# ROMANIAN ECONOMIC AND BUSINESS REVIEW

Editor Bogdan Glăvan Romanian American University

Associate Editors Lucian Botea George Ionescu Flavia Anghel Tudor Edu Iuliu Ivănescu Romanian American University

Editorial Board

Moisă Altăr, Romanian American University Florin Bonciu, Romanian American University Mohamed Latib, DeSales University Galen Godbey, DeSales University Anthony Evans, European Business School Andras Inotai, Institute of World Economy, Hungary Academy of Science Mihai Aristotel Ungureanu, Romanian American University Ion Stancu, Academy of Economic Studies Constantin Floricel, Romanian American University George Ionescu, Romanian American University Nikolay Gertchev, European Commission Marcel Moldoveanu, Institute of World Economy, Romanian Academy of Sciences Alex Sharland, Barry University Ion Pohoață, Alexandru Ioan Cuza University Theodor Purcărea, Romanian American University Nicolae Idu, European Institute of Romania Cosmin Marinescu, Academy of Economic Studies Ovidiu Folcut, Romanian American University Josef Sima, Anglo-American University in Prague Laurențiu Anghel, Academy of Economic Studies Ilie Vasile, Academy of Economic Studies Klodiana Gorica, University of Tirana Pacha Malyadri, Osmania University Andreea Budacia, Romanian American University Marian-Florin Busuioc, Romanian American University Daniela Firoiu, Romanian American University

#### Statement of Purpose

Bogdan Wlodarczyk, University of Warmia and

Mazury

The Romanian Economic and Business Review (ISSN 1842-2497) intends to provide a forum for academic analysis of the economic phenomena and institutions affecting the world economy in general, and Romania, in particular. REBE examines a wide variety of phenomena related to economic growth and business development and attempts to publish high quality research focusing on the role of institutions and

public policy, within both a national and international context. *REBE* encourages cross-disciplinary research work of Romanian and foreign scholars.

Indexed and/or Abstracted in:
EBSCO; EconLit; ProQuest; Index Copernicus;
RePec

#### **Author Information**

The ROMANIAN ECONOMIC AND BUSINESS REVIEW (REBE) is a refereed journal published four times annually by the Romanian-American University. The editors invite submissions of articles that deal with important issues in economy and business. Papers that focus on specific phenomena and events affecting Romanian economy are particularly encouraged. Because REBE seeks a broad audience, papers should be comprehensible beyond narrow disciplinary bounds.

Manuscripts should not exceed 8,000 words and must conform to the REBE's style requirements, which are guided by The Chicago Manual of Style (14th edition). All submissions must include a cover sheet explaining the scope of the article, and including the authors' names and affiliations, telephone and e-mail address. The text should be single-spaced. References parentheses cited with using author/date/page style. Example: (Marcus, 2005, p. 74). Authors should use footnotes, not endnotes to add only short comments. Bibliography should include only references cited in the text, in the alphabetical order of authors. An abstract of no more than 200 words should be included.

Submission of a paper implies that the paper will not be submitted for publication to another journal unless rejected by the REBE editor or withdrawn by the author, and that it is an original work. All submissions should be sent to the journal Editor:

#### Dr. Bogdan Glăvan

Romanian-American University
Bulevardul Expoziției nr. 1B
București

E-mail: bogdan.nicolae.glavan@rau.ro

Subscription rates: Institutions - \$100/year Individuals - \$30/year

# ROMANIAN ECONOMIC AND BUSINESS REVIEW

WINTER 2024 VOLUME 19 NUMBER 4



# ROMANIAN ECONOMIC AND BUSINESS REVIEW

#### **CONTENTS**

CRISTIANA STEFANIA	DIRECTIONS AND GLOBAL	7
ANTONOVICI	TRENDS IN THE HOSPITALITY	
	INDUSTRY.	
	WHAT ARE THE TRENDS	
	INFLUENCING THE	
	HOSPITALITY INDUSTRY?	
MARIAN FLORIN BUSUIOC	THE IMPORTANCE OF	13
ANDREEA ELISABETA	MOUNTAIN TOURISM AND	
BUDACIA	STRATEGIES FOR ITS	
	DEVELOPMENT	
EMANUELA (ANTON)	THE INTEREST OF ROMANIAN	19
<i>MURGULE</i> Ţ	TOURISTS IN THE NORDIC	
ALEXANDRA-IOANA MILEA	COUNTRIES AS A SUMMER	
MARIANA SORLESCU	DESTINATION	
ADRIAN CIORANU	INNOVATIVE STRATEGIES	29
MANUELA LILIANA	FOR OPTIMIZING AIRPORT	
MURESAN	REVENUE STREAMS USING AI	
SILVIA-DENISA TARANU		
SILVIA-PATRICIA DODU	PRICING STRATEGIES IN	43
CAMELIA-ELENA CIOBANU	HOSPITALITY. ANALYZING	
IULIAN PASTIA	COURTYARD BY MARRIOTT'S	
	POLICIES AND THEIR IMPACT	
	ON OCCUPANCY RATES	

ICARTANIA COANTOĂ	THE ADOPTION OF	<b>7.</b> 2
MARIANA COANCĂ	THE ADOPTION OF	53
	ANGLICISMS BY THE	
	ROMANIAN ONLINE PRESS IN	
	TIMES OF CRISIS: GLOBAL	
	INFLUENCE AND LOCAL	
	ADAPTATION OF	
	INTERNATIONAL SPEECHES	
GINA GILET (LEFTER,	ANALYSIS OF CONSUMER	64
SZTRUTEN) DOBROTĂ	BEHAVIOR IN PURCHASING	0.
SZIKCIEN, DODKOIN	TOURIST SERVICES	
	TOOMST SERVICES	
CAMELIA M. GHEORGHE,	THE TRANSFORMATION OF	71
CRISTINA STOENESCU,	THE AVIATION AND TOURISM	/ 1
ROXANA-MONICA	INDUSTRY THROUGH SMART	
· ·		
CRĂCIUN, ANA MARIA	TECHNOLOGIES:	
ALEXA VOICU	INNOVATIONS, CHALLENGES,	
	AND PERSPECTIVES	
CATRINEL RALUCA	WHY BLEISURE TRAVEL?	91
DRIDEA		
EMILIA GABROVEANU	THE MOTIVATION OF HIGH	99
	SCHOOL GRADUATES IN	
	SELECTING UNIVERSITY	
	SPECIALIZATION	
ALEXANDRA MĂRGINEAN	STACEY HALLS' MRS	110
	ENGLAND OR A WELL-WOVEN	
	MYSTERY PLOT	
DENISA-ROXANA	THE IMPACT OF	122
BOTEA-MUNTEAN	DIGITALISATION IN A	
LUCIAN BOTEA	CIRCULAR ECONOMY. HOW	
	ARTIFICIAL INTELLIGENCE IS	
	TRANSFORMING TRADITIONAL	
	MARKETING INTO A GREEN	
	ONE	
ANDREIDÄDILLEGGI	IWODI D ECONOMY	122
ANDREI RĂDULESCU	WORLD ECONOMY –	133
	CHALLENGES	
	AT THE END OF 2024	

#### DIRECTIONS AND GLOBAL TRENDS IN THE HOSPITALITY INDUSTRY. WHAT ARE THE TRENDS INFLUENCING THE HOSPITALITY INDUSTRY?

Cristiana Stefania Antonovici\*

#### Abstract

The hospitality industry faces various issues and challenges that can impact its progress. In the last years, changes have been identified in the preferences of clients, who put more emphasis on sustainable and innovative practices. The future of the hospitality industry is created by the trend that emphasizes sustainability, personalized experiences, the integration of advanced IoT and AI technology, health and well-being through the integration of nutrition in menus and, finally, augmented reality. The current paper analyzes the impact that current trends have on customer experiences. The hospitality industry faces various challenges that can impact its progress. In recent years, shifts in customer preferences have been identified, with an increasing emphasis on sustainable and innovative practices. The future of the hospitality industry is shaped by trends focusing on sustainability, personalized experiences, and the integration of advanced technologies such as IoT and AI. Additionally, health and wellness are being prioritized through the incorporation of nutrition in menus, alongside the use of augmented reality.

**Keywords**: hospitality industry, tourism, trends, challenges, sustainability.

JEL Classification: Z30.

#### Introduction

It is already well known that the hospitality industry is influenced by numerous factors, both at micro and macro levels. Companies in the sector are constantly having to adapt to the changes that have occurred in recent years, especially in the post-pandemic period

The tourism and hospitality industry faces year after year different problems and challenges that can have both negative and positive impacts, both at the micro and macro level.

Over the last few years, changes in customer preferences have been identified, with customers placing increased emphasis on sustainable practices.

With the passing years the world is moving towards an increasingly digitalized society, and the hospitality industry is not left behind, it stands out as a hybrid industry, which combines and balances technological innovations in operations with the need to connect customers with human resources.

<sup>\*</sup> Cristiana Stefania Antonovici is at the Romanian American University in Bucharest. E-mail: stefania.antonovici@rau.ro.

Because trends in the hospitality industry are changing with the times, it is one of the most dynamic industries, with a rapid evolution both in the short, medium and long term.

Anticipating customer needs is one of the most important objectives for companies in the hospitality industry.

For companies in the hospitality industry, it is very important to be aware of and anticipate customer needs to be able to adapt to them. Analyzing data can help to identify and implement appropriate strategies geared towards customer needs.

The hospitality industry is one of the most dynamic industries, with a rapid evolution in the short, medium and long term.

According to the articles published by EHL Hospitality Business School (École hôtelière de Lausanne), 10 important trends of the hospitality industry for 2025 have been identified, among the main trends identified by them are the increasing weight of artificial intelligence in hotel activities, but also the redefinition of the relationship between hoteliers and their employees.

Robert Rauch (R. A. Rauch & Associates), also talks in his articles about ten trends in the hospitality industry, including the role of women in the top management of large hotels.

SIS Institute talks about five global trends of the hospitality industry, about the importance of companies in the field adapting to the needs of each individual client. It identifies as the main trends, sustainable practices and collaborations between operators in this industry and influencers for promoting the brand.

#### **Restoration of work teams**

In the post-pandemic period, one of the biggest challenges for hoteliers is to rebuild work teams. Due to the critical period during the pandemic, when many hotels were closed or had significant staff reductions. A large part of the employees laid off in 2020 found work in more stable fields and wanted to return to tourism. This led to new opportunities for new employees in the industry, they had the chance to negotiate their salaries and working conditions. It is predicted (Insights, EHL Insights, 2025) that the shortage of staff within the large hotel groups will improve considerably by the end of 2025.

To reduce and combat employee losses, many hoteliers offer much better remuneration packages, including, in addition to better salaries, free hotel accommodation and professional training courses.

#### Sustainability

Sustainability represents one of the current concerns in all economic fields, the hospitality industry has in recent years put a lot of emphasis on "the conscious use of resources in such a way that the resources are not exhausted or

damaged". For example, Marriott International has the sustainability and social impact platform Serve 360: Doing Good in Every Direction . "Serve Our World, guides Marriott's arrangement to have a positive and sustainable impact wherever they operate" .

JW Marriott Washington, DC is an example, in 2021 it received the inaugural Global Energy Management Leadership award, a very important distinction in the field of energy management and conservation, the award was received for the reduction of over 725 metric tons of carbon emissions, the equivalent the amount of carbon that would be removed from the air of 1532 acres of forest.

According to Denise Naguib, global vice president of sustainability and supplier diversity for Marriott International, Marriott aims to source locally 50% of the products used by the end of 2025, but also responsibly source 95% of the 10 most important categories of such as animal protein and seafood. In conclusion, Marriott International focuses on local supply, to support local communities, on preserving the natural climate and reducing carbon emissions.

Sustainability in 2025 represents a basic expectation from clients for everything that means ecological and sustainable initiatives in the hospitality industry, from the reduction of carbon emissions, of waste and sip to the supply of local and ecological products.

Sustainability Statistics

Hotels with sustainability certifications

Percentage of travelers preferring
sustainable brands

Reduction in plastic use by major hotel
chains

Table 1

Source: https://aura-group.com/the-latest-trends-in-the-hospitality-industry/

According to the study presented in table 1, the percentage of guests who prefer sustainable travel and brands increased in 2025, with an increase of 13% compared to 2022. As for the hotels that obtained sustainable certifications, their number increased in 2025 by 20% compared to the year 2022.

The main sustainable initiatives for the year 2025 in the hospitality industry are:



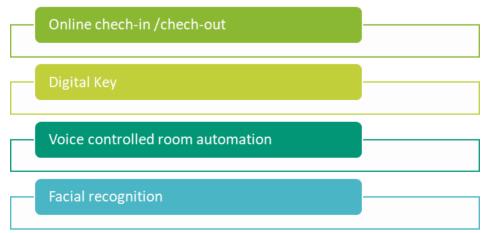
Source: https://sish.edu.sg/top-5-global-trends-in-hospitality-in-2024/#

In conclusion, hotel groups adopt as many sustainable strategies as possible, with as little negative impact on the environment as possible.

#### **Artificial intelligence**

Artificial intelligence is a concrete fact that is more and more common in modern society, in the hospitality industry it represents a current trend that is gaining momentum more and more. AI in the hospitality industry is not intended to replace human resources, but to come to their aid and help them offer better services.

**Contactless services** simplify the guest experience, first and foremost by reducing waiting time. Among the facilities can be listed (Insights, EHL Insights, 2025):



Citizen M, is the hotel brand that pioneered the implementation of contactless services in 2018, with a successful UX application.

Tabel 2

	2022	2025
Hotels using AI-driven concierge services	20%	60%
Expected increase in guest satisfaction through personalisation	10%	35%
Annual growth in hospitality tech spending	5 Billions euro	9 Billions euro

Source: https://aura-group.com/the-latest-trends-in-the-hospitality-industry/

Following the results shown in Table 2, we can see a significant increase in spending in the hotel industry for technological products and services in the last three years.

**Robotic systems** are now widely used to improve the efficiency of the operations in back-offices, such as housekeeping or food and beverages departments in hotels. These systems are widely used in Henn-na hotels in Japan, where a boost in efficiency was easily observed after the implementation of such systems, because the human staff could handle better more critical aspects of customer service.

Augmented realities has emerged as in important concept in hospitality management and, according to EHL in the Virtual Housekeeping course, allow an interactive and complete learning environment (Insights, EHL Insights, 2025). The global augmented reality market is projected to grow steadily in the next years as millenials are more likely than previous generations to use digital technologies. Some of the most effective uses in hospitality industry of augmented reality is interactive hotel rooms, as in Augmented Reality Florence Travel Guide – Italy.

**Personalized experiences** for guests, as in recent years clients want to have unique and different experences in their travels. More than 56% of consumers say they will become repeat buyers after a personalized experience. The current generations, especially the millennials, want to practice sustainable tourism and combine it with personalized experiences, they want to identify with the local culture, from the hotel environment to the culinary elements and the activities practiced in free time. More than other groups, millenials want an experience that makes them identify with the place they are visiting.

#### Women in the hospitality industry

Women in the last century have continued their quest for gender equality and made much achievements in leadership positions all around the globe in recent decades. In the hotel industry, too, they advanced into leadership and managerial roles with very good financial results for their companies.

Women in the hospitality industry – "in the year 2024, 58% of the human resource in the hospitality industry is represented by women, and 34% of them occupy management positions ".

#### Conclusion

The hospitality industry is a highly dynamic sector, continually evolving in response to shifts in both its microenvironment and macroenvironment. Experts in the field have pinpointed key trends and directions that are shaping the future of the industry. On top of the trends, we find sustainable and ecological development, the use of artificial intelligence and augmented reality is increasingly used in hotels all over the world.

For the year 2025, the trend is very clear, artificial intelligence becomes an integral part of operational systems within hotels.

It is important to underline the fact that the big hotel brands will diversify the range and more, they will offer less traditional experiences. For example, Hilton acquired "Graduate Hotels", to attract Generation Z and Millennials.

#### **References:**

- 1. https://aura-group.com/the-latest-trends-in-the-hospitality-industry/
- 2. https://hospitalityinsights.ehl.edu/hospitality-industry-trends
- 3. https://marriottbonvoyevents.com/news-and-highlights/article/372/how-marriott-is-expanding-its-sustainable-practices-for-events
- 4. https://segment.com/pdfs/State-of-Personalization-Report-Twilio-Segment-2023.pdf
- 5. https://sish.edu.sg/top-5-global-trends-in-hospitality-in-2024/#
- 6. https://www.bowo.fr/en/blog/the-worlds-top-10-hotel-groups-in-2020
- 7. https://www.cimso.com/2025-hospitality-trends-what-to-watch-out-for/
- 8. https://www.cloudbeds.com/hotel-business/brands/
- 9. https://www.costar.com/article/1223941439/top-10-hotel-trends-of-2025
- 10. https://www.costar.com/article/1223941439/top-10-hotel-trends-of-2025
- 11. https://www.hospitality.today/article/top-10-trends-in-the-hospitality-industry-in-2024
- 12. https://www.hypersolid.com/cases/citizenm
- 13. https://www.independenthotels.de/en/discover-top-5-hospitality-trends-2024-2025
- 14. https://www.mews.com/en/blog/see-the-future-with-the-2025-hospitality-outlook
- 15. https://www.mylighthouse.com/resources/blog/top-10-travel-and-hospitality-trends-2 025
- 16. https://www.phocuswire.com/amadeus-hospitality-trends-to-watch-2025
- 17. https://www.ucf.edu/online/hospitality/news/sustainability-in-hospitality-why-it-is-i mportant-and-how-industry-leaders-can-help/

## THE IMPORTANCE OF MOUNTAIN TOURISM AND STRATEGIES FOR ITS DEVELOPMENT

Marian Florin Busuioc, Andreea Elisabeta Budacia\*

#### **Abstract**

Mountain tourism represents one of the main forms of tourism practiced worldwide. The growth of mountain tourism has led to the creation of a large number of very diverse resorts in terms of size, location, altitude, architecture, and level of facilities. The selection of areas is based on the availability of suitable natural conditions for practicing the sports that define the profile of the resort.

Keywords: development, strategy, marketing, management, tourism.

JEL Classification: Z30.

The boom in mountain tourism has led to the creation of a large number of resorts, very diverse in terms of size, location, altitude, architecture, and level of equipment. The selection of territorial areas is made based on the existence of suitable natural conditions for practicing the sports that define the profile of the resort. Thus, for resorts intended for skiing, the focus is on relief conditions, climate, and temperature. For resorts primarily designed for summer tourism, the starting point is also the relief conditions, climate, and accessibility for hiking and mountaineering. In both cases, the evaluation of these resources and the determination of the optimal reception capacity are necessary, using general standards and specific techniques.

#### Policy and environmental protection in mountain areas

From the perspective of policies developed for mountain areas, France holds a central position and serves as an example of good practices in the specialized literature. After 1960, this country implemented a true mountain policy: the creation of the Service for the Study of Mountain Area Tourism Development and the Interministerial Commission for Mountain Area Tourism Development; the adoption of the "Plan Neige" in 1960; the passage of the Mountain Law in 1985; in the 1970s, the focus shifted to creating a large number of facilities aimed at attracting primarily foreign tourists. In 1977, with

Andreea Elisabeta BUDACIA□, PhD. Senior Lecturer, Romanian American University. E-mail: andreea.budacia@rau.ro.

<sup>\*</sup> Marian Florin BUSUIOC, PhD. Senior Lecturer, Romanian American University. E-mail: marian.florin.busuioc@rau.ro.

the change in the general economic situation, the focus shifted to multi-activities and the protection of natural heritage from tourism and tourist abuses

After 1980, the reorientation of France's mountain policy became clear: halting large-scale projects, focusing on quality rather than quantity, developing programs to equip existing resorts, modernizing ski lifts, cable cars, expanding the real estate sector, and improving access to resorts.

At the international level, the picture is contrasting: more advanced European states in mountain tourism, such as Spain, and extra-European industrialized countries like the USA, Canada, and Japan, continue to equip mountain areas. In countries with a tourism tradition in Europe, after the quantitative development phase of tourism, other priorities became more important: maintaining natural balance and better integrating tourism into mountain areas.

Mountain tourism also has negative environmental effects: increased erosion on slopes due to deforestation for access roads, ski slopes, and even resorts, the multiplication of cabins and holiday homes, and landscape alteration through the installation of cable car pylons; additionally, the risk of natural disasters is higher due to the multiplication of resorts, especially integrated resorts, which have altered ecosystems at high altitudes. Protective measures are multiple: stopping environmentally aggressive projects, conducting impact studies, strict zoning in land-use planning, establishing protected areas, national parks, and nature reserves.

The effectiveness of such measures depends entirely on the capacity of local communities to resist temptations and the rigor of authorities in enforcing existing legislation.

#### Mountain tourism has several important characteristics, such as:

- the rapid development of resorts after the war;
- the recent increase in visitation, which now raises concerns about the saturation of access and reception infrastructure;
- the degradation of the natural environment, which is highly vulnerable to mass tourism;
- the delayed adoption of policies to halt or control these phenomena. At the same time, mountain tourism has specific characteristics:
  - continuous and concentrated visitation in a small number of resorts;
- geographical and slope conditions that limit skiing to a few major massifs in temperate regions;
- the high costs of equipment necessary for various winter sports and services offered, which limits this form of tourism to wealthy countries.

#### Stages of mountain tourism development

It starts with the discovery of Chamonix by an Englishman in the early 19th century, who founded the British Alpine Club in 1857. This was followed by the acceleration of visitation in the 1930s and after 1960, as well as the specialization of several resorts in the early 21st century due to the appearance of new sports activities.

a. Initial phase (late 19th century - early World War I): This phase is linked to mountaineering, which was popular at the time, the discovery of the benefits of thermal water treatments and fresh air, as well as attracting various categories of people to vacation in mountain areas. The train made it easy to access the Alps, where higher and more picturesque areas are much appreciated: Mont Blanc, the Swiss and Austrian Alps, and the Dolomites. France with Chamonix (where the first Winter Olympics took place in 1924), Saint-Gervais, or Pralognan, Switzerland with St. Moritz, Davos, or Crans-Montana, Austria with Badgastein or Kitzbühel, attracted most of the new tourist flows. The Pyrenees also saw their share of international tourism with resorts like Luchon, Barèges, or Mont-Dore. Tourism provides additional resources to mountain communities, competing with agriculture and the development of urban industry, phenomena that led to the decline of traditional activities and the beginning of rural depopulation.

In 1894, the first mountain resort in Romania, Păltiniș, was established.

- b. Transition phase (1930-1960): Before the war, this phase was marked by an expansion of clientele and the appearance of new resorts at higher altitudes, specialized in skiing, such as Val d'Isère in France or Sestriere in Italy, developed starting from existing communities. After World War II, new resorts were developed, such as Verbier in Switzerland and Courchevel in France, which paved the way for the subsequent expansion phase. Accommodation structures developed, beginning to cater to middle-class social categories, sports equipment was improved, and ski slopes multiplied. Improved connections between resorts allowed access to areas that were previously isolated in winter. Winter sports also developed in other mountain ranges such as the Vosges, Jura, and Central Europe. In America, the first resorts were established in the Appalachians. In interwar Romania, resorts such as Sinaia, Buşteni, Lacu Roşu, Predeal, and Cheia were developed.
- c. The great development phase (1960-present): This phase focuses on the expansion of winter vacations: improved living standards in Western societies, increased vacation duration, democratization of travel, and the youthfulness of the population due to the "baby-boom" period. We witness a true "frenzy" in the creation of resorts, starting from existing villages or higher altitudes in the Alpine areas. The French, Austrian, and Swiss Alps benefited from the boom in mountain tourism. The tourism movement also reached the Central European massifs (Tatra) and the Balkan massifs (Dinaric Alps,

Rhodope Mountains), and spread to the Caucasus, the mountains of Lebanon, and Iran. In this global tourism boom, major resorts were built in North America, Japan, and New Zealand.

In this period, Romania developed resorts such as Poiana Braşov, Borşa, Semenic, Stâna de Vale, Vidra, Voineasa, Durău, Azuga, Pârâul Rece, and Fântânele. Recently, the number of tourists engaging in extreme sports such as paragliding, bungee jumping, mountain biking, canyoning, rafting, extreme skiing, snowboarding, etc., has increased, even becoming a trend.

#### **Proposals for Mountain Tourism Development**

Short-term development will focus on capitalizing on resources that contribute to the region's tourism potential. Another priority for tourism is the development of human resources in the tourism sector. Increasing the region's visibility, developing regional marketing. For this sector to grow significantly in the future, coordinated promotional actions are needed, aiming at the full utilization of tourist objectives across the entire region. Along with investments in rehabilitation and modernization of this sector, a well-directed and sustained tourism advertising campaign is necessary to increase the region's visibility through the development, diversification, and promotion of the tourism offer.

To support economic development, local productive sectors should be supported to ensure a healthy and safe growth of the economy. Improving this field involves capitalizing on local specificity, introducing new technologies, supporting innovative activities, and promoting alternative energies as a field of activity or as an environmental protection measure.

For the tourist image, it will be essential to preserve elements of local cultural identity in a well-protected and developed natural setting.

The local economy will be advantaged by innovative activities that will grant a high degree of competitiveness, and products will be recognized on European markets for their quality and specificity.

Other ideas for capitalizing on mountain tourism include:

- facilitating the promotion of quality in ecological tourism through mass media and institutional means;
- using revenue from penalties (such as littering in unapproved places) for the development of eco-tourism and leisure activities;
- establishing permanent contact with the community regarding the level of tourist and ecological education;
- reducing the impact on the number of protected species through non-ecological tourism practices. The uncontrolled development of tourism can exert great pressure on the natural environment, leading to its degradation, and thus the implementation of ecotourism should be promoted, not only in protected natural areas;

• installing restrictive signs in areas declared as natural habitats of protected species.

#### Ways to Develop and Modernize Infrastructure

A key factor in economic development, the transportation system becomes a priority due to the authoritative need to solve infrastructure issues to facilitate economic and social development in terms of efficiency and sustainability.

The first strategic objective is to increase accessibility. This will be pursued by reducing travel times to key destinations, achieved through the development and rehabilitation of road infrastructure, especially highways and railways, to meet the heavy traffic of goods and passengers, as well as reconsidering other modes of transport. The development of the transport network will lead to the harmonious development of the area. Another measure is ensuring territorial cohesion, by finalizing highways under construction, building new highways, and express roads.

A perspective that will lead to the accelerated development of the road network is the establishment of strategic road corridors. By modernizing and rehabilitating sections of roads included in these corridors, traffic will be ensured under optimal safety and comfort conditions for all vehicle types.

#### **Proposed Activities:**

- continuing and diversifying promotional activities for tourist attractions:
  - building and promoting the Maramureş county brand, for example;
- building and promoting local tourism brands focused on the county's four regions: Țara Chioarului, Țara Lăpușului, Țara Codrului, Țara Maramureșului;
  - participating in international tourism fairs;
  - properly organizing and promoting events with national impact.
- promotion of other regions of Romania situated in the mountain area, for example: Tara Lovistei, Tara Bârsei etc.

#### **Future Projects:**

- diversifying and increasing the print run of promotional materials;
- returning to active promotion by participating in fairs and expanding advertising space in relevant publications;
- raising awareness about the danger of losing traditional architecture and creating legal frameworks to prevent construction in still pristine areas;
- creating an authenticity certificate for traditional agro-tourism pensions and promoting them;
- improving pedestrian and cycling tourism infrastructure, creating related tourism offers;

• facilitating tourists' access to wooden churches as tourist objectives.

The focus will be on ecological tourism, reducing the impact on protected species, and installing signs restricting access in areas declared as natural habitats for protected species.

Mountain tourism becomes even more interesting through its overlap with spa tourism, contributing to better exploitation of a resort's, region's, or country's tourism potential.

#### **Bibliography**

- 1. Balaure V., Cătoiu I., Vegheș C. *Marketing turistic*, Editura Uranus, București, 2005
- Băltărețu A., Amenajarea turistică a teritoriului, Editura Universitară, București, 2013
- 3. Frenț C., Impactul economic al turismului statistică și metode de evaluare , Editura Universitară, Bucuresti, 2009
- 4. Neacşu N., Băltărețu A., Neacşu M., Drăghilă M. Resurse și destinații turistice interne și internationale -, Editura Universitară, București, 2009
- 5. mturism.ro
- 6. incdt.ro

# THE INTEREST OF ROMANIAN TOURISTS IN THE NORDIC COUNTRIES AS A SUMMER DESTINATION

Emanuela (Anton) Murguleț\*,
Milea Alexandra-Ioana\*\*,
Sorlescu Mariana\*\*\*

#### **Abstract**

In the last period of time, the tourism sector has witnessed the development of a new trend called the coolcation. The interest of the tourists for spending summer in destinations with mild temperatures has grown like never before due to the constant climate changes that made consumers rethink their vacation preferences. Destinations such as Norway, Denmark, Iceland or Sweden have become very popular amongst tourists because of the unique experiences promoted such as the Artic Circle, the Aurora Borealis or the Midnight Sun, tranforming them into must-visit countries during the warm season. The enthusiasm for these destinations has also risen in Romania in the last years. While most of the Romanian tourists perceived the summer as a chance to vacation in sunny locations with access to the beach, a growing number of people now prefer exploring cultural attractions in colder regions.

**Keywords:** coolcation, Nordic destinations, summer vacation, tourism trend

JEL Classification: Z30, Z31, Z32, Z33

#### I. Coolcation – the new trend in European tourism

The climate changes seen in the recent years have led to the transformation of the tourism industry all over the globe, causing the emergence of an innovative phenomenon – the coolcation.

The coolcation is the new trend in the tourism industry that involves spending summer vacations in destinations with a temperate or cold climate. This preference appeared because of the extreme climate changes registered in Europe in the last decade, highlighted mainly in the holiday destinations in the Mediterranean Sea region. In countries such as Spain, Italy and Greece, extreme temperatures were recorded in 2023 and 2024, accompanied by wildfires and extreme drought.<sup>1</sup>

<sup>\*</sup> Emanuela (Anton) Murguleț, Bucharest University of Economic Studies, Romania, e-mail: antonc.emanuela@gmail.com

<sup>\*\*</sup> Milea Alexandra-Ioana is Master Student at the Romanian-American University, Bucharest, e-mail: milea.i.alexandraioana23@stud.rau.ro

<sup>\*\*\*</sup> Sorlescu Mariana is Associated Professor at Romanian American Universitry, Bucharest, mariana.sorlescu@rau.ro

<sup>&</sup>lt;sup>1</sup> https://www.dw.com/en/coolcation-is-climate-change-transforming-travel/a-70187090

Moreover, the experts' forecasts regarding the climate show a constant increase in temperatures in the coming years, a fact that directly favors the growth of interest in colder destinations.

The Nordic countries became the region that experienced one of the biggest increases in demand in the post-pandemic years, a boost favored by summer temperatures maintaining at around 20-25 degrees Celsius, the absence of crowds and the possibility of participating in many activities in nature.

The growing interest for the Nordic destinations can be observed from the overall number of nighs spend in the summer of 2024. Finland, Norway, and Sweden saw a rise in the number of overnight stays compared to the previous summer. Out of all the four destinations, Sweden was the top pick for tourists, with the capital Stockholm being the favorite choice.<sup>2</sup>

Also, between June and August 2024, Norway experienced a historic increase in the number of registered night stays, setting a new record and measuring a 3% increase from last year.<sup>3</sup>

•		•	
Overnight stays (million)	Foreign	Domestic	Total
Sweden	8,5	20,5	29
Denmark	7,5	18,5	26
Norway	6,3	10,7	17
Finland	1,8	9,2	11
Iceland	3.1	6.9	10

Tabel no. 1. Overnight stays in the Nordic destinations during summer 2024

#### Source:

https://www.insights.visitory.io/post/tourism-boom-in-the-nordic-countries-the-key-figures-of-nordic-tourism-in-summer-2024

In addition to the fact that they offer mild temperatures during the summer, the northern destinations attract tourists due to their accessibility with various means of transportation. In the last decade, the major airlines have increased the number of flights to this region, adding new destinations every year. Moreover, all northern destinations have the common characteristic of being easy to discover by car during a road trip.

Another reason why tourists prefer these destinations is represented by the lack of crowding that can be found in the peak season in the coastal areas of

https://www.insights.visitory.io/post/tourism-boom-in-the-nordic-countries-the-key-figures-of-nordic-tourism-in-summer-2024

https://www.insights.visitory.io/post/tourism-boom-in-the-nordic-countries-the-key-figures-of-nordic-tourism-in-summer-2024

Southern Europe, as well as the possibility of visiting new, less discovered regions that offer a multitude of activities for all types of preferences. From visiting the northern capitals or observing the Aurora Borealis to visiting volcanoes or glaciers in Iceland, practicing cycle tourism in Sweden or observing the white nights in Greenland, tourists can be attracted to various destinations that combine the mountain area with the coastal area.<sup>4</sup>

Among the most popular Nordic destinations are Iceland, Denmark, Sweden and Norway. They have developed their destination brand in recent years, creating strategic marketing plans and offering the highest quality experiences.

