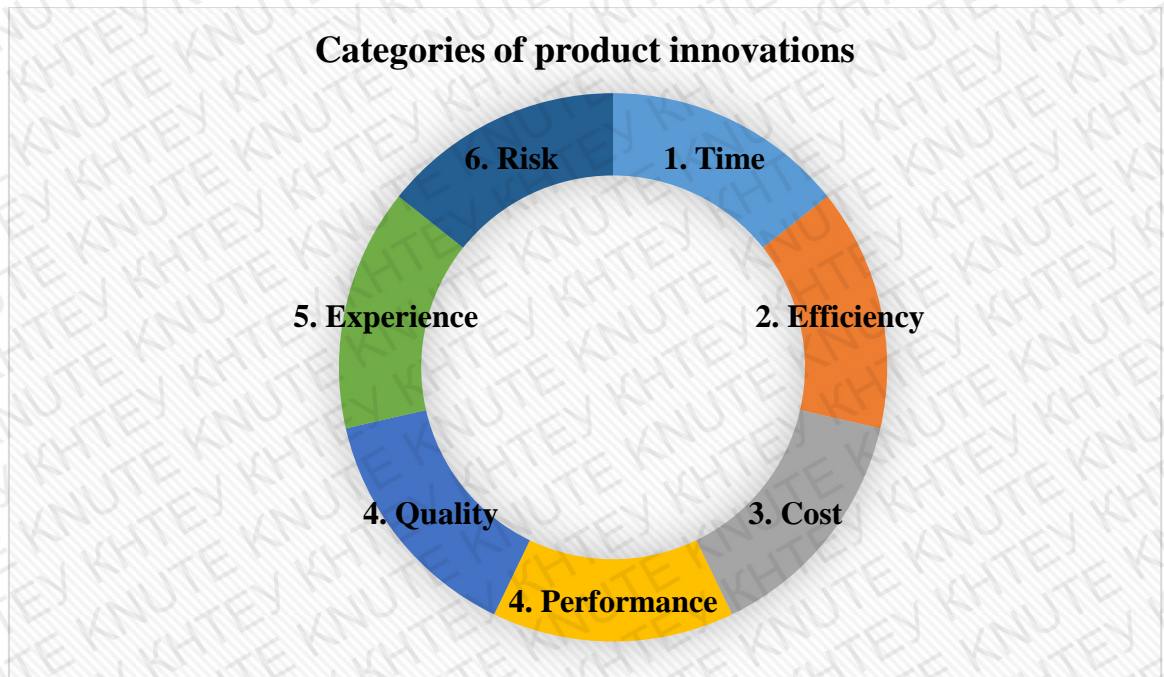


Figure 1.3 Categories of product innovation

1. Product innovation connected to time is such an innovation which helps reduce time consumption of some processes including things that improve productivity or represent customers' convenience.
2. Product innovation connected to efficiency is such an innovation which reduces the inputs in order to achieve specific goals.
3. Product innovation connected to cost is such an innovation which is in charge of reducing costs of product and services of the hotel.
4. Product innovation connected to performance is such an innovation which is measured by a figure of merit, a numerical expression representing the performance or efficiency of a product.
5. Product innovation connected to quality is such an innovation which is represented by such definitions as availability, durability and reliability.
6. Product innovation connected to experience is such an innovation which includes intangible elements such as feelings, sight, sound, touch, smell and so on.
7. Product innovation connected to risk is such an innovation which is in charge of reducing risks and improving safety and sustainability of hospitality products.

There are specific types of product innovations in the field of application which are listed in the Table 1.4:

Table 1.4

Types of product innovations in the field of application

Type of product innovation	Description
1. Technological	Product innovation in the form of new products and the process of introducing new technologies, equipment and materials. This type of product innovation is the most popular one and is widely used.
2. Organizational and managerial	Development and implementation of a new organizational structure in the hospitality industry.
3. Economic	The use of previously non-applicable systems and forms of remuneration, methods of managing production costs and delays.
4. Marketing	The development of new markets and ways to promote a product.
5. Ecological	The use of new technologies - the implementation of new technologies in the field of environmental protection.
6. Informational	The use of new information technologies.

The process of product innovation consists of the methods of transforming the scientific knowledge on innovation that satisfies the new public need; a coherent chain of actions that includes every phase of development and execution of novelty. During the process of product innovation not only is anticipated novelty generated, but also accompanying innovations are created that are the consequence of creative innovative activity at some point. [33].

The process of product innovation consists of specific stages of implementation [32]. They are presented in the Figure 1.4.

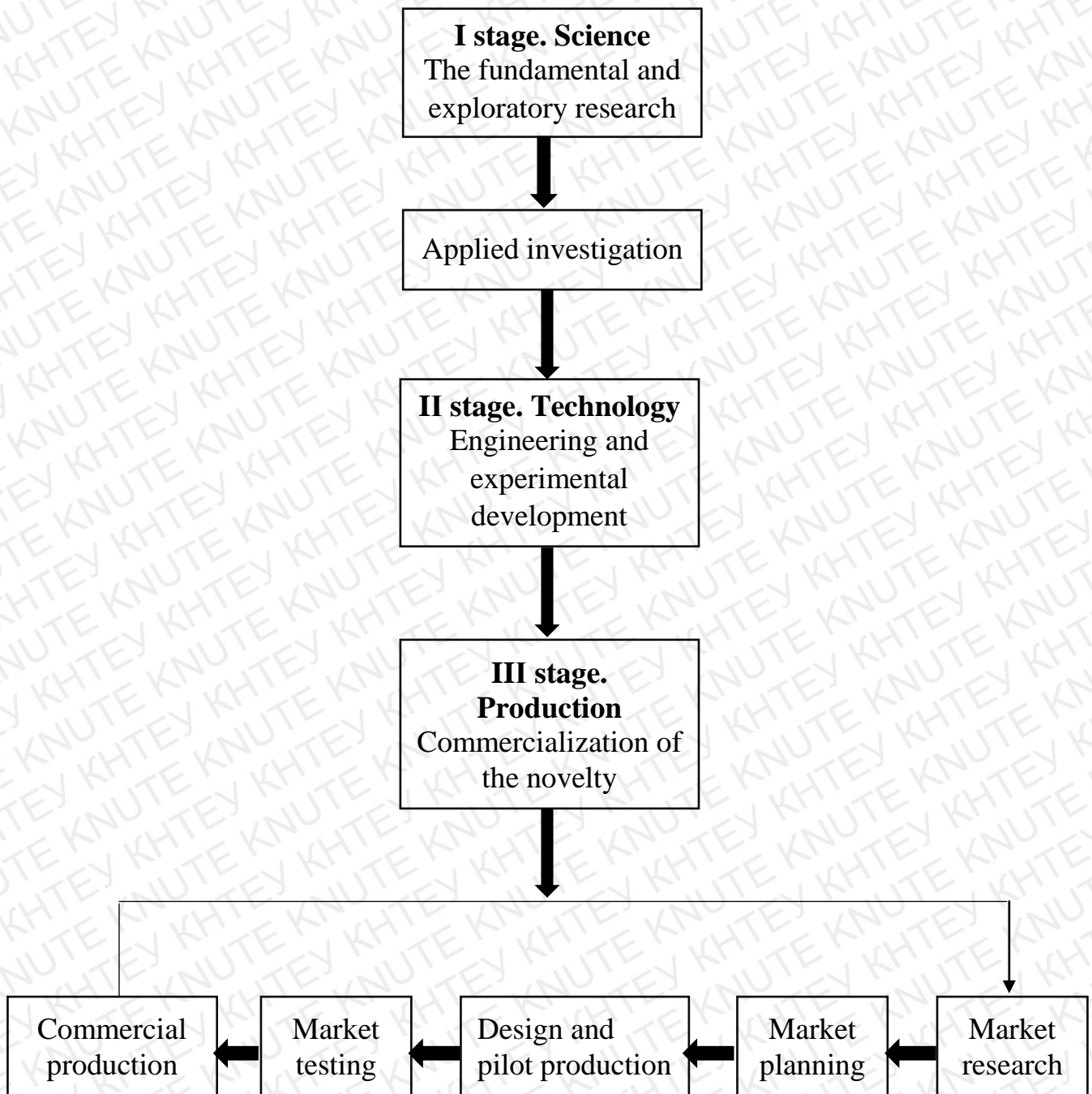


Figure 1.4. General scheme of the process of the product innovation

1. Science. The theoretical basis of issues is being created at this point. It includes basic and applied study phases. If the studies have focused, search oriented character, then there will be more favorable outcomes. These studies end with justification and experimental testing of new methods of meeting public needs and the result of this testing are inventions [17].

2. Technology. At this stage, the theoretical constructs of phenomena and processes are embodied in the material shell. This includes the design and development work phases that help to create, design, produce and test models of a new technique, technology or product. The technical characteristics of new products are determined, engineering and technical documentation is developed, prototypes are created, experimental production takes its beginning [29].

3. Production (commercialization of the novelty). This is the phase of introducing a new product into manufacturing, creating a marketing program and encouraging consumer innovation. Investments at this stage are also risky, but they are incurred by the entity, accumulating funds in special funds and using loan capital (bank loans) [37]. This stage covers several phases:

- market research: studying of market readiness for product innovation, evaluation of the ability to meet consumer needs, determining the form of promotion of the novelty to the market, the possibility of its modification for its individual segments;

- market planning: determining the volume of demand for a new product, its product range, potential markets, estimating production costs and forecasting future sales revenue;

- design: creating a novelty with the aesthetic, ergonomic (related to optimum adjustment of production conditions for productive work), functional specifications and taking into account consumer preferences in the selected market segment (modernity, convenience, sophistication, descriptive, price characteristics, etc.), developing marketing strategies to promote the product to the market;

- pilot production: establishing and refining the technological process, making an estimate of costs;

- market testing: carrying out an advertising campaign before the product is available on the market, determining the estimated price, producing a trial consignment of goods, estimating the demand for it, making changes to marketing tactics or product designing if needed;

– commercial production: forming a portfolio of orders for the production of batches of goods, negotiating agreements with suppliers, designing logistics schemes, choosing channels of distribution, designing and establishing of a production management system; manufacturing and selling of goods in the expected volumes; implementation of a quality management system; enhancement of pricing policies and methods of sales promotion [11].

At the level of hospitality industry, the process of the product innovation, despite its focus on creating new consumer value, is characterized by a much greater desire of its participants for commercial success, given its focus on creating new consumer value. The process of the product innovation in the hospitality industry is carried out in several stages:

- 1) generating ideas on how new social needs can be met;
- 2) development of the plan and preliminary evaluation of its market attractiveness;
- 3) reviewing of the hospitality industry requirements for the implementation of the project and the associated costs, their correlation with the hotel's financial capacity;
- 4) designing and establishing technological development of a new product;
- 5) trial marketing (forecasting demand and estimating future benefits);
- 6) planning and organization of the production process for a new product;
- 7) commercial implementation of the novelty [23].

The hotel industry is struggling to endure the continuing pressure of globalization. The hotel chains need to give their potential customers an added value that they do not get from their rivals to withstand the fierce international competition.

PART 2 ANALYSIS AND ASSESSMENT OF THE PRODUCT INNOVATION IN THE HOTEL CHAIN

2.1. Organizational characteristics of the hotel chain.

InterContinental Hotels Group (IHG) is one of the world's leading hotel companies and its purpose is to provide True Hospitality for every guest. IHG is the strong and confident global leader in the hospitality sector, with rooms accounting for 16% of the total global market share and 25% of the pipeline [20].

Brands of this company operate across the mid-and upper mid-scale segments, ranging from full-service hotels offering full-service services to extended-stay hotels offering longer-term accommodation compared to traditional hotels. Holiday Inn is a British-owned American brand of hotels, and a subsidiary of InterContinental Hotels Group.

InterContinental Hotels Group is focused on bringing its great brands to life for millions of guests all over the world. This brand is committed to creating healthy, welcoming environments for everyone as well as creating the right experience and taking active steps to help its hotels quantify and manage their impact on the environment.

This brand works hand in hand with its hotel owners as a predominantly managed and franchised business to make sustainable choices and take opportunities to do things differently. Operating this way is vital for its staff, clients, partners and stakeholders, and they take issues like climate change, water scarcity, energy use and waste management seriously.

InterContinental Hotels Group works in an industry with high growth potential, ranging from increasing consumer demand for branded hotels to a rising middle class and higher disposable income.

This brand has hotels spread through three operating areas in more than 100 countries:

- America;
- Europe, Middle East, Asia and Africa (EMEA);
- China.

The global presence of this brand is visualized in the Figure

2.1.

GLOBALLY

5,723

Opened hotels

1,925

Pipeline hotels

855,915

281,845



Figure 2.1 Global presence of IHG

Key performance indicators (KPIs) of this brand are carefully selected to allow them to track the quality of key indicators to achieve their strategy and long-term success. These KPIs are next:

1. Net rooms supply – Increasing the supply of rooms offers significant scale of benefits, including increasing the value of our loyalty program. This is a key indicator of IHG growth agenda's achievement. In 2018 net room supply was about 836,541 rooms.
2. Total gross revenue from hotels in IHG's System – Total rooms revenue from franchised hotels and total hotel revenue from managed, owned, leased and managed lease hotels. Other than for owned, leased and managed lease hotels, IHG

is not solely due to sales, as it is primarily derived from third-party owned hotels. The increase in IHG's gross revenue reflects the importance of our overall system to its holders. In 2018 the total gross revenue was \$27, 4 bn.

3. Global RevPAR growth – rooms’ revenue divided by the number of available room nights. RevPAR growth represents the increased value that guests attribute to our brands in the markets we operate in and is a key metric that is commonly used in our industry. The total amount of RevPAR growth in 2018 was 2, 7%.

4. Guest Love IHG’s guest satisfaction measurement indicator – guest satisfaction is vital to the ongoing success of IHG and is a critical measure for tracking the risk of failing to deliver preferred brands that meet guests’ expectations. This indicator in 2018 showed the result of 81, 7% of guests’ satisfaction [3].

In the Figure 2.2 is shown the short overview of InterContinental Hotels Group including geography of this brand, branded hotels and its segment.

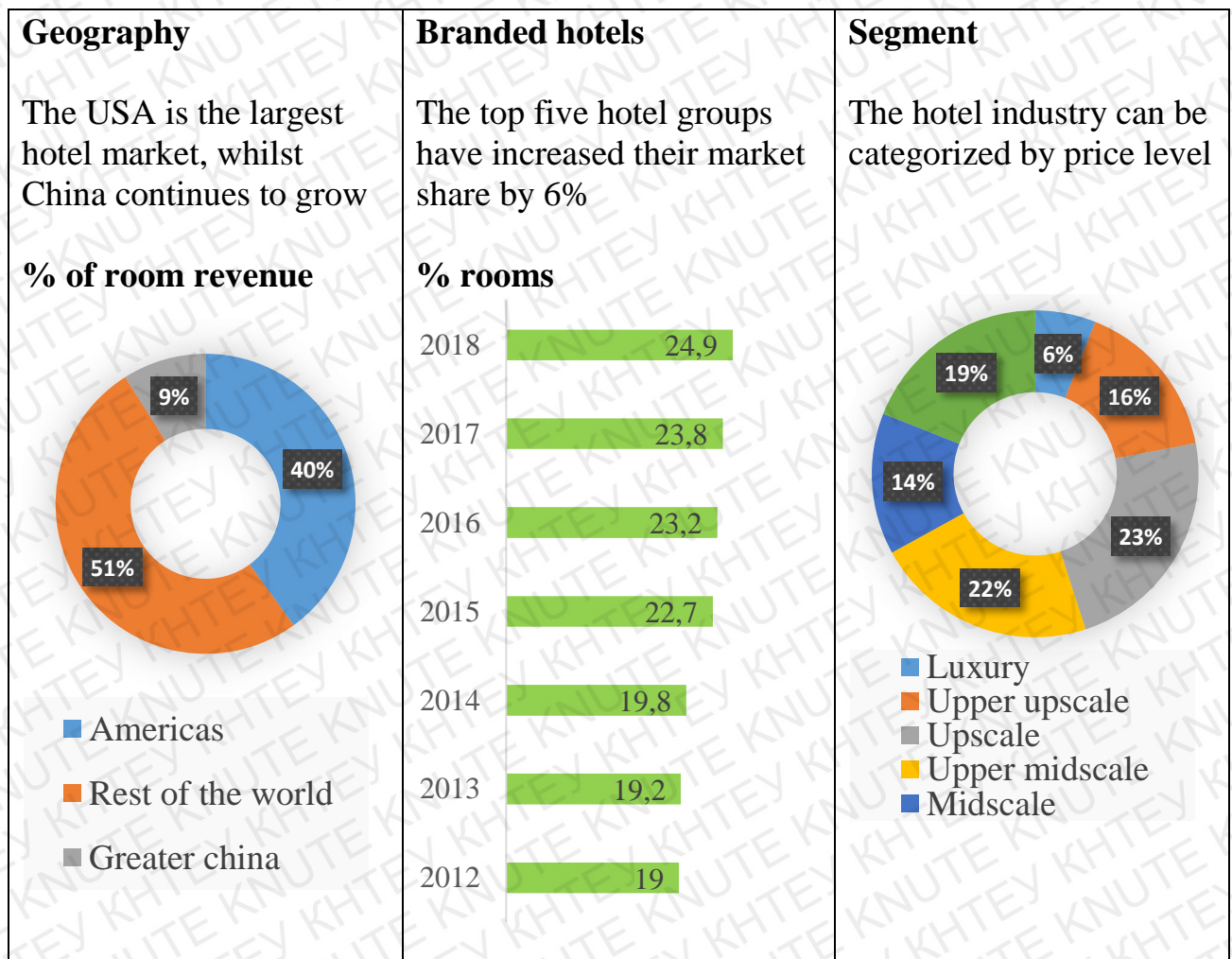


Figure 2.2 Overview of the InterContinental Hotels Group

If we talk about 10-year trend of the InterContinental Hotels Group growth drivers, they are represented in the Table 2.1:

Table 2.1

IHG growth drivers: 10-year trend

Global GDP	Global household income	Global corporate profits
+2.5%	+2.8%	+4.2%
This is an indicator of economic growth – hotel performance correlates with GDP.	This income is increasing due to growing consumer spending and leisure travel, supported by cheaper air travel.	Good indicator of business travel demand – continues to grow.

InterContinental Hotels Group works in an industry with high growth potential, from increasing consumer demand for branded hotels, to a rising middle class and higher disposable incomes.

InterContinental Hotels Group is constantly evolving to meet changing demands and preferences of guests and owners. It is done through finding new ways to unlock branded consumer opportunities, enriching customer travel with creative digital experiences, or efficient cloud-based technology solutions. Consumer's demand for branded experiences is constantly growing which allows hotel companies to continue finding new ways of operating to meet expectations with owners and partners.

IHG has added wellness focus brand, EVEN Hotels, a brand tailored to the Chinese consumer, HUALUXE, over the past decade and expanded Kimpton in the global luxury space following acquisition [19].

This group have also launched Avid hotels in the mainstream segment, upscale brand Voco, which focuses mainly on conversions, and acquired both Regent and Six Senses Hotels Resorts Spas in the luxury segment's top tier. It represents an ongoing

strategic emphasis on delivering more tailor-made experiences in the highest opportunities segments and markets to a diverse guest base.

InterContinental Hotels Group is well positioned to intensify the growth of its core business in an increasingly challenging environment, as well as maximize returns on new initiatives such as introducing new brands to our portfolio.

InterContinental Hotels Group has its own way to drive demand for their product and services. It is visualized in the Table 2.2:

Table 2.2

How IHG drives demand

<p>Scale</p> <p>Up to 5,800 hotels and around 865,000 guest rooms across 100 countries</p>	<p>Brand portfolio</p> <p>IHG has 16 brands all over the world that suit different consumer desires</p>	<p>IHG Rewards Club</p> <p>More than 100 million enrolled members</p>	<p>Web/Mobile</p> <p>Mobile friendly branded websites, offering more than 100 language combinations</p>
<p>Members' rates</p> <p>Exclusive rates for members of the IHG Rewards Club Program when booking directly</p>	<p>78% rooms revenue delivery</p>		<p>Food and beverage</p> <p>Non-room sales contributed for 15% of total gross revenue in 2018, with 13% coming from F&B.</p>
<p>Reservation system</p> <p>9 International call centers covering 13 languages</p>	<p>Revenue Management</p> <p>World class systems</p>	<p>Sales force</p> <p>Global Sales force of nearly 21,000</p>	<p>System Fund</p> <p>Annual advertising budget and services generating demand for IHG hotels</p>

The figure 78% rooms revenue delivery is calculated as rooms revenue that are distributed to hotels by IHG bookings, IHG Rewards Club members booking directly with hotels, and online travel agent bookings and the Global Distribution Network.

InterContinental Hotels Group consists of hotels that are represented in the Figure 2.7:



Figure 2.7 IHG brand portfolio

Holiday Inn Hotels & Resorts – the most recognized hotel brand in the world, which has been pioneering unforgettable hotel experiences for millions of customers since 1952, from families to business travelers alike. Established as a USA motel chain, it has become one of the largest hotel chains in the world. The hotel chain's headquarters are in Denham, Buckinghamshire.

Holiday Inn Hotels & Resorts has a much wider reach than its rivals and the company has proven itself countless times that it can supply to its owners; whether the property is situated on the outskirts of the city, in urban centers or in resort locations.

The Holiday Inn chain, known for its affordability, started in the 1950s as a motel chain and has always attracted families. Holiday Inn was relaunched in 2008 to give the company a higher standard consistently.

At Holiday Inn chain, guests know that through our dedication to ensuring that our service is always friendly and that everything always works, they can expect good quality.





The Holiday Inn Family of Brands:

- **Holiday Inn:** The largest and most recognizable brand that offers full-service hotels. Each property includes a restaurant, swimming pool, room service, and a fitness room.
- **Holiday Inn Hotel & Suites:** In addition to standard hotel rooms, these properties provide all the facilities and services of a traditional Holiday Inn by also offering suites.
- **Holiday Inn Resort:** Offering all the amenities and services of a full-service Holiday Inn, these more upscale properties are located in top tourist areas. Of the 16 properties in the U.S. Holiday Inn Resort, eight are located in Florida and two are located in southern California.
- **Holiday Inn Club Vacations:** Such resorts could only be found in the United States. The accommodation is a combination of villas and suites for the most part. Membership works on a flexible time-sharing basis, but non-member families can also book a stay in any hotel.
- **Holiday Inn Express:** all over the world these mid-priced hotels exist. Competitive with other value-oriented chains Holiday Inn Express properties tend to be smaller versions of Holiday Inn hotels with fewer amenities and services while offering breakfast and wireless internet access.
- **Holiday Inn Garden Court:** These properties exist only in Europe and South Africa and are created in order to reflect the national culture. Since the re-branding and relaunch of Holiday Inn in 2007, many Garden Court Hotels have converted into other Holiday Inn hotels or have left Intercontinental Hotels Group [19].

The global statistics of the brand Holiday Inn Hotels and Resorts are presented in the Table 2.3:

Table 2.3

Global presence of Holiday Inn Hotels and Resorts

Hotel	Franchised Hotels / Rooms	Managed Hotels / Rooms	Total Hotels / Rooms
 Holiday Inn	993/165,257	150/41,835	1,145/207,612
	2,432/227,720	110/26,184	2,542/253,904
	26/7,676	0/0	26/7,676
	28/6,803	17/4,260	46/11,653

Holiday Inn offers family-friendly travel options and is always ready to welcome guests and their children. Holiday Inn was the first company to provide the “Kids Stay & Eat Free” program where children aged 12 and under can eat free all day and their stay is free of charge at any Holiday Inn.

Holiday Inn hotels feature flexible-designed full-service restaurants, plus layouts that provide standardized breakfast, lunch, dinner and bar solutions.