The Swedish tourism association, Visit Sweden, supports this change, underlyning the fact that tourists are increasingly interested in visiting places with mild climates. Their website emphasizes the shift from seeking warmth to seeking comfort in colder regions. In the same way, Visit Norway promotes trips to the north as a cool option to escape the hot summers of southern Europe.

The scientific article focuses on the reasons that led to the increase of curiosity for northern destinations, having a particular importance in the analysis of how Romanian tourists perceive this trend as a potential fashion for spending summer vacations in the future based on imminent climate changes.

Thus, this study has as main objectives:

- observing the factors that determine tourists to choose northern destinations
- identifying preferences regarding the organization of vacations in such destinations
- shaping the profile of the tourist willing to spend a summer vacation in the northern region of Europe

The importance of the objectives resides in the connection between them and the observation of the tourist market in Romania, with the main goal being the development of this trend through the creation of new tourist packages, the introduction of new air destinations and the adaptation of this phenomenon to the tourism conditions in our country.

The research method is grounded and focuses on understanding the knowledge in the field, with a qualitative research approach focused on describing the phenomenon by documenting current information and opinions and carrying out a survey-type study.

### II. The impact of the coolcation on the tourism industry in the Northern destinations

The summer holidays spent in the northern region of Europe represent a major point of interest on the global tourism market, a fact that leads to the

<sup>&</sup>lt;sup>4</sup> https://www.visitnordic.com/en/nature-activities

appearance of some experts' opinions that predict a change in the tourists behaviour and their preferences.

The EU Commission predicts changes in tourism models, with the countries of Northern Europe and Central Europe being prepared to benefit from a fulminant increase in the number of tourists in the next decade. Destinations such as Denmark, Finland and Sweden are expected to be among the most popular, while countries such as Greece and Spain could see a drop of up to 30% in tourism receipts. <sup>5</sup>

The table below shows an upward trend in terms of the number of tourists who spent their vacation in a destination in the Nordic Region of Europe in the last 3 years. Moreover, tourist activity in the Nordic countries is also increasing in terms of overnight stays, which have exceeded pre-pandemic levels. The increase is most visible in Norway (+18%), Sweden (+12%), Iceland (12%) and Denmark (+9%). The increased fascination is partly fueled by the allure of wild landscapes and the mesmerizing northern lights. <sup>6</sup>

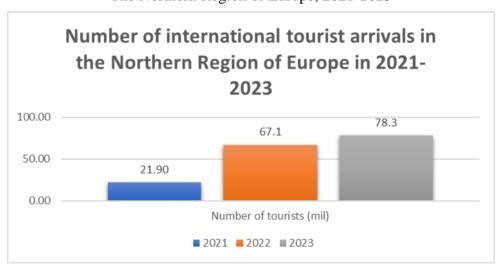


Figure no.1 Number of international tourist arrivals in The Northern Region of Europe, 2021-2023

Source:https://www.statista.com/statistics/261702/international-tourist-arrivals-in-europe-by-region/

Additionally, the increased interest in these destinations leads to a stimulation of the local economy, in 2023 the northern region registering an

<sup>&</sup>lt;sup>5</sup> https://www.ndtv.com/world-news/climate-change-drives-surge-in-coolcation-travel-trends-w hat-you-need-to-know-6550151

<sup>&</sup>lt;sup>6</sup> https://etc-corporate.org/news/european-tourism-recovery-continues-into-2024-with-travel-expenditure-expected-to-hit-record-numbers/

increase of 6% compared to the previous year in terms of tourist expenses, reaching a level of 124 million dollars. <sup>7</sup>

The enthusiasm for spending summer vacation in the Nordic countries also led to the transformation of the tourist offer present in these destinations. In this sense, the Finnish tourism sector already knows the potential for increasing the number of tourists, so it offers unique experiences of spending some white nights in nature. At the same time, night hikes are planned in Lapland and Finland, nature trips are promoted in Iceland to observe geysers and glaciers, and cruises to discover the fjords are organized in Norway.

Climate change is not the only explanation for the development of tourism in Scandinavia. Currency devaluations in Norway and Sweden have increased the attractiveness of these countries to foreign visitors. <sup>8</sup> The area is also experiencing various advantages due to a growing trend in post-Covid travel globally.

One of the advantages given by the interest in these destinations is represented by the greater number of stops made by cruise ships in this region, a fact that brings more income to the economy of countries such as Iceland, Norway or Sweden.<sup>9</sup>

Also, the growing demand for these destinations has led to the expansion of foreign air travel, with major airlines adding connections with various European cities. In terms of domestic tourism, the companies in the area have increased the frequency of flights and added new routes to meet the needs of tourists and encourage the visit of more tourist attractions.

The effect that climate change has on tourism demand can also be seen through the analysis carried out by the British tourist cruise operator Iglu Cruise, which observed a 235% increase in 2023 compared to the previous year for cruises in the Arctic region, more precisely Finland , Sweden, Denmark and Norway. $^{10}$ 

The global trend of spending vacations in northern destinations also extended to Romania, so that in 2023 the growth for such vacations increased by 30% compared to the pre-pandemic period. <sup>11</sup>

Another factor contributing to the increased interest in the Northern European region is sustainability. The Nordic countries are at the top of the

.

<sup>&</sup>lt;sup>7</sup> https://www.infobae.com/wapo/2024/07/08/los-turistas-escapan-a-la-fresca-escandinavia-en-lugar-de-los-puntos-mas-calurosos-de-europa/

<sup>&</sup>lt;sup>8</sup> https://www.euronews.com/business/2024/08/08/norwegian-tourism-gets-boost-as-weaker-kro ner-draws-visitors

<sup>&</sup>lt;sup>9</sup> https://www.infobae.com/wapo/2024/07/08/los-turistas-escapan-a-la-fresca-escandinavia-en-lugar-de-los-puntos-mas-calurosos-de-europa/

<sup>&</sup>lt;sup>10</sup> https://www.iglucruise.com/blog/travel-trends-the-rise-of-the-coolcation

<sup>&</sup>lt;sup>11</sup> https://economedia.ro/turistii-romani-interesati-de-destinatiile-din-europa-de-nord-cat-costa-o -croaziera-in-timpul-noptilor-albe-la-cercul-arctic.html

European ranking in terms of eco-tourism, constantly implementing multiple sustainable policies and practices. In this way, the region attracts tourists who are more and more involved in protecting the environment and spending a vacation as healthy as possible, emphasizing the promotion of natural attractions and biodiversity, local gastronomy and authentic experiences.<sup>12</sup>

#### III. The interest of Romanian tourists for the Nordic destinations

This scientific article adopts a qualitative research with the aim of observing the interest of Romanian tourists for the Nordic destinations as a way of spending their summer vacation away from the hot temperatures and their effect on the climate. For the purpose of the research, the questionnaire method was chosen, as we used a survey that included 27 questions answered by 56 respondents through an online app.

Regarding the analysis of the data resulting from the interviews, the strategy of data reduction through the coding method was used. Therefore, the information obtained was divided into categories based on a similarity of the answers and transposed into a table. A quantitative analysis was added to this method by establishing the frequency of certain terms and ordering the items according to the number of responses.

Regarding the analysis of the responses received, we observed an elevated level of enthusiasm of the respondents for this region, as 54% of them stated they prefer to spend their vacations in destinations with cold climates rather than hot climates and 80% of them responded they are interested in spending their summer holiday in a Nordic destination, aligning our country with the global trend known as Coolcation.

Another element we noticed is the close results in terms of preffered countries with Iceland leading the way with almost 30% of responses, followed by Norway with 24%, Denmark with 18% and Sweden with 17%.

Related to the favorite destinations is the attractiveness of the Nordic region offers. As seen in the table below, packages that include the discovery of Iceland and the possibility of observing the Aurora Borealis are at the top of interest for the Romanian tourists, succeded by the Fjords in Norway and the White Nights or the Midnight Sun.

\_

<sup>&</sup>lt;sup>12</sup> https://bpholiday.com/scandinavian-summer-tourists-flock-to-cooler-destinations/

Attractiveness of Nordic tourist offers Artic Circle North Cape 5 Norway Fjords Fascinating Iceland 32 White Nights Summer in Lapland = 10 Aurora Borealis 31 The Capitals of Northern Europe The Norway Grand Tour 15 20 25 30 35

Figure no.2 Attractiveness of Nordic tourist offers

Source: author

As for the main reasons of planning a vacation in the Nordic destinations, Romanian tourists stated that the Aurora Borealis is one of the most important parts that play in choosing a trip to this region, followed by the posibility to relax and detach as these countries offer a break from the overcrowding that happens in popular tourist destinations. The unique tourist attractions, the posibility to do activities in nature, the spectacular landscape or the mild climate are other reasons for which tourists would opt for these countries as a place to spend their summer vacation.



Figure no.3 Main reasons for planning a vacation in these destinations

Source: author

In regards to the planning of a trip to the Northern region, 50% of people document about what activities they can do in the first two days, while 38% of them plan their whole trip with long time ahead, the first option to retract information about the experiences in the region being the Internet (93%). Also, 79% of the respondents said they organize the vacation alone, while only 21% of people choose a tourism agency either for the transport and the accomodation or for full packages.

Most of the tourists choose to travel in the months of June (29%) and September (34%) as these are the times when most of the destinations are less crowded and they can enjoy their real potential.

Additionally, the average period of stay is 4 to 7 days (48%) as it offers the time to visit more attractions and to spend more time discovering the nordic culture, followed by 8 to 10 days (27%) and 1 to 3 days (23%) for people who prefer city-breaks in the capitals of this region.

In regards to the actual vacation, the majority of respondents want to spend it with their family (50%) or friends (46%), choose individual planning (89%) rather than group planning (11%) and would spend a budget between 2000-5000 lei (61%) or above 5000 lei (30%), showing great interest to cultural attractions mixed with activities made in nature such as trekking or hiking (59%).

In order to get to the destination, 73% of the tourists opt for the plane, while the rest are divided between train and personal car. At the destination, tend to travel either with a rented car (36%) as it is convenient for road trips, with local buses (36%), mainly in the capitals and with the train (23%) as the the railway system in the region is extremely developed.

Most of the Romanian tourists prefer to spend their vacation in a hotel (52%) or an apartment (43%) and opt for a Bed&Breakfest type of meal (59%) as they want to experience the local cuisine outside of the accommodation.

In regards to the typical profile of the Romanian traveller who wants to spend the summer vacation in the Northern destinations the common characteristics include a frequency of travel of 2 to 3 times a year (63%), vacation time split in 3 breaks over the course of one year (64%), a preference for the mountain destinations (54%), an avearge age of 18 to 24 years old (36%), followed by 35 to 44 years old (29%), educational level at superior studies (59%), professional status at employee (59%) and student (34%) and an avearge monthly income of 4000-6000 lei (59%).

#### **IV.Conclusions**

Climate changes that happened in the last decade have affected the tourism industry, shaping and developing new trends along the years. The coolcation, a phenomenon that implies the spending of the summer vacations in

regions with mild or cold temperatues has become extremely popular amongst tourists who are in the search for new, undiscovered attractions.

The Nordic region has started to record a growing number of tourists interested in destinations such as Norway, Iceland or Denmark or in activities such as exploring the fjords, seeing the Aurora Borealis or visiting the gheizers and volcanoes.

The Romanian tourists also seem to be part of this trend, as the demand for packages including the Northern destinations has witnessed a boost in the last years. The results of the study realized on the tourists show a growing enthusiasm for this region and a preference towards activities in nature mixed with cultural attractions, local cuisine and overall off the beaten track experiences.

Therefore, a development of the offers for this region can benefit the tourism market in Romania, as this trend is set to grow in intensity duet o the constant climate changes and rising temperatures recorded in the destinations that are now popular such as the Mediterannean region.

#### References

- 1. BP Holiday. (2024, September 12). *Scandinavian Summer: Tourists Flock to Cooler Destinations*. Accessed from BP Holiday: https://bpholiday.com/scandinavian-summer-tourists-flock-to-cooler-destinations/
- 2. Economedia. (2023, February 20). Turiștii români, interesați de destinațiile din Europa de Nord. Cât costă o croazieră în timpul Noptilor Albe la Cercul Arctic. Accessed from Economedia.ro: https://economedia.ro/turistii-romani-i nteresati-de-destinatiile-din-europa-de-nord-cat-costa-o-croaziera-in-timpul-n optilor-albe-la-cercul-arctic.html
- 3. European Travel Commission. (2024). European tourism recovery continues into 2024, with travel expenditure expected to hit record numbers. Accessed from European Travel Commission: https://etc-corporate.org/news/european-tourism-recovery-continues-into-2024-with-travel-expenditure-expected-to-hit-record-numbers/
- 4. Iglu Cruise. (2024, January 24). *Travel Trends: The Rise of the Coolcation*. Accessed from Iglu Cruise: https://www.iglucruise.com/blog/travel-trends-the-rise-of-the-coolcation
- Indrabati , L. (2024). Norwegian tourism gets boost as weaker Kroner draws visitors.
   Accessed from Euronews: https://www.euronews.com/business/2024/08/08/n orwegian-tourism-gets-boost-as-weaker-kroner-draws-visitors
- 6. Martini, J. (2024). 'Coolcation': Is climate change transforming travel? Accessed from Deutche Welle: https://www.dw.com/en/coolcation-is-climate-change-transforming-travel/a-70187090
- 7. Morrison, A. M. (2023). *Marketing and Managing Tourism Destinations*. Taylor & Francis.
- 8. Pandei, N. (2024). Climate Change Drives Surge In 'Coolcation' Travel Trends What You Need To Know. Accessed from World News: https://www.ndtv.com

- /world-news/climate-change-drives-surge-in-coolcation-travel-trends-what-yo u-need-to-know-6550151
- 9. Paulsson, L. (2024). Los turistas escapan a la fresca Escandinavia en lugar de los puntos más calurosos de Europa. Accessed from Infobae: https://www.infobae.com/wapo/2024/07/08/los-turistas-escapan-a-la-fresca-es candinavia-en-lugar-de-los-puntos-mas-calurosos-de-europa/
- 10. Visit Nordic. (2024). *Outdoor activities in the Nordic countries*. Accessed from Visit Nordic: https://www.visitnordic.com/en/nature-activities
- 11. Visitory. (2024, October 14). *Tourism Boom In the Nordic countries: The Key Figures of Nordic Tourism in Summer 2024*. Accessed from Visitory: https://www.insights.visitory.io/post/tourism-boom-in-the-nordic-countries-th e-key-figures-of-nordic-tourism-in-summer-2024
- 12. Alastair M. Morrison, *Marketing and Managing Tourism Destinations*, Published by Taylor & Francis, 2023

# INNOVATIVE STRATEGIES FOR OPTIMIZING AIRPORT REVENUE STREAMS USING AI

Adrian Cioranu, Manuela Liliana Muresan, Silvia-Denisa Taranu\*

#### Abstract

This article explores how the airport revenue streams can be optimized using artificial intelligence (AI). It explores some of the most innovative strategies, explaining how the dual revenue model of airports – consisting of aeronautical and non-aeronautical revenues – can unlock opportunities for airports' growth using predictive analysis for passenger flow, personalized retail offering, resource allocation and operational enhancements, while considering both regional and passenger traffic variables. Case studies show successful implementation of AI at airports such as London Heathrow and Singapore Changi. The article underscores the importance of a balanced, cost-effective approach to integrating AI, ensuring sustainable revenue growth while addressing operational constraints. While AI offers transformative potential, the authors of this article find that there are significant challenges to the implementation and use of AI, particularly for smaller airports, with barriers stemming from high implementation costs and skill shortages. This makes AI a powerful and very useful tool that requires a thorough cost-benefit analysis prior to implementing at airports with a traffic of less than 1,5 million passengers per year, or in some parts of the developing world.

**Keywords:** airport revenues optimization, aeronautical revenues, non-aeronautical revenues, AI in airports

**JEL Classification**: C61, C63, D24, L93, O33, R42

#### 1. Introduction

Airports are gateways to the local, regional, and national economy. They drive economic growth at local, regional, and national levels by enhancing connectivity and market access (Tveter, 2017). Existing literature explores to great length the positive impact of airports to the economy, so we will not insist here on this relationship that has been repeatedly proven across the literature and across the various regions of the world, from Europe to the Unites States and from Asia to Latin America (Button, K. et all 2010, Pot, F. et all 2022,

Silvia-Denisa Taranu is PhD student at the Bucharest School of Economics (ASE) Bucharest. E-mail address: taranusilvia08@stud.ase.ro.

<sup>\*</sup> Adrian Cioranu is PhD student at the Bucharest School of Economics (ASE) and Lecturer at the Romanian-American University, Bucharest. E-mail address: cioranuadrian21@stud.ase.ro Manuela Liliana Muresan is post-doctoral student at the Bucharest School of Economics (ASE), Bucharest. E-mail address: manuela.muresan@stud.ase.ro

Cristureanu, C. et all 2007, Gibbons, F. et all 2019, McGraw, M.J. 2017, Serebrisky, T. 2011).

Yet airports are businesses in their own right. As such, and irrespective of their ownership – private, public, or public-private partnerships – airports rely on healthy streams of revenues to cover the operating costs and to generate profit. The size of the airport is an important factor in evaluating the profitability of the airport. This is because, as expected, the economies of scale show that the larger the airport, the higher the revenues generated, and the more profitable they are.

#### 2. Airport revenues, profitability and AI impact

Whereas there is no established scale to link the profitability of airports to the number of passengers processed, the empirical experience of the authors of this study, backed by the findings of the European Commission (Oxera, 2024), shows that any airport with a traffic below one million passengers per year will struggle to cover their operating costs and to ensure a healthy development/upgrade of the infrastructure. This is explained inter alia by the significant fixed costs that must be covered, including personnel, maintenance, and utilities and not even considering the investments required to develop or upgrade the existing infrastructure.

The authors of the present study note that, although there are several papers that cover the relationship between the number of passengers of an airport and its profitability, they date back several years to 2002 or 2010. We did not provide an explanation as to why this is the case since it falls outside the scope of the current paper; however, we did not want to miss pointing out the finding. Another important observation is that the studies cover European airports, making them hardly generic enough to extrapolate the results to the world level. Even so, within Europe itself the results vary considerably, such as shown by Doganis and Thompson (1975), which found that British airports required an even higher number of passengers to break even.

First-hand consulting experience with airports in Africa and Latin-America shows that at a traffic level of 750,000 passengers per year, airports struggle to break even – least to have the funding available from own sources to make meaningful investments in brownfield infrastructure, namely to upgrade existing terminals, taxiways, and runways. Where such investments were made, they resulted in increases in airport charges, which are loathed by airlines and make air transport even more expensive for passengers.

If we were to find a common denominator, we would find that an airport is expected to become profitable anywhere between one million and 1.5 million passengers. This means that, as airports approach 2 million passengers, the revenues will increase enough to cover the fixed costs, with the additional income allowing both for investments/upgrades and for profit and keeping a

balanced level of charges to airlines and fees to the passengers. The ACI-commissioned Oxera study of 2024 provides additional evidence in this regard.

Considering the critical role of passenger traffic in determining airport profitability, it emerges that revenue generation is the key for sustainable airport operations. However, the number of passengers alone cannot explain the financial health of airports. Instead, one should consider how airports diversify their revenue streams. From aeronautical charges tied directly to airline operations to non-aeronautical income derived from retail, parking, and other commercial activities, airports must strike a balance between these sources to ensure financial resilience.

In the next section, we provide a comprehensive overview of airport revenue streams to explain how airports navigate the challenges to cover their operational costs, fund infrastructure developments, and maintaining competitive pricing for airlines, while generating profit as any other business undertaking.

#### 2.1. Overview of airport revenue streams

Before delving into how AI could help airports harvest the utmost from existing data to increase their profitability, we should present first the types of revenues concerned. Airport revenues consist of aeronautical revenues, non-aeronautical revenues, and non-operating revenues.

Aeronautical revenues include any income generated by aircraft using the airport facilities, such as for landing, parking or using air bridges. Aeronautical revenues are usually dependent upon the maximum take-off weight of the aircraft.

Non-aeronautical revenues on the other hand include income from leasing commercial real estate for retail shops, restaurants, and other businesses operating on the airport premises, from advertising as well as from car parking.

Non-operating revenues include revenues not directly related to the airport's core activities, such as investment income (investments in stocks, bonds, or other financial instruments), grants from government agencies or non-profit organizations, donations, or other sources such as asset sales, insurance or legal settlements. Noting that non-operating revenues may account for a significant amount at large airport, we will focus our discussion on aeronautical and non-aeronautical revenues.

According to Airports Council International World (ACI World), at the global level, aeronautical revenues accounted for 53% of the airport revenues in 2023, similarly to the 54% level in 2019, which is the baseline prior to the pandemic. At the same time, the aeronautical revenues slightly declined by 3 percentage points during the same period, while the non-operating revenues saw a steep increase by 67%, from 6% in 2019 to 10% in 2023.

When discussing about airport revenues in general but especially about non-aeronautical revenues, we should note that significant variations exist between the different regions of the world in terms of the contribution of each non-aeronautical revenue component to the total. Table no.1 below shows the evolution of the primary sources of non-aeronautical revenues in 2023 compared to 2019, while Table no.2 shows the significant variations across the regions of the world by revenue source.

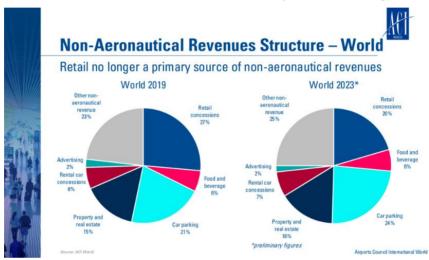


Table no.1 Non-aeronautical revenues by source and region

Source: Airports Council International (2023).

Region	Retail concession	Car parking	Rental car concession	Property income/rent	Advertising	Food & Beverage	Other*	Subsidies 8 Grants
Africa	33%	15%	6%	22%	7%	1%	13%	3%
APAC	40%	5%	2%	18%	4%	2%	28%	1%
Europe	24%	16%	2%	14%	3%	3%	33%	5%
LAC	38%	6%	3%	7%	4%	5%	36%	1%
North America	8%	26%	11 %	10%	1%	4%	30%	10%
WORLDWIDE	22%	16%	5%	14%	3%	4%	30%	6%

Table no.2 Non-aeronautical revenues by source and region

Source: Moodie Davitt Report (2009).

Table no.3 illustrates the sources of non-aeronautical revenues by region. Corroborating the information in Table no.3 with that in Table no.2, we obtain a clear indication as to the evolution of each source of non-aeronautical revenue over a 15-year period. Thus, we notice, inter alia, that car parking revenues

went up 250% in 8 years, up from 16% in 2009 and accounting for 40% of the non-aeronautical revenues at airports in North America, versus 20% in Europe and about 22% the world average.

Frequent buver Airports\*, non-aeronautical revenue, 2015 As % of total 100 Other 80 Property Advertising -60 Retail, food and beverage 40 Car rental 7 20 Car parking North World Furone America \*Survey of 827 airports covering 73% of worldwide passenger traffic Source: Airports Council International

Table no.3 Airports' non-aeronautical revenue as a % of Total

Source: The Economist (2017).

We referred above to how airport revenue streams are linked to the strategies airports may adopt. These strategies may be of diversification or of specialization.

Strategies of diversification are aiming to develop the non-aeronautical activities, to improve the airport's balance sheet. The most common strategy of diversification is the development of commercial activities by increasing the commercial areas for shops, restaurants, car rentals, etc., at the airport and the development of services to airport passengers, independent from the airlines (lounges, paid wireless internet access). For mid-sized or large airports, the strategies of diversification include developing consultancy or management services, know-how that is provided at a cost to smaller airports, and investments in other airports or other economic sectors.

Strategies of specialization are generally used to develop the aeronautical activity of the airport thanks to capacity increase (terminal and/or runway), commercial policies to airlines and promotion of the airport and its region. For small and medium-size airports, the development of low-cost terminals is a new trend in strategies of specialization, especially if strong competition with other airports or high-speed rail, whereas for large airports it is to maximize the infrastructure efficiency and to develop intermodality – integrating aviation, rail, and other modes of transportation to create seamless travel experiences (International Airport Review).

Lately, the trends in revenue generation include an increased focus on non-aeronautical revenues and on data transformation. As aeronautical charges face pressure from airlines and regulators to remain competitive, airports are increasingly leveraging non-aeronautical revenue streams. On the other hand, airports are adopting digital technologies to enhance operational efficiency and revenue generation. Tools such as passenger flow analytics, personalized marketing, and data-driven decision-making are becoming more widespread – though rather expensive to integrate and deploy, despite the advantages they bring.

#### 2.2. The role of AI in airport revenue optimization

Experts around the world consider the use of technologies in all fields to be a great help to today's society. Artificial intelligence refers to the ability to mimic human intelligence in machines that are designed to perform tasks that typically require human intelligence. Although the concept of AI has been around since the 1950s, it is only in the last decade that humanity has taken technology to a more significant level of knowledge. This was due to the following three factors: the advanced ability to collect and store large amounts of data; the vast increase in computing power; and the development of powerful algorithms.

Other sectors, such as telecommunications and healthcare, have already integrated AI to some extent into their daily activities. Now, we are seeing airports doing the same to improve safety, efficiency, and decision-making processes in various sections of the aviation industry (Malaviya, 2024).

Artificial intelligence (AI) and machine learning (ML) have a significant impact on airport operations, contributing to their optimization and efficiency. A notable example is the study "Neural Airport Ground Handling", which addresses aircraft ground handling (AGH), essential for the efficiency of airport management and aviation economics. The authors (WU et all, 2023) model AGH as a multi-fleet vehicle routing problem, integrating constraints such as precedence, time windows and capacity. They propose a construction framework that decomposes AGH into sub-problems and uses a neural method to build routing solutions, using attention-based neural networks and reinforcement learning. Experiments show that this approach outperforms classical methods, demonstrating efficient generalization to instances with a large number of flights and adaptability to stochastic flight arrivals.

Another example is presented by the European Aviation Safety Agency (EASA), which highlights the multiple applications of AI in aviation. AI can assist the crew in routine tasks, increasing the operational efficiency of the flight, and can predict problems such as turbulence or icing conditions, supporting pilots' decisions in conflict situations. In maintenance, AI facilitates predictive maintenance, optimizing maintenance programs and preventing

failures. AI also contributes to optimizing flight paths, reducing carbon emissions, and supports air traffic management by analyzing weather data and traffic configurations, improving efficiency and reducing delays.

The integration of AI and ML in airport operations is revolutionizing the aviation industry, offering advanced solutions for the complex challenges of airport management and flight operations. In recent years, AI systems have been used or experimented with in several airports around the world, we have selected and looked into the ones below, where there is a positive impact on passengers and a direct link to the airport:

- 1. Facial recognition systems for security and check-in. Used to authenticate the identity of passengers at security points, at boarding and during the check-in process, facial recognition has a positive impact stemming from reduces waiting time, increases security through more accurate checks, and the elimination of the need for physical documents at certain stages.
- 2. Chatbots and virtual assistants. AI-powered digital assistants answer passengers' questions about flights, boarding gates, delays and other useful information. As a positive impact, they provide 24/7 support, reducing traveler stress and allow passengers to get quick answers through apps or kiosks.
- 3. Passenger flow management systems. AI analyzes real-time data from cameras and sensors to manage crowds and redirect passenger flows. The positive impact stems from reduced congestion in key areas (security, boarding gates) and reduced waiting time at checkpoints.
- 4. Smart baggage systems make use of AI in baggage tracking and handling, including smart tagging and RFID and camera monitoring. The positive impact is that they reduce baggage loss or delays and allow passengers to track their baggage in real time.
- 5. Trip planning apps. Looking from a more holistic perspective, in this case AI algorithms help passengers plan their trips by optimizing connecting routes, flight times, and costs. This results in a smoother travel experience and as reduced risk of missing connecting flights.
- 6. Terminal guides and assistants. In this area, AI-powered robots provide information about terminals, boarding gates, restaurants, or other services available at the airport, enabling friendly and personalized interactions and a quick guidance, especially in large and busy airports.
- 7. Delay prediction and schedule optimization. Analyzing weather conditions, air traffic and other data, AI predicts flight delays and optimizes flight schedules. Thus, passengers are informed in advance, reducing uncertainty with connection management being improved and unnecessary waiting being reduced.

Salis' (2021) study "Towards the internet of behaviors in airports with a fog-to-cloud approach" presents the development of an Android application that uses the concept of proximity marketing to assist airport travel. The application

provides personalized recommendations and vouchers based on traveler preferences, using machine learning and a fog-to-cloud approach. The system provides benefits to both travelers and airport planners, including heat maps that highlight infrastructure bottlenecks and suggest necessary interventions; and in the study "Neural networks trained with Wi-Fi traces to predict airport passenger behavior" the authors explore the use of neural networks to predict passenger behavior inside airport terminals.

These studies highlight how AI-based technologies can be implemented in airports to improve the passenger experience through personalized assistance and behavior prediction, thus contributing to streamlining operations and increasing the passenger experience, making it faster, safer, and more enjoyable.

#### 2.3. AI-driven strategies for revenue optimization

As highlighted by Gündüz (2023), AI applications at airports cover areas such as flight delays, operations (including baggage handling), and security, to which we can easily add safety and commercial aspects. We would also like to stress that while one may easily think of passenger operations, cargo operations must not overlook. This is because, although less "visible", cargo may well represent a significant chunk of the revenues at some airports, depending on the respective business model and the specific economic environment.

Regarding passenger applications, AI-driven analytics can be used to understand passenger preferences and behaviors based on travel patterns, demographic data, and spending habits.

As such, AI-enabled analysis may enhance passenger facilitation by computing passenger flow management to reduce bottlenecks across the passenger journey throughout the airport. We should note that this journey starts when the passenger arrives at the airport and ends when the passenger is on board the aircraft awaiting the take-off.

By successfully resolving the facilitation aspects, passengers will not only be happier with the level of service of the airport but will be spending more time in retail and dining areas, which will then be used for an increased retail outreach to passengers and an increase in sales to passengers. Analyzing passenger movement patterns through predictive analytics help also determine optimal store placements and layouts to maximize visibility and sales potential.

Thus, by facilitating the access of passengers to shops and restaurants, the airport would not only boost its tenants' sales and customer satisfaction but enable the airport tenants to tailor retail offers to passengers that would have more time to enjoy in the stores – hence spend more money there, too. Such a circular win-win (airport-passengers-airport tenants) is a rare case where every stakeholder stands to win without incurring any negative impact, however slim

At the same time, for passenger that do not benefit from lounge access by virtue of their frequent flyer status with an airline, airports may develop a paid-for-access, airport-run lounge, that would increase their offer to passengers and the non-aeronautical revenues. Yet again, passengers will need to have the time first, to be able to spend it subsequently at the lounge.

We note that retail and concessionaires at the airport would benefit significantly from the use of AI, by analyzing sales data to identify trends and optimize product offerings in retail outlets, see how demographics and travel trends affect the business to increase the average transaction values. However, since these actions are taken by tenants and not the airport per se, such analysis falls outside the realm of the airport, and we will stop here the discussion about this area.

From an operational efficiency perspective, always in support of the revenue growth, AI could be used for resource allocation optimization. Thus, AI can enhance gate management, baggage handling, and other operational areas, ensuring smoother passenger experiences, which can lead to increased spending. In addition to the improved passenger experience, the optimized operations, particularly automating maintenance schedules and optimizing resource allocation such as staffing levels at peak times would benefit the airlines, which should notice a higher level of service and a decrease of delays due to airport operational or infrastructure reasons.

AI-powered advertising platforms may enable targeted campaigns on digital screens, based on passenger profiles, flight destinations, and real-time passenger traffic data. This would maximize advertising inventory, and real-time adjustments ensure higher revenue from advertising partners.

At the end of the day, one of AI's most powerful uses at the airport stems from assisting the management with strategic decision-making as well as with scenario planning and forecasting. AI models could enable quick and informed decisions and simulate revenue impacts of external factors, such as changes in passenger traffic, economic conditions, or different schemes for airline charges.

These benefits are tangible and significant. Yet, for all the benefits mentioned above, the caveat is that many times, and especially at smaller airports, there is a lack of personnel and there is not enough trained personnel available to start with. Smaller airports, especially outside Europe or North America lack the powerful IT systems and the know-how to set up, deploy, and operate the necessary equipment and software that would enable the important AI benefits.