The main motives of Holiday Inn Hotels and Resorts are:

- Family friendly;
- Stay in comfort;
- Joy of dining;
- True hospitality.

The brand of the Holiday Inn is proud to offer authentic hospitality with positive and friendly service that brings smiles to its guests and ensures a high level of guest satisfaction, making hotels effective.

2.2. Analysis of product innovation of the hotel chain.

InterContinental Hotels Group is constantly developing and investing in its brands, and deep consumer research and close collaboration with its owners are at the heart of the new enhancements. Holiday Inn Hotels and Resorts as a part of IHG Group is also taking part in creating and implementing such product innovations that will satisfy the needs of its customers.

The product landscape continues to develop – from millennials seeking ever more creative and meaningful experiences to money- and time-to-travel baby boomers, both of whom continually expect technology to support, educate and enhance their stays.

This is critical to offer brand experiences that suit the ever-evolving demands of mainstream customers and drive the hotel owners' success. As new product innovations begin to roll out across the market, InterContinental Hotels Group knows they are going to bring guest satisfaction and brand strength to the next level.

As it was already shown in the second part of this final qualifying paper there is a list of types of product innovations so let us have a look at each of these types of product innovation that is implemented in the InterContinental Hotels Group.

1. Technological type – new technologies

Guests today expect technology to be integrated into many travel experience areas from intuitive booking apps, chatbots, and mobile check-in / check-out to smart artificial intelligence assistants and seamless Wi-Fi. To follow this trend, the ability of hotel companies to work in collaboration with the right technology providers has become increasingly important.

InterContinental Hotels Group has made serious progress on the issue: from online payment solutions tailored to Artificial Intelligence Smart Rooms in some of InterContinental hotels and Holiday Inn Hotels and Resorts, enabling all guests to use voice commands to control curtain opening, switching on and off the TV, turning on and off the light in the room to room service ordering and the creation of IHG Studio with Avid brand, allowing seamless direct broadcasting of entertainment from customer smart devices to in-room TVs.

2. Technological type – new designs

As an industry icon, through H4 Design, Holiday Inn continues to innovate the customer's experience. This flexible solution, which was introduced in 2017, enables customers to adapt the space to meet their individual needs and is a brand standard for all new hotel openings, conversions and renovations.

The H4 prototype was introduced by the brand, an evolution of H4 Design that offers owners more modern and efficient building that adapts to the needs of individual markets, including:

- Flexible, open public areas that enable guests to be productive while maintaining a connection to the broader social environment;
- Various restaurant and bar formats that can be customized to the space available, enabling mobility while offering high-quality dining in a welcoming atmosphere;
- Adaptable meeting area that can be tailored to the needs of both business and leisure groups quickly and easily;
- Welcoming room design with thoughtful touches to ensure a great night's sleep, plenty of power and networking points and the "Welcome Nook" signature that provides multi-functional storage for guests to unpack in a way that works for them.

The IHG's extended-stay brands such as Staybridge Suites and Candlewood Suites, have launched prototypes and interior design ideas for the renovation of new build hotels and properties. Staybridge Suites ' new design solution will be launched in October 2019 and will include:

- A modern architectural design with a front porch to create a more vibrant sense of arrival for guests;
- A re-imagined public area designed to create a wide-open sense of arrival with shared work spaces, socializing areas, more seating, a breakfast area that transforms seamlessly into a relaxed lounge area, and a stronger connection to the outdoor space;

- Improved suites with separate working, relaxing and sleeping areas, sufficient storage options, modern kitchens and easy-to-move furniture, making it easy for guests to make their own space.

In addition to its new design plan, Candlewood Suites unveiled a new brand logo. The logo appeared on all new hotel openings, renovated hotels and promotional channels starting this summer. Thus upgrading the public spaces and the exterior of the hotel, this brand makes significant changes to the guest suites to better meet the customer requirements of extended travelers, including:

- A distinctive exterior building that offers windows in front of the store allowing for more natural light and an upgraded Gazebo Grill with bar-like seating;
- An open and updated lobby with comfortable common areas offering a variety of seats; and a redesigned 24-hour Candlewood Cupboard market, now incorporated into the lobby itself;
- Improved comfort in guest suites with the signature recliner of the brand, bigger TVs, twice as much space, modern kitchens and easy-to-move end tables with integrated cup holders;
- A "welcome perch" signature in one-bedroom suites where guests can start settling in by dropping their bags or taking off their shoes immediately.

3. Marketing type – new markets

IHG reinforces the leadership of the industry by launching the new brand Atwell Suites. The Atwell Suites brand draws on IHG's legacy of exploring new growth opportunities that better serve travelers for hotel owners and operators. The Atwell Suites brand is designed to meet the high demand for a new all-suites product in the upper midscale market. The newest deal offers owners and visitors something different from what's out there today—a luxurious suite with the flex for guests to work, socialize, or explore over a stay of four to six weeks. Initial features of the Atwell Suites brand include:

- All-studio suites: Atwell Suites properties will deliver all-studio suites that include separate living and sleeping areas; a kitchenette area with counter-

height fridge, microwave, coffee maker and sink; a high-top desk design work area.

- Connecting and sharing spaces: customers will be able to move easily from their rooms to public spaces to relax, work, interact and create connections that work best for them.
- "Golden Hours" F&B: The properties of Atwell Suites will provide F&B options when the sun comes up and down. All hotels will offer a free hot breakfast featuring two to three signature hot items, along with cold grab-and-go and premium coffee options.

4. Ecological type

The Sustainable Development Goals of the United Nations (SDGs) set out a number of international targets to end poverty, counter inequality and injustice, and address climate change by 2030. IHG has defined the specific objectives to which they think they can make the greatest contribution in support of this. IHG encourages its hotels to use green products and, whenever possible, to provide local goods and services. The examples of this are next:

- IHG works with manufacturer Ege carpets and together they are testing carpets that are made entirely from plastic bottles and fishing nets. IHG performed a carpet trial in eight of its Europe-based hotels in 2018, using four tons of 100% recycled yarn and hoping to increase the range to more properties in 2019.
- Holiday Inn as part of InterContinental Hotels Group has announced to stop using plastic straws till the end of 2019
- Holiday Inn introduced bulk-sized bathroom amenities in order to shorten the usage of plastic.

In order to find out what innovations is trending I have made a questionnaire which is represented in Appendix B. This questionnaire was given to staff the Holiday Inn and to the guests of this hotel to be filled in. This questionnaire was held for a month. All the answers were collected and summarized in the Figures below.

The first result of this questionnaire which was held among the staff is represented in the Figure 2.8:

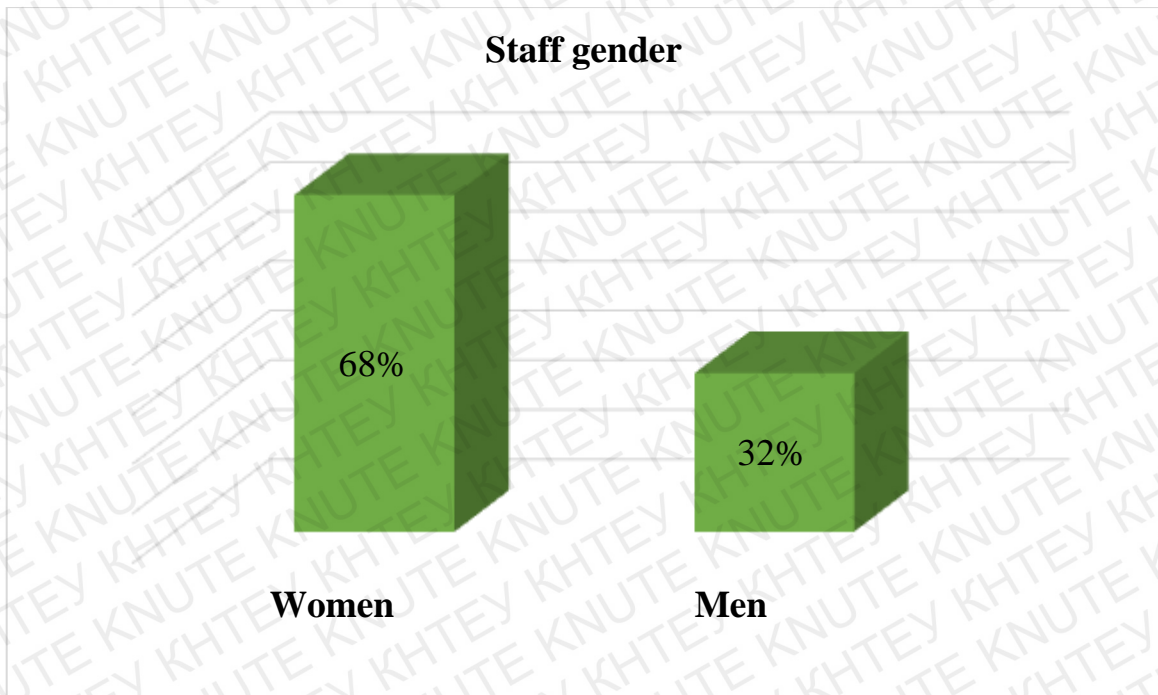


Figure 2.8 Gender of the Holiday Inn staff

As we can see from the Figure 2.8 above the amount of women that took this questionnaire is high in comparison with men.

According to the results of this test staff is more likely to choose the environmental type of product innovations. These results are represented in the Figure 2.9 below.

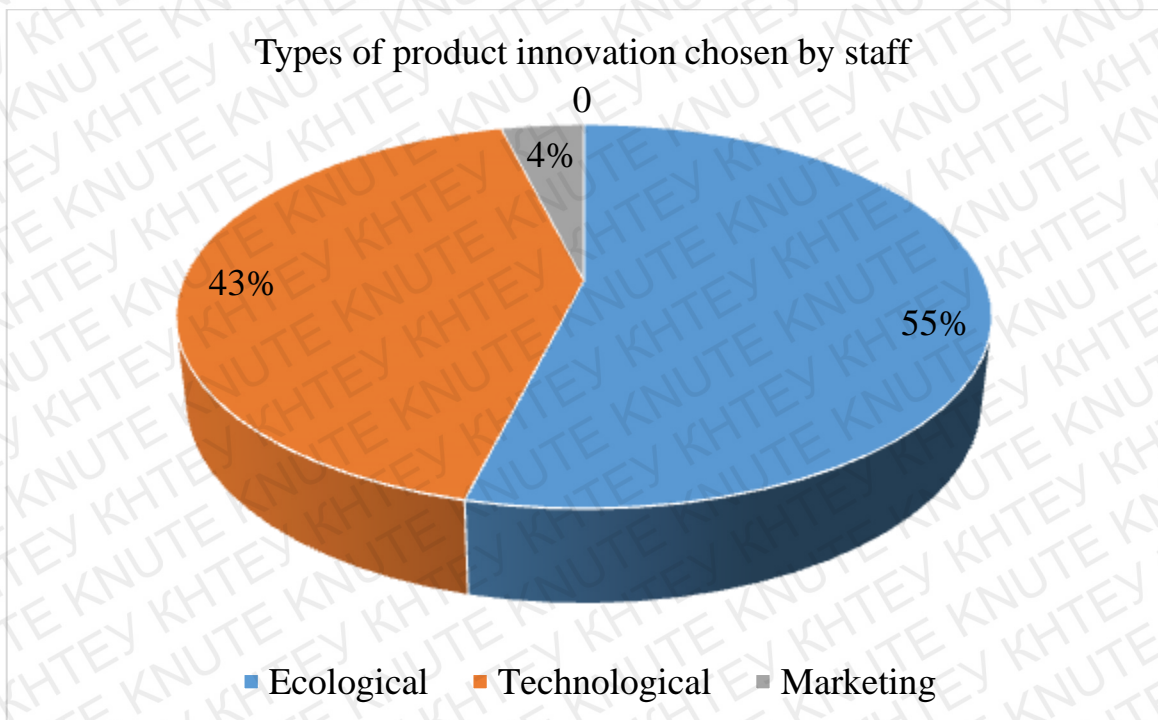


Figure 2.9 Types of product innovation chosen by staff

As we can see from the Figure 2.9, 55% of the Holiday Inn personnel chose ecological type, 43% chose technological type and only 3% gave their vote for the marketing type of the product innovations.

The questionnaire among customers took as well a month. This test was either filled in upon check in or check out. It was not obligatory and customers were free to refuse filling it. If they were in a rush, they were informed that this questionnaire could be filled in later or it could be sent to their e-mail addresses. The results among customers of the Holiday Inn are represented below and are somewhat different from the staff questionnaire.

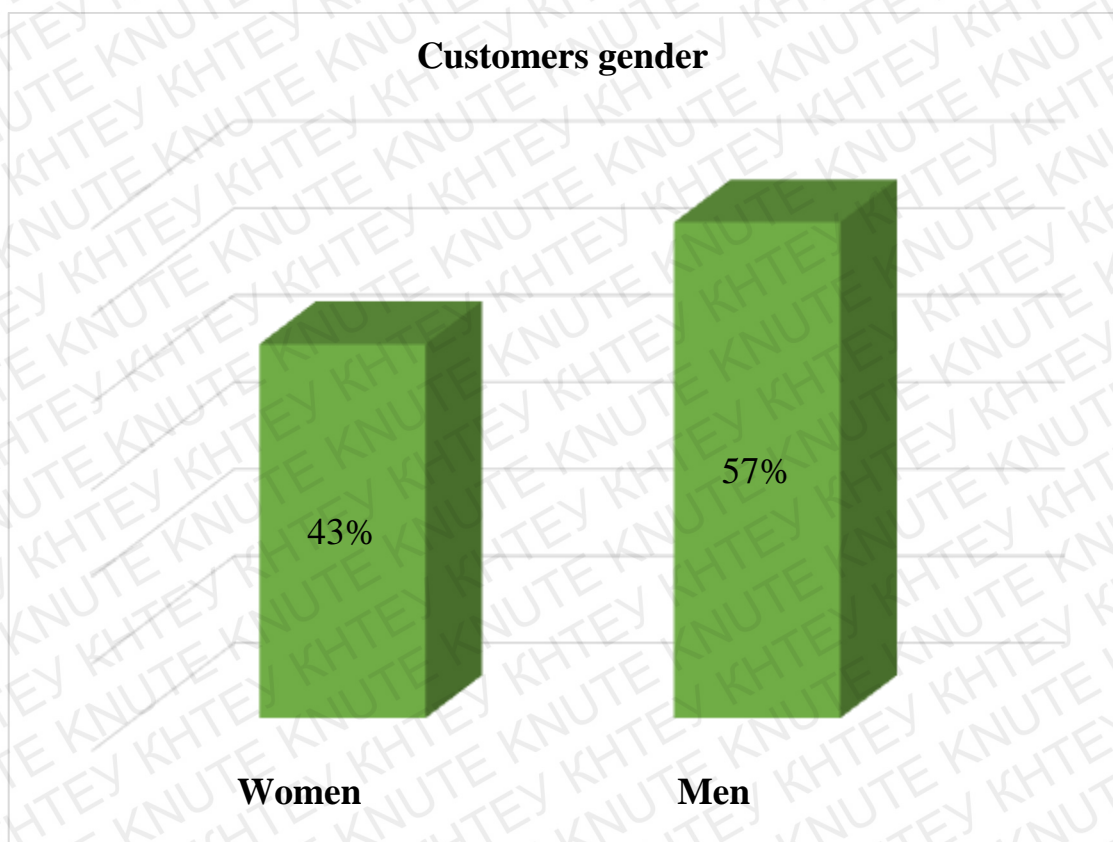


Figure 2.10 Gender of Holiday Inn guests

As we can see from the Figure 2.10 among customers who stayed in the Holiday Inn 57% are men and 43% are women. But the results on which type of the product innovation would be better to implement stays almost the same as in the staff questionnaire.

These results are represented in the Figure 2.11 below:

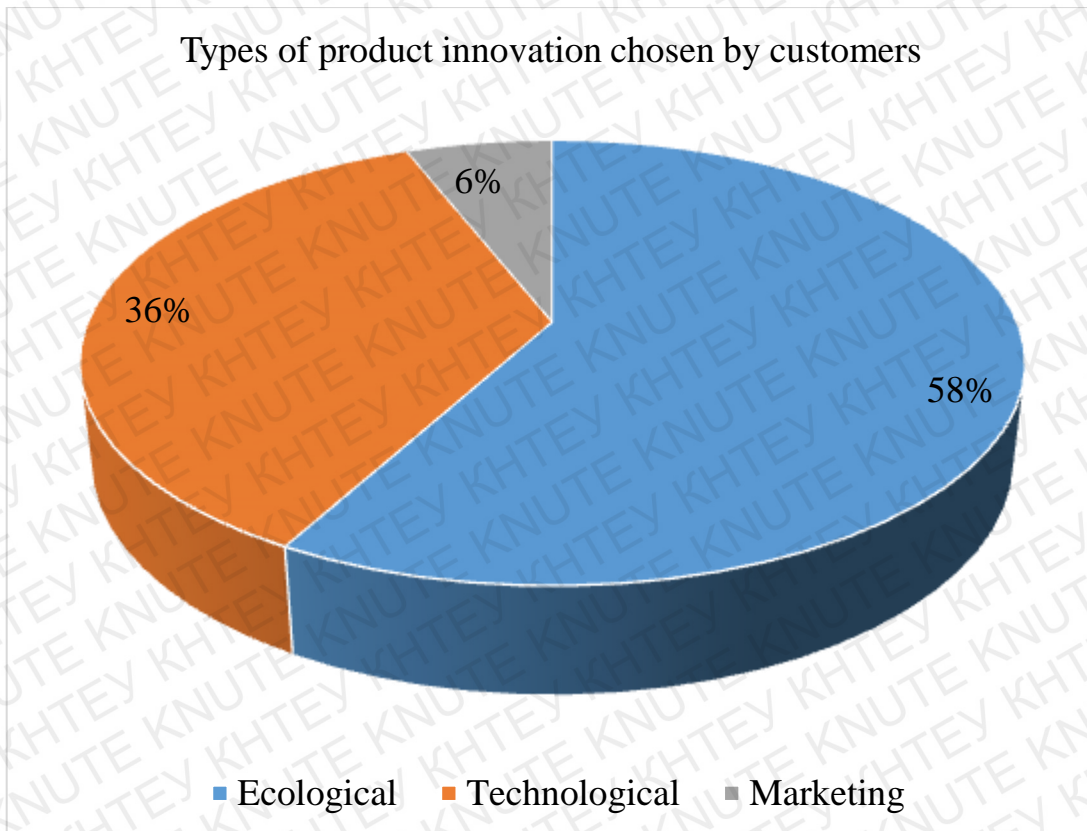


Figure 2.11 Types of product innovation chosen by customers

So as we can see from all the results above ecological type of product innovations is popular among Holiday Inn customers as well as among its staff. That is why it is important to think about what ecological innovations should be implemented in this brand in order to support and protect the environment and be profitable at the same time.

PART 3. DIRECTIONS OF IMPROVEMENT OF PRODUCT INNOVATION IN THE HOTEL CHAIN

3.1. Detailed scope of ecological product innovations in the hotel chain.

For the hospitality industry, sustainability is very important. It is essential to each and every one of us that all business including hospitality industry are cautious of the resources they use and are in know of what environmental protection opportunities are, especially in areas of water stress and environmental preservation.

Holiday Inn Hotels and Resorts as a part of the InterContinental Hotels Group is actively working to understand its influence, taking into account the business model and markets in which this chain operates. It helps to set goals and guidelines for customers of this brand, hotels that are included in this brand and its owners.

The IHG Green Engage System is used by all hotels of the InterContinental Hotels Group including Holiday Inn. Green Engage is a groundbreaking digital environmental sustainability system that gives IHG hotels the means to calculate and monitor their environmental impact.

Hotels can choose from more than 200 “Green Solutions” which are developed in order to help them reduce their energy, water and waste and improve their environmental impact. Level 1 is a requirement for all hotels of the InterContinental Hotels Group. The description of all level of Green Engage is represented in Table 3.1.

Table 3.1

Green Engage Levels

Level	Description
Level 1	At this level, hotels have implemented 10 best practice solutions that put them up for sustainability and help them through rapid energy and cost savings activities. It involves such actions as tracking data on consumption, setting up a green property team and installing energy-efficient lighting in guest rooms.

Continuation of the table 3.1

Level	Description
Level 2	At this level hotels have really started to understand the advantages of property sustainability and have taken steps to go beyond the fundamentals and implement solutions such as green procurement and incorporating sustainability into hotel operations.
Level 3	At this level hotels establish sustainability frameworks and embark on major projects such as the development of energy-efficient equipment and green project management.
Level 4	Hotels that reach level 4 are in charge of leading other hotels in the environmental sustainability area. It is done by demonstrating leading and innovative approaches to sustainable development.

In 2018, Holiday Inn Hotels and Resorts made good progress against its new environmental targets. When working with hotels and owners of this brand to reduce carbon footprint per occupied room globally, Holiday Inn managed to obtain a 2.2% reduction. Figure 3.1 shows the statistics of carbon footprint from years 2015-2018.

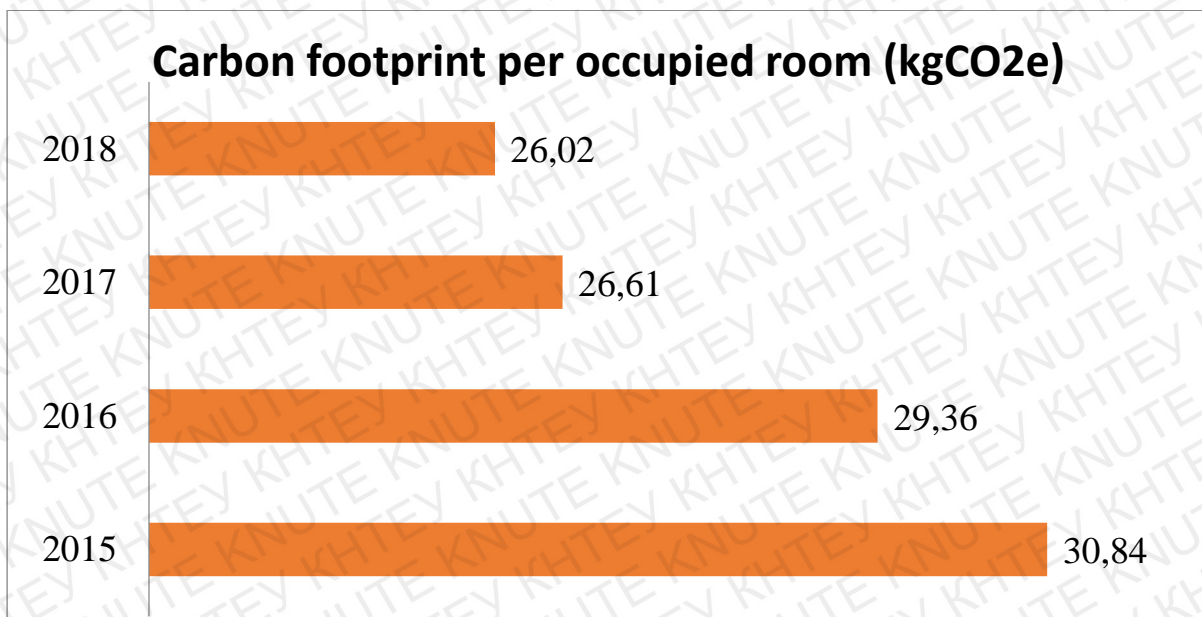


Figure 3.1. Carbon footprint per occupied room 2015-2018

InterContinental Hotels Group started its first project in London, UK, where five IHG hotels in London were partnering with the Rivers Trust. The project gave them vital lessons and helped to reduce hotels' exposure to water-related risks.

As a result of the London campaign, the UK&I estate has developed a sustainable water management system that connects hotels with the UK Rivers' Trust, which provides opportunities for local river cleaning.