Before engaging in an AI transformative process, it is important to balance the benefits from using AI with the on the ground situation, which may not always require a full implementation of AI-generated processes or optimizations. The cost involved, which we will cover in the next section of the paper, may prove prohibitive or outweigh the benefits, whether operational or commercial, since the capacity of the airport may simply not permit the airport to develop much in the current environment. Therefore, there should be a cost-benefit analysis performed to evaluate whether the costs outweigh the benefits, especially for airports with below 2 million passengers per year.

### 2.4. Case studies and real-world applications

The use of artificial intelligence for airports and airlines has gone viral in recent years, especially after the pandemic that hit this field deeply, so there are more airports that use AI and which have many benefits, in this sense the study "Aircraft Landing Time Prediction with Deep Learning on Trajectory Images" explores the use of artificial intelligence (AI) at Changi Airport in Singapore to predict aircraft landing times. The authors of the study collected the data during November 2022 using ADS-B data, so that the sequencing of aircraft upon landing is carried out after a very efficient time management. The proposed method is based on deep learning, using images of flight paths to predict the landing times of aircraft entering the airspace of the terminal area. The trajectories of all aircraft in flight within a specific time interval were transformed into images, where the trajectory of the target aircraft is highlighted. These images contained a variety of information, including aircraft position, speed, direction, and traffic flows, enabling the use of advanced convolutional neural networks to model landing times.

Additional data, such as aircraft type and weather conditions, are integrated to improve the accuracy of predictions. Implementation of this method resulted in a significant reduction in the mean absolute error in landing time predictions, from 82.23 seconds to 43.96 seconds. This level of accuracy, with an average accuracy of 96.1% and 79.4% of errors being low 60 seconds, highlights the potential of using AI in optimizing air traffic management.

Applying this technology means greater operational efficiency, reduced delays, and enhanced passenger satisfaction. This study highlights the benefits of adopting AI-based solutions in airports, demonstrating how more accurate landing time predictions can optimize aircraft sequencing and air traffic management (Huang & all. 2023).

Another notable example of AI impact analysis is the study by Xiaojia Guo, Yael Grushka-Cockayne and Bert De Reyck, titled "London Heathrow Airport Uses Real-Time Analytics for Improving Operations" (2020). The authors explore the implementation of a machine learning-based system to predict passenger connection times at Heathrow Airport. The main goal was to improve operational efficiency and passenger experience by connection time prediction – using real-time data to predict which passengers are likely to miss their connecting flights, allowing staff to take proactive measures such as rerouting or assisting passengers; and passenger flow optimization –

aggregating estimates of passenger arrivals at different points in the airport to adjust staffing levels and reduce congestion at checkpoints and security.

The implementation of this airport system has led to an increased operational efficiency – reducing delays caused by passengers missing connections and optimizing the use of airport resources; and an improved passenger experience – reducing waiting times and congestion, providing a more pleasant travel experience.

This study highlights how the use of real-time analytics and machine learning can transform airport operations, providing benefits for both passengers and airlines.

As lessons learned and key takeaways, we can highlight that integrating artificial intelligence (AI) technologies into airports offers valuable lessons on transforming operations, improving customer experience, and optimizing resources.

Here are some of the most important lessons that may translate into useful practices:

- 1. Increased operational efficiency: AI can quickly and accurately analyze large volumes of data to optimize complex processes, reducing operational costs and increasing efficiency. It does so by providing an optimal allocation of resources (staff, boarding gates, aircraft) and providing the airport with a delay prediction in (virtually) real time.
- 2. Improved passenger experience: AI can personalize and automate interactions with passengers, providing them with faster and more convenient services, thus reducing their stress, providing shorter wait times and an overall more enjoyable travel experience. Some examples include automated check-in systems and personalized notifications about flights and connections.
- 3. Faster and better-informed decisions: AI algorithms can provide real-time data-driven recommendations, helping airports make fast and well-informed decisions, improving their financial and operational performance. Examples include demand analysis to adjust aeronautical and non-aeronautical charges and predicting staffing needs based on passenger flows.
- 4. Sustainability and reducing environmental impact: AI can help reduce emissions and use resources more efficiently, in compliance with environmental standards and trends, and creating a more positive image for the public.
- 5. Improved security: facial recognition and behavioral analysis technologies can enhance security in airports and on-board aircraft. Though managed by security service on the airport and not the airport operator directly, such measures do increase passengers and staff safety, making security controls more efficient.
- 6. Flexibility and adaptability to change: AI helps companies be more agile and respond faster to unexpected changes. This can happen for instance in

the case of crisis management, such as flight disruptions caused by adverse weather, when resources can be adjusted according to fluctuations in demand, thus increasing resilience and reducing losses in unpredictable situations for the airport.

- 7. The importance of collaboration between people and technology: while not airport-specific, successful use of AI does not mean completely replacing the human factor but creating an effective partnership between people and technology. This increases employee trust and competence, and the staff can use the data generated by AI to make better-informed decisions.
- 8. The need for ethics and data protection: AI implementation must comply with rules on confidentiality and ethical use of passenger data, including GDPR regulations in Europe for biometric data. Ethics require transparency on how personal data is used to create a relationship of trust with passengers and to avoid legal issues.

The integration of AI into airlines and airports demonstrates that technology can transform the aviation industry, providing efficient, safe and sustainable solutions. The fundamental lesson is that the success of these innovations depends on responsible and ethical implementation, which maximizes the benefits for passengers, companies and the environment.

#### 3. Conclusion

Incorporating artificial intelligence (AI) into the management of both aeronautical and non-aeronautical revenues can greatly improve operational efficiency and create new opportunities for increasing airport revenues, as an airport's profitability is strongly tied to its passenger volume, with a threshold of approximately one to 1.5 million passengers per year necessary to cover operational costs, generate profits, and support infrastructure investments.

To ensure financial stability, airports must balance their revenue sources, combining income from aeronautical services (like airline operations) with non-aeronautical revenues (such as retail and parking). Non-aeronautical revenue contributions differ globally, with varying proportions of income derived from sources like parking, illustrating the regional diversity in airport commercial strategies.

AI can increase airport revenue by optimizing operations, improving passenger satisfaction, and enhancing retail and concession strategies. It also enables targeted advertising and predictive analytics, maximizing sales and helping airports allocate resources more effectively.

AI technologies like facial recognition, virtual assistants, and passenger flow management systems significantly improve the airport experience by minimizing wait times, enhancing security, offering personalized services, and efficiently managing passenger movement throughout the airport.

Although AI offers numerous benefits, smaller airports may struggle with limitations like insufficient trained staff, outdated IT systems, and high initial costs. A thorough cost-benefit analysis is crucial before implementing AI, particularly for airports with fewer than 2 million passengers annually. Also, AI assists airport management by providing valuable data-driven insights, helping forecast potential revenue changes, and simulating different operational scenarios. However, AI implementation must be carefully weighed against the airport's resources and capabilities, especially for smaller airports where the costs may outweigh the potential advantages.

#### References

- 1. A. Salis. 2021. "Towards the Internet of Behaviors in airports with a fog-to-cloud approach". *HighTech and Innovation Journal*.
- 2. ACI World Reports and traffic data, www.aci.aero.
- 3. Airport profits: ready to depart. 2017. The Economist.
- Artificial Intelligence and Aviation. EASA. Artificial Intelligence and Aviation | EASA
- 5. Bridging the gap: The future of intermodality between airports and rail. 2025. Available at: https://www.internationalairportreview.com/article/225947/brid ging-the-gap-the-future-of-intermodality-between-airports-and-rail/.
- 6. Bubalo, Branko. 2012. "Benchmarking European Airports Based on a Profitability Envelope". *Journal Title* 171-189. DOI: 10.1007/978-3-642-33587-7\_13.
- 7. Button, Kenneth; Doh, Soogwan; Yuan, Junyang. 2010. "The role of small airports in economic development". *Journal of Airport Management*, 4(2): 125-136.
- 8. Cao, Z.; Zhang, J.; Zhou, J.; Wu, Y.; Zhang, Y.; Zhang, X. 2023. "Neural Airport Ground Handling". *IEEE Transactions on Intelligent Transportation Systems* (24).
- 9. Cristureanu, Cristiana; Bobircă, Ana. 2007. "Airports Driving Economic and Tourism Development". *The Romanian Economic Journal*, 31-44.
- 10. Doganis, R.S.; Thompson, G.F. 1975. "Airport Profitability and Managerial Effectiveness". *The Manchester School*, 43: 331-352. DOI: 10.1111/j.1467-9957.1975.tb01236.x.
- 11. Gibbons, Stephen; Wu, Wenjie. 2019. "Airports, access and local economic performance: evidence from China". *Journal of Economic Geography*, DOI: 10.1093/jeg/lbz021.
- 12. Guo, X.; Grushka-Cockayne, Y.; De Reyck, B. 2020. "London Heathrow Airport Uses Real-Time Analytics for Improving Operations". *Interfaces* (50).
- 13. Gündüz, C. 2023. "Customised Holiday Experiences through Artificial Intelligence: Case Studies from the Aviation and Hospitality Sectors". *Journal of Aviation*, 7(3): 337-345. DOI: 10.30518/jav.1351472.
- 14. Huang, L.; Zhang, S.; Zhang, Y.; Zhang, Yi; Yin, Y. 2023. "Aircraft Landing Time Prediction with Deep Learning on Trajectory Images". *SESAR Innovation Days*.
- 15. McGraw, M.J. 2017. "The Heterogeneous Impact of Airports on Population and Employment Growth in Cities". *The Economics of Airport Operations* (Advances in Airline Economics, Vol. 6), 261-312. DOI: 10.1108/S2212-160920170000006011.

- 16. Moodie Davitt Report, Latest ACI Economics Report underlines vital role of non-aeronautical revenues for airports, 22 December 2009.
- 17. Orsini, F.; Gastaldi, M.; Mantecchini, L.; Rossi, R. 2019. "Neural networks trained with Wifi traces to predict airport passenger behavior". *16th International Conference on Models and Technologies for Intelligent Transportation Systems (MT-ITS)*.
- 18. Oxera. 2024. "Economic analysis of the profitability of regional airports". Available at: https://www.aci-europe.org/downloads/resources/Oxera\_Economic%20an alysis%20of%20the%20profitability%20of%20regional%20airports\_23.09.20 24.pdf.
- 19. Pot, Felix Johan; Koster, Sierdjan. 2022. "Small airports: Runways to regional economic growth?" *Journal of Transport Geography*, 98: 103262. DOI: 10.1016/j.jtrangeo.2021.103262.
- 20. Serebrisky, Tomás. 2011. "Airport economics in Latin America and the Caribbean: Benchmarking, regulation, and pricing". *World Bank Publications*.
- 21. Tveter, Eivind. 2017. "The effect of airports on regional development: Evidence from the construction of regional airports in Norway". *Research in Transportation Economics*, 63: 50-58. DOI: 10.1016/j.retrec.2017.07.001.
- 22. Wu, Y.; Zhou, J.; Xia, Y.; Zhang, X.; Cao, Z.; Zhang, J. 2023. "Neural Airport Ground Handling". *IEEE Transactions on Intelligent Transportation Systems*.

# PRICING STRATEGIES IN HOSPITALITY. ANALYZING COURTYARD BY MARRIOTT'S POLICIES AND THEIR IMPACT ON OCCUPANCY RATES

Dodu Silvia-Patricia, Ciobanu Camelia-Elena, Pastia Iulian\*

#### **Abstract**

Groups and events play an important role in hotel profit generation as they offer significant opportunities to maximize occupancy and utilization of dedicated spaces. Each segment has its own requirements and expectations, which require a strategic approach to pricing, whether it is for groups, corporate meetings, conferences or private events. Guest purchasing decisions are influenced by positioning the hotel competitively in a dynamic market by implementing customized pricing strategies for groups and events. In this case, rates need to be flexible and transparent and adapt to local demand, seasonality, group size and length of stay. This article focuses on the most effective pricing methods for groups and events, emphasizing the financial benefits for hotels and the impact on the guest experience. Best practices for optimizing rates and the key elements influences purchasing decisions and ensure a balance between profitability and guest satisfaction. This article includes a case study of the Courtyard by Marriott hotel, which is a well-known brand for event and corporate group management, to demonstrate the applicability and effectiveness of group and event pricing strategies. The study analyzes the pricing techniques used by hotels and how they affect revenue, occupancy and guest satisfaction. Through data collected from interviews with hotel employees, internal reports, and feedback from event organizers, the analysis provides practical insight into the implementation of the strategies discussed.

**Keywords:** pricing; strategy; packages; discount; guests

JEL Classification: O52, R11, Z30, Z32, Z33

#### **Introduction:**

The tourism and hospitality sectors have changed dramatically over the past ten years, raising the bar for companies looking to gain a competitive edge. In fact, the industry's intense competition and the pervasive use of new technologies have compelled operators to seek methods to enhance both their short-term tactical tactics and long-term goals.

With the introduction of new methods for quickly and simply adjusting rates in real time online, one of the most significant and dramatic shifts has taken place in the pricing sector.

<sup>\*</sup> Silvia-Patricia Dodu, Camelia Elena Ciobanu, Iulian Pastia are at the Romanian American University in Bucharest. E-mail: silvia.patricia.dodu@rau.ro; ciobanu.sc.cameliaelena20@stud.rau.ro, pastia.c.iulian24@stud.rau.ro

A significant component of hotel revenue comes from groups and events, which help to fill rooms and generate additional revenue using dedicated spaces, catering and other facilities. Events and conferences have a direct financial effect on the hospitality industry, on average, they generate a 30% increase in spend per room compared to individual bookings<sup>13</sup>.

#### **Market Analysis for Groups and Events**

To understand different customer requirements, it is essential to conduct a market analysis. Groups can include company members, tourists, sports teams or groups coming together for a special event such as a wedding or family reunion. Business conferences, product launches and team-building meetings are just some of the types of events.

One of the most studied topics in hotel management is pricing strategy. A well-designed pricing strategy must meet customer expectations, remain competitive, and maximize revenue. Pricing strategy for groups and events must take into consideration certain aspects such as total group size, because rates can be modified according to volume, offering progressive discounts for larger groups, length of stay, hotels may offer higher discounts and reduce fixed costs with longer stays, seasonality, because during periods of low demand, more attractive offers are necessary, while group prices may include surcharges during periods of high demand and services included such as catering, technical equipment and decorations<sup>14</sup>.

## Case Study: Courtyard by Marriott Bucharest Floreasca

One of the best-known global brands that has a solid strategy in group and event management is Courtyard by Marriott Bucharest Floreasca. The modern Courtyard by Marriott Bucharest Floreasca is in the center of the Floreasca business district, which is among the most vibrant areas of Bucharest. The hotel opened in 2019 and offers both business and leisure travelers an ideal combination of functionality, comfort and contemporary design. The hotel features 259 stylish guest rooms with modern amenities such as ergonomic workspaces and free internet. Courtyard by Marriott Bucharest Floreasca offers over 500 square meters of conference space for business or social events. These spaces are divided into flexible and fully equipped rooms<sup>15</sup>. To increase revenue on the groups and events side, the Courtyard by Marriott's sales department offers customized offers depending on availability, period, client. Being a business hotel, requests come from corporate clients, who have certain

\_

<sup>&</sup>lt;sup>13</sup> Tourism Management, Volume 55, August 2016, Pages 123-132

<sup>14</sup> Idem

<sup>15</sup> https://www.marriott.com

meetings or conferences from September through May and especially on weekdays.

During these periods, the offers are quite similar. To be able to attract customers even during less favorable periods, `courtyard has implemented several promotional packages and discounts in 2024. One offer implemented at the end of the year was the Christmas party offer. This offered free room rental, discounts on accommodation, specific decorations and customized menus for the Christmas season. Also, the hotel used the strategy of offering discounts for those who confirmed one month before the day of the event. This package brought about 5 Christmas parties from certain companies, an increase from 2022 and 2023.

Another promotional package that was implemented starts from 2023 and continued to be available for 2024 is the weekend event package. During the weekend there are generous discounts on both accommodation and event organization.

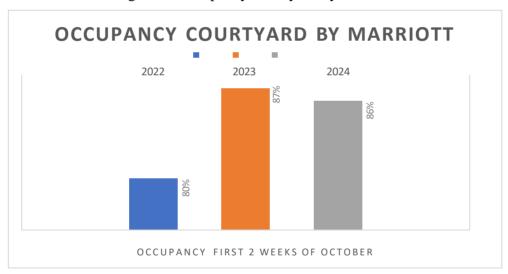


Figure 1. Occupancy Courtyard by Marriott

Source: History and Forecast Report

We conducted an analysis of occupancy levels in the first two weeks of October over three consecutive years to identify how promotional packages affected the performance of the Courtyard by Marriott Bucharest Floreasca. In 2022, occupancy was 80 percent; in 2023, it was up 7 percentage points from 2022; and in 2024, it was up 86 percent (a slight decrease of 1 percentage point from 2023, but still up 6 percentage points from 2022).

### **Impact of Promotional Packages**

The significant increase in occupancy in 2023 can be attributed to the introduction of strong promotional packages, which have been designed to attract corporate clients and groups during this period. Typically, the first two weeks of October coincide with the start of the corporate conference and event season. Increased demand from business groups after the summer vacation

Occupancy of 86% indicates that the hotel has been able to maintain high demand, strengthening relationships with corporate and social segment customers. A decrease of 1 percentage point from 2023 is due to increased competition from other hotels. A marginal decrease in demand from certain groups, possibly due to economic changes or guest priorities. To date, the success is largely due to promotional packages, which have included attractive discounts available for larger groups with larger bookings and offering a wide range of solutions for conference organizers including accommodation, function rooms and catering.

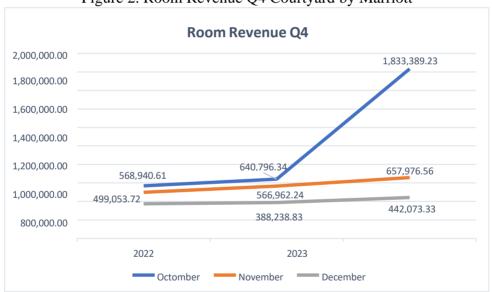


Figure 2. Room Revenue Q4 Courtyard by Marriott

Source: History and Forecast Report

The evolution of the revenue generated from rooms in the months of October, November and December from 2022-2024 is illustrated in the graph. Significant variations in the data and monthly trends of growth or stagnation are the basis for the observations and conclusions. October 2022-2023: Revenues increased by approximately 12.6% to \$71,816.33. Between 2023 and 2024, revenues increased significantly by \$1,193,132.89, an increase of approximately 186.2%. The rapid growth that has occurred since 2024 could be

the result of important measures such as implementing more aggressive dynamic pricing. Strong promotional campaigns that increase demand attracting customers to the company or organizing important events. December 2022-2023: Growth was only 13,684.65 (+3.65%) lower. Between 2023 and 2024, revenue increased 13.8 percent to 53,834.50. Because demand was lower in December compared to October and November, December growth was slower. This is due to the special season in December when customers prefer other destinations or services.

Some of the most significant factors contributing to this growth include the promotion of weekend discounts. Special weekend offers attracted leisure customers, who replaced the predominant corporate traveler segment. The hotel was able to maximize its capacity utilization by reducing rates during periods of lower demand. In the months of October and November, when business demand begins to decline slightly and when attracting city-break customers becomes a priority, this strategy was highly effective. Direct bookings increased when offers combined accommodation with additional benefits such as breakfast included, restaurant discounts or free access to facilities. Packages were designed to meet the needs of different types of customers, both individuals and groups; this led to an increase in the number of rooms sold and a greater diversity of customer bases. The steady year- on-year growth in revenue since November was the result of using this approach.

December, which is typically a less favorable month for accommodations, benefited from sustained growth thanks to the launch of offers specifically designed for groups and companies. Christmas party packages for companies include event rooms, customized catering and accommodation at great rates. Promotions for families and groups of friends, as well as discounts on accommodation for festive events. The strategy contributed to an increase of over 13.8% in December 2024 revenue compared to 2023. This partially offset this month's weak seasonality. The venture to collaborate with online travel agents and publish packages and discounts on the hotel's social media sites increased the visibility of offers. Thanks to historical data on consumer behavior, personalized marketing was able to attract specific customer groups.

# **Dynamic vs. Fixed Pricing: A Comparative Perspective**

There are two main pricing strategies in the hospitality industry: fixed and dynamic pricing. Each strategy has advantages and disadvantages. Either of the two can be chosen depending on the hotel's objectives, market behavior and the targeted customer group. Fixed prices refer to a constant price for rooms or services, regardless of changes in demand or other external factors. Because the rates remain the same for a certain period of time or within a contract, the hotel and customers benefit from predictability. It is a popular option for corporate packages and long-term contracts. In this case, customers know exactly what

they will pay, which creates confidence; rate administration is simpler, which reduces operational effort; and the predictability offered by fixed prices is preferred by corporate clients and event organizers.

Dynamic prices are adjusted in real-time or at intervals based on demand, availability, seasonality and consumer behavior. The rates can vary daily or even at shorter intervals, depending on market developments. In this case, during periods of high demand, hotels can increase rates or apply discounts to attract bookings during periods of low demand, allows quick adaptation to market changes and can be used to reach different segments using customized pricing (e.g. offering higher rates for last-minute customers).

The choice between fixed and dynamic pricing for groups and events is a frequently discussed topic in literature. Dynamic pricing uses real-time data to optimize revenue by adjusting rates based on demand, availability and competition. At times when demand is unpredictable, this strategy works well but may anger organizers who prefer the predictability of fixed prices.

However, fixed prices are often preferred by organizers for events because they guarantee them money. A hybrid approach is suggested in the literature: fixed prices for events planned well in advance and dynamic pricing for last-minute bookings or price adjustments according to demand. Rates are constantly adjusted according to season, local events, market demand and occupancy. For example, hotel room prices increase during periods of high demand, but decrease during periods of low demand. Hotels use algorithms in online booking platforms, such as Booking.com, that automatically change prices based on real-time demand data. There are two ways to price special corporate negotiated volume producer rates: Fixed pricing: a price that is determined and may change depending on the season (e.g., \$150 during the low season, \$200 during the high season). Unless the account has specific maximum of five seasons can be accepted for MarRFP instructions, a accounts. Dynamic pricing: For local accounts, this is a price point that fluctuates by season (10% off retail in high season, 15% off retail in low season) and floats as a percentage off retail (10% off retail, for example). The Global Business Travel Association only allows one level of discount for MarRFP accounts, and that level will be applied to any room pool groups that the hotel chooses to provide to the account.

# **Key Metrics Analysis:**

According to Marriott's analysis, hotels will typically profit from dynamic pricing for special corporate negotiated rates in an environment where retail prices are rising, while hotels will gain from fixed rate pricing in an environment of declining retail rates. During the most recent economic cycle, there were more years with rising retail rates than dropping ones, indicating that dynamic pricing was advantageous in many of those years. Because dynamic

special corporate rates vary with retail and get better when retail gets better, dynamic rates yield higher ADR than fixed rates. Dynamic rates result in higher ADR than fixed rates since dynamic special corporate rates move with retail and improve as retail improves. Hotels may benefit from switching from fixed to dynamic rates when retail ADR is anticipated to increase over the next years. It would be desirable to maintain stable rates if retail is predicted to stagnate or fall (with suitable modifications for market circumstances) and hold off on implementing dynamic till the subsequent economic boom. To find out if a MarRFP account is open to accepting a dynamic rate, consult the Strategic Account Profile (SAPP)<sup>16</sup>. When switching from fixed to dynamic pricing, hotels should take the agreed discount into account. The discount to retail is used to determine the effective discount for the special corporate account.

To understand the dynamics of sales and the effectiveness of the strategies implemented by Courtyard by Marriott Bucharest Floreasca, we analyzed the number of rooms sold between 2022- 2024. The data is segmented into two categories: rooms purchased individually, and rooms booked by groups.



Figure 3. Number of Rooms Courtyard by Marriott

Source: History and Forecast Report

Over the three years, the total number of rooms sold increased from 56,233 in 2022, to 63,565 in 2023, and then to 66,694 in 2024. This represents a

<sup>16</sup> 

https://mgscloud.marriott.com/common/sales-mktg-and-rev-mgmt/pricing-account-services#toolsresources

total increase of 18.6%, or 10,461 additional rooms. This upward trend is supported by two key segments:

Individual Customers: In 2022, there were 48,512 rooms sold to this segment, increasing to 52,357 in 2023 (+7.9%) and 55,890 in 2024 (+6.7%). Total growth over the three years is 15.2%, equivalent to 7,378 additional rooms. The flexible cancellation policy, combined with dynamic rates tailored to demand, has played a key role in attracting this type of customer.

Groups: The number of rooms booked by groups rose from 7,721 in 2022 to 11,208 in 2023, marking an impressive 45.2% increase. However, in 2024, the group's segment saw a slight decline with 10,804 rooms booked, representing a 3.6% decrease from the previous year. The overall increase between 2022 and 2024 remains significant at 39.9% (3,083 more rooms).

Another important strategy used by the Courtyard Hotel is to offer flexibility. The adaptable cancellation policy is becoming a necessity, not just to have a competitive advantage in this dynamic world where changes of plans are frequent. This strategy has been implemented by Courtyard by Marriott Bucharest Floreasca to better meet and fulfill customer expectations. Despite the fact that a flexible cancellation policy may seem at first glance to pose a risk to a hotel's revenue, there are clear strategic benefits to increased conversion rates. Customers make more reservations when they know they can cancel or change them without financial consequences and one positive experience makes customers return or recommend the hotel to others. The risk of last-minute cancelations, which can leave rooms empty, is one of the main problems with this policy. The hotel uses revenue management systems to adjust rates according to demand and maximize revenue. It also applies different rules for different categories of customers, such as non-refundable rates for promotional bookings or peak periods. The flexible cancellation policy helps build a relationship based on trust and loyalty through commitment to customer needs in addition to being a pricing strategy.

#### **Conclusion:**

The hospitality sector has experienced significant changes, and one of the most important aspects of staying competitive is pricing tactics. This analysis emphasizes how crucial well- thought-out pricing strategies are to meeting changing consumer needs, increasing sales, and attaining long-term success in a changing market. The use of creative and adaptable pricing techniques, along with group and event-specific promotional packages, has been very successful at Courtyard by Marriott Bucharest Floreasca. The success of these efforts is demonstrated by the notable rise in occupancy and income from 2022 to 2024, especially during times of high demand like October and the Christmas season.

The hotel was able to maintain a balanced occupancy rate across different client categories by using dynamic pricing to take advantage of times of strong

demand while providing alluring discounts during slower seasons or weekends. In addition to increasing reservations, the implementation of focused promotions including weekend event discounts and Christmas party packages improved ties with both business and leisure customers. The flexible cancelation policy has also become a competitive advantage. The approach has increased consumer confidence and loyalty, which has ultimately resulted in improved conversion rates and recurring business, despite the possibility of last-minute cancellations. When paired with cutting-edge revenue management technologies, the policy's flexibility guarantees that the hotel will continue to react quickly to changes in the market.

In conclusion, Courtyard by Marriott Bucharest Floreasca's data-driven, customer-centric pricing strategy is responsible for its notable revenue and occupancy increase. The hotel is well- positioned to maintain its competitive edge in a field that is becoming more and more difficult by consistently improving these tactics and utilizing information from market trends.

#### References

- 1. Bowen, J. T., & Chen, S. L. (2001). "The relationship between customer loyalty and customer satisfaction." International Journal of Contemporary Hospitality Management;
- 2. Chen, C. C., Schwartz, Z., & Vargas, P. (2011). "The impact of group size and service package characteristics on hotel pricing decisions." International Journal of Hospitality Management;
- 3. Choi, S., & Mattila, A. S. (2005). "Impact of information and promotion on room reservations: A perspective from revenue management." Journal of Revenue and Pricing Management;
- 4. Han, H., & Hyun, S. S. (2015). "Customer retention in the hospitality industry: The role of loyalty programs and flexible policies." Tourism Management;
- 5. Ivanov, S., & Zhechev, V. (2012). "Dynamic pricing in the hospitality industry: Current trends and future prospects.";
- 6. Kim, J., & Kim, H. (2014). "Event management and its impact on hotel revenues: A case study." Journal of Hospitality Marketing & Management;
- 7. Kimes, S. E. (2011). "The future of hotel revenue management." Cornell Hospitality Quarterly;
- 8. Noone, B. M., & Mattila, A. S. (2009). "Customer perceptions of time-based pricing in the hotel industry: The moderating role of fairness." Journal of Revenue and Pricing Management;
- 9. Shoemaker, S. (2003). "The future of pricing in services." Journal of Revenue and Pricing Management;
- 10. Wang, X., & Bowie, D. (2009). "Revenue management: The impact on business-to-business relationships." International Journal of Contemporary Hospitality Management;
- 11. https://mgscloud.marriott.com/mgs/marrdocs/mgs/common/salesmktgrevmgmt/revmgmt/pas/hotelcontacts/pasbtpricing/dynamicstrategyconsiderations.pdf
- 12. https://mgscloud.marriott.com/mgs/marrdocs/mgs/common/salesmktgrevmgmt/revmgmt/pas/hotelcontacts/pasbtpricing/pasmarrfppricingreferencehotelpricingcont

- acts.pdf https://mgscloud.marriott.com/common/sales-mktg-and-rev-mgmt/pricing-account-services#toolsresources
- 13. https://mgscloud.marriott.com/common/sales-mktg-and-rev-mgmt/tools-and-resource s/critical-to-know-information-for-a-seller
- 15. https://blog.smarthotel.nl/en-us/hotel-guest-reviews-important
- 16. https://mgscloud.marriott.com/mgs/marrdocs/mgs/common/lodgingoperations/qualit y/guestvoice/essresources/essoverview.pdf
- 17. https://www.expediapartnercentral.com/lodging/home/home?htid=36449453
- $18.\ https://mgscloud.marriott.com/mgs/marrdocs/mgs/common/lodging operations/quality/$

# THE ADOPTION OF ANGLICISMS BY THE ROMANIAN ONLINE PRESS IN TIMES OF CRISIS: GLOBAL INFLUENCE AND LOCAL ADAPTATION OF INTERNATIONAL SPEECHES

Mariana Coancă\*

#### **Abstract**

Global crises over the past few years, such as the pandemic, geopolitical tensions, and economic challenges, have led to the emergence of key terms like "coronavirus," "military conflict" and "inflationary crisis," which have become central to the online press, media and political discourse. These terms have impacted language use, with definitions evolving over time and influencing both lexical comprehension and public perception, as seen with the shifting definitions of the term "COVID-19" in dictionaries and the rise of concerns over military conflicts and inflation. The paper explores the use of English terms and expressions that describe these global realities in the Romanian online press. Loan translations often occur when an English concept or expression is introduced to Romanian, with the translation based on the components of the original term or phrase. This process enhances clarity and precision in communication. For example, terms such as "austerity measures" (măsuri de austeritate), "stimulus package" (pachet de stimulare economică), "hybrid warfare" (război hibrid), "war crimes" (crime de război), and "displaced persons" (persoane strămutate) illustrate this practice. Additionally, the paper examines how internationally relevant speeches, delivered by figures in positions of authority, are adapted for local audiences in the Romanian online press.

**Keywords:** anglicisms, borrowings, loan translations, linguistic evolution, terminological consistency

JEL Classification: Z13

#### 1. Introduction

The global crises over the past three years such as the post-pandemic crisis, the geopolitical crisis, the energy crisis, the inflationary crisis have propelled several terms, which have become standout terms in the political discourse, media and everyday conversations. The first of these terms, "coronavirus", was a standout term during the years 2020-2022. The pandemic had far-reaching impacts on public health, economies, and daily life around the world, making "coronavirus" and related terms (for example, "COVID-19", "mask", "isolation", "symptomatic", "asymptomatic") omnipresent in media coverage, scientific literature, and everyday conversations.

Researchers hypothesize that this marked increase in frequency can lead to an increase in lexical accessibility [Kleinman D. et al., (2022)]. Furthermore, through four experiments, they show that lexical expectations and

<sup>\*</sup> Mariana Coancă is at the Romanian American University in Bucharest. E-mail: mariana.coanca@rau.ro.

comprehension can shift due to rapid changes in a listener's real-life linguistic environment, and that such changes can persist over at least ten months (Ibidem). [Stewart, (2020)] highlights that when "Covid-19" was first added to the Oxford English Dictionary (OED) in April 2020, it was defined as "an acute respiratory illness". Due to the epidemiological complexity, the Oxford English Dictionary revised the definition of "Covid-19" to "An acute disease in humans caused by a coronavirus, which is characterized mainly by fever and cough and is capable of progressing to pneumonia". Similarly, other dictionaries like the Cambridge Dictionary, updated their definitions, describing "Covid-19" as "an infectious disease caused by a coronavirus (= a type of virus), that usually causes fever, tiredness, a cough, and changes to the senses of smell and taste, and can lead to breathing problem and severe illness in some people".