This hotel chain initiated their second project in Delhi, where water quality is low and inappropriate for human consumption. They have partnered with the Center for International Projects Trust (CIPT), a non-profit organization which is based in Delhi and a Columbia Water Center affiliate, and the Alliance for Water Stewardship in partnership with seven IHG branded hotels in order to identify key problems where small-scale technologies can be developed and implemented that can be replicated in other water-stressed areas. The water consumption pattern is visualized in the Figure 3.2:

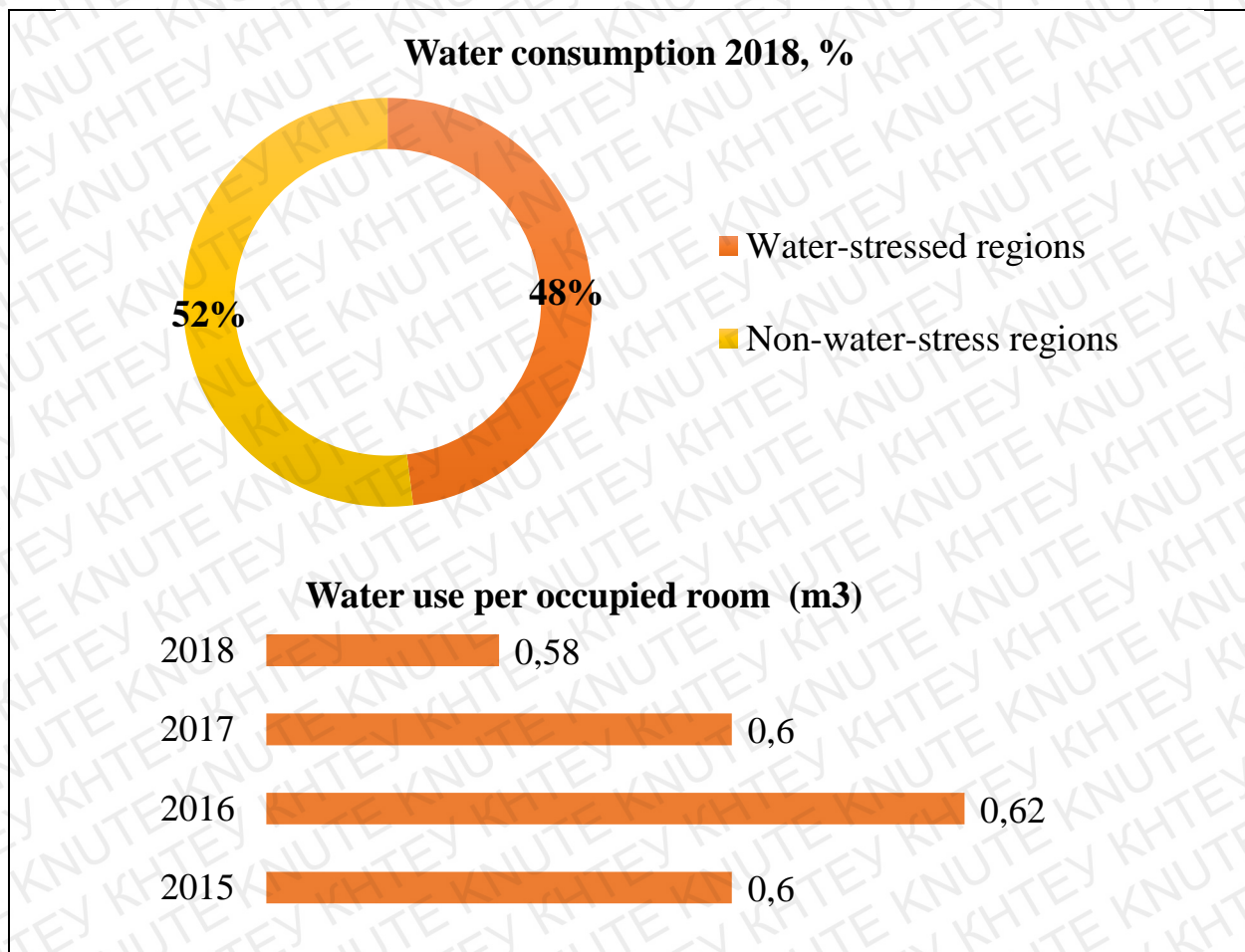


Figure 3.2. Water consumption pattern in Holiday Inn

Holiday Inn Hotels and Resorts are mindful of the Task Force on Climate-related Financial Disclosures (TCFD) guidelines and the need for businesses to match greenhouse gas emission reduction strategies with climate science (science-based targets). Holiday Innbrand will take these guidelines into account and in future will use it as part of updating its wider approach.

In 2018, Holiday Inn Hotels and Resorts are committed to remove single-use plastic straws from all hotel brands by the end of 2019 as part of our broader efforts to reduce plastic waste – eliminating an average of 50 million straws from hotels each year. Plastic straws have been eliminated from almost 1,000 hotels in Europe, Middle East, Asia & Africa area and IHG is adding large-scale bathroom facilities to several hotel brands in the Americas as part of wider waste reduction efforts.

The brands Holiday Inn Express, Staybridge Suites and Candlewood Suites are all increasing their acceptance of large-size dispensers. Since they were launched, such brands as EVEN Hotels and Avid Hotels have included bulk amenities, and Kimpton Hotels & Restaurants started rolling them out last year.

Holiday Inn Hotels and resorts will search ways to limit the amount of single-use plastics by shifting from miniature bathroom amenities to bulk-sized ones, they will be working with the right suppliers to help them retain a quality feel. Holiday Inn is also exploring ways in which they can apply this approach to other hotel brands.

The statistics for waste per occupied room is next:

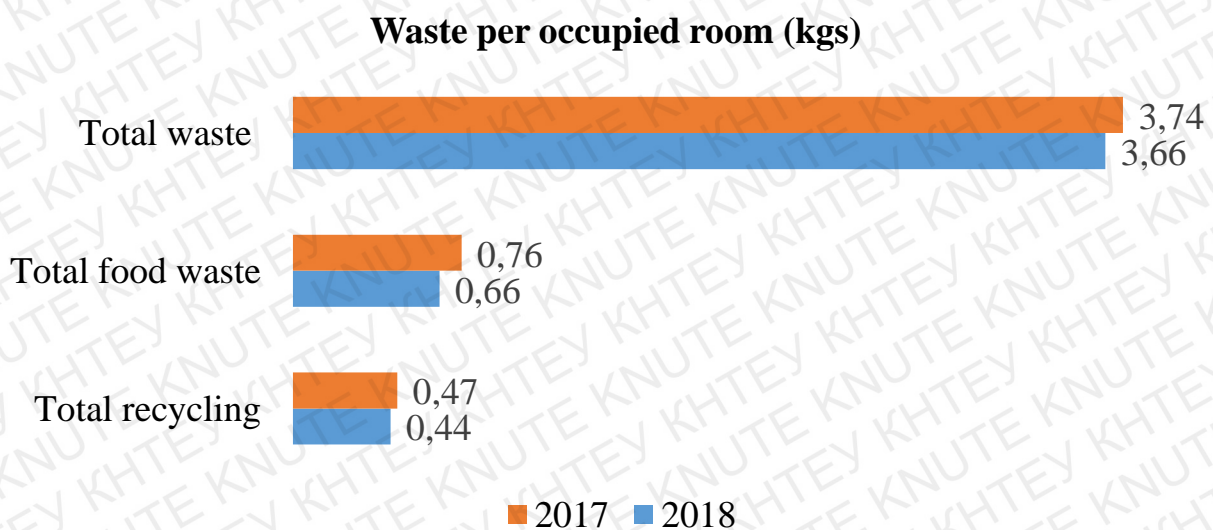


Figure 3.3. Holiday Inn waste statistics

Environmental issues are increasingly recognized as a significant concern for hospitality industries worldwide. Paula Vlamings, chief executive of Tourism Cares, a non-profit entity who works with tour operators to minimize the environmental impact of tourism, said ones that if big hotels can make small changes, the ripple can be huge. Sustainability is more than saving energy and recycling; it is about preserving the tourism product's communities.

3.2 Implementation of the ecological product innovations in the hotel chain.

Despite of the economic crisis outbreak, environmental problems nonetheless remain in the center of attention of many representatives of the hotel business. Of course, the adoption of most green concepts had to be abandoned in the circumstances of a recession however about 90% of the hotel guests surveyed were willing to pay more money for environmental products and services.

Because of the increasing anthropogenic stress on the planet and the potential for an environmental disaster, people started to be more cautious about the resources used, which increased demand for environmentally friendly goods.

The transition to be "green" is quite a costly and troublesome process. Notwithstanding this, the agenda of many hotels aims to green their activities. The continuous and steady implementation of administrative, technical and other solutions systems are enforced in order to improve the efficiency of the use of natural labor resources while at the same time improving or preserving environmental quality.

Tourism contributes about 5 percent of global greenhouse gas emissions, a figure that is expected to grow by 130 percent by 2035. In order to achieve complete decarbonization by 2050, hospitality industry needs to find a way to grow the industry, accommodate more and more guests and build more and more properties, while reducing the carbon footprint of the sector.

Eco-friendliness pattern changes fast from a nice-to-have, trended hotel commodity to a must-have priority for an increasing number of ecologically and socially conscious travelers.

As the brand Holiday Inn Hotels and Resorts takes part in the program Green Engage, they already have a list of innovations that they have already implemented or are about to implement. As it was discussed previously, there are four levels of the Green Engage program. The brand Holiday Inn managed to achieve the second level in this program.

I have come up with some ideas that can be implemented not only in the Holiday Inn brand but also in the whole chain of InterContinental Hotels Group:

1. Water conservation.

Water shortage is a recognized worldwide problem, with water demand expected to exceed 40% by 2030. Half of the world's population will live in areas of high water stress by the same year. Most water (97%) is in the oceans, covering 71% of the Earth's surface. Only 3% out of 97% is a freshwater, of which two-thirds are concentrated in icebergs and poles as ice. This leaves about 1% in rivers, lakes, atmosphere, and groundwater as freshwater.

Hotel companies have a strong commercial and ethical obligation to manage water use. Costs are a strong factor: in many hotels, water accounts for 10% of utility bills. Most hotels pay twice for the water they use – first by buying fresh water and then disposing it as waste water.

According to my research, hotels can reduce the amount of water consumed per guest per night by up to 50% compared to establishments with poor water consumption quality, depending on their water efficiency.

There are several ways how to cut down the usage of water. I would like to specify some of them:

- By skipping the Towel Change (Many hotels have offered their guests the opportunity to skip every day washing towels and sheets in an effort to save water and energy. It can be done by encouraging guests, for instance special notes can be put in the bathrooms of the guests, where there will be information about water consumption and the impact of each guest when they choose to skip the change of towels. Some other encouraging ways can be offering some benefits for those, who decided not to give towels for washing like discounts for restaurant services,

extra points on the account if they are members of Rewards Club Program, discounts for the stay in the hotel and so on. In order to signalize for housekeeping that a guest decided to skip the towel change, can be created special notes that are put on the door knob of the room or it can be specified upon check in of the guest and later on put in the profile notes of the guest so that reception and housekeeping will know that guest prefers to collect special benefits instead of washing towels each time). The sign can be next:



Figure 3.4 Skipping the Towel Change

- Eco bathroom taps (First suggestion will be using so cold “Turn on cold systems”. With the same tap, water and energy can be saved. Due to this technology, only cold water will be released when the consumer turns on the tap in its initial

position. This method eliminates the risk of burning and avoids the excessive use of hot water. It also reduces the use of power and CO² emissions from the use of heaters and boilers. Second solution will be using taps with flow limiter. Flow limiters customize the experience of the user, but above all help to save water. They can be installed with versions for 6, 7, 9 and 12 liters per minute in external taps for showers and washstands. Third suggestion will be taps with sensors, timers and electronics. There are a lot of advantages of this type of innovation like significant water savings, they are more energy-efficient, sensor taps are much more hygienic and so on). The list of advantages and disadvantages is represented in Table 3.2:

Table 3.2

Advantages and disadvantages of eco bathroom taps

Advantages	Disadvantages
1. Hygienic: They are much more hygienic than standard taps since they do not require physical interaction, which means that they are much less likely to be contaminated with bacteria and viruses.	1. Usability: Elderly who are unfamiliar with new technologies may be frustrated by their operation. These taps typically have hot and cold premixed water and due to that the temperature cannot be changed by the user.
2. Easier to clean: They are also far more resistant to soiling due to the lack of human contact. As a result, cleaning and maintenance are less needed.	2. Errors: Occasionally, fake signals from reflected light can trigger the sensor in such taps, they can sometimes become unresponsive.
3. Water savings: They can also result in considerable water savings, as the taps only run for as long as washing is needed. After some time of continuous use, many models have the opportunity to shut down automatically.	3. Certainly these taps require more initial investment than standard taps, plus remote control is also needed in order to change the default settings. However, in the long run, this tapware saves costs.

2. Waste reduction.

Every year, about one-third of the world's food produced for human consumption and around 1.3 billion tons of this food is either lost or wasted. Almost nine hundred million people in the world do not have enough food to eat. Each time food is wasted, water, electricity, time, manpower, soil, fertilizer, fuel packaging and money are wasted to produce, prepare, store, transport, cook the food. Food waste originates from a variety of sources:

- Spoiled or expired food;
- Peelings & trimmings;
- Inedible products such as bones, coffee grounds;
- Cooking errors;
- Plate waste.

The statistics of food waste is shown in the Figure 3.5:

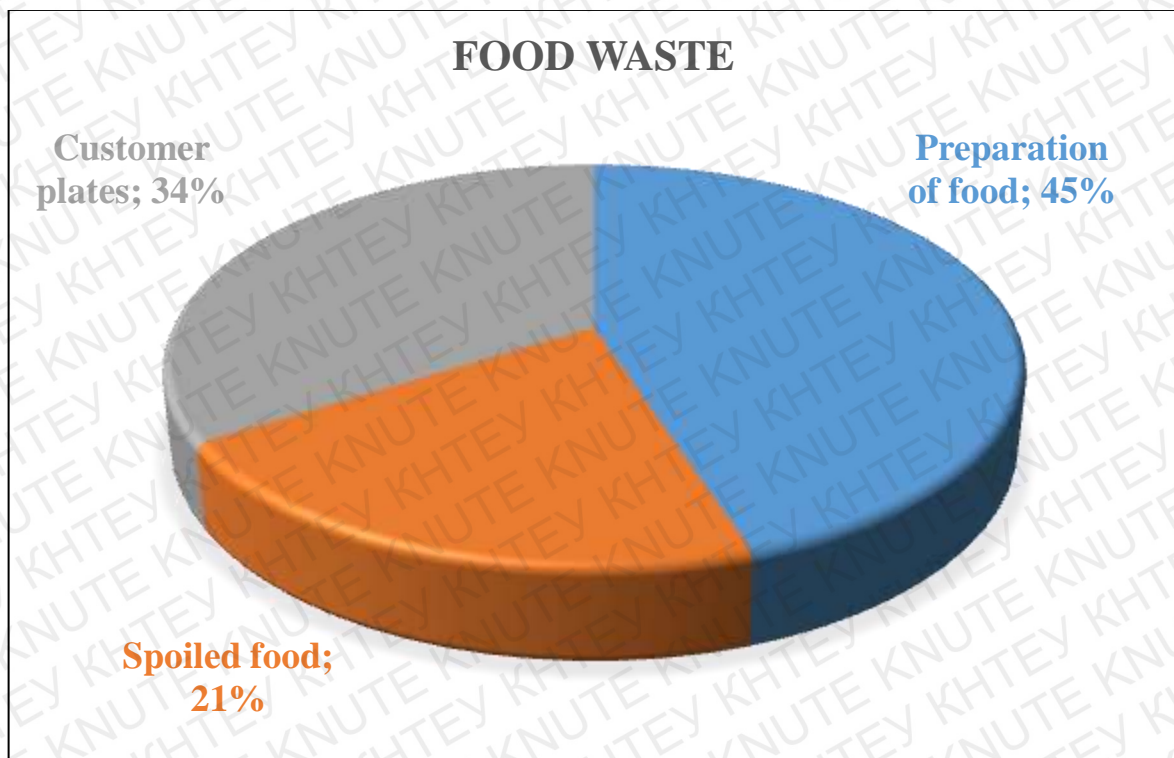


Figure 3.5. Holiday Inn food waste in hospitality industry

In June 2019 InterContinental Hotels Group has entered a partnership with so called tech company Winnow. This is a great step forward in reduction of the food waste in the hospitality industry because due to their new award-winning technology

which is called Winnow Vision Artificial Intelligence it will be possible to achieve a 30% reduction in food waste. This technology has been installed successfully in seven IHG hotels in Europe, Middle East, Asia & Africa (EMEA) region, with installation due in the coming months in another 30 properties.

Winnow Vision AI technology will help hotels reduce food waste by 30 percent. Through the use of a smart camera, smart measurements and AI-based smart meter technology, Winnow Vision evaluates ingredients and plates brought back to the kitchen throughout meal preparation to determine which ingredients are most wasted and in what quantities.

There is already an example of implementation of this technology. This approach is already taking advantage of InterContinental Fujairah Resort, UAE. The resort has been able to minimize food waste by more than 50% in just six months.

But as far as I am concerned, I consider that this technology should be implemented in all properties including Holiday Inn Hotels and Resorts. Here is a list of advantages and disadvantages of implementing Winnow Vision:

Table 3.3

Advantages and disadvantages of Winnow Vision AI technology

Advantages	Disadvantages
1. Error Reduction: This technology significantly reduces the error and the chance of accuracy with a greater degree of accuracy.	1. High costs: AI creation requires enormous costs as they are machines that are very complex. It takes a lot of costs to repair and maintain them.
2. No Breaks: Machines do not require frequent breaks and refreshments unlike humans. They are programmed for long hours and are able to perform continuously without becoming bored, distracted or even tired.	2. No Knowledge Improvement: Unlike humans, AI cannot be improved with experience. It holds a lot of data, but it is very different from human intelligence in how it can be processed and used.

Continuation of table 3.3

Advantages	Disadvantages
3. Faster actions and decisions: This technology aim is to make quick actions and decisions.	3. Unemployment: replacing people with machines can lead to unemployment on a large scale.
4. Risk taking: AI-powered computers do jobs that humans are either unable to do or would have to do with great care.	4. Bad calls: AI has no ability to make an argument for judgment and may never have the ability. It is impossible to replicate the human brain's innate intuitive abilities.

Many major companies of the hospitality industry have chosen to go plastic-free. From plastic straws to the complete removal of single-use plastics, a green travel experience is gradually being developed in the hospitality industry. Every year, the planet now produces around 300 million tons of plastic. Approximately 8.8 million tons of plastic will then be dumped directly into our oceans, which will never fully decompose. 70% of hospitality industry is currently looking to cut down on single-use plastics, like straws and water bottles.

IHG (InterContinental Hotels Group) have already started the campaign of reducing plastic waste. As it was already shown in the part 3.1 of my diploma IHG has announced that by the end of 2019 they will remove plastic straws from their global estate, representing over 5,400 hotels in almost 100 countries. Nearly 1,000 hotels have already removed plastic straws. As the studies show almost all hotels of the Holiday Inn brand got rid of plastic straws.

Holiday Inn and InterContinental Hotels (IHG) have informed that all bathroom products will be switched to bulk dispensers, refillable bottles and ceramic containers. In an effort to keep plastic waste out of the oceans, the company hopes to complete the transition by 2021.

Another suggestion to decrease plastic waste consumption is to remove plastic bottles of water and replace them with branded reusable glass bottles. They can be

replaced in conference rooms and in the guest rooms. Restaurant services can also replace all plastic beverages to the glassed once.

The example of the branded bottles that can be established in the Holiday Inn is represented in Appendix E.

Here is a list of advantages and disadvantages of using glass bottles:

Table 3.4

Advantages and disadvantages of using reusable glass bottles

Advantages	Disadvantages
1. Decent chemical stability, non-toxic and tasteless, cleanliness of the packaging and no negative effects;	1. Glass is solid, it has a firm structure and supports the package contents, but it is fragile as well;
2. Transparency is great and it clearly shows the contents;	2. It becomes much more dangerous when glass breaks. The edges of glass are sharp enough to break the skin, and finding all the pieces is often difficult. If broken glass blend unnoticed with the contents of a food package, if swallowed, they can cause internal damage.
3. It is longer lasting and can be multiple times washed while preserving its shape, durability and cleanliness;	
4. Water simply tastes better in a glass, glass is non-permeable and will not absorb color and fragrance;	3. Compared to paper or plastic containers, glass is heavier. Greater weight adds to the cost of shipping.
5. Unlike plastic, which would be "down-cycled" (meaning it is recycled into other items and every new bottle you buy is made of new plastic), glass can be reused again and again, which means a person can buy a recycled glass water bottle.	4. Food manufacturers seal food inside a plastic container and leave it to customers. In situation with glass bottle they need to find something to seal it. Manufacturers must take steps to prevent contamination from entering the packaging;

Continuation of the table 3.4

Advantages	Disadvantages
6. Even though a glass water bottle's initial cost is high, it saves you money over time.	5. During processing period, energy consumption is high and environmental pollution is severe.

The other solution for shortage of waste consumption can be coming up with the mobile app through which the guest can have electronic key instead of plastic one. Hoteliers realize that keyless access is not only the easiest and most effective way of giving guests access to their room – it is also the safest and the most efficient way.

For decades now, plastic key cards have been widely used in the industry, and while they have proved relatively inexpensive and efficient, they are also vulnerable to demagnetization, loss, theft, and hacking.

A Mobile Key is a digitally encoded "key" that resides on a mobile device, smartphone, or tablet enabling the user to access secure doors or other physical or digital access points within a property. The technological development of this mobile technology and its effective use of digital keys in the hospitality industry has resulted in a rapidly growing trend towards Keyless Entry.

If a hotel decides to move from the plastic keys to the mobile ones, the management should consider next things:

- End goal: they should what is a purpose of implementing such an innovation, are they doing it because it is a trend or this will make the hotel operate better;
- Options: Implementation of a mobile key system does not always have to be connected with the replacement of a full lock. Many devices include a module that can be reconfigured into existing locks to save time and cost of installation;
- Education: The decision of picking a mobile key provider should also be supported by appropriate planning and training of the hotel staff;

- **Integrations:** With hotel facilities and operations increasingly streamlined to make them more convenient and effective, hoteliers need to recognize the potential of a mobile key solution to work seamlessly with their guest-facing mobile apps and features that other companies can provide.

InterContinental Hotels Group already has an application called IHG –hotel booking & rewards. Holiday Inn as a part of IHG also uses this application. One of the suggestions could be include in this program opportunity for guest to make a quick check-in in this application and download a key from the room on the smartphone. The design of this Keyless application is visualized in the Figure 3.7:



Figure 3.7 Keyless applications for smartphone

Here is a list of advantages and disadvantages for keyless application system for a smartphone:

Table 3.5

Advantages and disadvantages for keyless application system

Advantages	Disadvantages
1. No more losing keys. If previously guest had to come to the reception for a new key because he lost it now it is not the problem because a person always has a phone with him/her.	1. A power failure with keyless systems can cause some problems. You never know if technology is going to malfunction, so it's best to have a standard backup key.

Continuation of table 3.5

Advantages	Disadvantages
2. No More Keys Fumbling. With keyless entry, when guests' hands are full, or when they are in a hurry, they will not have to waste time or energy searching for keys. The convenience of a keyless lock makes it easier for them to get safely and quickly into their room at any time.	2. If a person has trouble remembering passwords, this technology may cause a lot of problems and difficulties. Experts say that it is better to change the code from time to time to prevent theft.
3. Guests are able to track who is entering and leaving their room. One of the most wonderful benefits of a keyless entry system is that they can see precisely who enters and exits their rooms.	3. It may be unaffordable to use such devices. Keyless locking systems range from \$150 to \$250, while a traditional deadbolt lock's average cost is less than \$50.
4. The room key is coded when uploaded to a guest's mobile device using the guest's phone number, which ensures that the key cannot be moved to another device or room.	