The second term, "military conflict", has caught significant attention due to the ongoing military conflicts in Ukraine and Israel recently. These conflicts have been subjects of intense international focus, receiving extensive media coverage and prompting diplomatic efforts to address underlying issues. Furthermore, several factors such as the rising prices, supply chain disruptions, monetary policy, commodity prices, inflationary dynamics in the economy, geopolitical tensions and trade disputes have led to widespread concerns about inflationary pressures and their potential implications for economic stability, monetary policy, and living standards. Consequently, another frequent term is "inflationary crisis", which has become a prominent topic of discussion among policymakers, economists, investors, and the public.

## 2. Anglicization of the Online Press in Times of Crisis

It is important to note that language evolves in response to societal changes, and the impact on language may be dynamic and ongoing. Additionally, the adoption of new words can be influenced by factors such as the level of public awareness, the degree of media coverage, and the duration of a crisis. English serves as the prevailing language across various sectors, including diplomacy, economics, and technology, thereby reinforcing its prominence in media coverage of crisis-related events. Tracking language developments in the online press, public discourse, and official communications can provide insights into how languages evolve and how English can influence them, in response to current events. English-language media outlets often take the lead in reporting on significant global developments and possess substantial global reach and influence, shaping public discourse and framing discussions surrounding crises. which further receive media coverage Consequently, the Romanian online press has increasingly incorporated English terms and phrases, which are either partially or fully translated in Romanian. These instances frequently involve technical or specialized terminology related to public health, energy, or geopolitics. Occasionally, we observe fully or

partially translated terms or phrases in Romanian, or the use of Romanian terms, phrases, or acronyms and their English equivalents in brackets, followed sometimes by accurate definitions in Romanian. Examples include:

"În opinia sa, insistența cu care se promovează cu orice preț *politica grean deal* nu avea cum să ducă la un alt deznodământ." <sup>17</sup>

"Presa economică internațională folosește obsesiv termenul "stagflație" adică o stare a economiei caracterizată prin inflație persistentă combinată cu șomaj ridicat și o stagnare a creșterii cererii agregate." 18

"Ei sunt mai înclinați să aleagă programe de tipul "*cumperi acum, plătești mai târziu*" (BNPL, acronimul din limba engleză – "buy now, pay later"), pe care le vedem în retail, scrie The Atlantic."<sup>19</sup>

"Ca privire de ansamblu, ne mai uităm și la *productivitatea totală a factorilor* (Total Factor Productivity). E un indicator care măsoară, practic, eficiența economică dintr-o țară."<sup>20</sup>

As shown by research conducted during the pandemic, anglicization is a complex and multifaceted process. While English influences many languages, the extent and nature of this influence vary across regions and cultures. The degree of anglicization depends on historical, cultural, and linguistic factors in each linguistic community. For instance, the research conducted by [Belkina, (2021)] facilitated the identification of several distinct features in the development of the French language during the pandemic. These include the process of assimilating internationalisms, notably the naming of COVID-19, the nuances of incorporating borrowings from English, and the general trend of neologization. Other investigations contribute to the understanding of public notices within the context of crises by delineating the various forms, functions, features, and how the crisis context influences the effectiveness of public notices [Jianxin, Y. & Feng. Q., (2022)]. As for the dynamic nature of a language, several researchers [Asif et al., (2021)] emphasize a language can be considered a blend of ideas and thoughts, which automatically generates and coins new words to accomplish the needs of conversational situations. Their

<sup>18</sup> My translation: The international economic press uses the term "stagflation" obsessively, meaning a state of the economy characterized by constant inflation combined with high unemployment and a stagnation in the growth of aggregate demand.

<sup>&</sup>lt;sup>17</sup> My translation: In his opinion, the insistence with which the hard-deal policy is promoted at all costs could not possibly lead to a different outcome.

<sup>&</sup>lt;sup>19</sup> My translation: They are more predisposed to choose programs of the type "buy now, pay later" (BNPL, the English acronym – "buy now, pay later"), which we notice in retail, writes The Atlantic.

<sup>&</sup>lt;sup>20</sup> My translation: As an overview, we also look at the total productivity of the factors (Total Factor Productivity). It is an indicator, which actually measures the economic efficiency of a country.

study explores and analyzes the neologism in the perspective of the outbreak of COVID-19, starting from a theoretical framework based on the model of neologism introduced by Krishnamurthy in 2010 (i.e. word formation, borrowing, and lexical deviation).

Romanian language has mechanisms to adapt the borrowed words, and they may coexist with native terms or undergo semantic shifts over time. In times of significant events such as the Covid-19 pandemic, the energy crisis and the military conflicts between Russia and Ukraine and between Israel and Hamas, the Romanian language has been impacted and new words or expressions have entered ordinary language to capture the unique aspects of these situations. Many terms and phrases have equivalents in Romanian. We can also notice the adaptation of the loanwords by adjusting their spelling, pronunciation, morphology, and meanings to align with the linguistic characteristics of the Romanian language. This adaptation ensures that the loanwords seamlessly integrate into the Romanian lexicon, remaining understandable and consistent with the structure of the language, as shown in the examples below:

Lockdown/izolare, carantină

Social Distancing/distanțare socială

Epidemic Plateau/Platou epidemic

Incidence/incidență

Confirmed case/caz confirmat

Face mask/mască de protecție

WFH (Work from Home)/Lucru de Acasă (LDA)

Covidiot/Romanian: covidiot

Vaccine hesitancy/reticență față de vaccinare

Remote Learning/învățare la distanță, școală online

Austerity measures/măsuri de austeritate

Sanitizer/Dezinfectant

Scarcity of energy/sărăcie energetică

Vulnerable businesses/ afaceri vulnerabile

Vulnerable households/gospodării vulnerabile

Price-cap/plafon de preț

Stimulus package/pachet de stimulare economică

Hybrid warfare/război hibrid

War crimes/crime de război

Displaced persons/persoane strămutate

Sanctions/sancțiuni

Escalation/escaladare

Normalization/normalizare

Drone/dronă

Activate air defence/a activa apărarea aeriană

The COVID-19 pandemic is no exception to the influence of crises on human language [Loudovikou, A., Tsagkaris, C., Papakosta, V. et al., (2022)]. In the dynamics of the vocabulary used during the pandemic, a contradiction between norm and usage is manifested by the Romanian journalists' preference to use the English terms "booster" and "PCR-PCR" in phrases translated partially in Romanian (e.g., "doză booster", "teste PCR-PCR", "proteină spike"). The terms have permeated various aspects of life as individuals discuss and navigate the challenges posed by the pandemic. Terms like "WFH" (Work from Home) and "remote learning" have become relevant to a large portion of the population as remote work and online education became more frequent during the pandemic. They were coined or popularized by the online press and media and became part of the lexicon of the public reflecting how they talk about and perceive certain issues, individuals and the public figures' actions. Media has a broad reach and influence, and the repetition of equivalent terms such as "mască de protecție" (face mask), "covidiot" (covidiot), "antivaccinist" (antivaxxer), "symptomatic" (simptomatic), "asimptomatic" (asymptomatic), "autoizolare" (self-isolation), "dronă" (drone), "escaladare" (escaladare), "sanctiuni" (sanctions) led to their adoption and integration into everyday conversations. Additionally, their use in headlines or articles sparked discussions passing on their usage.

"Avertismentul unui professor român de la Oxford: "O *escaladare* în Israel ar crește riscul de atentate în Europa"<sup>21</sup>

"Atac cu drone al rușilor, în mai multe regiuni din Ucraina"<sup>22</sup>

The term "covidiot" is an English neologism borrowed by the Romanian press during the Covid-19 pandemic to describe a person who ignores or does not comply with the rules or recommendations regarding public health during the COVID-19 pandemic, putting others at risk or contributing to the spread of the virus. Although it has been widely used online with the meaning entered in the Cambridge Dictionary, Romanian lexicographers have not included it in the traditional dictionaries, probably because they predicted its frequency would diminish in the future. In the following examples, the term "covidiot" is used pejoratively to criticize individuals, groups or public figures for their perceived failures or irresponsibility in the context of the COVID-19 pandemic. The blend of "COVID" and "idiot" makes it catchy, humorous and memorable. When applied metaphorically to politicians by the journalists, it adds a layer of colloquial language and wordplay that can resonate with readers and contribute to the impact of the critique.

-

<sup>&</sup>lt;sup>21</sup> My translation: The warning of a Romanian professor from Oxford: An escalation in Israel would increase the risk of attacks in Europe

<sup>&</sup>lt;sup>22</sup> My translation: Russian drone attack in several regions of Ukraine

"Cum a ajuns PNL COVIDiotul util al lui Iohannis"23

"Iohannis și Orban se poartă tot mai des ca niște *democrați* asimptomatici."<sup>24</sup>

"Prin ceea ce fac de cinci luni încoace, Iohannis și partidul său demonstrează că au vrut *să bage* chiar *democrația în carantină*." <sup>25</sup>

"Elon Musk este Covidiotul tech nr. 1 din vremea pandemiei"26

"COVidiotul Voiculescu dă înapoi și anunță că TOATE REGULILE privind înmormântările se schimbă."<sup>27</sup>

In the first headline, the term "covidiot" is used pejoratively to imply that the National Liberal Party's actions were irresponsible or detrimental in the context of the pandemic. It suggests that the National Liberal Party has become instrumental or complicit in the President's handling of the pandemic in a manner that can be considered irresponsible or foolish. The metaphorical use of "asymptomatic" in the phrase "asymptomatic democrats" adds a layer of complexity to the critique, suggesting that the issues with democratic governance may not be immediately apparent but are nonetheless present and potentially harmful. The next statement criticizes President Iohannis and his party for their handling of the pandemic, suggesting that their actions undermined democratic principles. By labeling Musk a "covidiot," the second headline suggests that his behavior was irresponsible or ignorant in the context of the pandemic, given his influence in the tech industry. In the last headline, the term "COVidiot" is used to criticize Voiculescu, the Minister of Health, for his handling of COVID-19 regulations regarding funerals, implying that his actions or decisions were reckless and fallacious.

Terms related to specific events or situations may lose relevance once those events pass or are resolved. Thus, the usage of crisis-related terms by the media was dynamic, subject to change based on evolving circumstances nationally, shifts in Romanian public perception, and the emergence of new challenges at the international level. As a result, several terms that were prominent in one period have become less used over time, especially as restrictions were lifted.

# 3. Speeches Delivered by Authoritative Figures

Researchers reveal that language manipulation is evident in the speeches delivered in a context of war, by people in position of authority, who use

<sup>27</sup> My translation: COVidiot Voiculescu capitulates and announces that ALL RULES regarding funerals are changing

\_

<sup>&</sup>lt;sup>23</sup> My translation: How PNL [The National Liberal Party] became Iohannis's useful covidiot

<sup>&</sup>lt;sup>24</sup> My translation: *Iohannis and Orban behave more and more like asymptomatic democrats.* 

<sup>&</sup>lt;sup>25</sup> My translation: *By what they have been doing for the past five months, Iohannis and his party demonstrate that they wanted to put democracy in quarantine.* 

<sup>&</sup>lt;sup>26</sup> My translation: *Elon Musk is the number 1 tech covidiot of the pandemic* 

linguistic strategies such as powerful word choices, modals, tenses etc., and rhetorical strategies [Abbadi, Renad & Kreishan, Lana & Al-Saidat, Emad, (2024)]. In addition, metaphors and storytelling play a significant role in leadership communication. According to [Gkalitsiou, K. and Dimosthenis K., (2023)], leaders consistently employ metaphors and storytelling to be more persuasive and empowering but the intensity of the crisis influences their frequency (Ibidem).

I selected excerpts from speeches delivered by two prominent international authorities: Tedros Adhanom Ghebreyesus, the President of the World Health Organization (WHO) and Olaf Scholz, the Chancellor of the Federal Republic of Germany. These selections were made due to their pivotal roles in guiding responses to global crises, fostering cooperation and collaboration, disseminating critical information, reassuring the public, and influencing policy decisions on a global scale. The first speech focuses on the importance of science and solidarity in combating COVID-19, while Olaf Scholz's speech addresses the geopolitical implications of President Putin's actions in Ukraine and advocates for a multilateral approach to global governance.

As the speeches were delivered in English, the Romanian journalists used translation to ensure the content reached the Romanian audience. This process involved accurately translating the speeches while preserving the original message and nuances. The translation employs various devices to convey the message effectively, ensuring clarity and fluency in Romanian. For instance, direct translation is employed to maintain the original wording, as seen in phrases like "războiul este un mijloc comun al politicii" (war is a common instrument of politics) from Scholz's speech. Additionally, idiomatic expressions and phrasing are adjusted to ensure naturalness and accessibility for Romanian audiences. This adaptation is evident in the translation's fluidity, which seamlessly integrates the speaker's intentions with linguistic nuances that resonate with Romanian readers. As for the cultural references, the translation incorporates nuances skillfully to resonate with the Romanian audience, ensuring that the essence of the original speech is preserved. For instance, in Tedros Adhanom Ghebrevesus's speech, the mention of "inegalitatea, diviziunea, negarea, iluziile și ignoranța deliberate" (inequality, division, denial, wishful thinking, and willful ignorance) highlights societal challenges relevant to both global and Romanian contexts. Similarly, in Olaf Scholz's speech, the phrase "națiunile independente trebuie să se alăture vecinilor lor mai puternici sau stăpânilor coloniali" (independent nations have to submit to their stronger neighbors or their colonial masters) addresses historical and geopolitical dynamics that resonate with Romanian history and identity.

The speeches differ in their thematic focus and rhetorical strategies but they use linguistic devices effectively to engage the audience and convey their

respective messages. In the first speech, Tedros Adhanom Ghebreyesus, the President of the WHO, engages the audience through direct address techniques, employing phrases like "Poate că suntem obosiți de COVID-19"<sup>28</sup> and "este momentul ca lumea să se vindece"<sup>29</sup>. Implicatures are evident in the first speech and play a crucial role in effective communication, allowing the speaker to convey messages indirectly while enabling listeners to interpret meaning beyond the literal words stated. For instance, the speaker's statement "Poate că suntem obosiți de COVID-19. Însă el nu s-a săturat de noi." (We might be tired of COVID-19. But it is not tired of us) implies resilience and determination in the face of adversity. In the translated version of this statement, the implicature is preserved in Romanian to maintain the communicative intent of the speech.

This following excerpt maintains a formal register suitable for official address, emphasizing the gravity of the subject matter and the professional context in which they are delivered. Despite the formality, they incorporate instances of emotional appeal, acknowledging the impact of the pandemic on health disparities, advocating for unity, and healing. Rhetorical devices such as parallelism "învătare constantă, perfectionare constantă si responsabilitate constantă"30 and repetition are also employed to highlight key points and enhance persuasiveness. The use of sophisticated, even ironical language, including terms such as "ambitii imperiale" (imperial ambitions) and "ordine mondială" (world order) contributes to the authoritative tone, conveying a sense of expertise and credibility. The statement "Nu putem negocia cu COVID-19 și nici nu putem închide ochii și spera că va dispărea." (We cannot negotiate with it, nor close our eyes and hope it goes away) employs the parallel structure (We cannot... nor...) for rhetorical effect, underlining the two actions are ineffective. Furthermore, it conveys a pragmatic implication that negotiation with the virus is not feasible or sensible, emphasizing the situation is getting worse and worse and it must not be ignored thereby the need for proactive measures. The use of the verb "negotiate" in relation to the Covid-19 virus is a metaphorical expression, which reflects the incapability to reason with it.

The excerpt from the speech delivered by Olaf Scholz, the Federal Chancellor of Germany, uses a variety of linguistic devices to persuade the public. Emotive language is employed strategically to elicit emotional responses from the audience, emphasizing the gravity of the situation. Hence the phrase "Să privim neputincioși..." conveys a sense of urgency and concern, aiming to grab the attention of the audience. Parallelism is used in this speech to enhance its rhythm and emphasize key points. The use of rhetorical

<sup>&</sup>lt;sup>28</sup> My translation: We may be tired of COVID-19

<sup>&</sup>lt;sup>29</sup> My translation: *It is time for the world to heal* 

<sup>&</sup>lt;sup>30</sup> My translation: continuous learning, continuous improvement, and continuous accountability

<sup>&</sup>lt;sup>31</sup> My translation: Should we stand by helplessly...

questions further engages the public, encouraging them to analyze the issues debated worldwide. For instance, the rhetorical question, "Să privim neputincioși cum unii vor să ne trimită înapoi într-o ordine mondială în care..." urges the audience to think about the implications of certain actions. Finally, metaphorical language is employed to illustrate complex concepts and situations. For instance, Scholz refers to "Revenirea imperialismului odată cu războiul președintelui Putin împotriva Ucrainei nu a fost un dezastru doar pentru Europa..." using metaphor to convey the broader impact of geopolitical events. The chosen excerpts from these speeches provide significant insights into how the world responds to crises and how effective communication shapes public discourse.

#### **Conclusions**

The prevalence of anglicisms raises important questions for sociolinguists, lexicologists, and lexicographers. Sociolinguists can explore how *times of crises* influence language dynamics and public perception. Lexicographers, in turn, can address how these terms are assimilated into dictionaries and whether their inclusion is temporary or reflects enduring linguistic shifts. Translators, both in general and specialized contexts, navigate these complexities by deciding when to preserve English terms and when to adapt them.

The crises of recent years have introduced and popularized new terms, shaping public discourse and reflecting societal priorities. Terms like "lockdown," "social distancing," and "booster" during the pandemic, or "hybrid warfare" and "sanctions" during geopolitical conflicts and wars, illustrate how global events influence the lexicon. These borrowed terms often retain their English form or are partially translated to preserve expressiveness while ensuring accessibility for the Romanian audience:

- Direct borrowings like "PCR" and "booster" maintain technical precision.
- Partially translated terms, such as the "work from home" rendered as *Lucrul de Acasă (LDA)*, strike a balance between preserving the original meaning and integrating the term into Romanian syntax.
- Full translations are also employed, but sometimes they coexist with their English counterparts.

The motivations for this usage stem from the Romanian journalists' need to communicate effectively, maintain the relevance of the terminology, and align with international reporting standards. Journalists play a pivotal role in the integration of anglicisms, particularly in rendering speeches by international

<sup>32</sup> My translation: Should we stand by helplessly as some want to send us back to a world order where

<sup>&</sup>lt;sup>33</sup> My translation: The resurgence of imperialism with President Putin's war against Ukraine has not been a disaster only for Europe...

authorities. This process often involves adapting idiomatic expressions, cultural references, and employing rhetorical devices to ensure the translated content resonates while preserving the nuances of the original text.

#### References

- Abbadi, Renad & Kreishan, Lana & Al-Saidat, Emad. 2024. Discourse and language of war: A comparison of the linguistic and rhetorical strategies employed in Russian, United States, and Ukrainian presidential speeches. *International Journal of English Language and Literature Studies*. 13. 40-60. 10.55493/5019.y13i1.4957
- 2. Asif Muhammad, Zhiyong Deng, Iram Anila, Nisar Maria. 2021. Linguistic analysis of neologism related to coronavirus (COVID-19), *Social Sciences & Humanities Open*, Volume 4, Issue 1, 100201, ISSN 2590-2911. https://doi.org/10.1016/j.ssaho.2021.100201
- 3. Belkina, Olga. 2021. The Language of the Pandemic (Based on the French Language Materials) (June 6, 2021). Available at SSRN: https://ssrn.com/abstract=3861 176 or http://dx.doi.org/10.2139/ssrn.3861176
- 4. Cambridge Dictionary. Covid-19. Cambridge https://dictionary.cambridge.org/dictionary/english/covid-19?q=covid+19+
- 5. Cambridge Dictionary. Covid-19. Cambridge https://dictionary.cambridge.org/dictionary/english/covid-19?q=covid-19+
- 6. Cambridge Dictionary. Covidiot. Cambridge https://dictionary.cambridge.org/dictionary/english/covidiot
- 7. Jianxin, Yang. & Feng, Qiang. 2022. Using Language to Mobilize the Public in the Crisis: The Case of COVID-19 Public Notices on the Banners. *International Journal of Translation, Interpretation, and Applied Linguistics (IJTIAL)*, 4(1), 1-12. http://doi.org/10.4018/IJTIAL.304077
- 8. Gkalitsiou, Katerina, and Dimosthenis Kotsopoulos. 2023. "When the Going Gets Tough, Leaders Use Metaphors and Storytelling: A Qualitative and Quantitative Study on Communication in the Context of COVID-19 and Ukraine Crises" *Administrative Sciences* 13, no. 4: 110. https://doi.org/10.3390/admsci13040110
- 9. Kleinman D., Morgan A.M., Ostrand R., Wittenberg E. 2022. Lasting effects of the COVID-19 pandemic on language processing. PLoS ONE 17(6): e0269242. https://doi.org/10.1371/journal.pone.0269242
- 10. Loudovikou, A., Tsagkaris, C., Papakosta, V. *et al.* 2022. The impact of the COVID-19 pandemic on language deserves more attention: evidence from university students in Greece a research note. *Discov Ment Health* 2, 22 (2022). https://doi.org/10.1007/s44192-022-00026-x
- 11. Oxford English Dictionary. Covid-19. Oxford https://www.oed.com/search/dictionary/?scope=Entries&q=covid-19
- 12. Stewart, Trish. 2020. July 2020 update: scientific terminology of Covid-19. Oxford. https://public.oed.com/blog/july-2020-update-scientific-terminology-of-covid-19
- 13. https://www.euronews.ro/articole/exclusiv-ursula-von-der-leyen-solutii-la-criza-ener giei-ajutam-statele-membre-sa
- https://adevarul.ro/stiri-interne/evenimente/avertismentul-unui-profesor-roman-de-laoxford-o-2312040.html
- 15. https://romania.europalibera.org/a/atac-drone-ucraina/32733170.html

- 16. https://www.digi24.ro/opinii/cum-a-ajuns-pnl-covidiotul-util-al-lui-iohannis-1339149
- 17. https://www.hotnews.ro/stiri-coronavirus-23882568-elon-musk-este-covidiotul-tech-l-din-vremea-pandemiei.htm
- 18. https://ortodoxinfo.ro/2021/04/08/covidiotul-voiculescu-da-inapoi-si-anunta-ca-toate-regulile-privind-inmormantarile-se-schimba-cine-va-raspunde-pentru-umilirea -atator-oameni-inmormantati-goi-in-saci/
- 19. https://panorama.ro/criza-economica-globala-romania-marea-recesiune/
- 20. https://adevarul.ro/economie/cum-s-a-ajuns-la-criza-energetica-si-la-inflatia-2227142
- 21. https://www.hotnews.ro/stiri-opinii-25616714-criza-economica-este-facut.html
- 22. https://stirileprotv.ro/stiri/international/seful-oms-despre-pandemie-znu-putem-negocia-cu-covid-19-si-nici-nu-putem-inchide-ochii.html
- 23. https://www.economica.net/onu-cancelarul-scholz-declara-ca-putin-trebuie-sa-recuno asca-ca-nu-poate-castiga-razboiul\_613130.html
- 24. https://www.ndtv.com/world-news/world-may-be-tired-but-virus-not-tired-of-us-who-chief-tedros-adhanom-ghebreyesus-2322900
- 25. https://www.bundesregierung.de/breg-de/impressum/speech-by-olaf-scholz-2128554

# ANALYSIS OF CONSUMER BEHAVIOR IN PURCHASING TOURIST SERVICES

Gina Gilet (Lefter, Sztruten) Dobrotă\*

#### **Abstract**

Being intagible, tourism products don't provide the option to be verified before consumption, therefore only the analysis of potential tourists' behavior in planning a vacation, can offer a proper image. The way consumers are perceiving the tourist products and its accordance with the reality, are highly influenced by the presentation of tourist destinations, before purchasing the tourist services. During the process of obtaining the neccesary information for decision making, the potential tourists can contact a touroperator or do a research online, by themselves. It is well-known that touroperators can provide the resources and infrastructure required in order to offer important, documented information. On the other hand, especially during the pandemic, the activity of traditional touroperators has been challenged by the potential, independence and flexibility that represent the online environment. As a result, more and more tourists worldwide are purchasing tourist services online. From this perspective, this paper tries to underline the importance of researching the consumers' behavior in acquiring tourism services.

**Keywords:** touroperator, consum behaviour, tourism services

JEL Classification: Z30, Z31, Z32, Z33

According to Market Research Future (MRFR), the online travel market is projected to grow from 658.38 billion USD in 2024 to 955.41 billion USD by 2032, reflecting a compound annual growth rate (CAGR) of 4.8% during the forecast period 2024–2032 [www.marketresearchfuture.com].

It is well-known that there was a time when the phenomenon of online shopping was neither as popular nor as widespread as it is today. Consumers were hesitant to purchase consumer goods online, making the idea of buying vacation packages, tours, or accommodations unthinkable, as travelers lacked trust in online travel portals.

However, with the development of e-commerce, booking a vacation without the help of a travel agent started to become increasingly appealing and convenient for travelers. Today, no one can deny the convenience offered to the modern traveler by booking a trip through an online travel agency (www.travelos.ro), as opposed to using a traditional travel agency.

Regardless of the industry, the internet has made offers increasingly accessible, allowing consumers to find a growing number of tools online that

<sup>\*</sup> Gina Gilet (Lefter, Sztruten) Dobrotă is Lecturer at the Romanian American University in Bucharest. E-mail: gina.gilet.dobrota@rau.ro

meet their needs and facilitate the purchase of products and services at lower costs. This phenomenon is also evident in the tourism industry, where travelers have online access to any desired destination, can explore multiple travel options—sometimes combining different modes of transport for various segments of the journey—and discover a wide range of activities available at their destination. This is possible thanks to the dynamic, unlimited, accessible, flexible, and innovative support mechanism known as the internet [Claudia Bobâlcă,coordinator].

Nowadays, it is important to acknowledge the involvement of AI in booking travel services. While the process of booking a trip has evolved from manually purchasing plane tickets and hotel rooms to online transactions, AI can now handle all the booking details on behalf of the traveler.

From this perspective, the phenomenon of booking travel services and packages can be studied by analyzing consumer behavior in purchasing these services either physically or online. A quantitative research study was conducted using a questionnaire distributed online via mobile applications like WhatsApp. Among the respondents, 62% were women and 38% were men, indicating that women, across all age groups, are more concerned with and allocate more time to vacation planning. The age distribution of respondents was as follows: 8% under 18, 28% between 18-24, 33% between 25-34, 30% between 35-44, and only 2% over 65.

Respondents predominantly came from urban areas (95.9%), with only 4.1% from rural areas, suggesting that urban residents not only have greater access to online platforms but also to devices that facilitate bookings. From a psychological standpoint, they are also more inclined to travel, as they tend to have more disposable time.

The responses revealed that respondents travel relatively infrequently. About 16% travel less than once a year, 55% travel 1-2 times a year, 22% travel 3-5 times a year, and only a small percentage, 7%, travel more than 5 times a year.

When asked about their preferences for purchasing travel packages—online or directly from agencies—most responses favored online purchases (61%). Meanwhile, 17% preferred purchasing directly from a physical agency, and 22% used both methods.

Online sales or directly from travel agencies

Online sales from the website of travel agencies

Direct sale at the travel agency

Both methods

Figure no.1 Online sales or directly from travel agencies

Source: author

Considering the advantages of purchasing a travel package online compared to buying directly from a physical agency, the top three most important benefits were listed as follows: simplicity of the purchase (40%), speed of the order (40%), and financial advantage (lower prices) (14%).

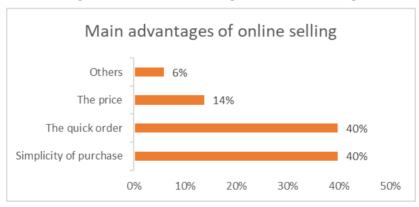


Figure no.2 Main advantages of online selling

Source: author

Although they prefer online purchases, the interviewed individuals acknowledge certain disadvantages of this method. Among the top concerns they listed were: insecurity in purchasing directly from service providers (34.7%), a higher financial risk compared to using an agency (28.6%), and the possibility of errors when booking transportation tickets or accommodation reservations (22.4%).

Figure no.3 Disadvantages of tourism online sales



Source: author

Among the key criteria considered when booking a travel package online, respondents ranked "the ability to cancel and modify the reservation" as the top priority (64%), followed by "the complexity of including multiple services in the package" (transport, accommodation, activities, etc.) at 70%. The third most important factor was "prices" (62%), and the fourth was "24/7 customer support" (50%).

Figure no.4 Top 4 criteria in online tourism sales



Source: author

When making online bookings, the majority preferred the websites of travel agencies (64%), followed by direct bookings on hotel or airline websites (36%).

Consumer incomes are predominantly average, with 46% earning between €600 and €1200, 38% earning less than €600, and only 4% earning over €1500. This income distribution helps explain the preference for road travel, the desire

for flexible bookings, and the search for low-priced travel packages. It also accounts for the low annual travel frequency, as about 71% travel infrequently, 55% travel 1-2 times a year, and 16% less than once a year, while 22% travel 3-5 times a year, and 7% travel more than 5 times a year.

Among the reasons why consumers have migrated from physical purchases of travel services and packages at travel agencies to online platforms are [explodingtopics.com]:

- **Visa Acquisition:** Many countries now allow tourists to obtain visas directly, eliminating the need for travel agencies to mediate the process with consulates or embassies before travel.
- **Navigation Technology:** Tourists can use their phones with apps like Google Maps or GPS to navigate destinations independently, without the need for tour guides.
- **Increased Travel Frequency:** Modern travelers, especially younger generations, travel much more frequently than previous generations, who often traveled only once in a lifetime. This frequent travel fosters independence and self-sufficiency in planning.
- **Preference for Independent Travel:** Young travelers tend to avoid organized group trips offered by physical agencies, perceiving them as outdated and not appealing.
- **Time Constraints:** Potential customers with full-time jobs often lack the time to visit travel agency offices, opting instead to book travel packages online during work hours or late at night.
- Social Media Influence: Consumers are curious about visiting destinations they see on social media, which may not be included in traditional travel agency offerings or may not align with their vacation schedules.
- Blending Business and Leisure: Many business travelers extend their trips for leisure purposes, often making reservations directly online with service providers rather than through local travel agencies.
- Preference for Smaller Accommodations: Tourists are increasingly interested in smaller accommodations that are not typically featured in travel agency brochures or websites, which usually focus on larger hotels offering various services.

One reason physical agencies are falling behind trends is that they continue to operate in the same way as decades ago. Adopting new technology is essential for survival and can help agencies expand into a larger market. Online sales platforms save time and reduce the need for human resources in physical transactions.

There is also a growing demand for online services due to the increasing number of international students [www.marketresearchfuture.com] who prefer

online access for reasons like language barriers, time constraints, and convenience. Additionally, consumer awareness in developing countries is rising, fueled by internet access and IT development, contributing to growth in the online travel market.

Furthermore, the internet offers virtual representations, such as interactive 3D tours, providing a clearer impression of travel destinations, which enhances the customer experience beyond traditional travel agencies. The online travel market has become a multi-billion-dollar industry in about 30 years, revolutionizing how tourists plan and book vacations—a trend that continues to grow, especially with the rise of artificial intelligence.

The online travel booking market has become a multi-billion-dollar industry in a relatively short period (around 30 years since the advent of the internet) and has completely revolutionized the way travelers plan and book their vacations. This evolution shows no signs of slowing down, especially with the emergence of artificial intelligence (AI). However, even though the internet has transformed the world, there are still regions globally that do not rely on these online sales channels. At the same time, certain segments of the travel market targeting older audiences, such as the cruise industry, cannot be overlooked. In this sector, physical agency sales still account for up to 75% of total purchases in 2023. [www.statista.com] This is often because travelers prefer to speak with an agent rather than booking a cruise online by themselves, as the booking process can be more complex due to the variety of options available.

#### **Conclusions**

This study concludes that, regardless of income levels, **consumers have shifted to online purchases**. Although they travel infrequently, when making online reservations, they prefer to buy from agency websites rather than directly from service providers (hotels and airlines). A direct and dynamic relationship exists between the evolution of tourism and the changing consumption habits of potential customers. Additionally, factors such as changes in consumer behavior, social media influence, increased disposable income for vacations, a rise in international students, consumer awareness in developing markets, individual travel preferences, easy navigation with smartphones, and simplified visa acquisition contribute to the growth of the online travel market.

Consequently, the traditional method of booking through physical travel agencies is becoming obsolete. Traditional agencies must adapt to these changing consumer behaviors, which can be achieved through information and communication technology, as well as rapid strategic transformations.

#### **References:**

- 1. Claudia Bobalca, Oana Tugulea, Andreea Maha, Liviu-George Maha, "Internetul sau agentiile de turism. Ce aleg tinerii turiști?", Published by Universitaria, Bucharest, 2014
- 2. A.K Bhatia, *The Bussiness of Travel Agency and Tour Operations Management*, Sterling Publishers Pvt. Limited, 2012
- 3. Joanie Ogg, Andy Ogg, Tom Ogg, *How to Start a Home Based Travel Agency*, Independently Published, 2020
- 4. https://explodingtopics.com/blog/travel-industry-trends
- 5. https://www.marketresearchfuture.com/reports/online-travel-market-5182?utm\_term =&utm\_campaign=&utm\_source=adwords&utm\_medium=ppc&hsa\_acc=289 3753364&hsa\_cam=21370418861&hsa\_grp=161806669325&hsa\_ad=70203 7994609&hsa\_src=g&hsa\_tgt=dsa-2088470572260&hsa\_kw=&hsa\_mt=&hs a\_net=adwords&hsa\_ver=3&gad\_source=1
- 6. https://www.marketresearchfuture.com/reports/online-travel-market-5182?utm\_term =&utm\_campaign=&utm\_source=adwords&utm\_medium=ppc&hsa\_acc=289 3753364&hsa\_cam=21370418861&hsa\_grp=161806669325&hsa\_ad=70203 7994609&hsa\_src=g&hsa\_tgt=dsa-2088470572260&hsa\_kw=&hsa\_mt=&hs a\_net=adwords&hsa\_ver=3&gad\_source=1
- 7. https://www.travelos.ro/2020/11/13/agentiile-de-turism-fizice-in-era-comertului-online/
- 8. https://www.statista.com/topics/2704/online-travel-market/#topicOverview

# THE TRANSFORMATION OF THE AVIATION AND TOURISM INDUSTRY THROUGH SMART TECHNOLOGIES: INNOVATIONS, CHALLENGES, AND PERSPECTIVES

Camelia M. Gheorghe, Cristina Stoenescu, Roxana-Monica Crăciun, Ana Maria Alexa Voicu\*

#### **Abstract**

Smart airports leverage technology, including IoT, AI, and automation, to improve operations and enhance the passenger experience. Advanced solutions such as biometrics and real-time information analytics reduce response times, boost security, and streamline valuable resource management. Remarkable examples are Dubai and Incheon airports. Despite the benefits, challenging situations involving interoperability and information security necessitate revolutionary solutions and appropriate legislation. Responsible use of these technologies can transform airports into models of sustainability and operational excellence.

**Keywords**: clever airport, technological innovation, automation, passenger experience, sustainability.

JEL Classification: Z30.

#### Introduction

Smart airports are a significant component of aviation modernization, incorporating advanced technology such as the Internet of Things (IoT), synthetic intelligence, and automation to improve operational performance and enhance passenger experiences. Recent study suggests that combining better technology leads to improved performance and consumer satisfaction (Alansari et al., 2019; Deloitte, 2021).

These innovative centers are intended to improve security procedures, reduce wait times, and provide passengers with a higher level of comfort. According to research shows that IoT-based technology and facial recognition can speed-up check-in and baggage inspection processes, improving airport security and performance (Changi Airport, 2019; Al Nuaimi et al., 2015).

Real-time analytics allows airport operators to better manage passenger flows while reducing the hazards associated with congestion and delays

<sup>\*</sup> Camelia M. Gheorghe, Cristina Stoenescu, Roxana-Monica Crăciun and Ana Maria Alexa Voicu are at the Romanian American University in Bucharest. E-mail: camelia.gheorghe@rau.ro; cristina.stoenescu@rau.ro; craciun.n.roxanamonica22@stud.rau.ro; voicu.p.anamariaalexa22@stud.rau.ro.

(Stewart, 2016). Additionally, AI in security processes allows for speedy and accurate passenger authentication, lowering wait times (Jiang et al., 2023).

Successful implementation of these technologies requires integrated and collaborative management, while challenges such as ensuring interoperability and safeguarding personal data privacy remain significant. This study contributes to the literature with a comprehensive analysis of the benefits and limitations of smart facilities, offering recommendations for future optimization of smart airports to enhance passenger satisfaction (International Airport Review, 2023).

#### **Smart Airports**

Smart airports constitute a developing fashion withinside the aviation industry, wherein superior technology including facial recognition, the Internet of Things (IoT), and artificial intelligence (AI) are used to optimize passenger experiences and streamline airport operations. According to Lu (2020), the implementation of these technologies aims to reduce waiting times and increase passenger security and satisfaction, providing a safer and faster travel experience (Lu, 2020). As safety and efficiency demands increase, the adoption of smart technologies is becoming a priority for major airports worldwide.

Dubai International Airport serves as a global leader in implementing facial recognition and iris scanning solutions for immigration control, enabling passengers to complete procedures without presenting physical documents (Dubai Vibes Magazine, 2021). Dubai Airport also presented the smart tunnel concept, in which passengers pass through control points using a fully contactless biometric system, cutting processing time to a few seconds (Airport Technology, 2021).

Recent research emphasizes the significance of effectively managing these technologies in order to address the real demands of travelers. For example, Zhang and Chen (2022) found that while passengers value enhanced efficiency, they are concerned about the privacy and security risks connected with biometric data utilization. In this regard, airports that focus on integrating smart technologies while following to privacy standards might improve customer satisfaction and operational efficiency (FTE, 2021).

# **Smart Hospitality**

Smart hospitality, a growing sector of the hospitality business, is gaining traction. It is anticipated that by 2031, the global market value of clever hospitality would reach USD 133.7 billion. The concept of "clever hospitality" generally relates to the integration of technology and IoT into the operations of hospitality businesses, with the goal of improving guest experiences and creating a more comfortable and pleasant environment.

Advanced technologies and IoT are also altering the hospitality business, accelerating its transition to a smarter model. Wireless infrastructure is predicted to become the standard in hotel IT applications, resulting in cost savings, increased productivity, and improved customer relationship management (CRM) and property management.

Smart hospitality takes an innovative approach to the sector, leveraging technology to improve guest experiences, operational efficiency, and sustainability. The combination of IoT devices, AI, and data analytics enables tailored and seamless visitor experiences. Hotels and resorts that use smart hospitality solutions have intelligent energy management systems, automated guest services, and individualized room surroundings, such as smart mirrors that show weather information. Furthermore, AI-powered chatbots and virtual concierges are becoming more common, offering immediate support and improving client happiness.

Between 2008 and 2020, research on smart tourism identified eight major trends, most of which focused on ecosystems and smart technologies, highlighting the need for exploring other directions, including responses to the COVID-19 pandemic. Previous studies have shown that the integration of big data and interconnected applications can enhance revenue management performance and competitiveness in the hospitality industry.

Moreover, a framework with ten essential technological skills for hospitality practitioners has been proposed, emphasizing the importance of technological competencies in this era. Hospitality and tourism professionals can utilize smart services to provide personalized and proactive experiences while safeguarding client confidentiality and ensuring accurate service delivery. Adopting smart hospitality, based on customer centrality, personalization, and marketing in interconnected destinations, contributes to the creation of sustainable business ecosystems that benefit all stakeholders involved. Research in smart destinations provides a foundation for identifying themes and future areas of study, offering valuable guidance for academics and professionals.

## **Smart Airport Systems**

As a end result of the Fourth Industrial Revolution, airport operations may be streamlined the use of superior technology, improving passenger experiences. Furthermore, the general performance of airports may be increased. Smart airports enhance aviation security, passenger comfort, operational performance, and useful resource optimization whilst addressing vital demanding situations and studies priorities for the future. Initially, the idea of a clever airport changed into proposed to offer primary statistics to clients in a easier and extra green manner, casting off direct interactions.

By integrating technology which includes IoT, synthetic intelligence (AI), biometrics, and information analytics, airport capabilities which includes

check-in, security, bags handling, and plane preservation are optimized. Passengers gain from shorter ready times, personalised services, and smoother tour experiences. At the identical time, airport operators beautify security, control sources extra efficiently, and make information-pushed decisions.

A preceding study (Lykou, G.; Anagnostopoulou, A.; Gritzalis, D. Smart Airport Cybersecurity: Threat Mitigation and Cyber Resilience Controls. Sensors 2018, 19, 19) described a clever airport as a unit that complements infrastructure intelligence and evolves right into a clever facility, helping boom and presenting a pleasing tour enjoy with the aid of using integrating commercial IoT and clever devices. Another study (AlMashari, R.; AlJurbua, G.; AlHoshan, L.; Al Saud, N.S.; BinSaeed, O.; Nasser, N. IoT-Based Smart Airport Solution. In Proceedings of the 2018 International Conference on Smart Communications and Networking (SmartNets), Yasmine Hammamet, Tunisia, 16-Revolutionary Organization terrorist organization 2018; IEEE: New York. NY, USA, 2018; pp. 1–6) defined the clever airport as component of a smart city, being a subsystem that connects urban life with aircraft movements. It was also mentioned that an IoT-based smart airport solution would enhance passenger services, operational efficiency, and security capabilities, providing a safer and more robust airport experience. Regarding smart airport management systems, IoT can improve passenger processing and flight management, enhancing services and facilitating passenger travel.

Aviation is an essential part of Hong Kong's constitutional identity. Article 128 of the Basic Law states that "The Government of Hong Kong shall provide the conditions and take measures to maintain Hong Kong's status as an international and regional aviation center." The key phrase "international and regional aviation center" is frequently interpreted as meaning "international aviation hub." Indeed, Hong Kong has been a successful international aviation hub due to its general laissez-faire economic policy and advanced infrastructure, although several factors have influenced this status over the years. However, the Guangdong-Hong Kong-Macao Greater Bay Area (GBA) Development Plan offers new opportunities for Hong Kong. The GBA initiative defines Hong Kong's role in the overall development of the GBA region and reinforces its importance as a leading international aviation hub. This article suggests that although Hong Kong's status as a connecting airport has weakened, the GBA initiative can strengthen its role as an international and regional aviation center.

The Hong Kong International Airport (HKIA) is a remarkable example of a smart airport, utilizing advanced technology to improve both operational efficiency and passenger experiences. Implemented solutions include facial recognition for check-in and security control, enabling passengers to quickly navigate through various stages of travel without the need for human interaction. The airport also employs automated baggage management systems,

facilitating real-time tracking and reducing delays. Additionally, HKIA uses IoT technologies to monitor and manage airport resources such as passenger flow, lighting, and air conditioning, thereby increasing efficiency and reducing energy consumption. The airport has developed mobile applications that provide passengers with personalized and real-time information about flights, baggage status, and available services. Robots are also used to guide passengers, offering information and additional assistance during their journey. These technologies contribute to improving waiting times, operational efficiency, and safety, consolidating Hong Kong's status as an international aviation hub.

At Hamad International Airport (HIA), passengers and visitors can benefit from smart solutions such as the "Pay-on-Foot" automated parking payment system and the "Web Check-In" online check-in service to avoid waiting times."Pay-on-Foot" machines allow visitors to make payments via strategically placed terminals within the terminal. This system saves passengers time by helping them avoid additional fees associated with waiting in queues to exit airport parking. Although personnel are available in almost every corner of the airport to assist visitors, users, especially first-time visitors, need to familiarize themselves with the system. HIA has announced parking fees that are already in effect. To use the "Pay-on-Foot" machines, visitors must keep their parking tickets rather than leaving them in their vehicles. One of the challenges passengers face is locating their cars in large (short-term) parking areas, especially for those who do not remember their parking space numbers or levels. Even with numbers assigned to each parking space, some passengers find it difficult to locate their vehicles, and sometimes it can take more than an hour to find their car. Parking is free for the first 30 minutes, and the fee for the first hour is QR5. The "Pay-on-Foot" machines accept payments for parking fees but also return change when large-denomination bills are inserted. They also accept coins, but unfortunately, no coins larger than 50 dirhams, so this option may not be usable. In addition, "Web Check-In" machines allow passengers to obtain boarding passes and select their preferred seats on the plane, offering a faster and more personalized experience at the airport.

Heathrow Airport, placed in London, United Kingdom, is one of the largest and maximum essential airports within the world, recognized for its function as an worldwide aviation hub. Operated through Heathrow Airport Holdings Ltd, the airport gives a extensive variety of offerings for airlines, passengers, and numerous business sectors. Aeronautical offerings encompass centers for take-off, landing, plane parking, and bags handling. The airport additionally gives non-aeronautical offerings, inclusive of retail operations, automobile parking, and marketing and marketing revenue.

Heathrow is likewise recognized for its superior infrastructure, consisting of cutting-edge terminals and an green rail shipping system, inclusive of the

Heathrow Express service, which connects the airport to imperative London. In addition, the airport rentals business areas inclusive of hangars, upkeep centers, and load warehouses. Heathrow is a important departure factor for worldwide flights and performs an critical function within the UK economy, serving many passengers and substantially impacting the tourism and change industries. The airport is owned through FGP Topco Ltd and maintains to put money into innovation and improvement to decorate passenger reports and operational efficiency, strengthening its status.

Incheon International Airport, placed close to Seoul, South Korea, is certainly considered one among the biggest and maximum cutting-edge airports withinside the world, identified for its superior infrastructure and revolutionary offerings. Opened in 2001, the airport serves as an essential worldwide hub, being a first-rate transit factor among Asia and the relaxation of the world.

The airport gives a extensive variety of offerings and centers for each passengers and airlines. These encompass an automatic check-in system, speedy protection through biometric technology, an efficient baggage handling system, and modern parking facilities. In addition, Incheon International Airport is known for its exceptional passenger experience, including relaxation lounges, entertainment areas, as well as a museum and luxury shopping space. The airport places a strong emphasis on innovation, using technologies such as passenger-guiding robots and check-in kiosks.

Incheon is also a leader in utilizing smart airport solutions, implementing IoT and artificial intelligence technologies to enhance operational efficiency and reduce passenger waiting times. The airport has also been recognized for its contributions to environmental sustainability, featuring an extensive energy management system and carbon emissions reduction Initiatives.

Incheon International Airport performs a critical function in South Korea's financial system and its global connections, serving hundreds of thousands of passengers yearly and status for example of excellence within the aviation industry.

Incheon International Airport is an example of ambitious development, having a global, regional, and national impact. Over the past decade, the airport has evolved from an impressive transport complex to essential infrastructure for South Korea. Starting with Incheon International Airport, a modern terminal of 6 million square meters that replaced the old Kimpo Airport, this project was planned by Bechtel Corporation and designed by Fentress Bradburn Architects.

Incheon International is a fundamental component of the infrastructure supporting South Korea's ambition to transform Seoul into a major gateway to Northeast Asia. The airport is connected through an extensive transport complex, including a new Transportation Centre designed by Terry Farrell & Partners from London. This elegant and complex building coordinates multiple modes of transport to link the airport to the capital, located over 30 miles away.

Incheon International and its transportation center are vital to the region's development and consolidating South Korea's status as a global transport hub.

## **Smart Airport Case Study: Dubai Airport**

Dubai Airport continues to evolve and enhance traveler experiences, being recognized for its innovative initiatives in smart technology and serving as a model for other global hubs such as Heathrow and Charles de Gaulle (Future Travel Experience, 2021; Dubai Vibes Magazine, 2021). These technological advancements offer new perspectives for optimizing airport operations worldwide.

In the past decade, the emergence of new technologies has led to the development of smart cities, which aim to provide stakeholders with efficient and effective technological solutions. The primary goal of smart cities is to improve outcomes related to people, systems, and processes in businesses, public administration, and other entities in the public and private sectors, ultimately enhancing the fine of existence for all residents. In this context, clever tourism has emerged in latest years as a subcategory of the clever town concept, aiming to offer tourism answers that meet the particular desires of travelers.

Dubai is a growing traveler vacation spot that has carried out clever town and clever tourism structures to have interaction numerous stakeholders.

Dubai International Airport (DXB) is diagnosed as one of the smartest airports in the world due to its advanced technology integration and innovative vision for passenger experience. It has become a global model of efficiency, comfort, and innovation, completely transforming how travelers perceive airport transit.

Advanced Technologies for a Seamless Experience

One of the reasons DXB stands out is its use of cutting-edge technologies to simplify and speed up processes. From automated check-ins and state-of-the-art security scanners to biometric gates that allow swift passage through passport control, every detail is designed to save time and reduce traveler stress. Artificial intelligence systems and big data play a crucial role in optimizing passenger flows and reducing queues, while dedicated mobile apps provide real-time updates on flights, boarding gates, and amenities.

A Smart Ecosystem for Diverse Passenger Needs

DXB aims to be more than just a transit point. The airport has invested significantly in creating an environment that caters to every type of traveler, from tourists to businesspeople. Relaxation areas are equipped with rest spaces and sleep pods, while free, high-speed Wi-Fi and coworking spaces make DXB a perfect spot for the ones running at the go. Furthermore, the cultural variety of passengers is meditated thru a huge variety of eating places and shops, showcasing global impacts.

Sustainability as a Top Priority

Another factor contributing to its reputation as a savvy airport is its commitment to sustainability. DXB has implemented several green measures, such as LED lighting systems, electric vehicle charging stations, and an extensive recycling program. By reducing its carbon footprint and properly utilizing resources, the airport not only provides a modern experience but also contributes to environmental preservation.

Innovation and Future Orientation

DXB's ongoing enhancement ambitions include implementing futuristic technologies such as augmented reality for passenger steering and companion robots that provide data and directions. Furthermore, the airport is looking into blockchain solutions to improve safety and transparency in dealing with visitor data.

Dubai International Airport is extra than a international hub; it's far a image of development and technological adaptability. By integrating clever, customer-centered answers, DXB is redefining enterprise standards, demonstrating that generation and innovation can remodel any adventure right into a memorable revel in. Thus, DXB keeps to encourage and set tendencies for the destiny of aviation.

Survey on Romanians` Preferences for Smart Airport Technologies: Applicability to Henri Coandă Airport

This study was conducted to identify Romanian inhabitants' opinions and possibilities on the concept of smart airports and the use of advanced technology in Romanian airports, specifically at Henri Coandă Airport. Smart technology is becoming increasingly prevalent in airports throughout the world, with the goal of improving passenger experiences, streamlining operations, and providing faster and more personalized services. High-quality services, including sustainable energy. By completing this poll, we hope to determine how prepared Romanian travelers are to adopt such technology and their expectations of Henri Coandă Airport's application of smart solutions.

The survey is anonymous and involves a sample of 45 individuals from various social classes, age groups, educational backgrounds, and genders. The questions include both identification questions and questions related to airport preferences.

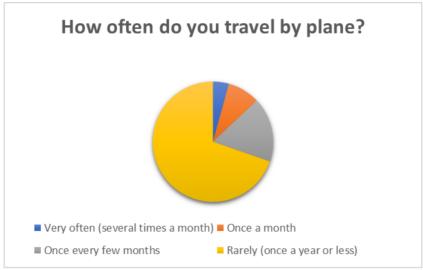


Chart 1. Respondents' Air Travel Habits

The majority of respondents (70.5%) travel by air infrequently, indicating a low usage frequency of this mode of transport, possibly due to financial reasons or a lack of necessity. Regarding familiarity with the concept of a "smart airport," over half of the participants (56.8%) have not heard of it, highlighting a lack of awareness about technological innovations in the airport industry. Additionally, more than half (52.3%) state that they are not at all familiar with the technologies used in smart airports, such as automated check-ins or facial recognition, while only 25% of respondents are very familiar with them.

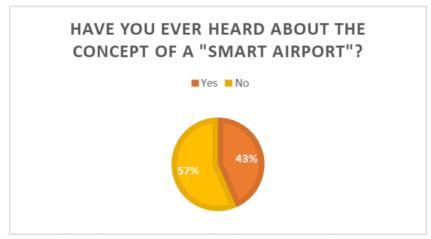


Chart 2. Awareness of the 'Smart Airport' Concept

These findings reflect a low level of adoption and awareness of modern technologies, suggesting the need for educational campaigns and the promotion of the benefits provided by "smart airports." Only 57% of the respondents admit having heard of the concept of "smart airport".

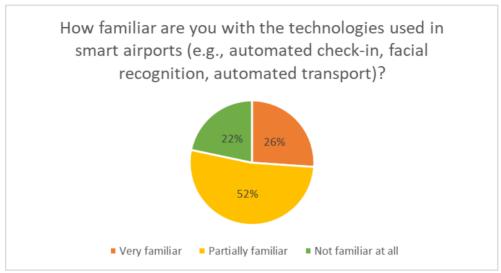


Chart 3. Familiarity with Smart Airport Technologies

Moreover, 22% of the respondents feel they have no familiarity with the technologies used in smart airports, while the majority, 52% admit that they are somewhat familiar. Only 26% consider themselves highly familiar with smart airport technologies.

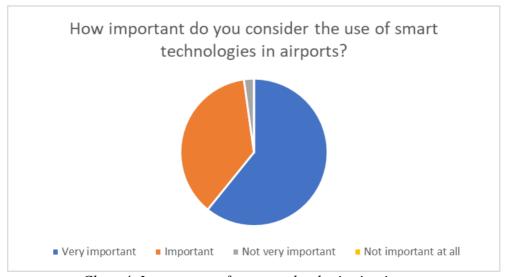


Chart 4. Importance of smart technologies in airports

The survey data reflects a positive attitude among Romanians toward the use of smart technologies in airports. The overwhelming majority of respondents (63.6%) consider these technologies to be very important, while 34.1% regard them as important, demonstrating widespread interest in digitization and innovation in this field.

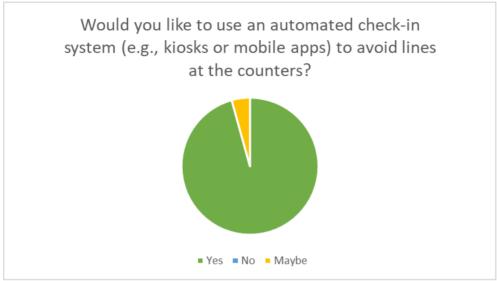


Chart 5. Automated check-in systems

Regarding the implementation of an automated check-in system, almost all participants (95.5%) would prefer this solution to avoid queues at counters, emphasizing the need for faster and more efficient processes.

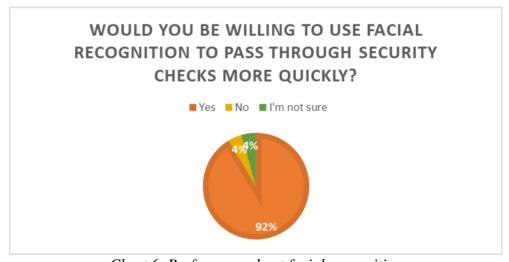


Chart 6. Preferences about facial recognition

Additionally, facial recognition for security control is well received, with 90.9% of respondents stating they would be willing to use this technology to reduce waiting times.

These results indicate a significant openness to adopting smart technologies in airports, aiming to enhance the passenger experience and simplify procedures.



Chart 7. Pay-on-foot system

The overwhelming majority (95.5%) value the usefulness of such a system, suggesting a heightened interest in time-saving technologies that simplify processes.

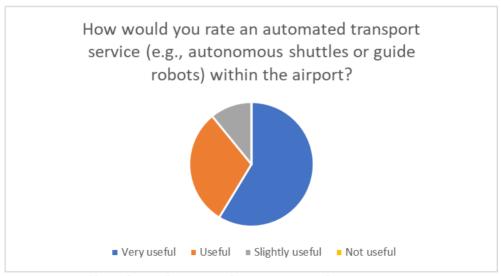


Chart 8. Preferences about automated transport service

Approximately 88.6% of respondents consider this service "useful" or "very useful," reflecting broad openness to modern technological solutions in airports, with a low potential for public resistance.



Chart 9. Mobile app for receiving real-time information

With 93.2% of respondents willing to use such an application, it is evident that quick access to updated information is a major priority for users, and such a digital solution would have a high adoption rate.

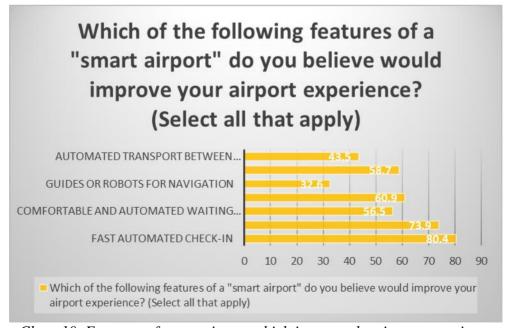


Chart 10. Features of smart airport which improve the airport experience

Most of the respondents (80.4%) consider a fast-automated check-in would improve their airport experience, 73.9% agree that they would like to use facial recognition system for security screenings, whereas 60.9% would like to receive real-time information on mobile apps.

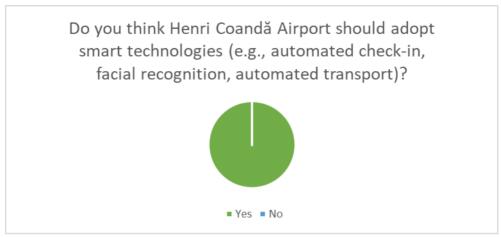


Chart 11. Henri Coanda should adopt smart technologies

The results from the charts indicate a high level of interest and significant openness among respondents toward the implementation of smart technologies at Henri Coandă Airport. All 44 participants (100%) believe the airport should adopt technologies such as automated check-ins, facial recognition, and automated transportation, highlighting a clear consensus in favor of modernization.

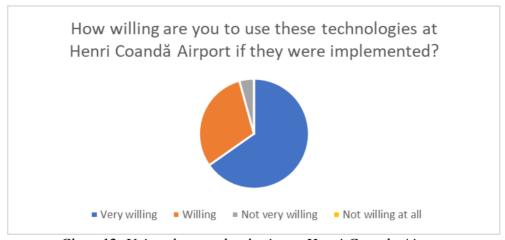


Chart 12. Using these technologies at Henri Coanda Airport

Regarding the willingness to use these technologies, 65.9% of respondents stated they are "very willing," and 29.5% are "willing," demonstrating a positive attitude and a high level of acceptance.

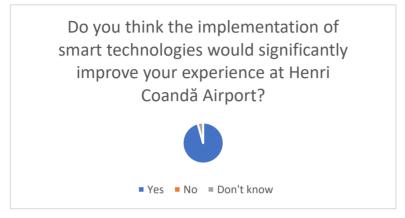


Chart 13. Experience of respondents at Henri Coanda Airport

Among the smart features considered most useful for improving the airport experience, respondents prioritized quick check-ins (79.5%), followed by facial recognition (72.7%), real-time information (59.1%), and smart waiting lounges (56.8%). Options such as smart parking (56.8%) and automated transportation (43.2%) were also well-received, though with slightly lower preferences.



Chart 14. Useful smart technologies for Henri Coanda Airport

According to the survey responses, the main perceived obstacles to adopting a "smart airport" in Romania, particularly at Henri Coandă Airport, are the high implementation costs (63.6%) and the lack of adequate infrastructure (61.4%). Other significant barriers include the lack of user education and information (54.5%) and fear of using advanced technologies (34.1%).

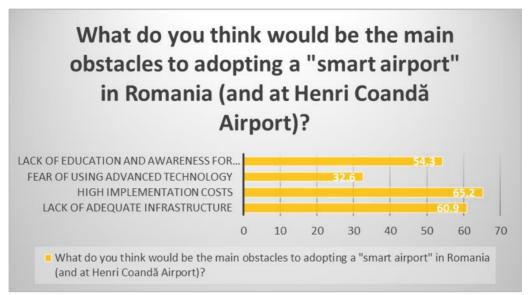


Chart 15. Main obstacles to Henri Coandă becoming a smart airport

However, the majority of respondents (95.5%) believe that implementing smart technologies would significantly improve their airport experience. Among the technologies perceived as most useful are automated check-ins (88.6%), facial recognition for security (72.7%), mobile applications for information (68.2%), and automated parking fee payments (68.2%), while robotic guides are considered useful by 36.4% of participants.

These findings suggest a strong openness toward smart technologies, but they also highlight the need for measures to overcome the identified barriers.

The survey results indicate that the majority of respondents (72.7%) are female, while only 27.3% are male. Regarding education levels, 54.5% of participants hold a university degree (bachelor's), 25% have high school education or less, and 20.5% have postgraduate education (master's or doctorate).

Analyzing the age distribution, most respondents (40.9%) fall into the 25–34 age group, followed by those aged 35–44 (25%) and 18–24 (18.2%). The under-18, 45–54, and over-65 age categories each have equal representation, at 6.8% each.

Most respondents are full-time employees (54.5%), while 40.9% are students. The rest are part-time employees, entrepreneurs, unemployed, or retirees, but in much smaller percentages.

The majority of respondents live in urban areas (86.4%), while a minority of 13.6% come from rural areas. This indicates an urban concentration of the respondents.

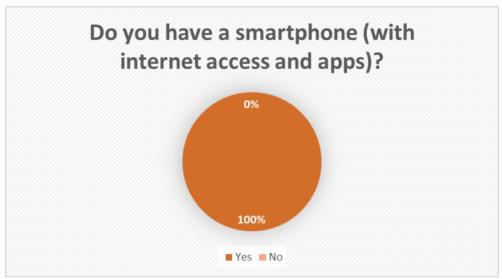


Chart 16. Access of the respondents at a smartphone

All respondents (100%) own a smartphone, suggesting universal access to modern technology among the participants.



Chart 17. Air travel for business trips vs vacations

The survey results provide an interesting insight into the preferences of Romanians regarding air travel and their monthly income. Regarding flight frequency, the majority of respondents (43.2%) use air transport more often for vacations than for business. Nearly as many (40.9%) report using air travel for both purposes equally, while a smaller percentage (13.6%) state that they never travel for business. These data suggest that vacations are the primary reason Romanians use air transport, with leisure flights being more popular than corporate ones.

In terms of monthly net income distribution, the largest group of respondents (29.5%) falls within the 2,001-4,000 RON range, reflecting a middle-income category. Other significant groups include those with incomes between 1,000-2,000 RON (15.9%) and those earning between 4,001-6,000 RON (15.9%). A smaller percentage (11.4%) indicate incomes below 1,000 RON, with the same percentage opting not to respond. This distribution highlights a predominance of middle-income participants in the survey.

In conclusion, the preference of Romanians for vacation-related flights and their average income provides valuable insights for airlines and tourism operators. They can tailor marketing strategies focused on promoting leisure offers, thus responding to the majority market demand.

Smart airports represent a crucial element of aviation modernization, leveraging advanced technologies which includes the Internet of Things (IoT), synthetic intelligence (AI), and automation to increase Operational performance and enhance passenger experience. These answers lessen ready instances, beautify protection, and customize services, presenting a smoother tour experience. Recent research display that IoT technology and biometric systems, together with facial recognition, boost up check-in and bags coping with processes, optimizing airport resources (Alansari et al., 2019; Deloitte, 2021). Moreover, real-time facts analytics allow green passenger waft control and decrease overcrowding.

Dubai International Airport is a frontrunner in enforcing clever answers, making use of biometric tunnels that permit passengers to by skip via protection factors contactless, decreasing processing time to only a few seconds (Dubai Vibes Magazine, 2021). Hong Kong International Airport (HKIA) employs IoT technology to screen passenger waft and enhance electricity performance. Additionally, robots manual passengers, imparting data and customized assistance. Similarly, Incheon International Airport in South Korea makes use of AI and IoT to lessen ready instances and provide great services, which include sustainable electricity control answers.

In addition to airports, the idea of clever hospitality is gaining traction within the tourism industry. The integration of IoT and AI in motels permits customized services, together with clever rooms that modify settings primarily based totally on guests` possibilities and chatbots presenting on the spontaneous

assistance. These answers beautify purchaser experience, lessen costs, and growth operational performance. The international clever hospitality marketplace is projected to reach \$133.7 billion with the aid of using 2031, highlighting the huge capacity of this industry.

However, enforcing clever technology in airports and hospitality offers demanding situations associated with interoperability and private facts privacy. While passengers admire performance and comfort, they're touchy to the dangers related to the use of biometric data (Zhang & Chen, 2022). To ensure the success of these solutions, it is essential for operators to comply with privacy regulations and adopt an integrated and collaborative approach. At the same time, airports and hotels implementing such technologies can significantly improve customer satisfaction and operational efficiency, contributing to the creation of sustainable business ecosystems.