Hospitality industry plays a huge role in protecting the environment. As consumers have become interested in having hotels reduce their resource consumption and address their impact on the environment, additional motivation has been given to the long-established and continuous effort by the hotel industry to control costs through such sustainable practices as limiting water and energy use. Despite years of conservation efforts, there is still substantial use of energy and resource in hotels — but that also opens the way for further environmental measures, which have the dual benefit of saving money and helping the climate.

CONCLUSIONS

It is a well-known fact that innovation is the key for ensuring a sustainable competitive advantage in any industry, especially in the hotel industry. Innovation is used in order to improve the competitive position of hospitality industry in an increasingly competitive global environment.

Innovation is often compared with such aspects as creativity, novelty, value creation. Nowadays hospitality industry highly depends on their capacity of being able to innovate in order to reach economy growth. A lot of different authors were investigating the process of innovation, its main stages and how to implement innovation in every industry, especially hospitality industry.

It is said that finding the optimal balance between development and innovation not only helps the production process and products to be continuously changed, but also shows the perspective, identifies new promising paths or business models, diversifying activities in order to meet new social needs.

Product innovation is the most common and well-understood type of innovation and is connected to creating a completely new product, adding a new feature in the existing one or enhancing features of the product that already exists.

The use and implementation of product innovations helps to improve the quality of service, increase the competitiveness and image of the hotel, making it unique. There are specific types of the product innovations such as technological, organizational and managerial, economic, marketing, ecological and informational types.

The statistics of the international travel show that the international departures worldwide highly increased. Growth in international travel departures is one of the most consistent trends. However, the origin of departures varies over time and it is important for travel business leaders to see where the next wave of visitors will come from.

InterContinental Hotels Group (IHG) is one of the world's leading hotel companies and its purpose is to provide True Hospitality for every guest. IHG is the

strong and confident global leader in the hospitality sector, with rooms accounting for 16% of the total global market share and 25% of the pipeline.

Brands of this company operate across the mid-and upper mid-scale segments, ranging from full-service hotels offering full-service services to extended-stay hotels offering longer-term accommodation compared to traditional hotels. Holiday Inn is a British-owned American brand of hotels, and a subsidiary of InterContinental Hotels Group.

Holiday Inn Hotels and Resorts – the most recognized hotel brand in the world, which has been pioneering unforgettable hotel experiences for millions of customers

Holiday Inn Hotels and Resorts has a much wider reach than its rivals and the company has proven itself countless times that it can supply to its owners; whether the property is situated on the outskirts of the city, in urban centers or in resort locations.

Due to the increasing anthropogenic stress on the planet and the potential for an environmental disaster, people began to be more cautious about the resources used, increasing demand for environmentally friendly goods.

Holiday Inn Hotels and Resorts use the IHG Green Engage Program. Green Engage is a pioneering online environmentally sustainable system that provides Holiday Inn hotels with the means to measure and track their impact on the environment.

As Holiday Inn Hotels and Resorts are engaged in the Green Engage project, they already have a list of developments that they have already introduced or are about to introduce. But nonetheless I have come up with some suggestions regarding shortage of water consumption, food and plastic waste reduction. They are next:

- Skipping the towel change;
- Ecological bathroom taps;
- Implementing Winnow Vision AI technology in all brands of Holiday Inn Hotels and Resorts;
- Start using branded reusable glass bottles instead of plastic ones;
- Create keyless application for smartphone.

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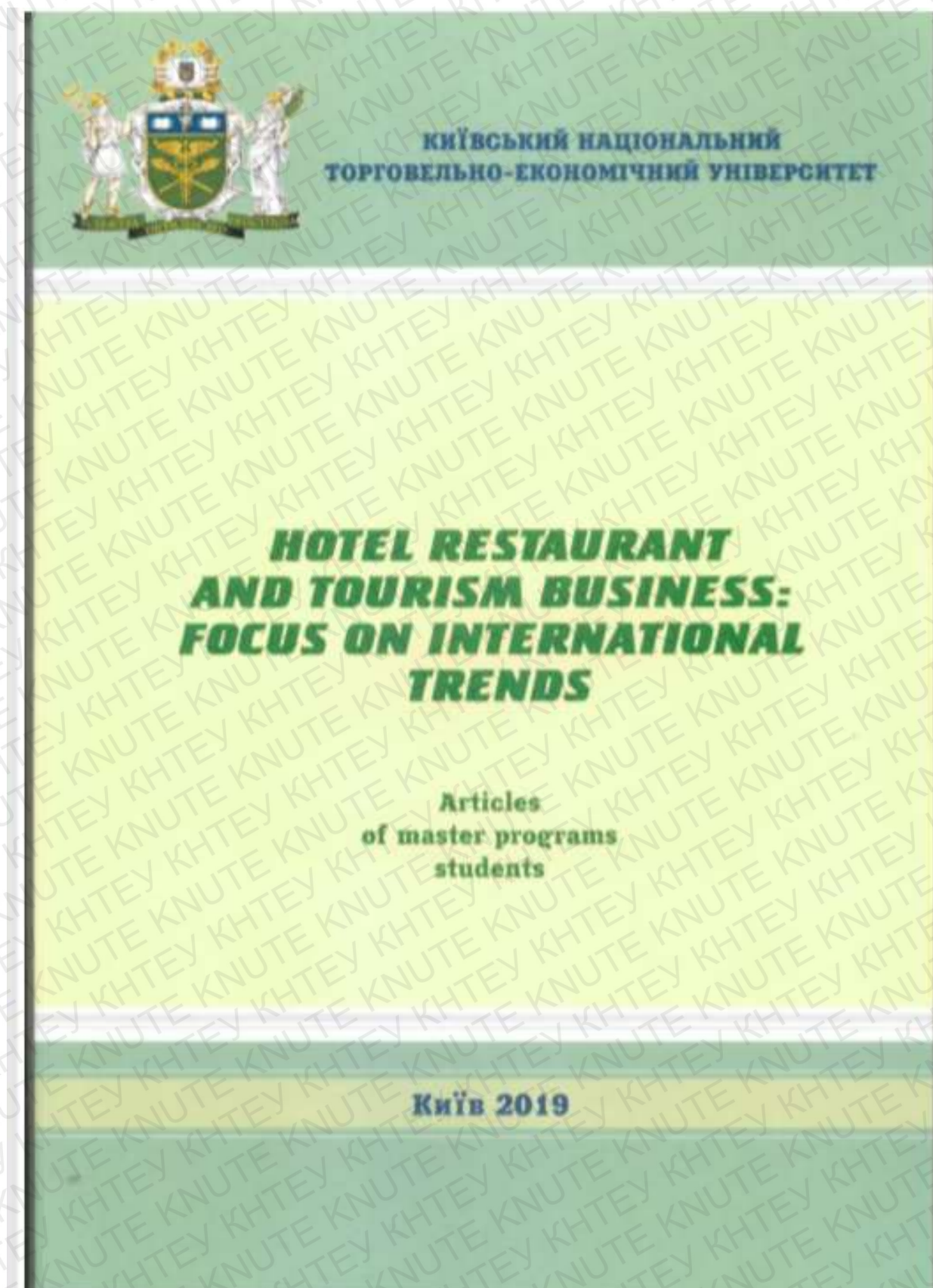
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APPENDENCIES

Appendix A

Article «Ecological innovations in the hotel industry»



**Kyiv National University of Trade and Economics
Hotel and Restaurant Business Department
Tourism and Recreation Department**

***HOTEL RESTAURANT
AND TOURISM BUSINESS:
FOCUS ON INTERNATIONAL TRENDS***

**Articles of master programs students
Specialty 073 «Management»
(specialization «Hotel and Restaurant Management»,
«Tourism & Resort-Recreational Management»),
241 «Hotel and Restaurant Business»
(specialization «International Hotel Business»),
242 «Tourism» (specialization «International
Tourism Business»)**

Kyiv 2019

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Work is executed under scientific guidance of the Doctor of Economic Sciences,
Professor MAZARAKIA A.

ECOLOGICAL INNOVATIONS IN THE HOTEL INDUSTRY

DVOINYH A., 2 course of Master FRHTB KNUTE
specialty «Hotel and Restaurant Business»

У даній статті визначено сутність поняття екологічної інновації. Розглянуто підходи і концепції, за допомогою яких можливо реалізувати еко-інновації, запропоновано способи впровадження управління природними ресурсами, наведено приклади використання еко-трендів в готельній сфері.

Ключові слова: екологія, інновації, ресурси, навколишнє середовище, вплив, розвиток.

This article defines the essence of the concept of environmental innovation. The approaches and concepts with which it is possible to implement eco-innovations are considered, ways of implementing management of natural resources are offered, examples of the use of eco-trends in the hotel industry are given.

Keywords: ecology, innovation, resources, environment, impact, development.

Relevance of the topic. Sustainability has become an essential issue for hospitality industry as they naturally consume a great amount of resources. Environmental issues are increasingly recognised as a significant concern for hospitality industries worldwide. Kemp and Pearson defined eco-innovation as the production, assimilation or exploitation of a product, production process, service or management or business method that is novel to the organization and which results in a reduction in environmental impact [1].

Eco-innovation has received considerable attention lately. The majority of hotels' environmental impact is derived from the unlimited and diffused consumption of nondurable resources including water, food, energy, paper, and other goods, followed by the emissions of pollutants and unfriendly materials to the local environment.

Analysis of research and publications. Several authors have been working on identifying the main aspects that affect firms' environmental orientation, finding solutions on how to reduce the consumption of nondurable resources. Among these scientists are: Amara N., and Landry, R., Kemp, R., and Pearson, P., Kesidou, E., and Demirel, P., Kassinis, G., and Soteriou, A., Bagur-Femenias, I., Ulich, J., Alonso-Almeida, Bohdanowicz, P., Zientara, P., Novotna, E., Blanco, E., Rey-Maqueira, J., Lozano, J. and many others. The quantity of special literature devoted to the

development of ecological strategies, their implementation, advantages and disadvantages, the results of application is constantly increasing [8].

The hospitality industry is an operations-based service, with large fixed costs, very dependent on tourism and leisure travel and with different management options. However, this traditional operations structure coexists with the quick adoption of innovations in information technology [4].

Taking into account the diversity of industry characteristics among services, the different sources of information that service firms use in their innovation processes and the different approaches to product and process innovation, the relative impact of the drivers on the environmental orientation in a specific service might justify a different action plan to promote eco-innovation. This study is the first approach in evaluating whether the drivers of the environmental orientation detected in previous studies exist and follow the same patterns in the hospitality industry [7]. The arguments presented above determine the *relevance and purpose* of this scientific article.

Research results. The study of theoretical aspects of the formation of the ecological management strategy in hospitality industry allowed us to conclude the motivators underlying the adoption of environmental practices in the hotel industry [9]. They are:

- cost reduction and efficiency;
- internal forces;
- external pressure.

Several studies have developed this perspective showing that motives related to cost include potential cost reduction, efficiency, competitor differentiation and attraction of new clients. Then, internal forces include management convictions and the organisational culture or cultural motivations linked to shared values, attitudes, commitments, beliefs and overall patterns of thinking socially constructed among members of an organisation. And last but not least are external motivators that include external pressures, clients' demands and the need for legal compliance [2].

Despite strong reasons for implementing environmental practices, the adoption of such practices is not lacking in problems. Hospitality industry has both internal and external barriers for implementing sustainable practices. Internal barriers include resources, comprehension and perception, implementation, management attitudes, and organisational culture, whereas external barriers comprise certifiers/ verifiers, economic issues, institutional weaknesses, and support [3].