### References

- 1. Airport Technology (2021). "Contactless security: how technology can cut airport queues".
- 2. Al Nuaimi, M., et al. (2015). International Conference on Smart Airport Technologies.
- 3. Alansari, Z., Soomro, S., & Belgaum, M. (2019). Smart Airports: Review and Open Research Issues. EUDL.
- 4. Bradford (2015). Dubai or not to buy: Airport innovation through customer first strategy.
- 5. Bradford (2015). Travelers' perception of service quality at Dubai International Airport.
- 6. Changi Airport (2019). Changi Airport Official Report.
- 7. Deloitte (2021). Smart airports and the Internet of Things. Deloitte Insights.
- 8. Dubai Vibes Magazine (2021). "State-of-the-art Dubai launches facial recognition for seamless airport experience".
- 9. Future Travel Experience (2021). "Facial Recognition at Dubai Airports".
- 10. International Airport Review (2023). International Airport Review Official Website.
- 11. Ivanov, S.; Webster, C. (2019). Robots, Artificial Intelligence, and Service Automation in Travel, Tourism and Hospitality. Emerald Publishing Limited: Bingley, UK.
- 12. Jiang, Y., Tran, T. H., & Williams, L. (2023). Machine studying and blended fact for smart aviation: Applications and challenges. *Journal of Air Transport Management*, 111, 102437.
- 13. Liu, Y.; Henseler, J.; Liu, Y. (2022). What Makes Tourists Adopt Smart Hospitality? An Inquiry beyond the Technology Acceptance Model. *Digital Business*, 2, 100042.
- 14. Lu, J. (2020). Smart Airport Technologies and Passenger Satisfaction. *Journal of Airport Management*.
- 15. Qatar. Qatar's Hamad International Airport launches smart solutions.
- 16. Singh, A.J.; Kasavana, M.L. The Impact of Information Technology on Future Management of Lodging Operations: A Delphi.
- 17. Smart City and Smart Tourism: A Case of Dubai (2017).

- 18. Statista (2021). Market Size of the Smart Hospitality Sector Worldwide in 2021, with a Forecast for 2031.
- 19. Stewart, J. (2016). Journal of Airport Efficiency.
- 20. \*\*Travelers' perception of smart airport facilities: An X (Twitter) sentiment analysis. *Journal of Air Transport Management*, Volume 118, July 2024, 102600.
- 21. Wu, H.C.; Cheng, C.C. (2018). Relationships among Technology Attachment, Experiential Relationship Quality, Experiential Risk and Experiential Sharing Intentions in a Smart Hotel. Journal of Hospitality and Tourism Management, 37, 42–58.
- 22. Zhang, Y., & Chen, L. (2022). Biometrics and Privacy in Smart Airports. International Journal of Aviation Security.Qatar: QATAR'S HAMAD INTERNATIONAL AIRPORT launches smart solutions
- 23. https://www.proquest.com/docview/3065056404/fulltext/BDF24BE041E047BAPQ/1 ?accountid=35090&sourcetype=Scholarly%20Journals Hong Kong as a Center of International and Regional Aviation in the GBA Initiative

### WHY BLEISURE TRAVEL?

Catrinel Raluca Dridea\*

#### **Abstract**

As the tourism industry has faced numerous challenges over the recent years, many changes have occurred in terms of tourists demands and travel habits. New trends have emerged, and little by little, tourism representatives have tried to identify and provide new and interesting offers in order to cater for the exigent and sophisticated tourists. As part of the undergone changes in the tourism industry, the concept of bleisure has become to arise and to be more and more attractive for the consumers. Therefore, the time for work and leisure, the interconnection of these, the difficulty in providing a clear definition in the context of blending the two concepts, represent important issues for all tourism organization to consider for an optimal approach of tourism services. So, why bleisure travel? This paper tries to analyze the role and importance of bleisure travel and its part of the major trends shaping the future of the tourism industry.

**Keywords:** work, leisure, bleisure, travel, tourism, trends.

JEL Classification: Z32, Z31, Z30.

### 1. INTRODUCTION

Over the recent years tourism has gone through a series of transformations, as a result of the Covid 19 pandemic, economic crises, political instability and others. The pandemic has led to a remote working scenario, that had risen in popularity ever since. Even though this concept wasn't new, the large-scale application has generated many benefits for both the employers and the employees, such as increase productivity, costs reduction, optimization of transport and others.

Based on these arguments many companies have integrated more and more the concept of remote working, with different ranges, from 1-2 days per week, to the entire week for specific roles. This has translated into new working perspectives, offering the opportunity to do all related activities away from office.

More than that, the increasing need for travel has stimulated the development of bleisure travel. By combining the concept of work and leisure, the digital nomads are redefining business and leisure.<sup>34</sup>

Based on similar definitions, terms as digital nomad or bleisure traveller are usually not the same, the digital nomad represents a change in lifestyle,

\* Dridea Catrinel Raluca is Lecturer at the Romanian-American University, Bucharest, e-mail: catrinel.raluca.dridea@rau.ro

<sup>&</sup>lt;sup>34</sup> https://nomad365.beehiiv.com/p/the-rise-of-bleisure-travel-how-digital-nomads-are-redefinin g-business-and-leisure

working remotely for a longer period of time, for weeks or months, or indefinite<sup>35</sup>.

Whether the term used is *workation, digital nomad of bleisure traveller*, with their particularities, the main idea represents the intertwining of work and leisure time, aspects that presents large benefits for all parties included. Future trends in tourism are underlining the importance of these, as organizers are taking into account the availability of working and leisure facilities. Adapting to cater for this segment of tourists has generated tailor made services and specialized offers.

### 2. BLEISURE TRAVEL – BLENDING BUSINESS AND LEISURE

Tourism industry has gained a significant increase over the past few years, being projected to grow annually with a rate of 3.9% from 2025 to 2029, reaching a value of 1.114 billion USD, in terms of revenues.<sup>36</sup> International tourist arrivals are expected to register 2 billion over the next decade, as currently being 1.5 billion per year<sup>37</sup>.

The rapid growth of travel comes with a series of transformations that are shifting towards niche vacations, a preference for personalized and meaningful experiences such as<sup>38</sup>:

- Family travel, focusing on multigenerational trips and activities,
- Romantic getaways and unique experiences based on sustainable practices and digital detox,
  - Destinations for sports tourists, combining fitness and travel
  - Travelling for music and festivals
  - Bleisure travellers
  - Solo travellers

Other perspectives are conveying over future tourism trends as<sup>39</sup>: AI-tinerary (increase demand for AI generated travel planning), authenti-cities (choosing unique / remote travel places, rather than the well-known destinations) or, earth-friendly escapes (sustainable travel), *bleisure travel*, solo travel, food focused travel etc.

It can be acknowledged that, over the last few years, the focus of tourists has been on authentic and meaningful experiences, offering a similar perspective over the tourism industry's trends. One can see clearly, the

<sup>37</sup> https://www.travelandtourworld.com/news/article/global-travel-industry-poises-for-historic-milestone-as-international-tourist-arrivals-projected-to-surpass-2-billion-by-2030/

<sup>&</sup>lt;sup>35</sup> https://www.sevencorners.com/blog/travel-tips/bleisure-travel-getting-paid-while-you-work-f rom-anywhere

<sup>&</sup>lt;sup>36</sup> https://www.statista.com/outlook/mmo/travel-tourism/worldwide

<sup>38</sup> https://www.linkedin.com/pulse/trends-leisure-travel-2025-alessia-negro--fnckf

<sup>&</sup>lt;sup>39</sup> https://all.accor.com/a/en/limitless/thematics/lifestyle-trends/travel-trends-2025.html

importance of bleisure travel, as it has maintained a constant position within all trends. The need for properly blending the business and leisure travel is on a rise

What is blesuire travel? It can be defined as an extension of work-related trips for leisure activities.

The work-travel evolution can be explained by the following steps<sup>40</sup>:

- 1. Bleisure the main reason for travel is represented by business activities, with a few days for leisure before or after work;
- 2. Workation the business remains the primary reason, but the setting is chosen in regard with travel preferences;
- 3. **Remote work** a more permanent arrangement for working outside the office:
- *4. Digital nomad* an independent work by balancing aspects as location, freedom and work-travel flexibility.

Redefining the patterns of work and leisure has changed the image of travel. From the tourism perspective, there are new opportunities for travel, all year round, and also in other destinations than the overcrowded ones. From a company's perspective, bleisure travel is one of the perks employees are looking for, with benefits on both sides. As a result, finding an optimal way to integrate bleisure travel should be one of the priorities of every company.

The table below accentuates the differences between bleisure and workation, both of them with a positive outcome for the entire tourism industry.

	Bleisure	Workation	
Dates and location	Dependent on business venue and	Flexible	
	date		
<b>Duration of stay</b>	A few days	Up to a month	
Accommodation	Selected by the company	Usually a rental	
		home/apartment	
Priorities	Nearby attractions, tours	Equipped workplace	
Payment	The company pay for flights and	Paid by the employee	
	accommodation and the employee		
	for the extra days		

Table 1 Bleisure vs Workation

Source:https://www.altexsoft.com/blog/bleisure-travel-how-to-capitalize-on-bu siness-travelers-that-linger-for-leisure/

<sup>40</sup> https://oneplanetjourney.com/understanding-bleisure-travel-complete-guide/

The increased interest for bleisure travel is determined by its benefits, among which there can be presented: improving the work-life balance, generate a greater job satisfaction and therefore employee retention, increase productivity, personal development, cost reduction or savings and so on.

Nowadays finding the proper work-life balance can be a challenge. The time associated with work and other activities of a mandatory nature can take its toll on people's well-being, generating the need for leisure practices. With extra time on business travels for leisure activities, the bleisure concept provides the opportunity for stress reduction and avoiding or diminishing the burn out syndrome.

The increase of job satisfaction represents another important aspect to consider in promoting bleisure travel, as an extra incentive, enhancing motivation and productivity<sup>41</sup>.

This type of travel can significantly help the professional and personal development, adding value to the entire experience of traveling, enriching the business component with local cultural immersions, gaining skills and knowledge.

In terms of cost reductions, certain expenses are covert in part by the sending company, such as airline tickets and accommodation as well as the opportunity to travel extra season, among others.

Factors of influence	Potential Reason For Bleisure	
Economic and social	- A part of the trip is paid by the company;	
	- Desire for shorter but more frequent vacations;	
Generational	- More authentic experience while travelling,	
	especially for the younger generation;	
Health, wellness and lifestyle	- Increase balance between work and healthy life;	
	- Spend more time relaxing;	
Personal	- Spend more time with family and friends;	
	- Learn more about the places;	
Safety and security	- Insured while travelling on business;	
Technological	- Possibility of working remotely;	
	- Increase knowledge of leisure activities due to social	
	networks.	

Table 2. Factors Influencing Bleisure Tourism

Source: Narendra Kumar, Swati Sharma, Vasco Ribeiro Santos, Smart Travel and Sustainable Innovations in Bleisure Tourism, IGI Global, 2024;https://www.google.ro/books/edition/Smart\_Travel\_and\_Sustainable\_Innovations/OiQqEQAAQBAJ?hl=ro&gbpv=1

\_

 $<sup>^{41}\</sup> https://www.fcmtravel.com/en-nz/insights/benefits-and-challenges-with-bleisure$ 

## 3. BLEISURE TRAVEL AND ITS INFLUENCE ON TOURISM DEVELOPMENT

Bleisure travel has grown over the years, due to the various benefits for both the employer and the employee, as it can be observed in statistics registrations of the international tourism indicators. Even though the concept of bleisure has appeared years ago, it has developed with a higher growth rate than initially predicted. The numbers highlight the positive evolution of this type of tourism, as seen in the figure below, expecting an annual growth rate of almost 20%.

Estimated Global Bleisure Tourism Market Size 2024

USD 709.2 billion

Projected Global Bleisure Tourism Market Value 2034

USD 4219.5 billion

Value-based CAGR (Compound Annual Groth Rate) 2024 to 2034

19.5%

Fig.1 Global Bleisure Tourism Industry Analysis

Source: https://www.futuremarketinsights.com/reports/bleisure-tourism-market;

Regarding the regional statistics, the economies of Europe, North America and Asia, the percentages below are underlining the importance of bleisure tourism and its prediction the annual growth rate for 2024-2034.

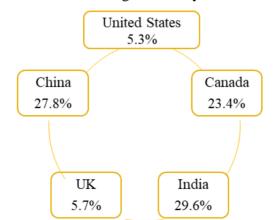


Fig2. Bleisure tourism market regional analysis – CAGR 2024 to 2034

Source: https://www.futuremarketinsights.com/reports/bleisure-tourism-market

The numbers presented in the previous figure show that USA and UK predictions are the lowest compared to the other. USA is expected to lead North America's bleisure tourism market influenced by the number of outbound tourists and also due to the increase of low-cost airlines; nevertheless the growth may be limited considering they have one of the lowest average paid vacation days in the world and inflexible work environments; Regarding Europe, the popularity of United Kingdom as a bleisure destination still remains, attracting foreign visitors and Americans, being expected to reach a moderate market growth of 5.7% CAGR<sup>42</sup>. Canada, China and India are strong examples of growth in the years to come, with important contributions for the next decade of 23.4%, 27.8% and 29.6%.

The interest for bleisure travel, as statistics has showcased is definitely increasing, for instance<sup>43</sup>: the most of respondents in India are planning bleisure travel (92%), followed by China (84%), Germany (79%), and the US and the UK (both at 72%).

This growing trend is embraced by 78% of millennials, with the technology sector leading at 24% of such travellers, 13% from manufacturing sector and other 12% from finance and so on; more that 65% are solo travellers, though 35% bring companions, and 57% are influenced by family considerations in selecting destinations; bleisure travellers are taking an average of 6.4 trips annually, with Indian travellers leading at 7.4 trips per year, followed by German and Chinese; four in five business travellers believe that leisure time should be integrated into work trips<sup>44</sup>.

Recent studies have illustrated that business travellers are requesting more and more the addition of leisure time to their trips<sup>45</sup>:

- 89% want to add leisure time to the next business trip;
- 76% have already combined business and leisure travel;
- 55% intend to plan more bleisure trips to improve the work-life balance;
- 73% consider that adding leisure to their business trips will enhances their professional well-being etc.

Such surveys are illustrating the importance of bleisure for employees, being an imperative from their point of view in selection a business trip and therefore, a requirement for companies to consider integrating it as part of employees' incentives and benefits. As statistics shows, employees are taking into account more and more the opportunity for extra leisure travel associated with business trips.

-

<sup>&</sup>lt;sup>42</sup> https://www.futuremarketinsights.com/reports/bleisure-tourism-market

<sup>&</sup>lt;sup>43</sup> https://www.bbc.com/travel/article/20241231-travel-in-2025-longer-trips-to-fewer-places

<sup>44</sup> https://hoteltechreport.com/news/bleisure-statistics

<sup>&</sup>lt;sup>45</sup> https://navan.com/blog/insights-trends/bleisure-travel-statistics

### 4. CONCLUSIONS

So why bleisure travel? Because it provides several benefits for tourists, organizations and destinations. The business tourists are given the opportunity to detach from work, stress or even burn out, to learn about people and culture, to immerse into the local tradition, to enhance their personal development and many more. They have the chance to explore new destinations, in off peak season, to save costs for travelling and spend time with families and friends.

Companies are encouraging bleisure travel, as it increases employees' productivity and well-being and consider this to be one of the most appealing perks of their job.

Destinations are benefiting from all the extra days for leisure, which will translate in higher tourists' arrivals and receipts and also the increased international notoriety.

Therefore, bleisure travel remains an important trend of the tourism industry, alongside other related concepts that are properly combining work and leisure activities.

### References

- Kumar Narendra, Sharma Swati, Santos Vasco Ribeiro, Smart Travel and Sustainable Innovations in Bleisure Tourism, IGI Global, 2024; https://www.google.ro/books/edition/Smart\_Travel\_and\_Sustainable\_Innovations/OiQqEQAAQBAJ?hl=ro&gbpv=1
- 2. Morrison Alastair M., Tourism Marketing In the Age of the Consumer, Taylor & Francis, 2022;
- 3. Pamukçu Hüseyin, Sharma Anukrati, Tanrisever Canan, Future Tourism Trends Volume 1 Tourism in the Changing World, Emerald Publishing Limited, 2024;
- 4. https://all.accor.com/a/en/limitless/thematics/lifestyle-trends/travel-trends-2025.html;
- 5. https://bleisuretraveller.com/en/ trends;
- 6. https://hoteltechreport.com/news/bleisure-statistics;
- 7. https://hoteltechreport.com/news/bleisure-statistics;
- 8. https://navan.com/blog/insights-trends/bleisure-travel-statistics;
- 9. https://nomad365.beehiiv.com/p/the-rise-of-bleisure-travel-how-digital-nomads-are-redefining-business-and-leisure;
- 10. https://oneplanetjourney.com/understanding-bleisure-travel-complete-guide/;
- 11. https://pro.regiondo.com/blog/bleisure-travel/;
- 12. https://www.bbc.com/travel/article/20241231-travel-in-2025-longer-trips-to-fewer-pl aces;
- 13. https://www.bbc.com/travel/article/20241231-travel-in-2025-longer-trips-to-fewer-pl aces:
- 14. https://www.educationaltravelasia.org/bleisure-travel-a-modern-way-for-workers-get away/;
- 15. https://www.fcmtravel.com/en/resources/insights/bleisure-travel-trends;
- 16. https://www.fcmtravel.com/en-nz/insights/benefits-and-challenges-with-bleisure;
- 17. https://www.futuremarketinsights.com/reports/bleisure-tourism-market;
- 18. https://www.linkedin.com/pulse/trends-leisure-travel-2025-alessia-negro--fnckf;

- 19. https://www.locomote.com/blog/the-pros-and-cons-of-encouraging-bleisure-travel;
- 20. https://www.sevencorners.com/blog/travel-tips/bleisure-travel-getting-paid-while-you-work-from-anywhere;
- 21. https://www.statista.com/outlook/mmo/travel-tourism/worldwide;
- 22. https://www.travelandtourworld.com/news/article/global-travel-industry-poises-for-h istoric-milestone-as-international-tourist-arrivals-projected-to-surpass-2-billio n-by-2030/;
- 23. https://www.travelperk.com/blog/bleisure-travel-statistics/ trends and statistics;

# THE MOTIVATION OF HIGH SCHOOL GRADUATES IN SELECTING UNIVERSITY SPECIALIZATION

Emilia Gabroveanu\*

#### **Abstract**

The educational market, like any other market, is dynamic and must consistently adapt to new conditions. Various factors influence how quickly educational programs respond to the demands of the labour market, including a country's legislation, institutional autonomy, academic freedom, program accreditation, and available financial and human resources, and university management policies. Additionally, it is essential to analyse client's demands in this market. High school graduates select fields of study or university programs based on different criteria. Recently, there has been increasing discussions about the relationship between the chosen field of study and the success of graduates in entering the labour market. This connection can be optimized if young people receive guidance and make informed study choices, allowing for better alignment with job market needs upon graduation. Based on these considerations, this study analyses the motivation of recent high school graduates in selecting university specializations, particularly those that are currently considered 'in trend', and the factors that influence their decisions regarding fields and specializations in higher education.

**Keywords:** educational market, higher education, students.

JEL Classification: 120.

# 1. Influences on the choice of university study program specializations

High School Students, even from the early years of their studies are encouraged by parents or teachers to express their preferences for university studies.

When faced with the choice of a university study program, whether in preparation for the Baccalaureate exam or University admission, the major challenge lies in the lack of decision- making elements such as maturity, motivation, understanding of personal strengths, delayed discovery of inclinations toward a specific field, and more. For a young person aged 15-16, it is much easier to rely on advice and allow their decision on a study program to be influenced by family members, friends, or social media, rather than discovering themselves and exploring their own abilities or competencies that could support their professional life after graduating from university.

In today's socio-economic context, continuing high school education with university studies has become a norm for the professional development of every

<sup>\*</sup> Emilia Gabroveanu is Associate professor at the Romanian American University in Bucharest. E-mail: emilia.gabroveanu@rau.ro.

young individual, even if they do not discover their aptitudes for a specific professional field in time.

According to a study published by iZidata and conducted by the Bucharest International School of Management, young people preparing for university admission choose their specialization in such a way that, once they graduate, they can find a job as quickly and easily as possible. Over 60% of respondents stated that having a job after university is a must. Furthermore, 58% dream of a well-paid job. This is likely one of the reasons high school graduates are drawn to faculties specializing in business administration, marketing, digital marketing, economics, finance, accounting, cybernetics, computer science, sociology, or literature [Laura Macavei, 2024].

In other words, today's young people want a real chance at employment, a well-paid job, and the possibility of maintaining an active social life during their university years.

## 2. The correlation between the chosen specialization and the graduates finding employment

To identify the criteria for choosing a university, by students or graduates of bachelor's programs, and the determining factors in their decision, a sociological study was conducted using an online questionnaire.

The sample had a higher percentage of women (87.3%) and only 18.7% men, with ages ranging from 18 to 44 years old, the 18–24 age group having the highest representation (87.5%). Among the respondents, there were young people who chose the following options: Bioengineering Systems, Law, Medicine, History, and Tourism.

By exploring these elements, the research could provide valuable insights for optimizing educational pathways for high school graduates, ensuring that their choices align not only with personal interests but also with improved employability in a changing labour market.

According to the results from the online questionnaire, the top 3 reasons that influenced the choice of a university were: passion for the field of study (75%), family influence (34.4%), and potential salary earnings in the field of study (28.1%).

Three main reasons for choosing a university

The accessibility of the university

The employment opportunities

Salary income

The influence of the family

The passion for the field of study

75%

0% 10% 20% 30% 40% 50% 60% 70% 80%

Figure 1. Three main reasons for choosing a university

It is well known that the reputation of a university plays a significant role in shaping a graduate's career, but at the same time the student's professional persona is shaped by the specialization they graduate in. Thus, the present study attempted to analyse the criteria for choosing a specialization or a study program. Interest in further study of a specific field (81.3%), obtaining a better-paid job (28.1%), and the increased demand in the labour market for Subject Matter Experts (SME) within the chosen field (25%) were the top three reasons selected by the respondents of the study.

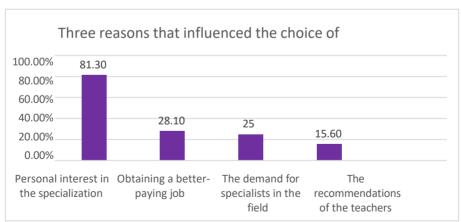


Figure 2. Three reasons that influenced the choice of specialization/program

Source: author

The correlation between the theoretical training provided during university and starting employment after graduation, indicates that only 17% of

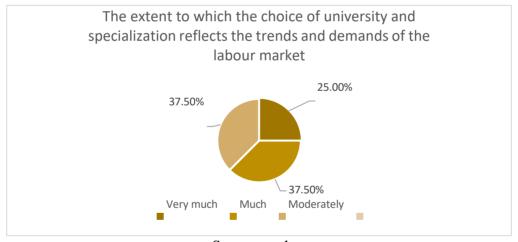
respondents consider themselves well-prepared to work in their field, 75% believe they are well-prepared but require practical experience, and only 9.4% stated that the theoretical training was insufficient.

Understanding the importance of gaining practical experience (internships, projects) in their chosen field to be more competitive in the labour market: 93.8% of respondents considered it important (59.4%) or very important (34.4%).

More than half of the respondents (53.1%) answered positively to the question of whether the university offers sufficient opportunities to connect with economic operators or to gain practical experience in their chosen field, while 31.3% felt that opportunities were limited.

"To what extent is the choice of university and specialization influenced by labour market trends and requirements?", to this question, 25% responded "to a large extent," and 37.5% "to a very large extent." The feedback can be explained by a limited perspective on the medium and long-term dynamics of the labour market.

Figure 3. The extent to which the choice of university and specialization reflects the trends and demands of the labour market



Source: author

Taking into account labour market requirements, the salary level or employment opportunities are valued by the majority of respondents, ranging from moderate to very much, totalling 92.7%, while only 6.3% of respondents consider these factors as not worth taking into account.

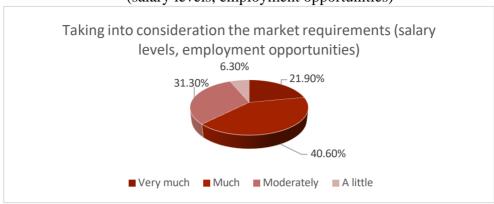


Figure 4. Taking into consideration the market requirements (salary levels, employment opportunities)

The support provided by the university in finding a job after graduation was rated as very good by 12.5% of respondents, good by 56.3%, moderate by 18.8%, and poor by only 9.4% of respondents.

Regarding the relationship between salary levels and the completed specialization, 21.9% believe that the specialization has a major impact on salary levels, while 68.8% consider that, although it is important, it has less impact, compared to factors such as experience or company's location.

When it comes to employment plans in their field of study, 50% want to work in the field they studied, 12.5% are seeking employment in a different field, and 25% plan to go further with their studies through master's or doctoral programs and are not yet decided.

6% of respondents stated they chose a field of study despite the lack of sufficient employment opportunities in that area on the labour market, 44% believe they chose a field with high demand in the labour market, and 50% acknowledge choosing a sought-after field but with increased competition in the job market.

The field of study is in demand in the labour market

No, there aren't enough job opportunities available 6%

Yes, it is a field with high demand in the labour market 44%

Yes, but there is a lot of competition for job positions 50%

Figure 5. The field of study is in demand in the labour market

Among the main challenges anticipated by high school students regarding the choice of specialization were the reduced number of job opportunities (9.3%), not enough practical experience upon graduation (43.8%), and the low starting salary at the beginning of their career (46.9%).

Reduced job opportunities may be linked to the perception that, in certain fields, there are not enough available positions or that there is significant competition for the ones that exist. High school students may be aware of labour market fluctuations and the fact that some fields of study might provide theoretical preparation without automatically guaranteeing immediate employment. This reflects a general uncertainty about the balance between supply and demand in the labour market.

Acknowledging not having enough practical experience upon graduation indicates that young people understand that, while they gain theoretical knowledge during their studies, it is often difficult to acquire sufficient practical experience, which is essential for employment. High school students may see this as a major obstacle, given that the employers require practical experience when recruiting new graduates.

The concern about low starting salaries at the beginning of a career is justified, as early-career wages are a significant concern, especially in the context of rising living costs. Young people may worry that they will not be able to earn enough to secure a decent living standard. Additionally, in certain fields, starting salaries may be lower than in others, which could influence high school student's decision when choosing a specialization, especially if they prioritize immediate financial stability.



Figure 6. The challenges anticipated by high school students regarding the choice of specialization

These fears can indeed be real factors of uncertainty for many young people who must make important educational and professional decisions.

More than half of the respondents, 53.1%, believe that the rapid evolution of technologies and the labour market will bring significant changes to the future of their field of study, while remaining attractive. This option suggests that the majority of high school students are aware of the impact of technological transformations on the labour market and the fields in which they study. However, they consider that, although there will be significant changes (automation, artificial intelligence, digitalization, etc.), those fields will remain attractive. The reason is that technology often brings new opportunities for already existing professions or creates new fields, and these high school students believe that their adaptability and ability to learn will be essential to remain competitive.

28.1% believe that it will bring more employment and development opportunities, perceiving technological evolution as an opportunity rather than a threat. Many consider that technological progress will generate new industries, products, and services that will require a higher number of qualified employees. It can also be considered that certain fields, such as IT, digital technology, or scientific research, will benefit from continuous development, creating new job opportunities for young people in these areas.

The rapid evolution of technologies and the labour market will reduce the jobs available in the future field, according to 12.5% of respondents. These are

more concerned about the effects of automation and artificial intelligence on jobs. They consider that many jobs will disappear as technology advances, especially in repetitive fields or those that can be automated. For example, traditional industries or certain jobs in sectors such as production or transport could be affected by new technologies, which would lead to a reduction in the number of available jobs.

The main criteria for selecting a specialization with a direct impact on the employability of its graduates are as follows: for 31.3%, the relevance of the study program in the labour market is essential, and for another 31.3%, it is the collaboration with the business environment and the completion of internships during studies. For 28.1%, it is the quality of the academic environment and educational resources, and for only 9.4%, it is the strength of the university's brand in the market.



Figure.7. The main criteria for selecting a specialization in order to have a direct impact on the employability of its graduates

Source: author

Among the main improvements considered necessary to better support the absorption of graduates into the labour market, respondents highlighted the following: increasing internship and practical training opportunities (12.5%), closer collaboration with employers to facilitate faster integration of graduates (50%), improving the acquisition of transversal skills such as communication and teamwork (15.6%), and developing courses that reflect the current demands of the labour market (21.9%).

For high school students, when choosing a field of study that will ensure immediate employability after graduation, it is important to consider several factors that influence the labour market. Based on this study, several conclusions can be drawn:

### • Researching the labour market and its demands

High school students need to gather information about fields with high demand for workers and low unemployment rates. Some areas with significant potential include IT, healthcare, engineering, digital marketing, the construction industry, and sustainability-related fields.

Additionally, it is important to monitor trends and technological developments, as certain industries may experience significant growth (e.g., emerging technologies such as AI, block chain, IoT), while others a reduced activity.

### • Choosing a Field with a Combination of Theory and Practice

In many cases, employers prefer candidates with practical experience, even for entry-level positions. High school students should choose specializations that offer opportunities to gain practical experience during their studies, such as internships, collaborative projects, or courses that include practical applications.

Additionally, fields such as information technology, engineering, or healthcare can provide practical learning opportunities that help facilitate a smoother transition into the labour market.

## • Focusing on Transferable Skills

Choosing a specialization that develops transferable skills (communication, problem-solving, teamwork, digital skills) will help high school students adapt quickly to various job roles. For example, programming skills, digital marketing, project management, or even financial competencies can be applied across multiple fields.

Soft skills, such as critical thinking and adaptability, are increasingly valued by employers and are essential for navigating the ever-changing professional world.

## • Choosing a Growing Field or One with a Workforce Shortage

High school students should choose fields where there is high demand for professionals and a shortage of qualified specialists. Examples of fields with a workforce shortage include IT (programmers, software developers, cyber security specialists), healthcare (nurses, doctors), and various technical trades (electricians, welders).

Additionally, fields related to sustainability and green energy (environmental specialists, ecological engineers) are expanding due to new global policies and the growing need to protect the environment.

### • Continuous learning and obtaining additional certifications

High school students should choose a specialization that allows them to continue their education and obtain certifications or licenses valued by employers. For example, in the IT field, certifications from major companies (such as Google, Microsoft, Cisco) are a considerable advantage.

Additionally, online courses and supplementary training can help young people acquire new relevant skills, significantly improving their chances of immediate employment.

## • Searching for a mentor or professional guide

It is essential for high school students to seek mentors or professionals in their desired field, who can provide them with information about industry requirements, guide them in choosing a specialization, and offer advice on how to build a successful career.

Participation in professional events, career fairs, or educational counselling sessions can help high school students better understand how to leverage their studies and increase their employability.

## • Flexibility and openness to new fields

High school students need to be aware that the labour market is constantly changing, and fields that are popular now may undergo rapid shifts due to emerging technologies. Flexibility and a willingness to engage in continuous learning will be essential for maintaining employability.

Additionally, it may be useful to remain open to interdisciplinary fields that combine multiple skills and can offer a wide range of job opportunities (e.g., digital marketing with data science, biotechnology with engineering).

### **Conclusions**

In conclusion, the main factors influencing the decision of high school graduates in choosing a university and specialization are: personal interests and abilities - aligning individual passions and skills with potential career paths; labour market trends - student's awareness of fields with demand and growth potential in the job market; financial considerations - the influence of tuition costs and potential salaries; social influences - the role of family, peers and social expectations in shaping decisions.

High school students aiming for immediate employability should choose specializations that combine labour market demands, technological trends, and the future needs of the economy. It is important for them to focus on developing relevant skills, prepare in advance for the challenges of the job market, and be willing to engage in continuous learning, thus adapting to its rapid changes.