Among internal barriers there are:

1. **Insufficient knowledge.** A lack of knowledge about environmental strategies and an underestimation of the importance of an organisation's carbon footprint.
2. **Human resources.** They have an aversion to change. The lack of human resources capabilities such as knowledge, skills and professional advice could be another key barrier to implementing environmental practices.
3. **Financial barrier.** It refers to the fact that many owners and managers are concerned with short term profitability and the need to meet budgets and deadlines.
4. **Hotel managers' resistance to implementing sustainable strategies.** This barrier reflects owners' attitude, the failure of hotel-industry managers to perceive the need and value of this field in relation to their business.
5. **Operational barrier.** A lack of staff members who understand the sustainable management of hotels has a great influence on implementing environmental strategy.

Among external barriers, the first type of barrier is the attitude of consumers. Certain hotel owners believe that mentioning sustainable strategies could have a negative impact on hotel image because some guests' scepticism towards the quality of alternative products is still rife. The second type of barrier is related to legislation and accreditation that is, prominent increases in water and energy costs that investors can hardly assess in terms of medium-term economic returns [6].

The summary is presented at Figure 1.

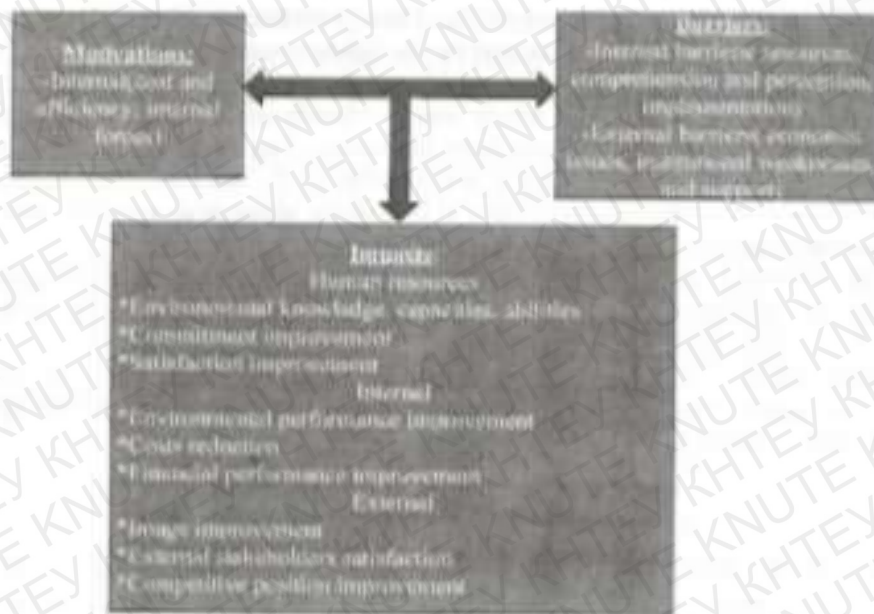


Fig. 1. Motivators underlying the adoption of environmental practices in the hotel industry

Adopting environmental orientation as a strategic precondition is crucial for sustainability initiatives and business performance. This requires hotel's top managers to integrate environmental direction into hotel's policies and strategies, champion environmental initiatives in hotel's systems and operations, and allocate the required resources. Once this orientation has become a strategic focus, hotel managers can begin to implement internal and external sustainability initiatives that can yield improved hotel performance [5].

Nowadays there are several ways that companies use to become eco-friendly. Hospitality industry use such trends as:

- Cutting down on food waste. For example, by growing food onsite, sourcing food locally, and shifting social norms to ensure that «plate waste» is no longer considered acceptable;
- Minimizing water usage beyond the hotel room. In addition to encouraging guests to be mindful of their water and towel usage, some properties are turning to innovations such as showers that filter their own water;
- Eliminating plastic. A step beyond recycling, doing away with single-use plastic products can help limit the huge amount of waste stemming from creating and discarding these items. Getting rid of plastic water bottles and plastic bags is a good place to start;
- Conserving energy. This method is effective and easy to apply, for example by redesigning the guest experience to encourage guests to apply adaptive behaviors. One way is to replace the mini-fridge and coffee machine in each room with a communal amenities area in an open guest space;
- Creating a paperless hotel. A task made easy by a modern property management system, which will simplify operations;
- Integrating sustainability into the hotel architecture. In building new properties, there is a «three-zero-concepts» approach: using local construction materials and skills (zero kilometers), prioritizing energy management and lower emissions (zero carbon dioxide), and introducing life-cycle management into the building process (zero waste).

Hotels must invest in the innovation. Innovation leads to superior efficiency especially in terms of optimal exploitation of resources like time, energy and money. Innovation also helps in optimal exploitation of human resources. Resources like time, energy and money are inter-related in

the sense that efficient use of time and efficient use of energy (human or otherwise) automatically lead to efficient use of money or working capital for the hotel concerned. Additionally, innovation can help the industry in reducing the costs of externalities such as pollution.

Conclusions. The purpose of this article was to identify some-determinants behind the environmental orientation of hospitality firms when innovating. This research contributes to both theoretical and managerial levels in the field of sustainability in the hotel context. Understanding the forces and effects of eco-innovation practices in the service sector is an essential quest at the heart of sustainability research.

This study provides an early empirical investigation of the relationships among eco-innovation practices, environmental orientation and environmental supplier collaboration in the hotel industry. It also examines their direct and indirect effects on hotel performance.

Hospitality industry needs to seize opportunities for innovation activities and orient the innovation process properly in an attempt to become more environmentally oriented and gain competitive advantage over their competitors.

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Work is executed under scientific guidance of the Doctor of Economic Sciences, Professor
BOYKO M. H.

Questionnaire: «Implementation of innovations»

IMPLEMENTATION OF INNOVATIONS**1. Enter your gender.**

- Male
- Female
- Prefer not to say

2. Enter your age.

- 18-30 years old
- 31-40 years old
- 41-50 years old
- 51-65 years old
- prefer not to mention

3. Does environmental degradation bother you?

- Yes
- No

4. What problems do you find the most important to solve in the first place?

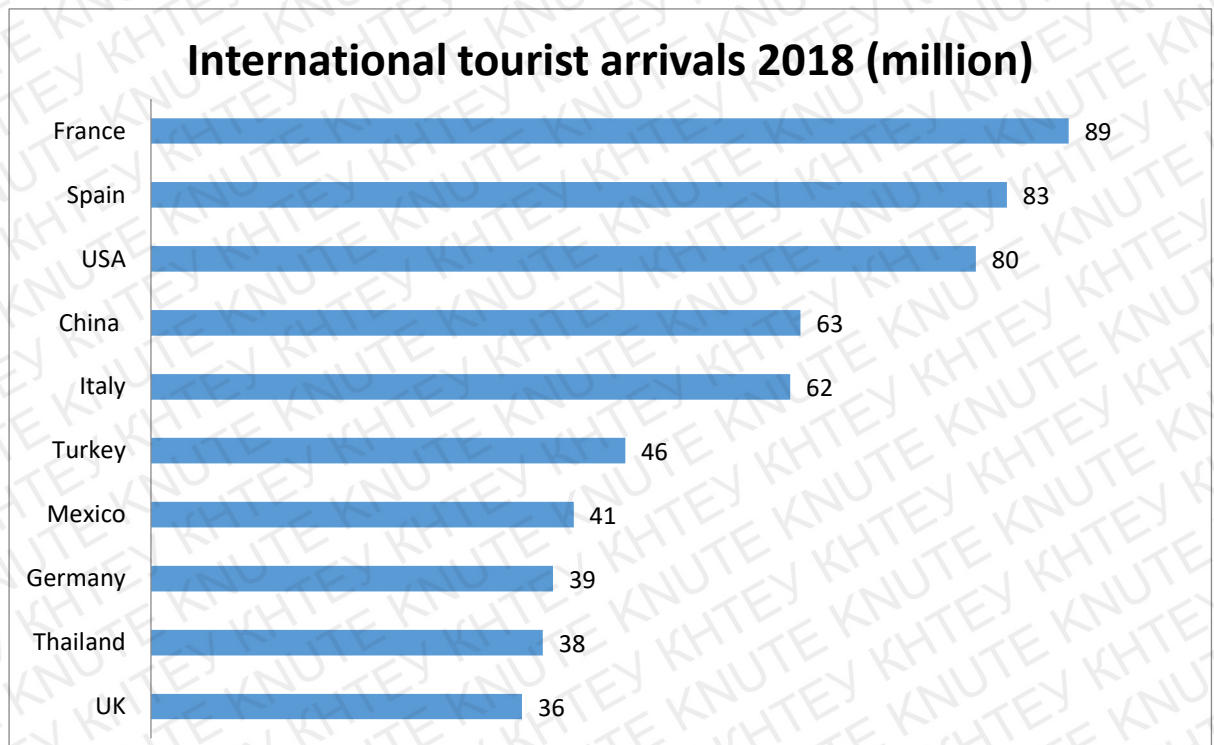
(you can give more than one answer)

- water pollution
- usage of the old technologies
- not enough smart technologies
- air pollution

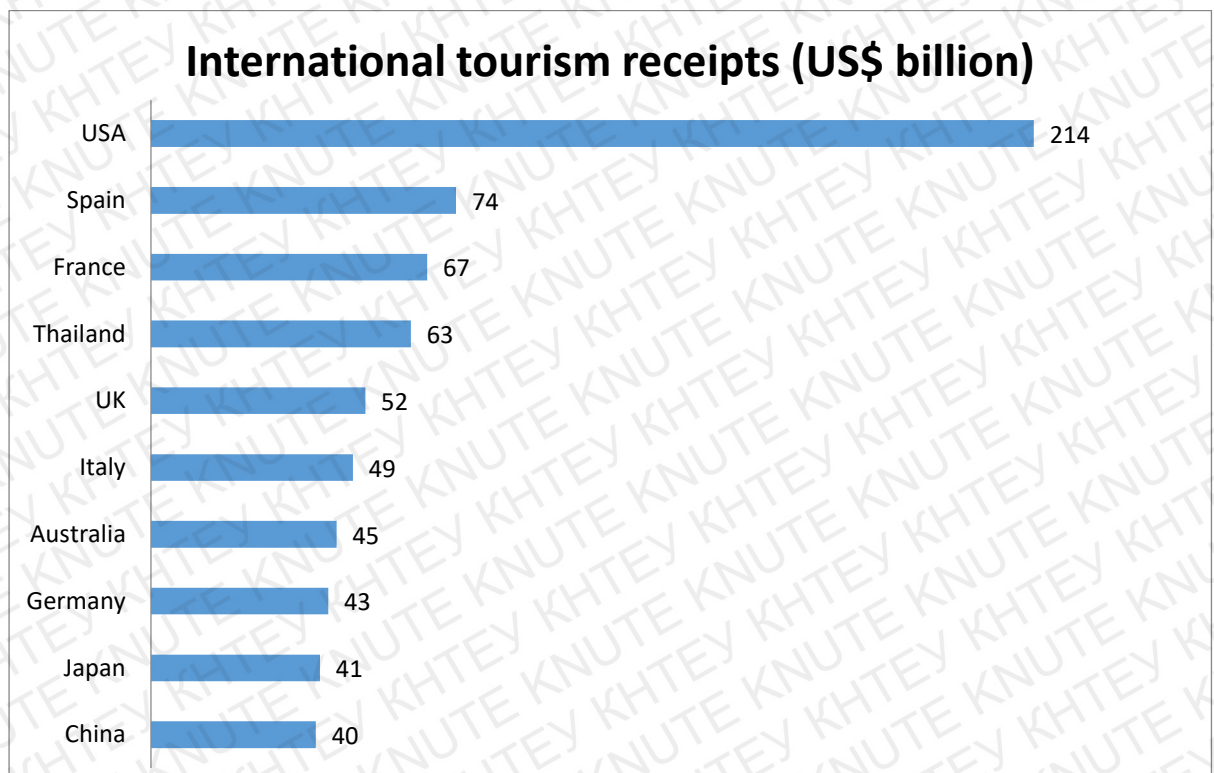
5. Choose what type of the innovation from your point of view is more important to implement first.

- Technological type (new technologies, products, materials)
- Ecological type (reducing water, energy consumption, environmentally friendly products)
- Marketing type (new brands of this hotel chain that will offer something different from other brands)

Statistics of international tourist arrivals



Statistics of international tourism receipts



Example of Holiday Inn branded bottle