#### References

- 1. The questionnaire was created together with Lecturer PhD. Gina (Lefter, Sztruten) Dobrota, using the Google Forms and distributed via social media.
- 2. O.Oskar, R.Simbolon, K.Kondar, M.Sinaga" Empowering Students: Evaluating the Impact of Career Education Programs on College Major Choices", Jurnal Ilmu Pendidikan dan Humaniora,
- 3. Published by Insan Akademika Publications, 2022
- 4. https://adevarul.ro/stiri-interne/educatie/criteriile-dupa-care-isi-aleg-tinerii-facultatea 2375592.html. Articol Laura Macavei, 17 iulie 2024
- 5. https://www.bestjobs.eu/casual/2023/01/25/top-15-facultati-de-viitor-pentru-cei-care-isi-aleg- domeniul-de-studiu-in-2023/
- 6. https://adevarul.ro/economie/cum-arata-joburile-viitorului-tinerii-din-romania-23610 36.html
  - https://www.zf.ro/profesii/absolventii-de-facultate-isi-gasesc-cel-mai-usor-un-loc-de-munca-rata-
- 7. de-angajare-in-randul-licentiatilor-este-de-peste-80-16588947 https://cpedu.ro/angajabilitate/
- 8. https://www.weforum.org/publications/the-future-of-jobs-report-2020/in-full/chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/
- 9. https://www.oecd.org/content/dam/oecd/en/publications/reports/2017/07/getting-skill s-right- skills-for-jobs-indicators\_g1g7b8c1/9789264277878-en.pdf
- https://www.macslist.org/career-happiness/your-guide-to-the-top-career-podcasts-of-2024

# STACEY HALLS' MRS ENGLAND OR A WELL-WOVEN MYSTERY PLOT

Alexandra Mărginean\*

#### **Abstract**

The paper analyzes the way in which Stacey Halls' novel, Mrs England, provides an instance of a well-woven mystery. This is achieved by reviewing the sources of enigma in the story, starting with the most controversial of them, namely the protagonist giving the title of the book. Then, the other characters are put under a lens (and dedicated separate sections), through the investigation of which we show how suspense and mystery are built. The conclusions reveal the fact that the secrecy constructed around them is the main mechanism to accomplish a suspense plot, through ambiguity and open possibilities, but that there are also other details that contribute to the build-up and which play a secondary role, completing the feeling nevertheless. The approach is cultural and identity studies.

**Keywords:** identity, mystery plot, Gothic novel, femininity

JEL Classification: Z10

#### 1. Introduction

Ruby May is a Norland-educated nanny, having therefore the best possible background in tending to children of wealthy families. The opening of the novel finds her quitting a good position with the Radletts, because she does not want to emigrate to Canada with them, although she is invited to. The reason for this refusal from her part — we are made to understand — is something suspicious related to her family, with whom she is not really in close contact, this constituting the first element of mystery introduced in the story. We get the notion that something significant is amiss and troubling her in her family situation, something having occurred in the past which has made things tense and awkward among family members.

Then, Ruby is offered by Mrs. Sim, her teacher and manager at Norland, a position with a some people living in rural Yorkshire, at Hardcastle House, in a distant area near a wild scape, where she needs to take care of four children – a handful and a challenge even for an experienced nanny. We are misled to believe that this may be a problem, but we soon realize that the children are angels, and the master of the house is affable and lacks any arrogance. However, the mistress of the house, Mrs. England, acts strangely and is volatile as a personality, which makes mystery lie with her for the best part of the novel.

<sup>\*</sup> Alexandra Mărginean is an Associate Professor of English at the Romanian-American University, Bucharest. E-mail address: alexandra.roxana.marginean@rau.ro

This is the setting that Ruby starts her journey with the family in – and us along with her.

In what follows, we shall look at the sources of mystery in Stacey Halls' novel, which we consider to be mainly the characters, through ambiguity characterizing their personalities and actions. Since enigmas get built in this way, we have therefore dedicated sections in which we investigate them one by one below, following the natural construction and manner proposed by the author. As pointed out by critics, Mrs England has a "touch of Gothic", but, although employing some usual "tropes" of this genre, such as dramatic beginnings, "hidden letters, a secret identity and a fire", it reinvents it, using "twists", one being that it is "devoid" of "any supernatural element" or ruses (Booker Talk, 2022). Some have even pointed out physical details of the book playing a part in the way readers relate to the story, and to how the atmosphere gets created from incipient stages, setting the right expectations among the audiences; one such opinion discusses the "emotional connection to the book as an object" achieved through the "clever design" on the front cover, which is kept throughout editions in various languages (Godsell, 2021).

# 2. Mrs. England

From the onset, Mrs. England baffles through her personality. At first, we see a shut-in woman, a bit strange and withdrawn, and we assume that a shyness towards people and avoidance of social contexts is one of her defining personality traits, out of which a certain clumsiness, awkwardness, air-headedness and inattention as well as confusion stem as natural consequences. She hardly eats, is fatigued, often physically weak or indisposed and a bit agoraphobic, always preferring to remain cloistered in her room, not up to any event or visit outside her home. She seems not to be preoccupied with the things of the world because she has a dreamy nature. However, her behavior is odd beyond the possibility of merely being explained fully and solely by such a predisposition, as it soon becomes obvious.

The night Ruby May arrives at the mansion, accompanied by Mr. England, who has picked her up at the train station – something that she has already found peculiar – Mrs. England seems taken by surprise by her being there, and acts confused before finally accompanying the guest to the children's room, hesitant as to what she is supposed to do, as if she has not even given it a thought beforehand. In the first conversation Charles England has with the nanny, he characterizes his spouse as forgetful, when Ruby wonders before him about his wife's confusion. Moreover, it turns out that the mistress of the house was the one to book Ruby's train tickets, which makes her slip of the mind even stranger. When a photographer is contracted to take a family picture, and is due in at nine one morning, soon after Ruby's arrival, Mrs. England mixes up the time, thinking that they are expecting him at ten, and therefore is not dressed

when he comes in, all the members of the household having to wait for her to get ready.

To her surprise, Ruby is summoned to a discussion with the master of the house, Charles, about the children's program and her future chores, which is strange as well, as these duties and knowledge would normally fall to the lady of the household. Mrs. England appears as uninvolved, and the first hints to her incompetence arise. It is already evident that the lady spends most of her time secluded in her room, and seems strangely and expressly eager to retreat in there if she accidentally bumps into Ruby in the hallway. There are clear signs that her behavior is not just extravagance, a mere predilection of her personality, but something more serious than that. One night, Ruby smells gas and alerts everyone in the house, saving their lives and the mansion by getting them outside and opening all windows, and we infer that Mrs. England may have been the one to leave the gas valve open in her room. Everybody suffers from gas poisoning, including the lady, being dizzy and sick for days afterwards. At this point, her forgetfulness appears as the result of a condition rather than anything else, a fact that gets confirmed by Mr. England in a subsequent conversation with Ruby, when he acknowledges the potential need for specialized treatment for his wife, but admits to having left things the way they are in order to avoid stressing the children and his spouse. His gesture of locking her in her room at night is justified by this condition and a tendency to sleepwalk, according to his claims.

In relationship with her children, Mrs. England seems just as oblivious of them as of everything else (at least initially). She almost never tends to their needs, nor seems to know or care what these are. She seldom even comes to their room, does not interact with them, and when she does, encouraged by Ruby, she seems clumsy in her gestures and verbal interactions, hardly finding anything to say, acting out of place and relieved once she manages only a few words or a short activity together, as if she has completed a tricky task, and is happy to get out of the situation. The impression she gives is that she does not know her own children, as she needs to be explained about their likes, preoccupations and talents. Her awkwardness with her own kids points to her as an inept mother. She apparently cannot make any decisions regarding the children either, seeming unable to make up her mind or think logically about something, even if it appears as obvious. For instance, Saul, the oldest of them, has the problem of wetting the bed from time to time. Ruby proposes to Mrs. England to buy and use a plastic cover for the bed to solve the incidents more efficiently, but the mother cannot decide to agree even though it is a sensible and rational solution.

The first details that get introduced to contradict the carefully designed personality above as disconnected and incompetent refer to Mrs. England's relationship with the children. There are small gestures of tenderness, such as

taking her daughter Millie in her arms while sitting, or touching Decca's shoulder, which are mainly performed by her absent-mindedly, or apparently so. These are subtly slipped in the narrator Ruby's descriptions of the mistress' actions, here and there, noticeable, but still details existing under the overall umbrella of carelessness, which gets pointed out as the main attitude and constant. Presenting them as performed under absent-mindedness diminishes their relevance, making them somewhat mechanical in nature and thus depriving them of the value and weight of intentional, conscious and heartfelt gestures.

However, as the story advances, other, more forceful and undeniable evidence of mystery in Mrs. England's character emerges, letting us know that there is more to her than what initially meets the eye. While the Englands are visiting the extended family from Lilian's part, the Greatrexes, at Crow Nest, Saul has an asthma attack, which Dr. Powell confuses for gastric symptoms. prescribing the patient to lie down, and injecting a drug in his neck, despite Ruby's protests, who recognizes the affliction and claims that steam and heat would relax the boy's airways and help him breathe, whereas lying down would only make him worse. Mrs. England proves presence of mind and courage, locking herself in the room with Saul and Ruby, keeping all the others, including the doctor and her husband outside, and following Ruby's advice rather than the professional's, so making the right decision against all odds and despite appearances. Ruby's training at Norland included a three-month medical internship in a hospital, but cannot, theoretically, compare to the experience and knowledge of the Greatrex family doctor who has professed all his life. However, Lilian England follows her intuition and trusts Ruby, going against everyone else, including her husband's express indication. Moreover, as she thinks it best to remain with the boy at Crow Nest for a few days to give him time to recover, but is unsure whether she would be heeded by Charles and supported in this endeavor, she instructs Ruby to lie to Mr. England regarding the decision to stay, telling him that it is the doctor's suggestion and manipulating him into believing the final decision is his, which Ruby does effectively. Lilian collects her wits and stands up to everyone, be they her family and two representatives of male authority that practically exercise a lot of influence and pressure on her. Her concern with Saul and stress over his health issue brings out a mother side that we have only gotten a pale glimpse at, which proves how she loves her children, if she is willing to put herself at risk for them by neglecting the whole family's instructions, if it is her belief that it would help Saul. Doing something like this also requires a strength of character that this woman has shown to apparently lack, through her debilitating conduct so far.

On principle, Lilian England prefers to avoid contact with other people, as we have already seen. Even her voice is always low and hushed, as if she were afraid to even speak. This leads us to believe that she suffers from an enhanced timidity with everyone around her. However, to Ruby's astonishment, she knows Tommy Sheldrake the blacksmith, with whom she appears to exchange letters, or at least receives mail from him, stealthily using her oldest daughter, Decca, as an unofficial mail carrier. The nanny catches the girl hiding such a letter in her clothes before giving it to her mother. Given the secrecy, we suspect romantic involvement, and thus Mrs. England appears in a whole new light. The shy, antisocial woman who seems afraid of her own shadow may actually turn into an adulteress. Blaise, the maid, confirms to Ruby that she has seen Tommy a couple of times not only wandering about the premises of the mansion, but also eerily standing still outside, watching it.

Also, Mrs. England is not exactly the feeble, fragile, sickly woman that she appears to be at the beginning of the book. When she finally does decide to venture outside for a walk with Ruby and the children, subsequent to the visit to Crow Nest and to Saul's health episode, she takes the untrodden and more dangerous path, and acts as if she knew her way around the area, which is surprising for a woman who has spent most of her days bedridden. She is even bold enough to cross a river with the baby carriage on an apparently unsafe bridge where even Ruby hesitates, pushing the stroller herself, and then climbing to reach a plateau, and thus showing unusual strength and stamina for an ill-disposed woman, and qualities of dealing with the natural environment that are not necessarily top-of-the-list for a lady of the high society. As Ruby points out, she is "not at all like someone who forgot things, who left valves leaking and misplaced her servants' post"; "not the pale moth glancing off the edge of conversations, [...] not the preoccupied, distracted creature inspecting her gloves", but "whole" (Halls, 2021: Ch. 18)

The weak being, dependent on her husband, apparently unable to decide anything for herself, let alone contradict him with something, is not entirely who she is at all. This first became apparent when she plotted to have her way and stay at her parents' mansion for her son, also determining Ruby to follow her orders and do the same with regard to the master. There may be an element of not only trickery but also slyness to Mrs. England. One other situation where this is visible concerns Ruby's correspondence. Lilian England progressively forges a bond with her children's nanny; she pulls Ruby on her side, determining her to keep secrets with which the nanny betrays her master's trust - as with the letter received by the mistress from the blacksmith - and listens to Ruby's family problems and childhood situations, making Ruby confide in her, appearing as sensitive and empathetic. Nevertheless, it turns out that Mrs. England has kept Ruby's letters - from home, from Decca's school and from Mrs. Sim at Norland Institute – in her drawer for days on end, despite knowing how important they are for her employee. Ruby was waiting for news from her sister Elsie, who was unwell, having contracted a new kidney disease besides

her spine affliction, as well as from Decca, who had had to leave for school in tears and with vehement protests, and for whom an answer from her nanny would have probably meant avoiding depression. Apart from the fact that maintaining a dialogue with these people through written messages was crucial under the circumstances, which Mrs. England knows very well, Ruby had specifically and repeatedly been inquiring whether she had any mail, which basically makes the chances of the situation being simply an overlook, an honest mistake from Lilian's part, very slim. On the other hand, Mrs. England's forgetfulness is proverbial, even though highly unlikely in this particular case. Yet again, when Ruby lets her know about the news from Decca in the letter, Mrs. England remarks that her daughter has not written to her as well, which may leave for us room for suspicion that she may be jealous of Ruby for the attention the nanny gets from the girl, and suggests perhaps the possibility that the mother may have hidden the letters out of spite. The question is whether the lady is capable of deviousness and meanness, or is merely her usual unmindful self. Another comment from Mrs. England's part introduces even more doubt into the picture, pointing that something else is amiss, sending Ruby on a different lead, as she remarks on the position of the mailbox in their yard being close to Mr. England's room, indirectly suggesting that her husband may have been the one to hide the letters.

Blaise's observations to Ruby pinpoint Mrs. England's personality once more, and her word weighs a lot, since, as a maid, the servant spent a lot of time close to her mistress. She says that understanding Lilian England is "difficult", "Like catching smoke." and states that she has often wondered if the lady is not "more clever than she makes out" (*ibidem*: Ch. 19).

### 3. Mr. England

Mr. England appears as a likable man, full of qualities and understanding and caring with his wife despite her obvious shortcomings. He picks Ruby May from the train station, reins the carriage himself, is deprived of any superiority, excuses his wife before the nanny and respects her whims, covering up for her moods and flaws. He lacks haughtiness, invites Ruby to have suppers with him, heeds her advice and gives her a raise, acknowledging her merits and help. He is open to discussing his wife's condition without being disrespectful to her in the process, explaining simply and plainly that he does not want to put her or the children through the stress of being institutionalized. He has a close relationship with the children, sometimes tending to their needs and thus performing tasks that would normally be his wife's duty (especially in Edwardian times), not only allowing them around him to play, but playing with them. He appears to have forged a stronger emotional bond with the kids than their mother, in the presence of whom they are usually stiff and unresponsive, unlike the exuberant manifestations they have towards him. All these features

make him very congenial. He does not have the stiffness or rigidity of male role models of his time, who are supposed to be dominant characters, masters and providers, "breadwinners", kings of their castles, keeping the family somewhat at bay in order to preserve their status of superiority, whereas women are "dependant" and homebound (Dyhouse, 2013, Ch. 1). He can, however, hold "coercive control" over his wife, as also deemed normal in that age (emmasbibliotreasures, 2021). The power distance is not as far as etiquette would normally impose in the Edwardian era, when "social relationships were strictly defined, and interactions among and between the classes were governed by a series of complex and rigid rules" (The Manners of the Edwardian Era, 2016). He proves more flexible and atypical in this respect.

This impression changes a bit, however. There are dents and cracks in the general ideal picture painted to the man of the house. The first appears with the situation of Decca's departure to St Hilda school. It is unclear whose idea or decision it is, even though Mr. England claims it is his wife's, but Lilian's devastation, hesitance and apparent helplessness says otherwise (and she later denies it to Ruby). The timing is also special, right after Decca has helped her mom with the secret letter, about which Mr. England has found out something, so the girl's sending away may as well be his punishment for both his wife and daughter, to separate them.

This begs the question of how he really feels about his wife. As Ruby notices initially, he is very concerned about Lilian. He accepts all her peculiarities, strangeness, dispositions, inabilities and absence in matters that a wife, mother and mistress of a household is supposed to manage successfully, especially in Victorian times. This may point to the fact that he has strong feelings for her, loving her a lot, being so accepting and caring. On the other hand, there is that strange episode when he asks Ruby to act like a care provider and put him to bed – as if he were his children, but, of course, not quite like that, as the sexual innuendo is present – and Ruby does it, also planting a kiss on his forehead upon his request, surprising even herself for obeying.

The action of sending his eldest daughter far away to school, despite her obvious fear, lamentations and sorrow for having to go, comes in contrast with his love of his children that he displays on every occasion. His insensitivity to the girl's desperate cry looks a lot like cruelty. He does not act out of concern for her studies, or having her best interests at heart, as, at the beginning of the novel, while presenting the children's education to Ruby, when mentioning that his girls have been taught only how to read and write whereas Saul still enjoys private tutoring, he seems perfectly at peace with this idea. His calm depiction of this inequitable state of affairs, gender-wise, renders the feeling that he sees it as utterly normal. He does not even fathom the possibility of a potential inadequacy or unfairness, seeming to take for granted the notion that the rudimentary knowledge tools he has provided for his daughters are fit and quite

enough for them. At the historical time of the novel, girls often received their education at home and then a boarding school, and the purpose of this education was "not academic", the deed being more a "tribute" to the parents' social standing (Bryce qtd in Dyhouse, 2013, Ch. 2). It then follows that a female's schooling is not the reason why he is preoccupied to send his daughter away, which would raise the odds that it is rather out of revenge.

Another aspect that may contradict the view that Mr. England is as perfect as he seems is the idea that strikes Ruby while having that audacious stroll with Mrs. England, the one in which the lady acts liberated from the confinement of the house, and a much better, revigorated version of herself, namely that the woman is "desperately unhappy" (Halls, 2021: Ch. 19). Also, one day, Ruby visits the Booths – the former maid, Blaise, and tutor Eli – and the woman tells her that Conrad Greatrex, Mrs. England's father, gives Charles England a significant monthly allowance; as Blaise puts it, they (the Greatrexes) pay him to take care of his wife. Hence, his tenderness does not come for free. Facts seem to gather that cloud his initial solar image.

## 4. Ruby

Ruby is a controversial personality herself, but in a much more subdued manner. There are clues as to the fact that she is hiding something traumatic from her past, and which is related to her family. We infer this much from cues that are subtle enough not to be decisive. There is an air of unease whenever she thinks about her family, but nothing concrete at first for us to be able to either understand that there is a problem or make up our minds in this regard. Then, the way she feels very connected to her relatives, so much so as to renounce the opportunity to go to Canada as a nanny in a family that she likes and who like her, as they have had a contract and relationship for some time, is a bit odd. What we sense is not necessarily emotional closeness to her relatives, as she is somewhat sad to pass the opportunity of leaving; it is not essentially affection that keeps her in the country (that is, if we leave out Elsie, her sister, whom she clearly really loves), but rather a sense of duty, which comes along with an unpleasant or peculiar feeling – and we shall understand only in the end why. Moreover, she only keeps in touch with her family through the letters she writes to Elsie. Later, we are told that she has not opened the mail from her father, and that there is a box which she avoids looking into, which contains something equally valuable and disagreeable. Hence, there is something eerie in her childhood or adolescence that remains unexplained for the longer part of the novel.

She has chosen to activate in the public sphere in the only domain that was deemed as respectable and acceptable for women in the late Victorian and Edwardian times, i.e. teaching and caring for children. Proper women had to avoid becoming abominable or "dreadful", like the suffragettes, wanting too

much to be part of the active, public sphere, so they had to be involved in the only job that did not damage their reputation — "child welfare was seen as consonant with woman's proper sphere in private and domestic life" (Martin, 1999: 30). From this point of view, Ruby still observes convention, but is on the brink towards employment and independence, so on the threshold towards masculine attributes.

Ruby's relationship with men is ambiguous, more precisely her containment and naivety. When she arrives at the Englands' home, she meets Mr. Booth, who will soon make a comment on this to her face, saying that she is innocent as a lamb. Nevertheless, she not only follows Mr. England in his room in the dark to put him to bed and kisses his forehead when invited to do so, but then fantasizes and thinks about how she would take care of him if she were married to him, and how he deserves a wife who would do so instead of the one he has. Also, she agrees to take walks in the woods with Booth, accepting his compliments and feeling attracted to him, even after he is married to Blaise. Even Tommy Sheldrake, the blacksmith, has in her perception a magnetism that she feels, but, in his case, she senses this attraction as combined with something menacing. The description of her encounters with these men creates suspense and mystery in the story, as every one of them represents a possibility of development for a different scenario, and we do not know what to believe of both what will happen with Ruby and how she is as a person (either more or less respectable).

# 5. Disentanglements

When Ruby comes back to Hardcastle House from a visit to the Booths, during which relevant ideas are exchanged with Blaise (some of which we have presented above), she stumbles upon a fight Charles England has with Conrad Greatrex, in which the latter threatens to put an end to the financial arrangement that they have – the one in which Charles is the beneficiary. Conrad leaves, and an enraged Mr. England takes the kids to Crow Nest with him, disallowing both his wife and Ruby to accompany him, as punishment for the fact that the nanny has taken the liberty to visit the Booth family. Ruby realizes that this outing has made him mad because he tells her that she can now go back and continue the visit without the kids. At this point, from the way the plot has been constructed, we suspect that Charles may even be jealous.

Mr. England's outburst shocks Ruby and brings back bad memories, of how her own father tried to kill her and Elsie, and Ruby passes out. When Ruby was twelve, he pushed the girls off a high bridge, subsequent to having suffered from depression caused by financial troubles and having progressively lost his wits. The girls miraculously survived both the fall and drowning, as a boat passing by fished them out of the water. This is how Elsie got her permanent damage to the spine, as she was only three then. All this comes back to Ruby in

her fretful sleepy and dreamy state induced by the violence of the master of Hardcastle. Mrs. England takes care of her while she recovers, and confirms that she was not the one to have taken her letters

Mrs. England remains in Ruby's room not only to look after her, but also to escape to the woods at night. Ruby follows her, finds her and finds out that Lilian was actually married to Tommy, and that her daughter Decca is his. The Greatrex family has practically sold her to Charles, paying him a lot of money to accept a pregnant woman as his wife and to keep the secret. Lilian describes him as egocentric, tyrannical and manipulative, having estranged her from her children, making them prefer their father, with her allowing it so as to deter him from starting to hate them, as a result to feeling that he is competing with the little ones for her affection and attention. When Charles finds the two women in the forest, he means to push Lilian into a precipice rather than allow her to leave him, and Ruby, reviving in her memory the danger she once was in from a similar fall, and reliving the fear and revolt, pushes Charles to his end instead, with Lilian's help.

Mystery as to the denouement is kept until the very last regarding the two women's future. Lilian decides to go to Australia, where she had her romance with Tommy – and we assume that he will relocate there as well, only to find out that they will not be a couple after all, as they have shared and gone through too much together, and their paces of evolution have been different since. Ruby is invited to join Lilian to the continent, but decides against it, as she receives the news of her father's death right before giving Lilian an answer. Since she has never forgiven her father and has kept her distance from the mother because of him as well, we tend to think that she might consider returning there, but this is not what she chooses either, opting for going back to Norland for the time being. Here, she receives a job offer from Mrs. Sim, who wants to open a daycare business, and the lady lets her know that Mrs. England has left her forty pounds – her wages for a whole year. The end shows us a confident Ruby, who retires to a house on the seacoast, free to weigh all the possibilities before her, able to decide for herself and live in liberty for the first time in her life.

These last life choices are perhaps unexpected, for the main characters in the story, i.e. Mrs. England and Ruby, and we do not know until the very last moment what lies ahead for each one. Through this, Stacey Halls shows once again her mastery of creating a mystery plot. Also, by placing two heroines at the forefront, we may infer a feminist vein in the otherwise patriarchal context, where men have the power over women's lives and well-being to a great extent, where gestures such as locking a woman in her room are not frowned upon and can be deemed to make sense. The two women prove both cleverer than a clever man, Charles England, and capable, independent and powerful. Therefore, the voices that wonder whether the placement of the story in 1904, around the time when the "Suffragettes' struggle to win the vote for women

was becoming militant", contains a symbolical message, in the directing line of a statement of women's power, may be right (Godsell, 2021).

Also, throughout the story, there is a feeling of well-crafted suspense, of being held in waiting. Although nothing much happens, practically speaking, we get a sense of shocking things looming, about to be revealed. Open possibilities and the very feeling of apparent peacefulness and stillness in action contribute to the tension that gets created. One of the hanging developments is related to Ruby's past, when we know that something bad happened, because she avoids looking at the letters and items in her box of personal belongings, but we are kept guessing. Another unknown advancement is connected with her romantic involvements, Booth, Charles England and even Sheldrake having meaningful encounters with her and functioning as potential scenario threads in this respect. Mrs. England's personality is controversial, mystery stemming and brimming from her character as well. Halls appears to also know how to use dosage, as minimum clues are thrown in a paced manner and just to the extent to which they make us wonder about the next step. Contradictory hints are also dropped, especially related to Charles and Lilian's characters, as we are led to believe that either one is either good-natured or devious. The friction Ruby has with the servants, especially Blaise, who dislikes her from the beginning – and we are told she wanted the position of a nanny for herself, but was deemed unfit - creates a bit of tension as well. The natural environment is an element from which mystery emerges, through the proximity of the forest and high rocks and plateaus, which suggest a certain amount of peril, especially in the context of Mrs. England's habit of sleepwalking, and as we have a description of a few of the characters' walks taking place in the dark, coupled with depictions of sounds, smells and images of the surroundings that compose an eerie atmosphere. This is why we can say that the milieu where Hardcastle House is placed plays a role in the makeup of mysteriousness in the novel. Hence, we may conclude that the characters are indeed the main sources of ambiguity and thus mystery, but other details and elements contribute to it and complete the picture, enhancing this feeling and rendering it complexity and weight. Taking all these factors into account, we may consider the novel a sample of a well-crafted mystery plot.

#### References

- 1. Booker Talk. 2022 (September 28). "Mrs England by Stacey Halls a touch of Gothic". On *Booker Talk*. Retrieved October 3, 2024, 12:04 p.m., from https://bookertalk.com/mrs-england-by-stacey-halls-a-touch-of-gothic/.
- 2. Dyhouse, Carol. 2013. *Girls Growing up in Late Victorian and Edwardian England*. London, Boston and Henley: Routledge and Kegan Paul. EPUB format. DOI: 10.4324/9780203104101.

- 3. Emmasbibliotreasures. 2021. (December 29). "Book Review: Mrs England by Stacey Halls". On *emmasbibliotreasures*. Retrieved October 3, 2024, 12:30 p.m., from https://emmasbibliotreasures.com/2021/12/29/book-review-mrs-england -by-stacey-halls/.
- 4. Godsell, Andrew. 2021. (October 16). "Book Review: Mrs England by Stacey Halls". On *In-Common*. Retrieved October 3, 2024, 12:15 p.m., from https://www.in-common.co.uk/2021/10/16/book-review-mrs-england-by-stace v-halls/.
- 5. Halls, Stacey. 2021. *Mrs England*. London: Manilla Press. IDSUK (Data Connection) Ltd EPUB book.
- 6. Martin, Jane. 1999. *Women and the Politics of Schooling in Victorian and Edwardian England*. London and New York: Leicester University Press.
- 7. The Manners of the Edwardian Era. 2016. (May 16). On *Driehaus Museum*. Retrieved October 3, 2024, 12:55 p.m., from https://driehausmuseum.org/blog/view/the-manners-of-the-edwardian-era.

# THE IMPACT OF DIGITALISATION IN A CIRCULAR ECONOMY. HOW ARTIFICIAL INTELLIGENCE IS TRANSFORMING TRADITIONAL MARKETING INTO A GREEN ONE

Denisa-Roxana Botea-Muntean, Lucian Botea\*

#### Abstract

In a circular economy, the impact of digitalisation is increasingly felt within the transformational processes and promotion of sustainability by companies. With the help of artificial intelligence and components of improve, convert and transform, research supports the idea that digitalisation promotes ecological change by adapting traditional marketing into green marketing. In this context, the influence and importance of sustainable and AI-supported promotion methods, which are both environmentally friendly, efficient and innovative, are highlighted. Methodologically, the research is exploratory and uses specific research questions to analyse the efficiency of green marketing strategies, based on AI and to bring new research perspectives, especially considering the limitations of the research related to the novelty of the topic and key elements, such as: sustainable development, technological change, digitalisation and circular economy. The research conclusions, based on the results obtained and in accordance with the specialised literature, emphasize that digital transformation and the implications of AI have a significant impact in shaping consumer attitudes and behavior towards ecological marketing, the strategies of this type of marketing defining new sustainability perspectives.

**Keywords:** sustainability, technological change, marketing, environmental economics, digitalisation, circular economy, artificial intelligence

JEL Classification: Q01, O33, F23, M31, Q55

#### 1. Introduction

The background of the theme is founded on the premise that environmental protection has become one of the main targets on the agenda of companies that aim to become sustainable, green and environmentally friendly. The subject started from the United Nations mention on the agenda of the Sustainable Development Goals, which aim to reduce global carbon dioxide emissions by 45% by 2030 compared to 2010 levels and to reach net zero emissions by 2050.

E-mail address: munteandenisa21@stud.ase.ro

Lucian Botea is PhD Lecturer at Romanian-American University, Bucharest.

E-mail address: lucian.botea@rau.ro

<sup>\*</sup>Denisa-Roxana Botea-Muntean is PhD student at Bucharest University of Economic Studies, Bucharest.

Starting from these directives, a growing number of global companies and corporations have developed a sustainability strategy based on their own principles, which value the components: environment, economy and society, in accordance with the principles of the circular economy: recycling, reduction, reuse [Mocho, (2020)].

Relevance of the theme is noticed thus through the main research question: How is AI technology reshaping traditional marketing into a green one to create more sustainable strategies? Since digitalisation is a phenomenon of the modern world that supports ecological change, its results make it possible to improve, convert and transform processes and business models, with an effect on consumer behavior [Ramesohl, S., Berg, H., & Wirtz, J., (2022)]. Thus, the supply and demand relationship can be viewed holistically from the perspective of both companies and end consumers.

The structure of the paper is divided into three major chapters, such as literature review, methodology and results and discussion, these relying on the key elements of the paper: digitalisation, circular economy and green marketing. The secondary research questions: "What are the implications of AI in marketing?", "What impact do sustainable promotion methods have?" and "What are the effects of digitalisation in a circular economy?" outline the scientific approach of the topic, in accordance with the review of the specialised literature.

#### 2. Literature review

# 2.1. The impact of digitalisation in circular economy

Digitalisation is developing a transformational potential that is profoundly changing people, our societies and the planet [Kottmeyer, B., (2021)]. From the facilities it offers to the challenges it faces, digitalisation plays an increasingly important role in any activity undertaken. When we talk about promotion in terms of marketing, the impact of technology is substantial, especially since we are considering, on the one hand, protecting the environment through the use of digital means of promotion, and on the other hand, developing society in accordance with sustainable development. Specialised authors have emphasised that digitalisation is not only about the use of emerging technologies, but also about the development of new, human-centered services and products, disruptive changes in service delivery, personalised services, and new partnerships [Redlein, A. and Höhenberger, C. (2020)].

The circular economy also has an impact on this transition to a digital transformation, encompassing and adapting traditional marketing to a new form of marketing, the green one. In other words, being digital in a circular economy means, above all, being systematic [Ramesohl, S., Berg, H., & Wirtz, J., (2022)] because digitalisation is considered an enabler of a circular economy [Ronkainen, L., (2022)]. Because digitalisation is currently seen as an enabler of circular economy, linking the two concepts results in a technological future perspective, with a positive impact on the environment [Chauhan, C., Parida, V. and Dhir, A. (2022)]. Whether we are talking about promoting sustainability, or about implementing efficient, innovative and environmentally friendly practices, digital technologies support the approach towards a digital transformation within the circular economy.

In this case, traditional marketing strategies become sustainable marketing strategies, highlighting the transition from a traditional type of marketing to a green one, based on the principles of circularity and sustainability objectives. The impact of digitalisation in the circular economy in relation to the transition of marketing towards the sustainable sphere, thus marks a technological boost supported by artificial intelligence towards future promotion methods. This approach is highlighted especially by the increasing notoriety of the circular economy concept and awareness of the impact that human or technological processes have on the environment.

# 2.2. Traditional marketing vs green marketing

As a field in itself, marketing in the author Philip Kotler's understanding is not only about selling, but also about creating value for customers. Starting from this assumption, the adaptation of classic marketing to ecological marketing is defined rather by the environmental component of the sustainability's pillars (environmental, social and economic responsibility). Basically, the marketing mix with the 4Ps (price, product, promotion, placement) was transposed into a sustainable approach, which gives rise to a type of green marketing by exposing marketing elements in an environmentally friendly form [Mishra, P. and Sharma, P. (2014)].

As a result of globalisation and sustainable development in accordance with the development of society, green marketing represents a redefinition of the concept of sustainability in favor of the demand-supply relationship, and with the implications of buying behavior from the consumer's perspective, and understanding the market and adapting to the market from the perspective of companies. At the same time, in terms of companies and business models, adopting and implementing a type of green marketing certainly marks a competitive advantage [Sripathi, M., Leelavati, T.S., Krishna, K.V.P., Sindhuja, A., Lakshmi, T.D., Vamsi, E. and Singh, N.S. (2022)], considering the notions of education for sustainability, digitalisation and responsible consumption.

Unlike the usual practices of traditional marketing, green marketing emphasises a deep understanding of consumers' needs and desires, identifying their expectations for sustainable products and services. In this context, it is becoming increasingly evident that companies are forced to adapt their design, pricing, promotion and distribution to a new, innovative and green type of marketing [McDonald, S., and Oates, C. J., (2006)]. From a historical point of

view, the authors argue that green marketing was born in the 80s-90s, promoting environmental awareness with consumer behavior and sustainable development.

# 2.3. Artificial intelligence supporting circular economy through marketing strategies: challenges and opportunities

Artificial intelligence and digitalisation show great support for the concept of a circular economy through green marketing practices, by promoting sustainability, digital marketing, and future technological changes.

The integration of artificial intelligence in the transformation process of traditional marketing into a green one, suggests opportunities for recognizing the impact of technology, for education in digitalisation and for sustainable, innovative and efficient promotion. At the same time, this integration process also implies the building of a sustainable relationship between companies and consumers, focusing on the responsibility component by promoting a circular business model and protecting natural resources through recycling, reduction and reuse.

The challenges noted as barriers, especially regarding the limits exposed by the impact of digitalisation within the circular economy, from a perspective of the implications of AI in the process of transforming traditional marketing into a type of green marketing, are categorised by the specialised literature [Ritzén S, Sandström GÖ. Barriers to the circular economy. (2017)] into 4 pillars, as follows:

- 1) Financial challenges: in this case we are dealing with barriers of costs, profitability, investment nature, such as higher costs for implementing the new technologies;
- 2) Structural challenges: in this case we are dealing with barriers of lack of information, such as misinformation;
- 3) Operational challenges: in this case we are dealing with barriers of infrastructural nature, supply chain management, such as power outages and the internet:
- 4) Attitudinal challenges: in this case we are dealing with barriers of perceptual nature, especially the perception of the concept of sustainability and risk aversion, such as: education for digitalisation and artificial intelligence (older generations of people may not handle new technologies).

In terms of opportunities, we take into account the development of society in relation to sustainable development, the streamlining of processes involved in the circular economy, as well as the innovative promotion marked by green marketing. Thus, the opportunities generated by digitalisation and the implications of artificial intelligence are directly connected to the strategic means of sustainable promotion, such as improve, convert and transform,

leading to an interconnection of marketing processes with the principles of sustainability [Kumar, V., Rahman, Z., Kazmi, A.A. and Goyal, P. (2012)].

Being a driver for sustainability [Gensch, C.O., Prakash, S. and Hilbert, I. (2017)], digitalisation thus represents an environmentally friendly evolution alternative, with future prospects and circularity implications, expected to gain more and more momentum in marketing processes in the near future. Traditional marketing promotion methods become, with the help of digital transformation and the implications generated by artificial intelligence, sustainable promotion methods that minimize the negative effects of resource consumption on the environment, supporting the principles of the circular economy in the long term.

# 3. Research methodology

The research "The Impact of Digitalisation In A Circular Economy. How Artificial Intelligence is Transforming Traditional Marketing into a Green One" is an exploratory research and relies on a review of the specialised literature.

Starting from the authors' premises that define the circular economy, digitalisation and green marketing, as well as the implications of artificial intelligence, the present study pursue a perspective analysis on sustainable development in accordance with the development of society.

The exploratory and analytical analysis on key concepts, such as: circular economy, digitalisation, artificial intelligence, green marketing, represents both an interconnection of modern terms and a scientific overview, the review including academic journals, industry reports and specialised premises.

The research gap of this paper is given by the limitations exposed that come from the fact that the key terms defined in the paper are discussed more separately at this point and less in the same context, so the research leaves the chapter of discussions open from this scientific point of view.

#### 4. Results and discussion

# 4.1. General perspectives

The main question of the research, "How does AI technology transform traditional marketing into an ecological one to create more sustainable strategies?" highlights, with the help of findings from the specialised literature, the fact that the involvement of artificial intelligence in a type of classic marketing within the circular economy leads to the transformation of this type of marketing into a green, ecological one, which is defined by the adoption of strategies based on reducing the consumption of natural resources, recycling materials involved in the production, promotion, distribution and price processes, and the reuse of tools used in strategies. For example, if in traditional marketing an outdoor campaign is done with the help of Out of Home (OOH) campaigns, in green marketing the promotion is done either on a digital panel,

and we are dealing with the technological component, being Digital Out of Home (DOOH), or on a panel created from sustainable materials that filter the air, that is, an innovative, sustainable component.

It is clear that as companies increasingly adopt AI and other digital technologies, marketing practices are evolving to become more efficient and greener, adapting to the natural cycle of transformation for environmental, social and economic responsibility. In essence, by using digital platforms and integrating AI tools to optimize transparent communication in marketing campaigns, brands can not only improve their market position, but also contribute to broader long-term sustainability goals. In this case, we are talking about the concepts of market understanding and market adaptation, in line with with global technological advancements.

The findings indicate that AI-based marketing strategies significantly improve consumer engagement and trust by delivering personalised and transparent messages, highlighting the implications for sustainability education, both for companies and for consumers, consumers who are becoming increasingly climate-conscious, attentive to market developments, and inclined to make sustainable, ethical, and quality choices [Halder, P., Hansen, E.N., Kangas, J. and Laukkanen, T. (2020)], because nowadays consumers are becoming more aware and sustainably oriented with a concern hat the natural environment is fast deteriorating.

The other three research questions are based on a review of the specialised literature, depending on the impact of digitalisation in the circular economy, traditional marketing vs. green marketing, and AI supporting the circular economy through marketing strategies. The answers to these were highlighted through the conduct of this exploratory research and mark points of interest for the topic addressed, leaving the discussion open for new perspectives and scientific implications.

What are the implications of artificial intelligence in marketing? The perspectives and results of the research show us that, with the help of AI and by involving it in the strategy and scope of traditional marketing, the latter becomes a type of ecological marketing, in fact, a component of modern marketing. In this case, we say that digital tools and technologies such as AI support the circular economy approach through efficient, innovative and sustainable promotion methods.

What impact do sustainable promotion methods have? These methods, as found in the literature, aim to bring to the forefront the components that are desired to be promoted, either directly or indirectly, but this time in a sustainable way. Practically, within the circular economy and with the help of digitalisation, promotion methods are environmentally friendly, efficient and innovative, especially when artificial intelligence also makes its appearance.

What are the effects of digitalisation in a circular economy? In this case, we are talking, based on the results derived from the research on specialised sources, about the components improve, convert and transform, all of which are involved in a new transformational process based on artificial intelligence, which creates new directions for development, promotion and visualisation. Basically, we are talking about a circularity of classic marketing recycled into a form of ecological marketing.

The general perspectives of this paper are based on the exploratory research methodology, which encompasses, on the one hand, the vision of a future based on digitalisation and marked by artificial intelligence, but on the other hand, the strategic marketing vision of a transformation process in accordance with the principles of the circular economy.

# 4.2. Challenges related to the circular economy and digitalisation

In terms of challenges, we can acknowledge that digitalisation, in addition to efficiency in consumption, time and resources, comes with a series of less favorable aspects, but which, once taken into account, can be foreseen, managed or avoided. Both among consumers and companies, digitalisation is seen as a central component in the circular economy, which can boost business models and consumer attitudes towards sustainability, innovation and development [Antikainen, M., Uusitalo, T. and Kivikytö-Reponen, P. (2018)].

Among the main challenges of digitalisation, we find financial, structural, operational and attitudinal challenges. These include a series of barriers that can interfere with the digitalisation process, either before implementation or in the use of digital tools. In this case, the use of artificial intelligence also aligns with this category, which, although it aims to be a promoter of positive change in the world, can bring with it a series of challenges [Neligan, A., Baumgartner, R.J., Geissdoerfer, M. and Schöggl, J.P. (2023)].

In relation to green marketing, digitalisation can involve high implementation costs, investment risks, information limitations or limited education regarding artificial intelligence, reluctance to use digital platforms and tools, as well as unforeseen risks or risks related to the interconnection of processes.

At the same time, among companies, the challenges related to the CE and digitalisation are seen through the lens of business models that assume a reconfiguration of the strategy, focused on a mentality of reorienting services and products [Antikainen, M., Uusitalo, T. and Kivikytö-Reponen, P. (2018)]. In this case, adapting the business and marketing strategy to the principles of sustainability, by integrating digitalisation and adapting to a circular economy in a gradual way, with future perspectives, can assume an organic path of companies oriented towards economic, social and environmental results.

Over time, and especially in the current period, amid globalisation, digitalisation has become a key process among companies that want to improve their sustainability component [Majid, S. (2024)]. However, in order to strengthen their sustainability and digitalisation strategy, companies must put the role of consumers at the center of the transition, an important role in adapting to new products and services on the market. Since understanding the market and adapting to the market is an essential step, it is obvious that consumer behavior also represents a basic component in the digitalisation of production, promotion and communication processes, creating the premises of a circular, innovative and future-oriented business model.

# 4.3. Solutions to the challenges of digital integration

Despite the challenges encountered in the transition from traditional marketing to green marketing, by integrating digitalisation and artificial intelligence into business models oriented towards the circular economy, there is, in addition to a series of solutions, some ambiguity regarding the integration of circular business models and the digitalisation component, so as to result in an efficient, innovative and sustainable future strategy [Neligan, A., Baumgartner, R.J., Geissdoerfer, M. and Schöggl, J.P. (2023)]. In this framework, the role of facilitator for a circular economy falls to digitalisation both from the point of view of the current period and from the point of view of future evolution prospects on a global scale [Majid, S. (2024)].

However, for the challenges exposed in order to integrate digitalisation, the related solutions incorporate a holistic approach, of co-creation, networking, increasing transparency and providing information, aspects that can contribute greatly to establishing a green marketing strategy in relation to the adoption and insertion of the artificial intelligence component [Antikainen, M., Uusitalo, T. and Kivikytö-Reponen, P. (2018)]. The use of AI-based tools can facilitate the entire transformational process and create added value or generate a competitive advantage for companies that use such modern techniques. Moreover, in this case, we are talking about an adaptation to the globalization process, a process seen as an impact factor in the evolution of traditional marketing towards green marketing [Alyoshina, I.V. (2022)].

#### 5. Conclusions

This research provided a perspective on the impact of digitalisation in a circular economy, more specifically, how artificial intelligence can transform traditional marketing into green marketing. In this context, the importance and role of marketing in the adoption of digital solutions is noticed, highlighting at the same time the fact that this role is a growing one, especially against the backdrop of an increasingly evident digital evolution through its interconnected presence in various activities.

The digital ecosystem currently present at a global level represents a launch pad for AI-based strategies of companies that propose a reconfiguration of current business models into circular business models. Also from this perspective, traditional marketing is migrating towards a modern, ecological type of marketing, more precisely, green marketing, improved by its perspective on sustainability, with an impact on the environmental, social and economic components.

Based on the key elements analysed in the research: sustainability, technological change, marketing, environmental economics, digitalisation, circular economy, artificial intelligence, the results of the work were presented in a scientific form, in accordance with the exploratory methodology adopted, and they are grouped under the headings of general perspectives, challenges related to the circular economy and digitalisation and solutions to the challenges of digital integration.

In the research, by conducting an extensive review of the specialised literature on the subject, a series of perspectives, challenges and solutions were identified that mark the impact that the digitalisation component has in transforming the current traditional marketing model into a sustainable marketing model. Against the backdrop of a circular economy and with the implications of artificial intelligence, the current promotion methods of companies are forced to be adapted to the principles of social, environmental and economic responsibility. Thus, we can report that digitalisation is a promoter of the circular economy, helping efficiently, innovatively and sustainably the processes' transition towards modernisation.

Furthermore, the identified challenges presented in adopting digitalisation for a sustainable strategy are mainly related to obvious investment risks and costs, related both to the development of companies and to the understanding of consumers. An important role in this case is played by understanding the market and adapting to the market, components highlighted in the demand-supply relationship. Also, the solutions presented mark the premises of an organic development of society, in relation to the sustainable, digital and innovative development of society.

Due to the research gap regarding the limitation of results in the context of a digital era with multiple innovations, this paper indicates a point of open discussion towards new research perspectives related to the impact of digitalisation in a circular economy and how artificial intelligence transforms traditional marketing into a green one. Also, the interconnection of the key terms of the paper may represent a limitation present in the specialised literature at this time.

From the perspective of the literature review, the study reported that consumers are currently increasingly aware and willing to choose environmentally friendly, socially ethical and economically beneficial products

and services, which is encouraging more and more companies to direct their promotional strategies towards sustainable directions. Thus, the elements of the marketing mix are also being translated into a circular and sustainable model, contributing to a more sustainable and technological economy.

In conclusion, this exploratory research represents an important step in analysing the impact of digitalisation within the circular economy, providing a basis for discussions on the opportunities and challenges that this process has on society. In this direction, the transformation of traditional marketing and the migration of promotion processes and methods towards a green marketing approach, with ecological promotion processes and methods, constitutes a point of interest for understanding the global evolution from a digital point of view.

By incorporating all these concepts into a research that emphasizes the sustainable and digital evolution of society, we can note through the above that globalization represents an essential and decisive factor both in the transition of traditional marketing to a green one, and in the integration of tools based on artificial intelligence. In this context, both consumers and companies are witnessing a large-scale transformation of the current world towards a modern, digital and sustainable world.

#### **Abbreviations**

CE: Circular Economy AI: Artificial Intelligence

#### References

- Alyoshina, I.V. 2022. "Globalisation as a factor of marketing concepts' evolution". In *UPRAVLENIE/MANAGEMENT* (Russia), 10(1), pp.85-100.
- Antikainen, M., Uusitalo, T. and Kivikytö-Reponen, P. 2018. "Digitalisation as an enabler of circular economy" In Procedia Cirp, 73, pp. 45-49.
- Chauhan, C., Parida, V. and Dhir, A. 2022. "Linking circular economy and digitalisation technologies: A systematic literature review of past achievements and future promises". In Technological Forecasting and Social Change, 177, p.121508.
- Gavkalova, N., Martin, J., Shumska, H. and Babenko, K. 2024. "Landscape and circular economy as a mechanism of sustainable development in globalisation and digitalisation of the world economy".In **Economics** Development, 23(2).
- Gensch, C.O., Prakash, S. and Hilbert, I. 2017. "Is digitalisation a driver for sustainability?". In Sustainability in a digital world: New opportunities through new technologies, pp.117-129.
- Halder, P., Hansen, E.N., Kangas, J. and Laukkanen, T. 2020. "How national culture and ethics matter in consumers' green consumption values". In Journal of cleaner production, 265, p.121754.
- Kottmeyer, B. 2021. "Digitisation and sustainable development: the opportunities and risks of using digital technologies for the implementation of a circular

- economy". In Journal of Entrepreneurship and Innovation in Emerging Economies, 7(1), pp. 17-23.
- 8. Kumar, V., Rahman, Z., Kazmi, A.A. and Goyal, P. 2012. "Evolution of sustainability as marketing strategy: Beginning of new era". In *Procedia-Social and Behavioral Sciences*, *37*, pp.482-489.
- 9. Majid, S. 2024. "Digitalisation as a Tool to Enhance Eco-efficiency Measures: A Systematic Literature Review". In *Scientific Papers of the University of Pardubice. Series D, Faculty of Economics & Administration*, 32(2).
- 10. McDonald, S., Oates, C.J., Young, C.W. and Hwang, K. 2006. "Toward sustainable consumption: Researching voluntary simplifiers". In *Psychology & Marketing*, 23(6), pp.515-534.
- 11. Mishra, P. and Sharma, P. 2014. "Green marketing: Challenges and opportunities for business". In *BVIMR Management Edge*, 7(1).
- 12. Okorie, O., Salonitis, K., Charnley, F., Moreno, M., Turner, C. and Tiwari, A. 2018. "Digitisation and the circular economy: A review of current research and future trends". In *Energies*, 11(11), pp. 3009.
- 13. Neligan, A., Baumgartner, R.J., Geissdoerfer, M. and Schöggl, J.P. 2023. "Circular disruption: Digitalisation as a driver of circular economy business models". In *Business Strategy and the Environment*, 32(3), pp.1175-1188.
- 14. Ramesohl, S., Berg, H. and Wirtz, J. 2022. "The Circular Economy and Digitalisation: Strategies for a digital-ecological industry transformation".
- 15. Ritzén S, Sandström GÖ. Barriers to the Circular Economy. 2017. "Integration of Perspectives and Domains". In *Procedia CIRP* 2017; 64:7–12. doi:10.1016/J.PROCIR.2017.03.005.
- 16. Redlein, A. and Höhenberger, C. 2020. "Digitalisation". In *Modern Facility and Workplace Management: Processes, Implementation and Digitalisation*, pp.139-175.
- 17. Ronkainen, L. 2022. "Increasing circular economy awareness with digital marketing".
- 18. Sripathi, M., Leelavati, T.S., Krishna, K.V.P., Sindhuja, A., Lakshmi, T.D., Vamsi, E. and Singh, N.S. 2022. A "Green Marketing Exploration: A Shift from Traditional Marketing for a Sustainable Environment". In *NeuroQuantology*, 20(8), p.2785.

# WORLD ECONOMY – CHALLENGES AT THE END OF 2024

Andrei Rădulescu\*

#### **Abstract**

The world macroeconomic climate slightly improved at the end of 2024, an evolution supported by the positive developments on the international financial markets and the prospects for de-regulation and interest rate cuts in the short-run, with favorable impact for the investments. However, more than 4 years since the outbreak of the coronavirus pandemic and almost 3 years since the outbreak of the crisis in Ukraine the world economy continues to be confronted with multiple risks and challenges, including the high level of the uncertainty and the divergence among the main economic blocks in terms of macroeconomic performance. In this paper standard econometric tools are applied and the database of International Monetary Fund (IMF) is used in order the estimate the annual pace for the structural components of the volume of global trade and of the GDP in the world and main economic blocks (USA and China) for the period 1980 – 2024. The results of the econometric analysis show a weak annual pace of potential output for the world economy (influenced by the challenges in terms of global trade) with divergences among the main economies – upward trend in USA and downward trend in China.

**Keywords:** world economy, potential output, investments

JEL Classification: C20, E22, F10

#### 1. Introduction

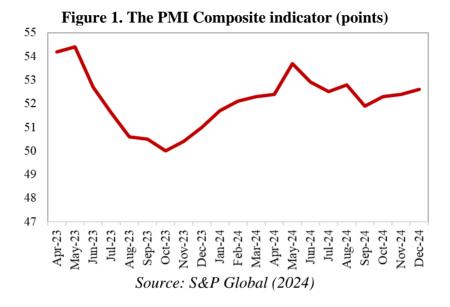
The growth pace of the world economy improved at the end of 2024, towards the best performance since the month of August, according to the PMI Composite indicator estimated by S&P Global (2024), as can be noticed in the following chart.

This evolution was supported by several factors, including the positive developments on the international financial markets [the stock market capitalisation / GDP ratio in USA is at record high levels, according to the platform GuruFocus (2024)], supported by the prospects for de-regulation and for the continuity of the interest rate cut cycle in the world in the coming quarters, with favorable impact for the fixed investments in the real economy.

In this respect we point out that in USA (the largest economy in the world, with a nominal GDP of over USD 29tn in 2024, according to the estimates of the Bureau of Economic Analysis) the fixed investments grew by an annual pace higher than the private consumption (the main component of the GDP, and

<sup>\*</sup> Ph.D., Andrei Rădulescu is Senior Researcher at the Institute for World Economy, Romanian Academy. E-mail: iemradulescu@gmail.com

also the engine of the world economy in the past decades) over the past quarters.



However, the growth pace of the world economy continues to be weak, in the context of the geo-economic fragmentation, whose impact was estimated by the International Monetary Fund (2023) to range between 0.2% of GDP to 7.0% of GDP.

Furthermore, the uncertainties persist at high levels, being determined by the unknowns regarding the geo-political tensions and the trade tensions among the largest economies in the world, and the risk factors, including the tough stance of the public finance and the high level of the real interest rates in the USA.

This paper applies standard econometric tools and uses the database of the International Monetary Fund (2024) (annual observations) in order to estimate the annual potential growth pace for world trade and for the GDP in the world, USA, and China during the period 1980-2024.

The results of the econometric estimates point to the consolidation of the annual pace of the structural component of the world GDP and of the world trade in 2024, at levels below the post-crisis cycle, given the consequences of the exogenous shocks, the coronavirus pandemic and the geo-political tensions.

Furthermore, there can be noticed the divergence between the USA and China in terms of the annual potential growth pace, determined by the dynamic of the investment/GDP ratio.

The rest of the paper has the following structure: chapter two presents the recent developments in the world economy; the third chapter briefly describes

the employed methodology; the results of the econometric estimates are discussed in the fourth chapter; the last chapter briefly presents the main conclusions

# 2. The Recent Macroeconomic Developments in the World Economy

The performance of the world economy was impacted by the consequences of the geo-economic fragmentation, the persistence of the geo-political tensions, the high level of the real interest rates, the upward trend for the public debt, and the electoral context in 2024.

However, the growth pace of the global economic activity stabilised last year, as reflected by the World Economic Forum (2024), an evolution supported by the slowing-down inflationary pressures, and the resilience of international trade.

In this respect, we underline that the volume of the international trade with goods grew by an accelerating pace of 3.6% in November 2024, the best performance since October 2022, according to the statistics of the Netherlands Bureau for Economic Policy Analysis (CPB, 2024) and reflected in the following chart.

(volume, YoY)

20%

10%

0%

-10%

20%

International trade with goods — World industrial production

-30%

Figure 2. International trade with goods vs. world industrial production (volume, YoY)

Source: Netherlands Bureau for Economic Policy Analysis (2024)

During January-November 2024 the volume of the international trade with goods advanced by an annual pace of only 1.7%, a rebound after the contraction by around 1.2% YoY in 2023. Despite this improvement, the growth pace of the international trade with goods was weak last year, at least compared to the developments during the previous economic cycles, an evolution determined by

the populist economic measures implemented in many countries, as pointed out by the World Bank (2024, a).

In this context, the volume of the world industrial production rose by an annual pace of around 1.7% during the period January – November 2024, an acceleration after an estimated increase by only 1.0% YoY in 2023.

We point out to the divergences among the largest economies in the world [USA and China, with a cumulated contribution of over 40% to the global GDP, according to the estimates of the IMF (2024)] in terms of the evolution of the volume of exports of goods and of the volume of the industrial production.

For instance, the volume of the exports of goods grew by an average annual pace of 3.1% in the USA during January-November 2024, slowing-down from 3.2% in 2023, according to the estimates of CPB (2024).

On the other hand, the volume of the exports of goods of China [the second largest economy in the world, with a nominal dimension of over USD 18tn, according to IMF (2024)] increased by an average annual pace of 11.0% in the first 11 months of 2024, accelerating from 2.9% in 2023.

Furthermore, the volume of industrial production contracted in the USA by an average annual pace of 0.4% during January-November 2024, following the increase by around 0.2% in 2023.

In China the volume of industrial production advanced by an accelerating average annual pace to 5.6% in the period January-November 2024, from 4.4% in 2023, according to the CPB (2024) database, as can be seen in the following chart.



Figure 3. The volume of the industrial production in USA and China (MA12, YoY)

Source: Netherlands Bureau for Economic Policy Analisys (CPB) (2024) 3. Methodology In this paper the econometric filter Hodrick-Prescott (1997) is applied in order to distinguish between the structural and the cyclical components of the annual pace of world trade and of the annual pace of the GDP (world, USA, and China) during the period 1980 – 2024.

The database of the World Economic Outlook of October 2024 of the International Monetary Fund (IMF, 2024) was used, with annual observations for the annual dynamic of world trade and GDP (world level, USA, and China).

According to the seminal article of Hodrick-Prescott (1997), this method highly used in the macroeconomic literature is synthesized by the following relation:

$$\mathbf{Min} \sum_{t=1}^{T} (\ln Y_{t} - \ln Y_{t}^{*})^{2} + \lambda \sum_{t=2}^{T-1} ((\ln Y_{t+1}^{*} - \ln Y_{t}^{*}) - (\ln Y_{t}^{*} - \ln Y_{t-1}^{*}))^{2}$$
(1)

where the  $Y_t$ ,  $Y_t^*$  and  $\lambda$  are the macroeconomic indicator, its structural component (the trend), and the smoothness parameter.

In this paper we employed a value of 100 for the smoothness parameter, as this is the value recommended by the authors, while working with annual observations.

Although this is a transparent method, several authors, including Bouthevillan et al. (2001), emphasized its short-comings, namely the leakage and the compression effects, whose dimension is dependent on the parameter  $\lambda$ .

In this paper the econometric software E-Views was used.

# 3. The Interpretation of the Results

According to the results of the econometric analysis, the annual potential pace of world trade consolidated at 2.8% in 2024. This is the highest level since 2017, the year before the Trump 1.0 Administration implemented the first wave of the tariffs.

However, this is a lower level compared to 3.1% in 2016 (at the end of Obama Administration) or 5% in 2008 (at the end of Bush Administration), and also very close to the lowest level since the beginning of the 1980s, as can be noticed in the following chart.

Figure 4. Annual pace of the world trade and of the trend component of the world trade (%)

Source: econometric using the database of International Monetary Fund (2024)

Furthermore, it is easily noticed that the implementation of the tariffs by the Trump 1.0 Administration in 2018 determined the deterioration of the annual potential pace for world trade in the following years, to as low as 2.6% in 2020, the minimum since 1981.

On the other hand, we point out that the deterioration of the annual potential pace of world trade had a negative impact for the evolution of the potential growth pace of the world economy, as reflected in the following chart.

In this respect, we underline that the annual potential pace of world trade presented lower levels than the annual potential growth pace of the world economy for the ninth year in a row in 2024. Therefore, world trade ceased to be an important engine of growth for the world economy, after several decades, an evolution determined by the changes of paradigm in terms of trade tariffs, starting with the Trump 1.0 Administration in the USA.

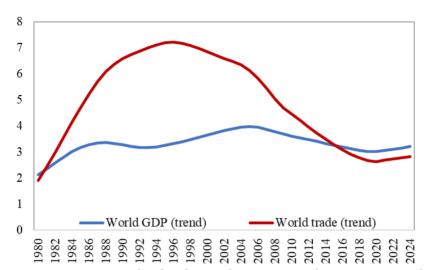


Figure 5. Annual pace of the trend component for world trade and world GDP (%)

Source: econometric using the database of International Monetary Fund (2024)

As regards the annual potential growth pace of the world economy, we also notice a consolidation in 2024, at around 3.2%. This is the highest level since 2015, the year before the end of the Obama Administration in the USA.

However, the annual potential growth pace of the world economy continues to be lower compared to the levels of 2010 (in the year following the Great Recession this indicator stood at 3.6%), 2007 (3.9%), and 2005 (around 4%, a record high level for the past decades, at least since 1980 until now), according to the results of the econometric estimates represented in the previous chart.

Last, but not least, we emphasize the divergence among the largest economies in the world (the USA, and China) in terms of the annual potential growth pace.

On the one hand, the results of our econometric analysis point to the acceleration of the annual potential growth pace in the USA from 2.8% in 2023 to 2.9% in 2024, the highest level since 2001, as reflected in the following chart. This was supported by the upward trend for the investments, with the total investments / GDP ratio climbing to around 22% in 2024, the maximum since 2007.

On the other hand, the annual potential growth pace in China decelerated from 4.6% in 2023 to 4.3% in 2024, a record low level for the past decades, at least from 1980 until now.

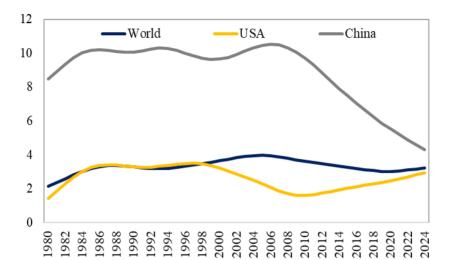


Figure 6. Annual potential growth pace (%)

Source: econometric using the database of International Monetary Fund (2024)

This deterioration of the annual potential growth pace in China was determined by the downward trend for the total investments/GDP ratio, to around 42% in 2024, the lowest level since 2007, given the challenges across the real estate sector, and the maturity of the economic growth and development model.

#### 4. Conclusions

Our analysis pointed out the consolidation of the annual potential pace of world trade, and of world GDP in 2024. This evolution confirms the high level of resilience of world economy in a complicated context, dominated by the persistence of the unprecedented challenges, including the geo-political tensions, the trade frictions, and the high levels of the real financing costs.

In this respect, it is very important to emphasize the fact that the world economy avoided a recession in 2024, while the global macroeconomic climate slightly improved at the end of the year.

However, the annual potential paces of world trade and of world GDP stood well below the levels of the previous economic cycles in 2024. Furthermore, the annual potential pace of the trade continued to be lower than the annual potential growth pace of the world economy in 2024, expressing the fact that trade is not anymore an engine of global growth.

In this context, of weak annual potential growth pace, the progress in countering global poverty was limited, as also recently reflected by the research of the World Bank (2024, b).

Therefore, there are needed measures in order to promote the acceleration of world trade (remove the trade barriers) and to improve the potential growth pace in the world economy.

On the one hand, a new Bretton Woods momentum is needed more than ever, as multilateralism is the most adequate solution to address the current unprecedented challenges in a sustainable way.

On the other hand, the Administrations across the world should focus more on the acceleration of the structural reforms, while prioritising the measures in order to determine a sustainable relaunch of the fixed investments, while countering the climate change, incorporating the technological progress in a balanced way and promoting peace against the militarisation efforts.

Unless important intelligent and calibrated economic policy measures are implemented in a coordinated way across the world the divergences among the economic block would persist, with negative consequences for the global peace and for the sustainability of the planet.

#### References

- 1. Bouthevillain, C., et al., 2001. Cyclically Adjusted Budget Balances: An Alternative Approach. *European Central Bank Working Papers*, 77. Disponibil la http://www.ecb.de/pub/pdf/scpwps/ecbwp077.pdf
- 2. Bureau of Economic Analysis (2024). Principal Federal Economic Indicators, available at https://www.bea.gov/
- 3. Guru Focus (2024). USA Ratio of Total Market Cap over GDP, available at https://www.gurufocus.com/economic\_indicators/4602/usa-ratio-of-total-market-cap-over-gdp
- 4. International Monetary Fund (IMF) (2023). Geoeconomic Fragmentation and the Future of Multilateralism, available at https://www.imf.org/en/Publication s/Staff-Discussion-Notes/Issues/2023/01/11/Geo-Economic-Fragmentatio n-and-the-Future-of-Multilateralism-527266
- 5. International Monetary Fund (IMF) (2024). World Economic Outlook, October, available at https://www.imf.org/en/Publications/WEO/Issues/2024/10/22/world-economic-outlook-october-2024
- Netherlands Bureau for Economic Policy Analysis (CPB) (2024). World Trade Monitor November 2024, available at https://www.cpb.nl/en/world-trademonitor-november-2024
- 7. S&P Global (2024). Global PMI Indicators, available at https://www.pmi.spglobal.com/Public
- 8. World Bank (2024, a). Global trade has nearly flatlined. Populism is taking a toll on growth, available at https://blogs.worldbank.org/en/voices/global-trade-has -nearly-flatlined-populism-taking-toll-growth
- 9. World Bank (2024, b). 2024 Key Development Challenges in Nine Charts. How the World Is Off-Track to Reduce Poverty, available at https://www.worldbank.org/en/news/immersive-story/2024/12/17/2024-in-nine-charts#:~:text=Amid%20anemic%20economic%20growth%2C%20the,or%20reverse%20progress%20even%20more.

10. World Economic Forum (2024). Global economy is stabilizing – but weakness remains. Here's the economic outlook from chief economists, available at https://www.weforum.org/stories/2024/09/chief-economists-outlook-global-economy-growth/